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PROPOSALS
FOR THE
INTERNATIONAL
RADIO CONFERENCE

GENEVA, 1959

PUBLISHED BY THE
INTERNATIONAL TELECOMMUNICATION UNION
1959
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In conformity with Article 10, paragraph 2. (1), of the International Telecommunication Convention (Buenos Aires, 1952), the task of the Ordinary Administrative Radio Conference (Geneva, 1959) will be:

a) to revise the Radio Regulations and the Additional Radio Regulations adopted by the Atlantic City Conference in 1947;

b) to deal with all other matters deemed necessary within the terms of the Convention, the General Regulations and the directives given by the Plenipotentiary Conference (Buenos Aires, 1952).

In accordance with Article 10, paragraph 2. (2), the Administrative Radio Conference also:

a) elects the members of the International Frequency Registration Board;

b) reviews the activities of the Board.

These Collected Proposals contain proposals submitted by Members and Associate Members of the Union for consideration by the Conference within the terms specified above, and are published by the General Secretariat by virtue of Chapter 3 of the General Regulations annexed to the Convention. As may be seen from the table of contents, the Collected Proposals are divided into two main parts, the first relating to the Radio Regulations and the second to the Additional Radio Regulations.

The first part is sub-divided into four sections. The first section consists of proposals or considerations of a general nature. In the second, the pages are usually divided into two columns, the left-hand column showing the present text of the RR and the right-hand column indicating, opposite the appropriate article, the proposed amendments. For some tables, however, it was impossible to divide the page into two columns, due to lack of space. In such cases the present provisions have been printed across the page and are followed by the relevant proposals. The third section contains proposals relating to the Appendices to the RR. It is followed by a fourth section which contains some proposals relating to Recommendations to the C.C.I.R.

The second part is sub-divided into two sections, the first of which comprises proposals or considerations of a general nature. The second section is arranged in two columns, the left-hand column showing the present text of the RR and the right-hand column indicating, opposite the appropriate article, the proposed amendments.

Some Administrations have submitted entire new drafts for certain Articles, with the request that we reproduce their new versions, with the general comments thereon, entire, without any attempt at sub-division.

These same Administrations have used an additional provisional numbering of paragraphs. This has been kept for the amended Articles, to facilitate the work of reference (see also under Recommendation of the Baltic and North Sea Radiotelephone Conference, Göteborg, 1955, Part I, A).

As this volume is in the form of a loose-leaf folder, any proposals which reach the General Secretariat after it has been sent to the printer and prior to the opening of the Conference will be issued as supplements to the Collected Proposals (2nd, 3rd, 4th series, etc.). These also will be in loose-leaf form to facilitate insertion in the main document.

The proposals are numbered consecutively. This numbering will be continued for proposals published in supplements to the Collected Proposals or during the Conference itself.

In accordance with Chapter 18 of the General Regulations annexed to the Convention, a report was prepared jointly by the specialized Secretariat of the C.C.I.R. and the General Secretariat, and was distributed to Administrations of Members and Associate Members of the Union in Circular No. 772 dated 21. March 1959.
List of Abbreviations employed in the present publication

<table>
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<td>C.C.I.R.</td>
<td>International Radio Consultative Committee.</td>
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<td>Convention</td>
<td>International Telecommunication Convention.</td>
</tr>
<tr>
<td>F.C.C.</td>
<td>Federal Communications Commission.</td>
</tr>
<tr>
<td>French O.P.T.A.</td>
<td>Group of the different territories represented by the French Overseas Postal and Telecommunication Agency.</td>
</tr>
<tr>
<td>I.C.A.O.</td>
<td>International Civil Aviation Organization.</td>
</tr>
<tr>
<td>I.F.R.B.</td>
<td>International Frequency Registration Board.</td>
</tr>
<tr>
<td>I.M.C.O.</td>
<td>Intergovernmental Maritime Consultative Organization.</td>
</tr>
<tr>
<td>I.T.U.</td>
<td>International Telecommunication Union.</td>
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<tr>
<td>RA</td>
<td>Additional Radio Regulations.</td>
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<td>RG</td>
<td>General Regulations annexed to the Convention.</td>
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<td>Ri</td>
<td>Rules of Procedure of Conferences.</td>
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<td>RR</td>
<td>Radio Regulations.</td>
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<td>RTf</td>
<td>Telephone Regulations.</td>
</tr>
<tr>
<td>RTg</td>
<td>Telegraph Regulations.</td>
</tr>
<tr>
<td>SG</td>
<td>General Secretariat of the I.T.U.</td>
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<tr>
<td>United Kingdom</td>
<td>United Kingdom of Great Britain and Northern Ireland.</td>
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<td>U.S.S.R</td>
<td>Union of Soviet Socialist Republics.</td>
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Rules of Procedure of Conferences

Note by the S. G.: Article 11 of the International Telecommunication Convention (Buenos Aires, 1952) provides that:

For the organization of their work and the conduct of their discussions, administrative conferences shall apply the Rules of Procedure of Conferences contained in the General Regulations annexed to the Convention. However, before starting its deliberations, each conference may adopt such additional provisions as are indispensable.

The provisions of the General Regulations (Chapter 9) are reproduced below:

Rules of Procedure of Conferences

RULE 1

Inauguration of the Conference

The conference shall be opened by a person appointed by the inviting government. When there is no inviting government, it shall be opened by the Chairman of the Administrative Council or in his absence by the Secretary-General.

RULE 2

Order of Seating

At meetings of the Plenary Assembly, delegations shall be seated in the alphabetical order of the French names of the countries represented.

RULE 3

Election of the Chairman and Vice-Chairman. Constitution of the Secretariat

At the first meeting of the Plenary Assembly:

a) the Chairman and Vice-Chairmen of the conference shall be elected;

b) the Conference Secretariat, made up of staff of the General Secretariat of the Union, and, in case of need, of staff provided by the administration of the inviting government, shall be constituted.

RULE 4

Powers of the Chairman of the Conference

1. The Chairman, in addition to performing any other duties incumbent on him under these Rules of Procedure, shall open and close the meetings of the Plenary Assembly, direct its deliberations, ensure that the Rules of Procedure are applied, give the floor to speakers, put questions to the vote, and announce the decisions adopted.

2. He shall have the general direction of all the work of the conference, and shall ensure that order is maintained at meetings of the Plenary Assembly. He shall give his ruling on motions of order and points of order, and in particular, he shall be empowered to propose that discussion on a question be postponed or closed, or that a meeting be suspended or adjourned. He may also decide to postpone the convening of a Plenary Assembly or meeting thereof should he consider it necessary.
3. It shall be the duty of the Chairman to protect the right of each delegation to express its opinion freely and fully on the point at issue.

4. He shall ensure that discussion is limited to the point at issue, and he may interrupt any speaker who departs therefrom and request him to confine his remarks to the subject under discussion.

RULE 5
Appointment of Committees

The Plenary Assembly may appoint committees to consider matters referred to the conference. These committees may in turn appoint sub-committees. Committees and sub-committees may, if necessary, form working groups.

RULE 6
Composition of Committees

1. Plenipotentiary Conference:
   Committees shall be composed of the delegates of Members and Associate Members and the observers referred to in Chapter 1 paragraph 8 of the General Regulations, who have so requested or who have been designated by the Plenary Assembly.

2. Administrative Conferences:
   Committees shall be composed of the delegates of Members and Associate Members, and the observers and representatives referred to in Chapter 2 paragraph 3 of the General Regulations, who have so requested or who have been designated by the Plenary Assembly.

RULE 7
Chairmen, Vice-Chairmen and Reporters of Committees

1. The Chairman of the conference shall submit for the approval of the Plenary Assembly the choice of the Chairman, and of the Vice-Chairman or Vice-Chairmen of each committee.

2. The Chairman of each committee shall propose to his committee the nomination of the reporters and the choice of the chairmen, vice-chairmen, and reporters of the sub-committees which may be set up.

RULE 8
Summons to Meetings

Meetings of the Plenary Assembly, committees, sub-committees and working groups shall be announced in good time in the meeting place of the conference.

RULE 9
Proposals presented before the Opening of the Conference

Proposals presented before the opening of the conference shall be allocated by the Plenary Assembly to the appropriate committees appointed in accordance with Rule 5 of these Rules of Procedure. Nevertheless the Plenary Assembly itself shall be entitled to deal directly with any proposal.

RULE 10
Proposals or Amendments presented during the Conference

1. Proposals or amendments presented after the opening of the conference must be delivered to the Chairman of the conference, or to the Chairman of the appropriate committee, as the case may be. They may also be handed to the secretariat of the conference for publication and distribution as conference documents.
2. No proposal or amendment may be presented unless signed or approved by the Head of the delegation concerned or by his deputy.

3. Every proposal or amendment shall give, in precise and exact terms, the text to be considered.

4. (1) The Chairman of the conference or the Chairman of the appropriate committee shall decide in each case whether a proposal or amendment shall be presented to delegations in writing or orally.

   (2) In general, the texts of all major proposals to be put to the vote at a meeting of the Plenary Assembly shall be distributed, in good time, in the working languages of the Conference, in order that they may be studied before discussion.

   (3) In addition, the Chairman of the conference on receiving proposals or amendments referred to in paragraph 1 of this Rule, shall refer them to the appropriate committee or to the Plenary Assembly as the case may be.

5. Any authorized person may read, or may ask to have read, at a meeting of the Plenary Assembly, any proposal or amendment submitted by him during the conference, and he shall be allowed to explain his reasons therefor.

RULE 11

Conditions required for Discussion of, and Vote on, any Proposal or Amendment

1. No proposal or amendment submitted prior to the opening of the conference or by a delegation during the conference may be discussed unless it is supported by at least one other delegation when it comes to be considered.

2. Each proposal or amendment duly supported shall be submitted to a vote after discussion.

RULE 12

Proposals or Amendments passed over or postponed

When a proposal or an amendment has been passed over or when its examination has been postponed, the delegation sponsoring it shall be responsible for seeing that it is considered later.

RULE 13

Rules for Debates of the Plenary Assembly

1. **Quorum**

   For a valid vote to be taken at a meeting of the Plenary Assembly, more than half of the delegations accredited to the Conference and having the right to vote must be present or represented at the meeting.

2. **Order of debates**

   (1) Persons desiring to speak must first obtain the consent of the Chairman. As a general rule, they shall begin by announcing in what capacity they speak.

   (2) Any person speaking must express himself slowly and distinctly, separating his words and pausing as necessary in order that everybody may understand his meaning.

3. **Motions of order and points of order**

   (1) During debates, any delegation may, when it thinks fit, submit a motion of order or raise a point of order, which shall at once be settled by the Chairman in accordance with these Rules of Procedure. Any delegation may appeal against the Chairman's ruling, which shall however stand unless a majority of the delegations present and voting are against it.

   (2) A delegation submitting a motion of order shall not, during its speech, discuss the substance of the matter in question.

4. **Priority of motions of order and points of order**

   The motions and points of order mentioned in paragraph 3 of this Rule shall be dealt with in the following order:
a) any point of order regarding the application of these Rules of Procedure;
b) suspension of a meeting;
c) adjournment of a meeting;
d) postponement of debate on the matter under discussion;
e) closure of debate on the matter under discussion;
f) any other motions of order or points of order that may be submitted, in which case it shall be
to the Chairman to decide the relative order in which they shall be considered.

5. Motion for suspension or adjournment of a meeting
During the discussion of a question, a delegation may move that the meeting be suspended or
adjourned, giving reasons for its proposal. If the proposal is seconded, the floor shall be given to two speakers
to oppose the suspension or adjournment and solely for that purpose, after which the motion shall be put to
the vote.

6. Motion for postponement of debate
During discussion of any question, a delegation may propose that the debate be postponed for a
stated period. Once such a proposal has been made, any discussion thereon shall be limited to no more than
three speakers, not counting the person submitting the proposal: one for the motion, and two against.

7. Motion for closure of debate
A delegation may at any time propose that discussion on the point at issue be closed when the list
of speakers whose names have so far been recorded has been exhausted. In such cases, before a vote is taken
on the proposal, the floor may be given to not more than two speakers opposing the motion.

8. Limitation of speeches
   (1) The Plenary Assembly may, if necessary, decide how many speeches any one delegation may
       make on any particular point, and how long they may last.
   (2) However, as regards questions of procedure, the chairman shall limit the time allowed for a
       speech to a maximum of five minutes.
   (3) When a speaker has exceeded the time allowed, the Chairman shall notify the Assembly and
       request the speaker to conclude his remarks briefly.

9. Closing the list of speakers
   (1) During the debate, the Chairman may rule that the list of speakers wishing to take the floor be
       read. He shall add the names of other delegations who indicate that they wish to speak and he may then, with
       the assent of the Assembly, rule that the list be closed. Nevertheless, as an exceptional measure, the Chairman
       may rule, if he thinks fit, that a reply may be made to any previous statement, even after the list of speakers
       has been closed.
   (2) The list of speakers having been exhausted, the Chairman shall declare discussion on the matter
closed.

10. Question of competence
    Any questions of competence that may arise shall be settled before a vote is taken on the substance
of the matter under discussion.

11. Withdrawal and re-submission of a motion
    The author of a motion may withdraw it before it is put to a vote. Any motion, whether it be amended
or not, which has been withdrawn from debate may be re-submitted or taken up by the author of the amend­
ment or by another delegation.

RULE 14
Right to Vote

1. At all meetings of the conference, the delegation of a Member of the Union duly accredited by that
Member to take part in the work of the conference shall be entitled to one vote in accordance with Article 1
of the Convention.

2. The delegation of a Member of the Union shall exercise the right to vote under the conditions
described in Chapter 5 of the General Regulations.
RULE 15
Voting

1. **Definition of a majority**
   
   (1) A majority shall consist of one more than half the delegations present and voting.
   
   (2) In computing a majority, delegations abstaining shall not be taken into account.
   
   (3) In case of a tie, a proposal or amendment shall be considered rejected.
   
   (4) For the purpose of these Rules of Procedure, a “delegation present and voting” shall be a delegation voting for or against a proposal.
   
   (5) The delegations present which do not participate in a particular vote or which expressly declare their unwillingness to participate therein shall not be considered absent for the purposes of determining the quorum, nor as abstaining for the purposes of paragraph 3 of this Rule.

2. **Special majority**

   In cases where Members of the Union are to be admitted, the majority described in Article 1 of the Convention shall apply.

3. **Abstentions of more than fifty per cent.**

   When the number of abstentions exceeds half the number of votes cast (for, against, abstentions), consideration of the matter under discussion shall be postponed to a later meeting, at which time abstentions shall not be taken into account.

4. **Voting procedures**

   (1) The following voting procedures shall be adopted except in the case provided for in paragraph 5 of this Rule:
   
   a) by a show of hands, as a general rule;
   
   b) by roll call, if the above-mentioned procedure shows no clear majority or if so requested by a delegation.

   (2) Votes by roll call shall be taken in the alphabetical order of the French names of the Members represented.

5. **Secret ballot**

   Voting shall be by secret ballot when at least five of the delegations present and entitled to vote so request. In such cases, the Secretariat shall at once take steps to ensure the secrecy of the vote.

6. **Prohibition of interruptions during votes**

   No delegation may interrupt once a vote has been begun, unless to raise a point of order in connection with the way in which the vote is being taken.

7. **Reasons for votes**

   The Chairman shall authorize any delegations which so request to give the reasons for their vote, after the vote has been taken.

8. **Voting on parts of a proposal**

   (1) When the author of a proposal so requests, or when the Assembly thinks it fit, that proposal shall be sub-divided and its various sections put to the vote separately. The parts of the proposal which have been adopted shall then be put to the vote as a whole.

   (2) If all the sections of a proposal are rejected the proposal shall be regarded as rejected as a whole.

9. **Order of voting on concurrent proposals**

   (1) When there are two or more proposals on any one matter, they shall be put to the vote in the order in which they were presented, unless the Assembly decides to the contrary.

   (2) After each vote, the Assembly shall decide whether or not the following proposal shall be voted on.
10. **Amendments**

(1) Any proposal for modification consisting only of a deletion from, an addition to, or a change in a part of the original proposal shall be considered an amendment.

(2) Any amendment to a proposal accepted by the delegation submitting the proposal shall at once be embodied in the original proposal.

(3) No proposal for modification shall be regarded as an amendment if the Assembly considers it to be incompatible with the original proposal.

11. **Voting on amendments**

(1) When an amendment is submitted to a proposal, a vote shall first be taken on the amendment.

(2) When two or more amendments are submitted to a proposal, the amendment furthest from the original text shall be put to the vote first; of the remainder, that furthest from the proposal shall then be put to the vote and the same procedure shall be followed until all the amendments submitted have been considered.

(3) If one or more amendments are adopted, the proposal thus amended shall then be put to the vote.

(4) If no amendment is adopted, the original proposal shall be put to the vote.

**RULE 16**

**Committees and Subcommittees**

**Rules for Debates and Voting Procedures**

1. The chairmen of all committees and subcommittees shall have powers similar to those conferred by Rule 4 on the Chairman of the Conference.

2. The provisions set forth in Rule 13 for the conduct of debates in the Plenary Assembly shall also apply to the discussions of committees and subcommittees, except in the matter of the quorum.

3. The provisions set forth in Rule 15 shall also apply to votes taken in committees and subcommittees, except as regards paragraph 2.

**RULE 17**

**Reservations**

1. As a general rule, any delegation whose views are not shared by the remaining delegations shall endeavour, as far as possible, to conform to the opinion of the majority.

2. However, if any decision appears to a delegation to be of such a nature as to prevent its government from ratifying the Convention or from approving the revision of the Regulations, the delegation may make reservations, final or provisional, regarding this decision.

**RULE 18**

**Minutes of Plenary Assemblies**

1. The minutes of Plenary Assemblies shall be drawn up by the secretariat of the conference, which shall endeavour to ensure their distribution to delegations as early as possible before the date on which they are to be considered.

2. After the minutes have been distributed, delegations may submit in writing to the secretariat of the conference the corrections they consider to be justified; this shall be done in the shortest possible time. This shall not prevent them from presenting amendments orally during the meeting at which the minutes are approved.

3. (1) As a general rule, the minutes shall contain proposals and conclusions, together with the principal arguments for them, presented in terms as concise as possible.
However, any delegation shall have the right to require the insertion in the minutes, either summarized or in full, of any statement it has made during the debates. In this case, the delegation should, as a general rule, announce this at the beginning of its statement in order to facilitate the work of the reporters and must itself hand in the text to the secretariat of the conference within two hours after the end of the meeting.

4. The right accorded in paragraph 3 (2) regarding the insertion of statements in the minutes shall in all cases be used with discretion.

**RULE 19**

**Summary Records and Reports of Committees and Subcommittees**

1. (1) The debates of committees and subcommittees shall be summarized, meeting by meeting, in summary records, in which shall be brought out the essential points of the discussion, and the various opinions of which note ought to be taken, together with any proposals or conclusions resulting from the debate as a whole.

(2) Nevertheless, any delegation shall be entitled to invoke Rule 18, paragraph 3 (2).

(3) The right referred to above shall in all circumstances be used with discretion.

2. Committees and subcommittees may prepare any interim reports they deem necessary and, if circumstances warrant, they may submit, at the end of their work, a final report recapitulating in concise terms the proposals and conclusions resulting from the studies entrusted to them.

**RULE 20**

**Approval of Minutes, Summary Records and Reports**

1. (1) As a general rule, at the beginning of each meeting of the Plenary Assembly, committee, or subcommittee, the Chairman shall inquire whether there are any comments on the minutes of the previous meeting, or, in the case of committees or subcommittees, on the summary record of the previous meeting. These documents shall be considered approved if no amendments have been handed in to the Secretariat and no objection is made orally. Otherwise, the appropriate amendments shall be made in the minutes or summary record as the case may be.

(2) Any interim or final report must be approved by the committee or subcommittee concerned.

2. (1) The minutes of the last Plenary Assembly shall be examined and approved by the Chairman of the Assembly.

(2) The summary record of the last meeting of each committee or subcommittee shall be examined and approved by the Chairman of the committee or subcommittee.

**RULE 21**

**Editorial Committee**

1. The texts of the Convention, the Regulations and other Final Acts of the conference, which shall be worded as far as practicable in their definitive form by the various committees, taking account of the views expressed, shall be submitted to an editorial committee charged with perfecting their form without altering the sense and with combining them with those parts of former texts which have not been altered.

2. The texts shall be submitted by the editorial committee to the Plenary Assembly of the conference, which shall approve them, or refer them back to the appropriate committee for further examination.

**RULE 22**

**Numbering**

1. The numbers of the chapters, articles and paragraphs of the texts subjected to revision shall be preserved until the first reading in Plenary Assembly. The passages added shall bear provisionally the numbers bis, ter, etc. and the numbers of deleted passages shall not be used.

2. The definitive numbering of the chapters, articles and paragraphs shall be entrusted to the editorial committee after their adoption at the first reading.
RULE 23
Final Approval

The texts of the Convention, the Regulations and other Final Acts shall be considered final when they have been approved at the second reading in Plenary Assembly.

RULE 24
Signature

The final texts approved by the conference shall be submitted for signature, in the alphabetical order of the French names of their countries, to the delegates provided with the full powers defined in Chapter 5 of the General Regulations.

RULE 25
Press Notices

Official releases to the press about the work of the conference shall be issued only as authorized by the Chairman or a Vice-Chairman of the conference.

RULE 26
Franking Privileges

During the conference, members of delegations, members of the Administrative Council, senior officials of the permanent organs of the Union, and the staff of the Secretariat of the Union seconded to the conference shall be entitled to postal, telegraph and telephone franking privileges to the extent arranged by the government of the country in which the conference is held in agreement with the other governments and recognized private operating agencies concerned.
PART I

RADIO REGULATIONS

Including the Appendices
A. Proposals or general considerations relating to all or to a large number of the provisions of the Radio Regulations and of the Appendices

1 Bringing the Radio Regulations into line with the RTg

After the Telegraph Regulations (Paris Revision, 1949) had been adopted, the General Secretariat considered what effect any changes made in the Telegraph Regulations might have on the Radio Regulations.

Although it is not for the Secretary-General to amend the Regulations, the General Secretariat, in Circulars No. 619 (18 March) and 624 (10 May, 1950) drew attention to those provisions in the Regulations which it felt would be affected by the decisions taken in Paris.

As regards the RR more particularly, Article 41, § 6 (2) seemed to require amendment. The nature of the change is shown opposite this provision in Section B, under the heading: Circ. 624/1950.

Although a new Telegraph and Telephone Conference has since been held (Geneva, 1958), we consider it necessary to indicate the changes which took place as a result of the Paris Conference — and which several Administrations have taken into account in their proposals — in order to draw attention to the fact that many of the “existing provisions” of the RR and the RA have changed since the Atlantic City Conference.

Other changes will occur as a result of the 1958 Telegraph and Telephone Conference in Geneva, but we have not had the time to draw up a list of them here. This will be done later on. Nevertheless several Administrations have already made allowance in their proposals for changes which are to be made in the texts of the Regulations as a result of decisions taken at the 1958 Geneva Telegraph and Telephone Conference.

2 Recommendations by the Baltic and North Sea Radiotelephone Conference (Göteborg, 1955) (B. N. R. C.)

It will be remembered that the Baltic and North Sea Radiotelephone Conference which met in Göteborg in September, 1955, took certain decisions about the maritime mobile radiotelephone service in the Baltic and North Sea. The Agreement reached at the Conference contained some additional Radio Regulations, which the Conference, in its Recommendation No. 10, urged the signatory Administrations to implement with all possible despatch.

In its Recommendation No. 9, the Göteborg Conference also recommended that Administrations consider proposals for submission to the next Administrative Radio Conference with a view to the inclusion, in the Radio Regulations, of a full, self-sufficient, set of rules for the running of the maritime mobile radiotelephone service in the bands between 1 605 kc/s and 3 800 kc/s. In its Resolution No. 7, it decided that pending consideration of the question by the next Administrative Radio Conference, ships of from 500 to
1,600 tons displacement, compulsorily equipped with radio and used for international voyages, and equipped for radiotelephony only, must carry the RR and RA, in so far as these regulations are applicable to radiotelephony.

We drew attention to this in the Telecommunication Journal, No. 12 (December, 1957), to which kindly refer for further details.*) This volume contains proposals submitted by various administrations on the basis of the above-mentioned Recommendations.

*) See also proposal 13, pages 7 and 11 to 25.

3 Name of the frequency unit

Decision of the International Electrotechnical Commission
(I.E.C.)

The Director of the C.C.I.R. having asked the International Electrotechnical Commission (Geneva) to be informed of the decision reached regarding the frequency unit, this Commission has replied in the following terms.

The Director of the C.C.I.R. has proposed that this letter should be brought to the notice of the Plenipotentiary Conference and the Administrative Radio Conference. We thought it would be of interest to reproduce it, as below:

"In reply to your letter of 1 November, 1957, the decision of the International Electrotechnical Commission regarding the designation of the frequency-unit dates from its meeting in June, 1953, at Scheveningen, where the Committee on Electrical and Magnetic Magnitudes and Units recommended 'the use of "hertz"', while nevertheless permitting the use of some other designation, provided however that it is correct.

"Since that time, the use of 'hertz', which until then had been limited to the Central European countries, has tended to become more general except in the English-speaking countries which continue to use 'cycles per second'. The French Electrotechnical Vocabulary, for instance, gives the 'hertz' as the frequency unit.

"At the present time, in the French text of I. E. C. publications, the terms 'hertz', 'kilohertz' and 'megahertz' are used exclusively, with the symbols 'Hz', 'kHz' and 'MHz', whereas in the English text, after having used the term 'cycles per second' (c/s) etc. exclusively, some of the Study Groups have recently asked that in future the symbol 'Hz', followed by the symbol 'c/s' in brackets, should be used in all publications prepared by them. The United States and United Kingdom delegations raised no objection to this request.

Yours faithfully,

(Signed): L. RUPPERT
Secretary."

4 Administrations' comments on proposals for the Administrative Radio Conference, 1959

Members

El Salvador. Has no proposals to submit.

French Overseas Postal and Telecommunication Agency. As this Agency took part in the meetings to revise the Radio Regulations which were organized by the Telecommunication Coordination Committee
of the French Union in Paris, the proposals submitted by France represent the views of overseas posts and telecommunication authorities.

Associate Members:

British West Africa. Has no proposals, but supports those submitted by the United Kingdom.

British East Africa. Proposals from British East Africa were submitted to the United Kingdom authorities and have been incorporated in the latter's proposals.

Federation of Rhodesia and Nyasaland. Has no proposals to submit.

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Australia (Commonwealth of)

Annexes 5, 6 and 7 to the Final Acts of the E.A.R.C. (Geneva, 1951)

5 Australia proposes that the Administrative Radio Conference (Geneva, 1959) examine the Maritime Mobile plan with a view to consolidating allocations to that service and obtaining additional spectrum space for other services, particularly the fixed service.

Annexes 8 and 9 to the Final Acts of the E.A.R.C. (Geneva, 1951)

6 Noting that the plans covering the Route and Off-Route Aeronautical Mobile Services provide for the assignment of channels on a 7 to a 10 kc/s basis, Australia proposes that the Administrative Radio Conference (Geneva, 1959) review the plans with a view to reduction of the channel separation basis and to consolidation of assignments, and that the resulting surplus spectrum space be allocated for use by other services operating in bands adjacent to the aeronautical mobile bands.

7 Australia proposes that because of the difficulty of maintaining operations within the limits of the bands presently allotted for industrial, scientific and medical purposes, the Administrative Radio Conference (Geneva, 1959) review these bands with a view to their extension; it also proposes that the Conference should consider the question of provision of additional I.S.M. bands below that centred on the frequency of 13 560 kc/s.

8 Australia proposes that, in all lists and documents which they publish, the I.T.U. and I.C.A.O. should, as far as practicable, employ standard symbols.
Coordination of functions of Aeronautical and Maritime Mobile Services in Search and Rescue Activities.

Use of Automatic Distress Radio Transmitters

In case of distress, the functions of the radio services are the following:

**Alarming:** The alarming of coast or aeronautical stations or of ships or aircraft in the vicinity of the scene of distress, with indication — if possible — of the position of the ship or aircraft in distress.

**Locating:** The locating of the ship or aircraft in distress, as well as of lifeboats, liferafts, other survival craft, and shipwrecked persons.

**Radio liaison:** The establishing of radio liaison between rescue units and units in distress, and between the rescue units themselves.

Up-to-date high-speed aircraft are not well suited for the use of 500 kc/s, because of difficulties in fitting the antenna, and such aircraft will probably neither be so in the future. For aircraft, the remaining possibility for establishing distress communication with the maritime services is therefore to use the radiotelephony distress frequency 2182 kc/s, which is in fact already used by many ships. Considering the ever-increasing number of ships that are being equipped for radiotelephony in the 2 Mc/s band the establishment of communication on the said frequency will be considerably facilitated in future. The recommended continuous watch on 2182 kc/s by means of loud-speaker in the place on board wherefrom ships are usually navigated, and the proposed introduction of the international telephone alarm signal would further increase the usefulness of 2182 kc/s for alarming. If a sufficient number of Adcock DF stations on 2182 kc/s were established along the appropriate coast-lines, the frequency could also to some extent be utilized for locating purposes.

Since military aircraft are usually utilized for search and rescue operations, and since some important military organizations have already adopted the frequency 243 Mc/s for the function of locating, this frequency should also be used on the civil side for the same purpose in order to ensure the standardization of civil and military radio equipments for search and rescue. For the purpose of speedily locating lifeboats, liferafts and other survival craft, a light, reliable and inexpensive automatic distress radio transmitter for 243 Mc/s should be the international standard equipment on board these boats and rafts. The same transmitter could also be used by any person in distress at sea if it were small enough to be attached to a life jacket, and the provision of such transmitters should therefore be encouraged to the largest possible extent.

It is furthermore important that the present status of the aeronautical emergency frequency 121.5 Mc/s be retained as prescribed in the RR. The frequency 121.5 Mc/s should consequently still be used for communication in case of distress or emergency, whereas the function of location should not be carried out on this frequency but on a separate and undisturbed frequency channel as 243 Mc/s. The automatic distress radio transmitter for homing on 243 Mc/s might however very well be combined with a special equipment for 121.5 Mc/s, although the weight and cost of the radio apparatus to be used by survivors would then be considerably increased. As on the other hand the automatic distress radio transmitter on 243 Mc/s must in any case be considered as a primary requirement for successful search operations, this transmitter should only be supplemented by an equipment for fulfilling the communication function, if feasible from a weight and cost point of view.
Considering the above-mentioned facts, the following proposals are made by Denmark, Finland, Iceland, Norway, and Sweden:

10 With a view to coordinating the functions of the aeronautical and maritime mobile services in case of distress the radiotelephony distress frequency 2182 kc/s should be used internationally for alarming and communication purposes.

11 The frequency 243 Mc/s should be used internationally for the purpose of locating in case of distress.

12 The emergency frequency 121.5 Mc/s should be internationally used in the aeronautical mobile service for radio liaison in case of distress in addition to the radiotelephony distress frequency 2182 kc/s.

13 Editorial Revision of Chapters XIII, XIV and XV of the RR (Atlantic City, 1947)

The rules for the conduct of the mobile radiotelephone service are at present not to be found in one and the same suite of provisions, in the Atlantic City RR, which are chiefly concerned with the radiotelegraph service. It is true that Article 34 contains certain provisions for radiotelephony, but on the other hand it is stated that as far as is reasonable and practicable some of the provisions concerning the radiotelegraph service are applicable also to the maritime mobile radiotelephone service (Art. 34, 811).

It is considered that the technical provisions and the service rules regarding radiotelephony should be separated from those applicable to radiotelegraphy. Moreover it is believed that it would greatly facilitate the application of the regulations for the conduct of different radio services, if these regulations were split up into separate sets of rules regarding the various services.

These views were shared by the Baltic and North Sea Radiotelephone Conference (B.N.R.C.) held in Göteborg, in September, 1955. The Agreement concluded between the 13 Administrations that participated in this Conference contains, in Chapter IV, a set of Supplementary Radio Regulations drawn up by the Conference with a view to facilitating the implementation of its resolutions concerning the maritime mobile radiotelephone service within the area of the Baltic and the North Sea in the frequency bands between 1 605 and 3 800 kc/s allocated for use by the maritime mobile service.

Furthermore, in view of the fact that the existing RR do not contain a complete procedure for the conduct of the maritime mobile radiotelephone service, the Göteborg Conference recommended (Recommendation No. 9) that administrations should consider proposing to the next Administrative Radio Conference that a self-contained comprehensive set of rules for the conduct of the maritime mobile radiotelephone service in the bands between 1 605 and 3 800 kc/s should be included in the RR.

Similarly, the International Maritime VHF Radiotelephone Conference held at the Hague in 1957, (H.M.R.C.), drew up Supplementary Radio Regulations for the Conduct of the International Maritime Mobile Radiotelephone Service in the VHF bands.

Considering the advantages that, it is supposed, would be offered by a reclassification of the provisions of the RR regarding radiotelegraphy and radiotelephony, and in response to Recommendation No. 9 of the Göteborg Conference, it is suggested that an editorial revision of Chapters XIII, XIV and XV of the RR be made, and in the hope of helping the work of the Conference the following draft proposal for a new arrangement of these chapters is submitted.
This arrangement would facilitate the extraction from the Radio Regulations of a self-contained comprehensive set of rules for the conduct of any mobile radiotelegraph or radiotelephone service. An example of such an extracted set of rules is given in Appendix I, which contains the international regulations, now in force, for the conduct of the maritime mobile radiotelephone service in the frequency bands between 1 605 and 3 800 kc/s and which was published in the Telecommunication Journal (December, 1957).

As regards the aeronautical mobile radio service there may be a need for incorporating in the articles indicated below certain provisions for that service as well, unless it is considered better to group together the prescriptions regarding the Aeronautical Mobile Service in a separate chapter. The proposed disposition of the existing Chapters XIII, XIV and XV of the RR includes, besides Articles 27-41 (568–999) of the RR, Articles 1–12 of the RA, and extracts from the Final Acts of the Göteborg Conference (B.N.R.C.) and of the Hague Conference (H.M.R.C.).

With respect to the Final Acts of the Göteborg Conference it should be noted in this connection that a special proposal has been submitted regarding the wording of Nos. 26 and 32 of the B.N.R.C. Supplementary Regulations.

### CHAPTER XIII

**Working conditions in the mobile services: technical provisions**

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*Conditions to Be Observed by Mobile Stations*

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*Emergency Installations. Frequencies to Be Used in Case of Distress. Alarm Signals and Apparatus*

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Working conditions in the mobile services: service procedure

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RR 580; 568-572; 602-608; 711-712

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Article 31

Service Procedure for Radiotelephony

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Appendix 1 to Proposal 13 regarding Editorial Revision of Chapters XIII, XIV and XV of the RR.

International Regulations

for the Conduct of the Maritime Mobile Radiotelephone Service in the Frequency Bands between 1 605 and 3 800 kc/s.

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FOREWORD

The regulations contained herein are those provisions in the Radio Regulations, Atlantic City 1947 (RR Atlantic City) (Articles 28–30 and 34–37) which are applicable to the Maritime Mobile Radiotelephone Service, and also the Supplementary Regulations for that Service, approved by the Baltic and North Sea Radiotelephone Conference (B.N.R.C.), Göteborg 1955, including Resolution No. 7 of that Conference. While in most instances these regulations are direct quotations, the existing text of the Atlantic City Radio Regulations has been modified in a few cases so as to apply only to radiotelephony. In each instance a cross reference to the relevant paragraph of the Atlantic City and B.N.R.C. documents has been made.

I. GENERAL PROVISIONS

1 The provisions of the present article are applicable in all cases to radiotelephone stations of the maritime mobile service.

2 The service of ship radiotelephone stations must be performed by an operator satisfying the conditions fixed by Article 24.

3 Automatic calling devices may be used in this service.

4 Mobile stations equipped solely for radiotelephony may transmit and receive radiotelegrams by means of telephony. The procedure indicated in 63 to 65 may be applied for this purpose.

5 Mobile stations must be provided with the service documents enumerated in Appendix 8 to the Radio Regulations.

Note. — Pending consideration at the next Administrative Radio Conference, compulsorily equipped ships between 500 and 1,600 tons gross tonnage, engaged on international voyages and fitted only with radiotelephony, must carry the following documents:

a) licence provided for by Article 22 of the Radio Regulations;

b) certificates of the operator or operators;

c) the log (diary of the radio service) in which the following are recorded as they occur, together with the time of their occurrence:

1) a summary of all communications relating to distress, urgency and safety traffic;

2) a summary of communications exchanged between the ship station and land or mobile stations;

3) a reference to important service incidents;

4) if the ship’s rules permit, the position of the ship at least once a day;

d) a list of coast stations with which communications are likely to be conducted, showing watchkeeping hours, frequencies and charges;

e) Radio Regulations and Additional Radio Regulations in so far as they are applicable to the radiotelephone service.

6 When the name and address of the administration or private operating agency controlling a mobile station are not given in the 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.

7 Broadcasting by mobile stations at sea and over the sea is prohibited.
Aircraft stations may enter into telephone communication with stations of the maritime mobile service on frequencies allocated to that service for radiotelephony. They must then comply with the provisions applicable to the maritime mobile radiotelephone service.

II. FREQUENCIES

The frequency 2,182 kc/s is both a calling and the distress frequency for the maritime mobile service of radiotelephony in the portions of the band 1,605 to 2,850 kc/s in which radiotelephony is authorized.

The frequency 2,182 kc/s may be used for calls and replies, and it is the frequency to be used for the distress call and traffic, as well as for urgency and safety signals and messages.

Its use for call and reply purposes between ship and coast stations is permitted only within the service areas of coast stations duly authorized by their administrations to this effect after a special arrangement if necessary. This information shall be indicated in the List of Coast and Ship Stations.

Coast stations which use the frequency 2,182 kc/s for calling must be able to use at least one other frequency in the portions of the band 1,605–2,850 kc/s in which the maritime mobile radiotelephone service is admitted.

One of these frequencies is printed in heavy type in the List of Coast and Ship Stations to indicate that it is the normal working frequency of the station. Supplementary frequencies, if assigned, are shown in ordinary type.

All radiotelephone ship stations working in the authorized bands between 1,605 and 3,800 kc/s must be able to use the frequency 2,182 kc/s.

Any radiotelephone station installed on board a ship which uses the frequency 2,182 kc/s for call and reply must be provided with at least one other frequency in the bands between 1,605 and 2,850 kc/s in which radiotelephone services are admitted.

Stations in ships equipped with radiotelephone apparatus must be able to receive, in addition to 2,182 kc/s, all the frequencies necessary for their service.

However, an administration may assign to a station other frequencies for call and reply.

The distress signal in radiotelephony is defined in 69.

III. HOURS OF SERVICE AND WATCHKEEPING

In order to permit the application of the following rules on the subject of hours of watch, every station of the maritime and aeronautical mobile services must have an accurate clock and the necessary steps must be taken to keep it correctly regulated to Greenwich mean time (G.M.T.).
20 Greenwich mean time (G.M.T.) (reckoned from 0000 to 2400 hours beginning at midnight) must be used for all entries in the radiocommunication service log and in all similar documents of ships compulsorily equipped with radiocommunication apparatus in compliance with an international agreement; the same will apply, as far as possible, to other ships.

21 Coast Stations

21.1 The service of coast stations is, as far as possible, continuous (day and night). Certain coast stations, however, may have a service of limited duration. Each administration or recognized private operating agency duly authorized to that effect, fixes the hours of service for coast stations under its jurisdiction.

21.2 Coast Stations whose service is not continuous may not cease before: (838-840)

a) finishing all operations resulting from a distress call, urgency or safety signal;

b) exchanging all traffic originating in or destined for mobile stations which are situated within their range and have indicated their presence before the actual cessation of work.

21.3 All coast radiotelephone stations which are open to public correspondence in the bands 1 605–2 850 kc/s and which form an essential part of the coverage of the area for distress purposes, shall, during their hours of service, remain on watch on the frequency 2 182 kc/s.

21.4 Coast radiotelephone stations may maintain this watch on the frequency 2 182 kc/s either by means of an operator, or by a loud-speaker, and this watch shall be in addition to any watch which may be kept on an auto-alarm receiver.

22 Ship Stations

22.1 For the international service of public correspondence, ship stations equipped exclusively for the use of radiotelephony constitute a single category. These stations carry on a service the duration of which is not determined by these Regulations.

22.2 Ship stations whose service is not continuous may not close before: (852-854)

a) finishing all operations resulting from a distress call, urgency or safety signal;

b) exchanging so far as practicable all traffic originating in or destined for coast stations situated within their range and mobile stations which, being within their range, have indicated their presence before the actual cessation of work.

22.3 Any ship station not having fixed working hours must inform the coast stations, with which it is in communication, of the time of closing and the time of reopening its service.

a) Any mobile station arriving in port, and whose service is therefore about to close, must so notify the nearest coast station and, if necessary, the other coast stations with which it generally communicates.
b) It must not close until after the disposal of traffic on hand, unless the regulations in force in the country where it is calling do not permit this.

22.4 Upon departure from port the mobile station must notify the coast station or stations concerned that its service is reopening from the moment when such reopening is permitted by the regulations in force in the country where the port of departure is situated.

23 With a view to greater safety of life at sea all radiotelephone stations of the maritime mobile service which normally keep watch on frequencies in the band 1605 to 2850 kc/s take steps, as far as possible, to keep watch on the distress frequency 2182 kc/s twice each hour for three minutes commencing at x h 00 and x h 30, Greenwich mean time (G.M.T.).

24 During the above-mentioned intervals, all transmissions in the bands between 2167 and 2197 kc/s, except distress, urgency and safety transmissions, must cease.

IV. TRAFFIC

Preliminary Operations

25 Before emitting, every station must listen for a period long enough to satisfy itself that it will not cause harmful interference to transmissions in progress within its range; if such interference is likely, the station awaits the first break in the transmission with which it might interfere.

26 If, these precautions having been taken, the emissions of the station happen to interfere with a radio transmission already in progress the following rules are to be applied:
   a) Within the zone of communication of a coast station open to public correspondence, the station whose emission causes the interference must cease sending at the first request of the said coast station.
   b) In the case where radiocommunication already in progress between mobile stations is interfered with by the emissions of another mobile station, this station must cease sending at the first request of one of the other stations.
   c) The station which requests this cessation must indicate the approximate waiting time imposed on the station whose emission it suspends.

Calls

27 Method of Calling

The call is made as follows:

   call sign of the station called, not more than three times;
   the words THIS IS;
   call sign of the calling station, not more than three times.

When contact is established the call signs may be transmitted once only.

28 As a general rule, it rests with the mobile station to establish communication with the land station. The mobile station may call the land station, for this purpose, only after coming within the range of action of the land station.
29 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 within range and is keeping watch.

30 In addition, every coast station must, so far as practicable, transmit its calls in the form of "traffic lists" consisting of the call signs in alphabetical order of all mobile stations for which they have 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.

31 Coast stations transmit their traffic lists on their normal working frequency. They may, however, announce this transmission by the following brief preamble sent on the frequency 2,182 kc/s:

```
"Hullo all stations", not more than three times;
the words THIS IS;
"............. Radio", not more than three times;
"Listen for my traffic list on ........ kc/s".
```

In no case may this preamble be repeated.

32 The hours at which coast stations transmit their traffic lists and the frequencies and classes of emission which they use for this purpose must be stated in the List of Coast and Ship Stations.

33 Mobile stations which hear their call sign during this transmission must reply as soon as they can do so, following as far as possible the order in which they are called.

34 When the traffic cannot be sent immediately, the coast station informs each mobile station concerned of the probable time at which working can begin, and also, if necessary, of the frequency which will be used for working with it.

35 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. This decision is based solely on the necessity for allowing each of the calling stations to clear the greatest number of radiotelephone calls or radiotelegrams.

36 When a radiotelephone station called does not reply to a call sent three times at intervals of two minutes, the calling must cease and must not be renewed until after an interval of fifteen minutes. Ship stations shall not radiate their carrier wave in the interval between calls.

37 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.

38 Before renewing the call, the calling station must ascertain that the station called is not in communication with another station.

39 The call may be repeated at shorter intervals if there is no reason to believe that it will interfere with communication in progress.
Frequency to be used for Calling and for Preparatory Signals

41 For making the call and for transmitting preparatory signals, the calling station uses the frequency on which the station called keeps watch.

42 A radiotelephone ship station calling a coast station of its own nationality should use a working frequency for the call, but whenever and wherever traffic density is low it may use the frequency 2 182 kc/s.

43 A radiotelephone ship station calling a coast station of another country should, as a general rule, use the frequency 2 182 kc/s. However, where mutually agreed by individual administrations, the ship may use a working frequency on which watch is kept by that coast station.

44 A radiotelephone ship station calling another ship station should, as a general rule, use an intership working frequency for the call, but whenever and wherever traffic density is low it may use the frequency 2 182 kc/s.

45 Coast stations should call radiotelephone ship stations of their own nationality either on a working frequency, or individual ships on the frequency 2 182 kc/s, according to the requirements of the country concerned.

46 As a general rule, coast stations should call radiotelephone ship stations of another country on the frequency 2 182 kc/s.

Reply to Calls

47 Form of Reply to Calls
The reply to calls is made as follows: call sign of the calling station, not more than three times; the words THIS IS; call sign of the station called, not more than three times.

Frequency for Reply to Calls and Preparatory Signals

48 For transmitting the reply to calls and to preparatory signals, the station called uses the frequency on which the calling station must keep watch, unless the calling station has specified a frequency for the reply.

49 When a radiotelephone ship station is called on 2 182 kc/s it should reply on the same frequency unless another frequency is indicated by the calling station.

50 When a radiotelephone ship station is called on a working frequency by a coast station of the same nationality, it should reply on the ship-to-shore working frequency normally associated with the frequency used by the coast station for the call.

51 Radiotelephone ships which frequently exchange traffic with a coast station of another country may use the same procedure for reply as ships of the nationality of the coast station, where this has been mutually agreed by individual administrations.
Coast stations should reply to calls made by radiotelephone ships of their own nationality either on a working frequency or on 2 182 kc/s according to the requirements of the country concerned.

**Indication of the Frequency to be used for Traffic**

If contact is established on the frequency 2 182 kc/s, coast and ship stations (622-626) should transfer to one of their normal working frequencies for the exchange of traffic.

Radiotelephone ship stations should, after calling a coast station or another ship station, 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.

**Indication of Traffic to be Transmitted**

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

**Difficulties in Reception**

If the radiotelephone station called is prevented from receiving traffic it replies to the call as outlined in 47, followed by "wait . . . . . . . minutes" (indicate probable duration of waiting time in minutes). If the probable duration exceeds 10 minutes (5 minutes in the case of aircraft stations communicating with stations of the maritime mobile service), the reason for the delay must be given. Alternatively, the station called may indicate by any appropriate means that it is not ready to receive traffic immediately.

When a radiotelephone station receives a call without being certain that such a call is intended for it, it must 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 must reply immediately asking for repetition of the call sign of the calling station.

**Duration and Control of Work**

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 to the duration and suspension of work. This provision does not apply to cases of distress.

In communication between mobile stations, except in cases of distress, the station called controls the working in the manner indicated in 58 above.

**Tests**

Where it is necessary for a mobile station to send signals for testing or adjustment which are liable to interfere with the working of a neighbouring coast station, the consent of the station must be obtained before such signals are sent.
61 When it is necessary for a radiotelephone 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, these signals must not continue for more than 10 seconds and must contain the indication "... (call sign of station) testing" spoken slowly and distinctly.

62 Any signals sent for testing on the frequency 2182 kc/s should be kept to a minimum.

**Procedure for Transmitting and Receiving Radiotelegrams by Radiotelephone**

63 The following procedure is given as an example for the transmission of a radiotelegram:

A calls:

Hullo B, hullo B, this is A, this is A, radiotelegram for you, radiotelegram for you, over.

B replies:

Hullo A, hullo A, this is B, this is B, send your radiotelegram, send your radiotelegram, over.

A replies:

Hullo B, this is A, radiotelegram begins: from ...... number ...... number of words ...... date ...... time ...... address ...... text ...... signature ...... transmission of radiotelegram ends. I repeat, radiotelegram begins: from ...... number ...... number of words ...... date ...... time ...... address ...... text ...... signature ...... radiotelegram ends, over.

B replies:

Hullo A, this is B, your radiotelegram begins: from ...... number ...... number of words ...... date ...... time ...... address ...... text ...... signature ......, your radiotelegram ends, over.

A replies:

Hullo B, this is A, correct, correct, switching off.

A then breaks the communication and both stations resume their normal watch.

64 When the station receiving is certain that it has correctly received the radiotelegram, the entire repetition of the telegram is unnecessary, except for a collated radiotelegram. If repetition is dispensed with, station B acknowledges the receipt of the radiotelegram in the following manner:

Hullo A, this is B, your radiotelegram correctly received, over.
When it is necessary to spell out call signs, service abbreviations and words, the following table is used:

<table>
<thead>
<tr>
<th>Figure to be transmitted</th>
<th>Letter to be transmitted</th>
<th>Word to be used</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>Amsterdam</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>Baltimore</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>Casablanca</td>
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<td>4</td>
<td>D</td>
<td>Danemark</td>
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<td>5</td>
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<td>F</td>
<td>Florida</td>
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<td>Jerusalem</td>
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<tr>
<td>Comma</td>
<td>K</td>
<td>Kilogramme</td>
</tr>
<tr>
<td>Fraction bar</td>
<td>L</td>
<td>Liverpool</td>
</tr>
<tr>
<td>Break signal</td>
<td>M</td>
<td>Madagascar</td>
</tr>
<tr>
<td>Full stop (period)</td>
<td>N</td>
<td>New York</td>
</tr>
<tr>
<td></td>
<td>O</td>
<td>Oslo</td>
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<td>Yokohama</td>
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<tr>
<td></td>
<td>Z</td>
<td>Zurich</td>
</tr>
</tbody>
</table>

However, stations of the same country may use, when communicating between themselves, any other table recognized by their administration.

V. DISTRESS SIGNAL AND DISTRESS TRAFFIC

Emergency (Reserve) Installations

The Convention for the Safety of Life at Sea prescribes which ships must be fitted with an emergency (reserve) installation and which lifeboats, liferafts and other survival craft on ships must be fitted with radio equipment. It prescribes also the requirements which must be complied with by such installations.

Distress Signal, Distress Call and Distress Message

General

In the maritime mobile service, the following procedure is obligatory.

1) Each transmission of figures is preceded and followed by the words "as a number" spoken twice.
67.2 No provision of these Regulations shall prevent the use by a mobile station in distress of any means at its disposal to attract attention, make known its position, and obtain help.

68 Frequencies to be used in Case of Distress

68.1 In case of distress for radiotelephone stations working in the authorized bands between 1 605 and 2 850 kc/s, the frequency to be used is the distress frequency 2 182 kc/s.

68.2 Ship stations which cannot transmit on the above distress frequency shall use their normal calling frequency.

68.3 Any aircraft in distress must transmit the distress call on the frequency on which the land or mobile stations capable of helping it keep watch. When the call is addressed to stations of the maritime mobile service, the frequencies to be used shall be the international distress frequency 2 182 kc/s or other watch-keeping frequencies of these stations.

69 Distress Signal

69.1 In radiotelephony, the distress signal consists of the word MAYDAY pronounced as the French expression "m’aider".

69.2 The distress signal indicates that the ship, aircraft, or other vehicle sending the distress signal is threatened by grave and imminent danger and requests immediate assistance.

70 Distress Call

70.1 The distress call and message are sent only on the authority of the master or person responsible for the ship, aircraft or other vehicle carrying the mobile station.

70.2 The distress call, when sent by radiotelephony, is generally preceded by the signal _ _ _ _ _ _ produced by a whistle or any other suitable means.*

70.3 The distress call when sent by radiotelephony on 2 182 kc/s is, as a general rule, preceded by the alarm signal as described in 71.*

70.4 The distress call sent by radiotelephony comprises:
- the distress signal MAYDAY spoken three times;
- the words THIS IS, followed by the identification of the mobile station in distress, the whole repeated three times.

70.5 The distress call has absolute priority over other transmissions. All stations which hear it must immediately cease any transmission capable of interfering with the distress traffic and must listen on the frequency used for the emission of the distress call. This call must not be addressed to a particular station and acknowledgement of receipt is not to be given before the distress message is sent.

* Instead of sub-paragraph 70.2, sub-paragraph 70.3 is to be applied for ships equipped for transmitting the alarm signal.
71 Alarm Signal

71.1 The radiotelephone alarm signal as specified in Recommendation No. 125 of the C.C.I.R. shall consist of two substantially sinusoidal audio frequency tones transmitted alternately. One tone has a frequency of 2,200 cycles per second and the other a frequency of 1,300 cycles per second, the duration of each tone being 250 milliseconds.

71.2 The radiotelephone alarm signal, when generated by automatic means, shall be sent continuously for a period of at least thirty seconds but not exceeding one minute; when generated by other means, the signal shall be sent as continuously as practicable over a period of approximately one minute.

71.3 The radiotelephone alarm signal should be used by coast stations to announce that a distress call or message is about to follow or to announce the transmission of an urgent cyclone warning; in the latter case it may be used only by the coast stations duly authorized by their administration.

71.4 The automatic devices intended for the reception of the radiotelephone alarm signal shall fulfill the following conditions:

a) The automatic receiving equipment shall respond to the alarm signal through intermittent interference caused by atmospherics and powerful signals other than the alarm signal, preferably without any manual adjustment being required during any period of watch maintained by the equipment.

b) The equipment shall not be actuated by atmospherics or by strong signals other than the alarm signal.

71.5 The automatic alarm equipments, for both transmission and reception on the frequency 2,182 kc/s, shall fulfill the following conditions:

a) The equipment shall be effective beyond the range at which speech transmission is satisfactory.

b) The equipment should, as far as practicable, give warning of faults that would prevent the apparatus from performing its normal functions during watch hours.

72 Distress Message

72.1 The distress call must be followed as soon as possible by the distress message. This message comprises:

- the distress call;
- the name of the ship, aircraft, or vehicle in distress;
- particulars of its position, the nature of the distress and the kind of assistance desired;
- any other information which might facilitate the rescue.

72.2 As a general rule, a ship signals its position in latitude and longitude (Greenwich), using figures for the degrees and minutes, together with one of the words NORTH or SOUTH and one of the words EAST or WEST. When practicable, the true bearing and distance in nautical miles from a known geographical point may be given.
72.3 As a general rule, and if time permits, an aircraft transmits in its distress message the following information:

- estimated position and time of the estimate;
- true heading and indicated air speed;
- altitude;
- type of aircraft;
- nature of distress;
- intention of person in command (such as forced alighting on the sea or crash landing).

72.4 As a general rule, an aircraft in flight signals its position:

- if possible by latitude and longitude (Greenwich), using figures for the degrees and minutes, together with one of the words NORTH or SOUTH and one of the words EAST or WEST; or
- by the name of the nearest place, and its approximate distance in relation thereto, together with one of the words NORTH, SOUTH, EAST or WEST, as the case may be, or, when practicable, by words indicating intermediate directions.

72.5 After the transmission by radiotelephony of its distress message the mobile station may be requested to transmit suitable signals followed by its callsign, to permit direction-finding stations to determine its position. This request may be repeated at frequent intervals in case of necessity.

72.6 The distress message must be repeated at intervals, especially during the periods of silence prescribed in 23, until an answer is received.

72.7 The alarm signal may also be repeated, if necessary.

72.8 The intervals must, however, be sufficiently long to allow time for stations preparing to reply to start their sending apparatus.

72.9 When the mobile station in distress receives no answer to a distress message sent on the distress frequency, the message may be repeated on any other available frequency on which attention might be attracted.

72.10 Immediately before a crash landing, a forced landing (on land or sea) of an aircraft, as well as before total abandonment of a ship or an aircraft, the radio apparatus must, if circumstances permit, be set for continuous emission.

72.11 A mobile station which learns that another mobile station is in distress may transmit the distress message in either of the following cases:

a) the station in distress is not itself in a position to transmit it;

b) the master or person responsible for the ship, aircraft or other vehicle carrying the station which intervenes, believes that further help is necessary.

72.12 Stations of the mobile service which receive a distress message from a mobile station which is, beyond any possible doubt, in their vicinity, must immediately acknowledge receipt. If the distress call has not been preceded by the alarm signal, these stations may transmit this alarm signal with the permission of the authority responsible for the station, taking care not to interfere with the transmission of acknowledgments of receipt sent by other stations.
72.13 Stations of the mobile service which receive a distress message from a mobile station which, beyond any possible doubt, is not in their vicinity, must allow a short interval of time before acknowledging receipt of the message, in order to permit stations nearer to the mobile station in distress to answer and acknowledge receipt without interference.

Distress Traffic

73 Distress traffic comprises all messages relative to the immediate assistance required by the mobile station in distress.

74 In distress traffic the distress signal must be sent before the call and at the beginning of any message.

75 The control of distress traffic is the responsibility of the mobile station in distress or of the mobile station which, by the application of the provisions of subparagraph 72.11, has sent the distress call. These stations may, however, delegate the control of the distress traffic to another station.

76 The station in distress may impose silence either on all stations of the mobile service in the area or on any station which interferes with the distress traffic. It addresses these instructions “to all stations” or to one station only, according to circumstances. In either case, it uses the words “stop transmitting” followed by the distress signal MAYDAY.

77 If it believes it to be essential, any station of the mobile service near the ship, aircraft or other vehicle in distress, may also impose silence. It employs for this purpose the procedure prescribed in 76 above, substituting for the distress signal the word DISTRESS followed by its own call sign.

78 The imposing of silence must be reserved, as far as possible, for the mobile station in distress and for the station controlling distress traffic.

79 Any station which hears a distress call must comply with the provisions of subparagraph 70.5.

80 Any station of the mobile service which has knowledge of distress traffic must follow such traffic, even if it does not take part in it.

81 For the entire duration of distress traffic, it is forbidden for all stations which are aware of this traffic and which are not taking part in it, to transmit on the frequencies on which the distress traffic is taking place.

82 A station of the mobile service which, while following distress traffic, is able to continue its normal service, may do so when the distress traffic is well established and on condition that it observes the provisions of 81 above and does not interfere with the distress traffic.

83 A land station receiving a distress message must without delay take the necessary action to advise the authorities participating in the operation of rescue facilities.

84 When distress traffic has ceased or when silence is no longer necessary, a station which has controlled such traffic transmits on the distress frequency and if necessary on the frequency used for distress traffic, a message addressed “to all stations” indicating that the distress traffic has ceased.
85 The message indicating that the distress traffic has ceased takes the following form when sent by radiotelephony:

- distress signal, MAYDAY;
- call "to all stations" (three times);
- the words THIS IS;
- call sign of the station sending the message (once);
- time of handing in of the message;
- call sign of the mobile station which was in distress;
- the words "the distress traffic is ended".

Acknowledgement of Receipt of a Distress Message

86 The acknowledgement of receipt of a distress message sent by radiotelephony is given in the following form:

- call sign of the mobile station in distress (three times);
- the words THIS IS;
- call sign of the station acknowledging receipt (three times);
- the word "received";
- distress signal.

87 Every mobile station which acknowledges receipt of a distress message must, on the order of the master or person responsible for the ship, aircraft or other vehicle, transmit, as soon as possible, the following information in the order shown:

- its name;
- its position in the form prescribed in sub-paragraphs 72.2 and 72.4;
- the speed at which it is proceeding towards the ship, aircraft or other vehicle in distress.

88. Before sending this message, the station must ensure that it will not interfere with the emissions of other stations better situated to render immediate assistance to the station in distress.

Repetition of a Distress Call or a Distress Message

89 Any station of the mobile service which is not in a position to render assistance and which has heard a distress message that has not been immediately acknowledged, must take all possible steps to attract the attention of stations of the mobile service which are in a position to render assistance.

90 For this purpose, with the approval of the authority responsible for the station, the distress call or the distress message may be repeated. This repetition is made on full power either on the distress frequency or on one of the frequencies which may be used in case of distress. At the same time all necessary steps are taken to notify the authorities who may be able to intervene usefully.

91 In radiotelephony, the repetition of the distress call or distress message is generally preceded by the transmission of the alarm signal as described in 71.

92 A station which repeats a distress call or distress message by radiotelephony, follows it by the words THIS IS and its call sign transmitted three times.
VI. URGENCY SIGNAL

93 The urgency signal may be transmitted only on the authority of the master or the person responsible for the ship, aircraft or other vehicle carrying the mobile station.

94 The urgency signal may be transmitted by a land station only with the approval of the responsible authority.

95 In radiotelephony, the urgency signal consists of three repetitions of the word PAN pronounced as the French word “panne”. It is sent before the call.

96 The urgency signal indicates that the calling station has a very urgent message to transmit concerning the safety of a ship, aircraft or other vehicle or of some person on board or within sight.

97 The urgency signal has priority over all other communications, except distress. All mobile and land stations which hear it must take care not to interfere with the transmission of the message which follows the urgency signal.

98 Where the urgency signal is used by a mobile station, it must, as a general rule, be addressed to a specific station.

99 Messages preceded by the urgency signal must, as a general rule, be drawn up in plain language, except in the case of medical messages.

100 Mobile stations which hear the urgency signal must continue to listen for at least three minutes. At the end of this period, if no urgency message has been heard, they may resume their normal service.

101 However, land and mobile stations which are in communication on frequencies other than those used for the transmission of the urgency signal and of the call which follows it may continue their normal work without interruption provided the urgency message is not addressed “to all stations”.

102 When the urgency signal has been sent before transmitting a message which is intended for all stations and which calls for action by the stations receiving the message, the station responsible for its transmission must cancel it as soon as it knows that action is no longer necessary. This message of cancellation must likewise be addressed “to all stations”.

VII. SAFETY SIGNAL

103 In radiotelephony, the word SÉCURITÉ pronounced as the French word “sécurité”, repeated three times, is used for the safety signal.

104 The safety signal indicates that the station is about to transmit a message concerning the safety of navigation or giving important meteorological warnings.

105 The safety signal and the message which follows it are sent on the distress frequency or on one of the frequencies which may be used in case of distress.

106 With the exception of messages transmitted at fixed times, the safety signal SÉCURITÉ, when it is used in the maritime mobile radiotelephone service, must be transmitted towards the end of the first available period of silence (see 23); the message is transmitted immediately after the period of silence.

107 All stations hearing the safety signal must continue to listen on the frequency on which the safety signal has been transmitted until they are satisfied that the message is of no interest to them. They must, moreover, not make any transmissions likely to interfere with the message.
In what follows, we are submitting our proposals for amendment of the RR for consideration by other Administrations. The amendments are more or less self-explanatory, but it might be useful, we think, to clarify one or two points first.

1. **Table of Frequency Allocations**

   For the bands below 27 500 kc/s, the changes we propose are of but little importance. It would be well, we feel, to make allowance for the efforts made these last few years, by all administrations, to operate their radio services in the appropriate bands.

   In the bands between 27-5 and 10 000 Mc/s, certain changes are proposed to allow for the rapid development that has taken place in radio equipment and operating methods.

   As regards the bands above 10 000 Mc/s, it is our view (although we make no definite proposals) that the Table should be extended to about 40 000 Mc/s, and that provision should be made for allocations in this part of the spectrum, so that manufacturers may push on with their research into more advanced radio equipment.

2. **Articles 10 and 11**

   2.1 **Article 10.** Everything connected with the membership of the International Frequency Registration Board, the qualifications demanded of its members, and the procedures for their election are, we consider, matters which can be dealt with only by the Plenipotentiary Conference. They should find no place in the RR.

   2.2 **Article 11.** We are suggesting a new version of Article 11, to be considered as a whole. Our wording is designed to make allowance for what has been achieved in bringing about a better use of the frequency spectrum, thanks to cooperation between Administrations and the I.F.R.B.

3. **Chapter XIII. Conditions Governing Operation of the Mobile Services**

   Because of the advances made in the equipment used by mobile stations, certain articles in this Chapter call for a complete overhaul. In particular, we are proposing a new wording for Articles:

   28. Conditions To Be Observed by Mobile Stations

   34. General Radiotelephone Procedure in Maritime Mobile Radiotelephony

   34bis. The Use of Frequencies for Maritime Mobile Radiotelephony.

   Each of these three articles must be considered as a whole.

4. **Chapter XIV. Distress, Alarm, Urgency and Safety**

   In our proposals, we have made allowance for what was achieved by the Baltic and North Sea Radiotelephone Conference (Göteborg, 1955) in introducing the radiotelephone alarm signal recommended by the C.C.I.R.

5. **Appendix 9bis. International Code for Maritime Mobile Radiotelephony**

   Further to Göteborg Recommendation No. 5, we are proposing a short form of code, extracted from the International Code of Signals. This should enable any ship-borne radio operator to make himself clearly understood by other operators when language difficulties might arise.
6. Appendix 11

We offer a particular example of a call set up between a French ship and a French coast station. This, we felt, was better than to outline the procedure to be followed, as in the old wording. In editions of the Regulations in languages other than French, it would be well to transpose this example rather than to translate it. Thus the English edition could describe a call between an English ship and an English coast station.

7. Miscellaneous Comments:

7.1 Except in the case of new articles submitted as a whole and not split up, only the provisions of the present Regulations which it is proposed to modify or delete have been mentioned.

"Unchanged" in the "Observations" column of the Table of Frequency Allocations merely signifies that no change in existing allocations is proposed. If changes are proposed in the footnotes, they are indicated in the appropriate place.

7.2 We suggest that the expression "Greenwich mean time (G.M.T.)" be replaced by "Universal Time (U.T.)", further to the remark (**) appended to Recommendation No. 179 of the C.C.I.R. (Warsaw, 1956).
Japan

General Observations

I

Proposal to Transfer certain Provisions of the RR, and the Provisions of the RA to the RTg

The Administration of Japan considers it appropriate that certain provisions of the RR, e.g. Article 39 (Indication of the Station of Origin of Radio Telegrams) and Article 41 (Accounting for Radiotelegrams) and provisions of the RA (excepting some provisions of Article 8, e.g. 2114, etc. which should be included in the RR) be entrusted hereafter to the review by the International Telegraph and Telephone Administrative Conference, and be transferred to the RTg.

Therefore we suggest that the Administrative Radio Conference should adopt a resolution to this effect.

The above mentioned provisions concern exclusively the operation and tariffing of radiotelegram service and are of the same nature as the RTg, being service regulations.

If the revision of the provisions concerning the handling of radiotelegrams is entrusted to the Administrative Telegraph and Telephone Conference, the burden of the Administrative Radio Conference will be lightened. Moreover, there will be the advantage of discussing such provisions together with those concerning general telegrams and on the same lines.

II

Alignment of certain Provisions Concerning the Handling of Radiotelegrams with the Provisions of the RTg*)

From the viewpoint of the simplification of service, it is desirable that the public radiotelegram service be fitted, as far as possible, into the same system as that of general telegrams, taking account of the particular nature of radiotelegrams.

The Administration of Japan, therefore, considers it appropriate that certain provisions of the present RR, such as those concerning payment of balances in international accounts of telegram charges, and of the RA, such as provisions concerning the minimum charges for each category of radiotelegrams, the coefficient of reduction applicable to reduced-rate telegrams and the interval before application of new rates be aligned with the provisions of the RTg (Geneva Revision, 1958).

(See our proposals concerning revision of the provisions of the RA.)

*) Note by the S. G.; See also proposal 1, page 2.
### 16 bis Netherlands

Proposal for re-classification of the Radio Regulations concerning the Mobile Services

1. Practice has shown that consulting the regulations concerning a definite subject of the Mobile Services is not an easy matter. The question arises if it would be more efficient to make a better division into:

   - "General" part,
   - "Radiotelegraphy" part,
   - "Radiotelephony" part,
   - "Distress" part, and
   - "Radiotelegrams" part.

2. Moreover, it is believed, that the understanding of Radio Regulations concerning the Mobile Services would be increased by insertion of a Scope of Services, Frequencies and Classes of Emission. (See Annex 1 and 2 of this proposal.)

3. Hence, the following re-classification of the Articles 23 to 41 is proposed.

#### MOBILE SERVICES

**PART I**

**General**

*Chapter XI*

Inspection of Mobile Stations. Operators' Certificates for Ship and Aircraft Stations.

Article 23. Inspection of Mobile Stations.

Article 24. Operators' Certificates for Ship and Aircraft Stations.

*Chapter XII*

Personnel of Mobile Stations.

Article 25. Class and Minimum Number of Operators for Ship and Aircraft Stations.

Article 26. Authority of the Master.

*Chapter XII A*

*(New.) Scope of the Maritime Mobile Services, Frequencies, Classes of Emission.*

Article 26 A *(New).*

*Chapter XII B*

*(New.) Scope of the Air Mobile Services, Frequencies, Classes of Emission.*

Article 26 B *(New).*
Chapter XIII

General Working Conditions in the Mobile Services.
Article 27. Aircraft and Aeronautical Stations.
Article 27 A (New) Working Hours of Stations in the Mobile Services.
(Taken from Art. 35)
Article 28. Conditions to be Observed by Mobile Stations.

PART II

Mobile Radiotelegraphy

Chapter XIII A

(New) Special Working Conditions in the Mobile Radiotelegraphy.
Article 28 A (New).
Article 30. Radio Telegraphic Calls.
Article 31. General Radiotelegraphic Call “To All Stations”.
Article 32. Radiotelegraphic Call to Several Stations Without Request for Reply.
Article 33. Use of Frequencies for Radiotelegraphy in the Mobile Services.

PART III

Mobile Radiotelephony

Chapter XIII B

(New) Special Working Conditions in the Mobile Radiotelephony.
Article 34.

PART IV

Distress, Alarm, Urgency and Safety Signals

Chapter XIV

Article 36. Emergency (Reserve), Lifeboat, Liferaft and Survival Craft Installations.

PART V

Radiotelegrams

Chapter XV

Article 38. Order of Priority of Communication in the Mobile Service.
Article 39. Indication of the Station of Origin of Radiotelegrams.
Article 40. Routing of Radiotelegrams.
Article 41. Accounting for Radiotelegrams.
ANNEX 1


I. Band between 110 and 160 kc/s.
   *Radiotelegraphy for medium distances, public correspondence.*
   Calling Frequency 143 kc/s. Class of emission: A1 or F1. Between 110 and 125 kc/s A2 may be used exclusively for the transmission of time signals.

II. Band between 285 and 315 kc/s.
   *Maritime radio navigation (radio beacons).*

III. Band between 405 and 535 kc/s.
   *Radiotelegraphy for short distances.*
   1. Distress. 500 kc/s is the international distress frequency and is used for distress calling, distress traffic, urgency and safety signals and messages. Class of emission: preferably A2. It is permitted to use class B emissions for signals of distress urgency and safety, for messages relating thereto, for messages relating directly to the safety of life and urgent messages relating to the movement of the ship.
   2. Public correspondence.
      500 kc/s is the calling frequency. Class of emission for calling and traffic: A1 or A2. Ship/shore and intership frequencies on an international basis.
   3. Transmissions from a life-boat, a life-raft or a survival craft.
      Frequency 500 kc/s; Class of emission: preferably A2.

IV. Band between 1605 and 2850 kc/s.
   *Radiotelephony for short and medium distances.*
   1. Distress. The frequency of 2182 kc/s is the international frequency for distress calls and distress traffic as well as for urgency and safety signals and messages. Class of emission: A3.
   2. Public correspondence.
      2182 kc/s is in use for call and reply; Administrations may assign other frequencies for this purpose. Class of emission: A3. Ship/shore and intership frequencies on a national basis. No frequencies available for international ship/shore traffic. No frequencies available for international intership traffic.

V. Band between 4000 and 23 000 kc/s.
   *Long distance radiotelegraphy and radiotelephony transmissions.*
   1. Radiotelegraphy.
      1.1 Public correspondence. Calling frequencies in international calling bands.
      No frequencies available for international intership traffic.
      1.2. The frequency 8364 kc/s is assigned for the use of survival craft in this frequency band. Class of emission: by preference A2.
   2. Radiotelephony.
      Public correspondence. Two frequency communications on a national basis. Calling on ship/shore working frequencies. No frequencies available for international ship/shore traffic. No frequencies available for national intership traffic. No frequencies available for international intership traffic. Class of emission: A3.

VI. Frequencies in the VHF-bands: 156.025–157.425 Mc/s 160.625–160.975 Mc/s 161.475–162.025 Mc/s are in use for the international maritime radio-telephone service on very short distances for the following functions. The class of emission for all purposes mentioned below is F3.
1. **Calling and Safety.**

The frequency 156.80 Mc/s is the frequency designated for world-wide use on a simplex basis in the maritime mobile service for calling and safety. It may also be used for messages preceded by the urgency signal and, if necessary, for distress messages.

2. **Intership frequencies.**

The assignment of the frequencies is given in the Frequency Allocation Table for the international maritime VHF radiotelephone service. Ship stations must be able to receive and to transmit on the first choice intership frequency (156.3 Mc/s). Class of emission: F3. Method of operation is with one frequency.

3. **Port operations.**

Here again the assignment of frequencies is given in the allocation table. For single frequency port operations the first choice frequency is 156.6 Mc/s; for two-frequency port operations the first choice frequencies are 157/161.6 Mc/s.

VII. In the bands 2 900–3 300 Mc/s and 8 500–9 800 Mc/s shipborne radar in merchant ships is confined within the bands 3 000–3 246 Mc/s and 9 320–9 500 Mc/s.

**ANNEX 2**

Article 26 B *(New).* Scope of the Services, Frequencies, Classes of Emission in the Aeromobile Radio Service.

*(Under study.)*
17 Sweden

Extension for Application on a universal Scale of the Safety System for Radiotelephony on 2 182 kc/s, Agreed upon at the Baltic and North Sea Radiotelephone Conference (B.N.R.C.), held at Göteborg in 1955

Considering:

1. the universal scope of the arguments which lead the B.N.R.C. to present and agree upon its maritime safety system for radiotelephony (see Appendix);
2. the necessity of a universal safety system for radiotelephony on 2 182 kc/s;
3. the necessity of universal radiotelephony regulations for distress;
4. the desirability of having a universally agreed radio safety system ready and at the disposal of the International Conference on Safety of Life at Sea to be held in London in 1960;
5. the I.C.A.O. RAC/SAR division's Recommendation No. 16/3 of the frequency 2 182 kc/s for use between aircraft and ships in case of emergency or search and rescue operations, and its Recommendation No. 17/6 concerning the use of an automatic alarm signal device on 2 182 kc/s on board aircraft capable of alarming ships and coast stations;

The Swedish Administration proposes:

18

a) that the maritime safety system for radiotelephony on 2 182 kc/s as it is agreed upon by the B.N.R.C. (see Appendix) be accepted by the Administrative Radio Conference as the universal safety system for radiotelephony in the MF band. The words: "in the area of the Baltic and North Sea" of the B.N.R.C. Resolution No. 5 (see Appendix) should thus be deleted;

19

b) that the Supplementary Radio Regulations of the B.N.R.C. be adopted as world-wide regulations with those few modifications or additions that may be found necessary;

20

c) that the Administrative Radio Conference deliver to the forthcoming International Conference on Safety of Life at Sea, to be held in London in 1960, a recommendation of the Radio Safety System with a description of its characteristics, so that the Conference on Safety of Life at Sea may be able to prescribe the best possible use of this system.

21

APPENDIX

to proposal 18 submitted by Sweden

The Baltic and North Sea Radiotelephone Conference,

considering

a) that since 1919 the lower tonnage limit of cargo ships compulsorily fitted with radiotelegraph installations has been 1,600 tons gross tonnage; cargo ships below that tonnage have, as a rule been equipped with radiotelephone installations;
b) that this applies generally to ships, even the smallest ones, fitted with radio installations;
c) that the number of ships fitted with radiotelephone installations all over the world amounted, in May 1948, according to the List of Coast and Ship Stations, to 22,510 in the bands between 1 605 and 3 800 kc/s, as compared with 15,336 ships fitted with radiotelegraphy, and has probably increased considerably since that date;*
d) that the value of human lives exposed to danger is independent of the size of the ship in distress;
e) that the ability of a ship to render assistance in sea emergencies derives essentially from characteristics other than its size;

resolves

that any rules proposed in the future with a view to improving the radiotelephone distress procedure should be so drafted as to be capable of application by any ship fitted with a radiotelephone installation.

The Baltic and North Sea Radiotelephone Conference,

considering

a) that the reliability and efficacy of a radiotelephone security system for sea rescue purposes will increase with the number of ships participating in the system;
b) that many ships fitted with radiotelephone installations are small craft, such as trawlers, fishing boats and coasting vessels, which are not subject to the regulations in Chapter 4 of the International Convention for the Safety of Life at Sea (London, 1948);
c) that, as a rule, such ships have limited financial resources and therefore could hardly participate in a security system, if this involved them in considerable expense;

resolves

that the radiotelephone security system should be organized so as to keep the total expenses to be borne by the ship in respect of apparatus for transmission and reception of the alarm signal, within moderate limits in comparison with the costs for the radiotelephone installation.

* Corresponding figures for December 1955 are 43,000 radiotelephony ships in the bands 1 605–3 800 kc/s as compared with 14,000 ships fitted with radiotelegraphy. 25,000 of the 43,000 are small vessels below 100 tons.
INTRODUCTION OF THE RADIOTELEPHONE ALARM SIGNAL

Resolution No. 6

The Baltic and North Sea Radiotelephone Conference,

considering

a) that in sea areas of heavy traffic there is a danger of a weak distress call not being identified in the presence of other signals;

b) that the use of a radiotelephone alarm signal which would be easily recognized in the presence of other signals would be most valuable;

c) that in its Recommendation No. 125 the C.C.I.R. has specified a radiotelephone alarm signal;

d) that in its Recommendation No. 124 the C.C.I.R. has recommended all Administrations to adopt and bring into use at an early date this radiotelephone alarm signal;

resolves

1. that as soon as possible, distress calls transmitted by radiotelephony should, as a general rule, be preceded by the radiotelephone alarm signal specified in C.C.I.R. Recommendation No. 125;

2. that the apparatus for transmitting the radiotelephone alarm signal should conform fully with the technical specification in Item 1 of C.C.I.R. Recommendation No. 125;

3. that it is most desirable that all ships which have a radiotelephone installation and which do not normally keep watch on 500 kc/s for distress purposes should, as soon as practicable, be fitted with a device for transmitting the radiotelephone alarm signal;

4. that in the case of ships which normally keep watch on 500 kc/s for distress purposes and which also have a radiotelephone installation, Administrations should consider the need for fitting the ships with a device for transmitting the radiotelephone alarm signal;

5. that coast stations should use the radiotelephone alarm signal either to announce that a distress call or message is about to follow or to announce the transmission of an urgent cyclone warning; in the latter case it may be used only by the coast stations duly authorized by their Administration.

WATCHKEEPING BY SHIPS ON THE DISTRESS AND CALLING FREQUENCY 2 182 kc/s

Resolution No. 4

The Baltic and North Sea Radiotelephone Conference,

considering

a) that the circumstances of watchkeeping by ships, in which the main radio equipment is radiotelephone and in which the radiotelephone operators normally have other duties to perform, are not conducive to regular periods of watch;

b) that the watch on the distress and calling frequency 2 182 kc/s as prescribed for Region 1 in No. 826 of the Radio Regulations, is not regularly kept by many vessels which would have to rely on this frequency for distress purposes;
c) that the watch would be made considerably more regular if it could be kept in the place wherefrom the vessel is usually navigated;

d) that further advantage would result from keeping such watch continuously, subject to navigational requirements;

e) Resolution No. 2 relating to the economic organization of the radiotelephone security system;

f) that the radiotelephone alarm signal as specified in C.C.I.R. Recommendation No. 125 is acoustically chosen to facilitate aural reception;

g) that the transformation of this alarm signal into a bell signal by an automatic receiving equipment may be regarded as a complicating and cost-increasing factor;

resolves

1. that in the case of ships which have a radiotelephone installation and which do not normally keep watch on 500 kc/s for distress purposes, Administrations shall encourage a continuous watch by any appropriate means on the distress frequency 2 182 kc/s in the place wherefrom the ship is usually navigated, whenever the receiving equipment is not necessarily in use on another frequency or whenever a second receiver is available for that purpose, and when the requirements of navigation permit;

2. that in cases where the provisions of para. 1 are unlikely to prove effective, Administrations should, as far as practicable, make individual or mutual arrangements for maintaining safety contact with the vessels concerned;

3. that in the case of ships which normally keep watch on 500 kc/s for distress purposes and which also have a radiotelephone installation, Administrations should consider the need for watch to be kept on the frequency 2 182 kc/s in particular areas.

26 WATCHKEEPING BY COAST STATIONS ON THE DISTRESS AND CALLING FREQUENCY 2 182 kc/s

Resolution No. 5

The Baltic and North Sea Radiotelephone Conference,

considering

a) the need to strengthen the radiotelephone security system on the distress and calling frequency 2 182 kc/s and the importance of continuous watch by ships on that frequency;

b) that watch on auto-alarm receivers or receivers with 2-tone filters will not receive the spoken word MAYDAY;

c) that in view of the type of ship fitted with radiotelephone installations, the possibility of human or technical failure to transmit the alarm signal when a ship is in distress should not be overlooked;

d) that ships are to be permitted to call coast stations of other nationalities and, under certain conditions, coast stations of their own nationality, on 2 182 kc/s;

e) that No. 819 of the Radio Regulations does not insist that coast stations should maintain listening watch at all times on the frequency 2 182 kc/s;

f) that the importance of 2 182 kc/s as a distress frequency is tending to equivalence with that of 500 kc/s;

g) Nos. 737 to 739 of the Radio Regulations which define the permanent watch on 500 kc/s to be kept at the coast stations during their hours of service;
that all coast stations in the area of the Baltic and North Sea which are open to public correspondence in the band 1 605–2 850 kc/s and which form an essential part of the coverage of the area for distress purposes, shall keep permanent watch by operator or loudspeaker on 2 182 kc/s during their hours of service, in addition to any watch which may be kept on an auto-alarm receiver.

27 PROPOSAL CONCERNING THE STUDY OF INTERCHANGING THE FREQUENCY BANDS 415-525 kc/s AND 1 495-1 605 kc/s

The evolution of ship radio shows that up to the year 1927, and with the exception of the largest passenger steamers, the only band used was the 500 kc/s band.

After 1927, a constantly growing number of ships have commenced using, in addition to the 500 kc/s band, the high-frequency band 4-22 Mc/s, so that to-day it is the normal standard for ocean-going ships to be equipped both for medium waves and short waves.

Since about 1935, the radiotelephones for coast traffic in small ships (1.6–3.8 Mc/s) have shown a remarkable increase in number, and now exceed three times the number of telegraph stations in the 500 kc/s band.

It has been found that an increasing number of ships which are by law equipped with radiotelegraphy in the 500 kc/s band, also are fitted with telephony in the 2 Mc/s band, because telephony is considered by them to be on many occasions a more convenient means of communication than telegraphy. This development is natural and can be expected to continue.

As a result of this development, we now have two frequency bands for short-distance traffic, presenting practically the same ground wave propagation characteristics over sea, viz. the 500 kc/s band and the 2 Mc/s band, of which the latter band is superior to the former in overall performance (see Appendix 1).

This state of things can hardly be called rational. For purposes of safety of life at sea there are now distress frequencies in both these maritime mobile bands. This involves, inter alia, the following serious inconveniences:

1. The ships have to be divided into two groups, one having distress procedure on 500 kc/s, and the other on 2 182 kc/s. The chance of obtaining assistance from ships in the neighbourhood is dependent on whether these ships are of the same group as the ship in distress. If this is not the case (e.g. if the ship in distress is a cargo-steamer using the 500 kc/s frequency, navigating north of Scotland and surrounded by fishing-vessels using 2 182 kc/s), communication between them can be arranged only by the medium of a coast station working on both these frequencies.

2. Coast stations in sea rescue service have to keep watch on both these frequencies and have to effect a distress procedure which is rendered unnecessarily complicated by the fact that they have to alarm both ships using the 500 kc/s frequency and those using 2 182 kc/s.

3. As a rule, aircraft, lifeboat, liferaft and survival craft stations which are now equipped by law with transmitters for 500 kc/s, are provided, for technical reasons, only with aerials of low efficiency.

In view of the difficulties to be expected at future conferences in providing for the need of frequencies for maritime purposes, the existence of two different maritime (500 kc/s and 2 Mc/s) bands must be considered as an inconvenient system.

The present frequency system, necessitating two separate transmitters on board, one for telegraphy and one for telephony, is uneconomical.
An interchange of the bands 415–525 kc/s and 1 495–1 605 kc/s would offer, inter alia, the following advantages to the maritime service:

1. Only one distress-frequency band would be necessary (viz. 2 182 kc/s), which would be common to telegraphy and telephony.

2. It would be possible to simplify, rationalize and cheapen the radio stations on board, which would afford the advantage of the ships being able to choose, according to circumstances, whether to correspond by way of telegraphy or telephony, and admit of fewer and more suitable aerial constructions on board.

3. The chance of obtaining aid from ships in the neighbourhood would be increased to the limit of what is possible.

4. The distress procedure would be simplified and rendered more efficacious.

5. The efficiency of aircraft, lifeboat, liferaft and survival craft stations would be increased due to the improved efficiency of the aerial resulting from the higher frequency 2 182 kc/s.

6. The balancing against one another of the frequency requirements of telegraphy and telephony which will be necessary in future can be made without having to contend with any important technical or financial difficulties.

This interchange would also imply a considerable benefit to the broadcasting service, as the propagation conditions over land are much more favourable in the 500 kc/s than in the 1 500 kc/s band, and it would permit of making a better use of the frequency band for broadcasting purposes.

The lower frequencies give higher field-strength values at the fading limit and are therefore more appropriate for sharing than the higher ones.

The main obstacle to the interchange of the two bands probably resides in the investments made in broadcast receivers and ship stations. The realization of this interchange will therefore be a long-sighted measure and a fixation of the date of interchange many years in advance is necessary.

APPENDIX 1
to proposal 27 submitted by Sweden

Comparison between propagation characteristics of the bands

<table>
<thead>
<tr>
<th>Frequency (kHz)</th>
<th>415–525</th>
<th>1 495–1 605</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 kW radiated power over sea water gives a ground-wave intensity measured in db above 1 µV/m, or directly in µV/m, as below:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distance (km)</td>
<td>10</td>
<td>50</td>
</tr>
<tr>
<td>460 kc/s (db)</td>
<td>89</td>
<td>75</td>
</tr>
<tr>
<td>1 550 kc/s (db)</td>
<td>89</td>
<td>74.5</td>
</tr>
<tr>
<td>460 kc/s (µV/m)</td>
<td>28 000</td>
<td>5 600</td>
</tr>
<tr>
<td>1 550 kc/s (µV/m)</td>
<td>28 000</td>
<td>5 300</td>
</tr>
</tbody>
</table>
The average field strength of atmospheric noise in the daytime is about 30 times and at night about 4
times higher at 460 kc/s than at 1 550 kc/s.

The efficiency of a ship antenna will improve by changing from 460 to 1 550 kc/s.

In summary: the propagation characteristics for ship use, taken from transmitter to receiver in­
cluding atmospheric noise, are more favourable in the 1 550 kc/s band than in the 460 kc/s band.
29 bis

U. S. S. R.

The name of the International Frequency Registration Board, as it appears throughout the RR, should be changed to "International Frequency Registration Bureau" (I.F.R.B.).

Reasons

See U. S. S. R. proposals for changes in the Convention.
B. Various proposals concerning the Radio Regulations

Present Provisions

Radio Regulations
ANNEXED TO THE INTERNATIONAL TELECOMMUNICATION CONVENTION (ATLANTIC CITY, 1947)

CHAPTER I

ARTICLE 1

Definitions

Proposals

30 India

Title. Read:

Radio Regulations
ANNEXED TO THE INTERNATIONAL TELECOMMUNICATION CONVENTION (GENEVA, 1959)

31 France, French O. P. T. A.

GENERAL COMMENTS

1. The "Notes" are an integral part of the proposals submitted with a view to inclusion in the Regulations.

2. Sources quoted between brackets:

3. Not all the terms for which definitions are proposed below are indispensable. No final choice can be made until it is clear what the body of the Regulations will be like.

4. We suggest that definitions of "OPERATING TERMS" be assembled in a Section VI.
Present Provisions

Preamble

1 The following definitions have been formulated in view of the Regulations annexed to the Convention and of the operation of the respective services; these definitions are not necessarily applicable to other purposes.

Proposals

32 Italy

1. After this No. add the following new text:

For definitions of terms used hereinafter but not defined in the Convention, administrations or recognized private operating agencies may consult the “List of Definitions of Essential Telecommunication Terms” (Part I: Telegraphy; Part II: Special Radio Terms).

Reasons

In order to introduce in the RR the same principle already adopted for the RTg and RTf.

33 France, French O. P. T. A.

2. Replace the present text by the following:

Telecommunication: Any transmission, emission, or reception of signals or of data of any kind by means of an electromagnetic system.

The use of signalling or position lights designed to ensure the safety of life and property forms no part of telecommunication.

Reasons

Drafting. A definition of “Signal”, required if the term “Telecommunication” is to be intelligible, is given in Section IV (See proposal 219).

34 India

2. Replace the present text by the following:

Telecommunication: Any process that enables a correspondent to pass to one or more given correspondents (telegraphy or telephony), or possible correspondents (broadcasting), information of any nature delivered in any usable form (written or printed matter, fixed or moving pictures, words, music, visible or audible signals, signals controlling the functioning of mechanisms, etc.) by means of any electromagnetic systems (electrical transmission by wire, radio transmission, optical transmission etc. or a combination of such systems).

Reasons

A more comprehensive definition taken from the “List of Essential Telecommunication Terms”.

Section I. General Terms

2 Telecommunication: Any transmission, emission or reception of signs, signals, writing, images and sounds or intelligence of any nature by wire, radio, visual or other electromagnetic systems.
**Present Provisions**

3 **General Network of Telecommunication Channels:** The whole of the existing telecommunication channels open to public correspondence, with the exception of the telecommunication channels of the mobile service.

35 **France, French O. P. T. A., Morocco**

3. **General Network of Telecommunication Channels:**

   *This definition should be transferred to Section VI (See proposal 282).*

   **Reasons**

   This is an operating term. A "Telecommunication channel" is also defined in Section VI (See proposal 281).

4 **Radiocommunication:** Any telecommunication by means of Hertzian waves.

36 **Denmark, Finland, Iceland, Norway, Sweden, Norway,**

4. **After:** Hertzian, add: radio.

37 **France, French O. P. T. A.**

4. Replace the present text by the following:

   *Radiocommunication: Telecommunication by means of Hertzian waves.*

38 **United Kingdom**

4. **Before:** Hertzian add: freely-propagated.

   **Reasons**

   To exclude line and waveguide communication.

39 **U. S. S. R.**

4. Replace the present text by the following:

   *Radio: A general term applied to the use of radio waves.*

   **Reasons**

   Clearer drafting. (See also proposal 47).
Present Provisions

5 Hertzian Waves: Electromagnetic waves of frequencies between 10 kc/s and 3 000 000 Mc/s.

Proposals

40 France, French O.P.T.A.

5. Replace the present text by the following:

Hertzian waves: Electromagnetic waves propagated in space with a frequency of between 8 kc/s and 3 000 000 Mc/s.

Reasons

Long-distance propagation of radio waves is possible between 8 and 10 kc/s.

41 Switzerland

5. Replace the present text by the following:

Hertzian Waves: Electromagnetic waves of frequencies between 10 kc/s and 3 000 000 Mc/s, propagated, without guide, in free space.

Reasons

To conform with the I.T.U. List of Definitions (01.18).

42 U.S.S.R.

5. Replace the present text by the following:

Radio Waves: Electromagnetic waves (Hertzian waves) of frequencies between 10 kc/s and 3 000 000 Mc/s.

Reasons

Clearer drafting. If this term is adopted, the appropriate amendments will have to be made in other sections of the RR.

43 Denmark, Finland, Iceland, Norway, Sweden

5. After this No. add, subject to approval by the Plenipotentiary Conference, the following new definition:

Hertzian Radio Waves (or Radio Waves):

Electromagnetic waves of frequencies between 10 kc/s and 3 000 000 Mc/s propagated in space without artificial guide.
Radio: A general term applied to the use of Hertzian waves.

6 After: Hertzian, add: radio.

France, French O. P. T. A.

6. Replace the present text by the following:

Radio: The technique whereby Hertzian waves are used. The word is both noun and adjective.

United Kingdom


Reasons

See proposal 38.

U. S. S. R.

6. Replace the present text by the following:

Radiocommunication: Any telecommunication by means of radio waves.

Reasons

Clearer drafting. (See also proposal 39).

Telegraphy: A system of telecommunication for the transmission of written matter by the use of a signal code.

7. Replace the present text by the following:

Telegraphy: Branch of telecommunication which is concerned in any process providing reproduction at a distance of a documentary matter such as written, printed or pictorial matter, or the reproduction at a distance of any kind of information in such a form.

Reasons

See proposal 34.
49 Switzerland

7. Replace the present text by the following:

Telegraphy: A branch of telecommunication which is concerned in any process providing reproduction at a distance of documentary matter such as written, printed, or pictorial matter, or the reproduction at a distance of any kind of information in such a form.

Reasons
To conform with the I.T.U. List of Definitions (01.03).

50 Australia (Commonwealth of)

7. After this No. insert the following new definition:

Telemetering: A process by which remote quantitative indication is given by electrical signals.

Reasons
In view of the increasing use of telemetering devices in radio services, it is considered that this new definition should be included in the RR.

France, French O.P.T.A.

8. Telephony: A system of telecommunication set up for the transmission of speech or, in some cases, other sounds.

9. Television: A system of telecommunication for the transmission of transient images of fixed or moving objects.

10. Facsimile: A system of telecommunication for the transmission of fixed images with a view to their reception in a permanent form.

51 8. Replace the present text by the following:

Telephony: A telecommunication system for the transmission of speech or, in some cases, of other sounds, between particular correspondents.

Reasons
The use of "set up" although justifiable, is not essential.

52 9. Television: Does not affect the English text.

53 10. Replace the present text by the following:

Facsimile telegraphy: A system of telecommunication for the transmission of fixed images, with or without half-tones, with a view to their reception in a permanent form.
France, French O.P.T.A., Morocco

10. After this No. insert the following new definitions:

54 Phototelegraphy: A system of facsimile telegraphy chiefly designed for the reproduction of half-tones, and making use of photographic procedures.

Reasons
Proposal (amended) put forward by the C.C.I.T.T.

55 Remote Control: A telecommunication system for the remote control of some device.

56 Telemeter: A telecommunication system for the automatic transmission of measurement results.

India

10. After this No. add the following new definition:

Phototelegraphy: A system of facsimile having special regard to tone reproduction, in which reception involves photographic processes.

Reasons
Definition considered necessary.

United Kingdom

10. After this No. add the following new definition:

Telemetry: A system of telecommunication for automatically indicating or recording measurements at a distance from the measuring device.

Reasons
Used in proposal 141.
**Present Provisions**

11. *Radiolocation*: Determination of a position or of a direction by means of the constant velocity or rectilinear propagation properties of Hertzian waves.

12. *Radionavigation*: Radiolocation intended solely for the determination of position or direction or for obstruction warning, in navigation.

13. *Radar*: Radiolocation system where transmission and reception are carried out at the same location, and which utilizes the reflecting or retransmitting properties of objects in order to determine their positions.


15. *Secondary Radar*: Radar using automatic retransmission on the same or on a different radio frequency.

16. *Radio Direction-Finding*: Radiolocation in which only the direction of a station is determined by means of its emissions.

**Proposals**

59. **Australia (Commonwealth of)**

11 to 16. Need is seen for revision of definitions 11 to 16 and it is proposed that the matter receive the attention of an expert Committee at the Conference.

60. **Denmark, Finland, Iceland, Norway, Sweden**


61. **France, French O. P. T. A.**

11. *Replace the present text by the following:*

*Radiolocation*: A telecommunication system whereby a position can be determined, or a bearing taken, by means of the constant-speed propagation qualities of radio waves.

62. **U. S. S. R.**

11. *Replace the present text by the following:*

*Radiolocation*: The discovery of objects at sea, in the air, or on land, and determination of their positions by means of radio waves.

**Reasons**

Clearer drafting.
Radionavigation: In navigation, radiolocation used to determine a position or take a bearing, or to detect obstructions.

Reasons
Clearer drafting.

Radar: A radiolocation system used for navigational purposes, making use of the reflecting or retransmitting properties of objects in order to determine their positions.

Reasons
For completeness.

There is no call for this. It has no application in the RR.
Present Provisions

Proposals

68 U.S.S.R.

13. After this No. add the following new definition:

Radio Astronomy: Astronomy based on the reception of radio waves of cosmic origin.

Reasons

Definition of a new kind of service.

69 France, French O.P.T.A.

14. Replace the present text by the following:

Primary Radar: Radar using the reflecting properties of objects only.

70 U.S.S.R.


Reasons

There is no call for this. It has no application in the RR.

71 France, French O.P.T.A.

15. Replace the present text by the following:

Secondary Radar: Radar making use of automatic retransmission on the same or on a different frequency.

72 United Kingdom

15. Replace the present text by the following:

Secondary Radar: Radar in which the responding object automatically retransmits on the same or on a different frequency.

Reasons

Clarity.
Present Provisions

Proposals

73  U. S. S. R.

15. Delete.

Reasons
There is no call for this. It has no application in the RR.

74  France, French O.P.T.A.

16. Replace the present text by the following:

Radio Direction-Finding: Radiolocation in which only the direction of a station or object is determined from its emissions. These latter may be peculiar to the station or object, or reflected, or received and retransmitted in the same or in a different form.

75  United Kingdom

16. Delete: only.

Reasons
In order not to exclude identification of the station.

76  U. S. S. R.

16. Replace the present text by the following:

Radio Direction-Finding: The reception of radio waves to determine the direction or position of transmitting stations.

Reasons
Clearer drafting.

France, French O.P.T.A., Morocco

16. After this No. insert the following new definitions:

77 Radio Telemetry: Radiolocation determining the distance of a station or object only, by means of its emissions. These emissions may be peculiar to the station or object, or reflected, or received and retransmitted in the same or in a different form.
Radio Control: A radio system for the remote control of some device.

Radio Measurement: A radio system for the automatic transmission of measurement results.

Netherlands

16. After this No. add the following new definitions:

Simplex Operation: A method of operation whereby the transmissions in the two directions are made available alternately, for example, by means of a press-to-talk system.

Duplex Operation: A method of operation whereby the transmissions in the two directions are made available simultaneously.

Semi-Duplex Operation: A method of operation which employs simplex at one end of the circuit and duplex at the other.

Note: Duplex and semi-duplex methods of operation necessitate the use of two frequencies; the simplex method of operation may be obtained with either one or two frequencies.

Reasons
In accordance with Annex 1 of the Hague Agreement (1957).

Telegram: Written matter intended to be transmitted by telegraphy; this term also includes radiotelegram unless otherwise specified.

France, French O.P.T.A., Morocco

17. This definition should be transferred to Section VI (see proposal 288).

Reasons
This is an operating term.
<table>
<thead>
<tr>
<th>Present Provisions</th>
<th>Proposals</th>
</tr>
</thead>
<tbody>
<tr>
<td>85 India</td>
<td></td>
</tr>
<tr>
<td><strong>17. Replace the present text by the following:</strong></td>
<td></td>
</tr>
<tr>
<td><em>Telegram:</em> Written, printed or pictorial matter intended to be transmitted by telegraphy and to be delivered to the addressee. Unless otherwise specified, this term also includes radiotelegram.</td>
<td></td>
</tr>
<tr>
<td><strong>Reasons</strong></td>
<td>Definition contained in the “List of Essential Telecommunication Terms” as amended.</td>
</tr>
<tr>
<td>86 Switzerland</td>
<td></td>
</tr>
<tr>
<td><strong>17. Replace the present text by the following:</strong></td>
<td></td>
</tr>
<tr>
<td><em>Telegram:</em> a) Documentary matter, whether in written, printed, or pictorial form, entrusted to the general telegraph service, with a view to its transmission by telegraphy and delivery to the addressee; these contents in the course of, or after, transmission. b) The document itself and any reproduction made in course of transmission, if necessary, or made for delivery to the addressee. Unless otherwise specified, this term also covers radiotelegrams.</td>
<td></td>
</tr>
<tr>
<td><strong>Reasons</strong></td>
<td>To conform with the I.T.U. List of Definitions (01.04).</td>
</tr>
<tr>
<td>87 Denmark, Finland, Iceland, Norway, Sweden</td>
<td></td>
</tr>
<tr>
<td><strong>17. After this No. add the following new definition:</strong></td>
<td></td>
</tr>
<tr>
<td><em>Telephone Call:</em> The effective use of the connection established between the calling and the called stations.</td>
<td></td>
</tr>
<tr>
<td><strong>Reasons</strong></td>
<td>A consequence of proposal 90.</td>
</tr>
</tbody>
</table>
Present Provisions

88 India

17. After this No. add the following new definition:
   
   **Phototelegram:** A telegram transmitted by phototelegraphy.

   **Reasons**
   
   Definition considered necessary.

18. **Radiotelegram:** Telegram originating in or intended for a mobile station, transmitted on all or part of its route over the radiocommunication channels of a mobile service.

89 France, French O.P.T.A., Morocco

18. **Radiotelegram:**
   
   This definition to be transferred to Section VI (see proposal 289).

   **Reasons**
   
   This is an operating term.

90 Denmark, Finland, Iceland, Norway, Sweden

18. After this No. add the following new definition:
   
   **Radiotelephone Call:** Telephone call originating at or destined for a mobile station established exclusively or in a section of its route on the radiocommunication circuits of a mobile service.

   **Reasons**
   
   There is a definition of the term “radiotelegram”. As a logical consequence of this, a definition of the expression “radiotelephone call” should be incorporated in the RR.

United Kingdom

18. After this No. add the following new definitions:

91 **Tropospheric Scatter:** The propagation of radio waves by scattering as a result of irregularities or discontinuities in the properties of the troposphere.

   **Reasons**
   
   Used in proposal 122.
Present Provisions

Proposals

United Kingdom (cont’d)

92 Ionospheric Scatter: The propagation of radio waves by scattering as a result of irregularities or discontinuities in the ionization of the ionosphere.

Reasons

Used in proposal 123.

93 Wideband Radio Relay System: A system for relaying by radio, normally via one or more intermediate stations, a number of telephone channels, or one or more television channels, or combinations thereof, or any types of signal requiring similar bandwidths.

Reasons

Used in the proposed revised Appendix 3.

94 Change in frequency usage: The bringing into use of a new assignment, or a change of frequency or other basic characteristic of an existing assignment.

Reasons

To define the use of this expression in the proposals for Article 11.

Switzerland

18. After this No. add the following new definitions:

95 International Frequency List: Recapitulative List of Assignment Notices published by the I.T.U.

96 International Master Radio Frequency Record: A card-index showing frequency assignments, kept up to date by the I.T.U.

Reasons

Two essential duties performed by the I.T.U.
Present Provisions

Section II. Services

19  Fixed Service: A service of radiocommunication between specified fixed points.

20  Aeronautical Fixed Service: A fixed service intended for the transmission of information relating to air navigation, preparation for and safety of flight.

Proposals

97  France, French O.P.T.A.

19 and 20. Does not affect the English text.

98  U.S.S.R.

20. Replace the present text by the following:

Aeronautical fixed service: A radio service between fixed points, for the transmission of information relating to air navigation, and to the preparation and safety of flights.

Reasons

Clearer drafting.

France, French O.P.T.A.

Broadcasting Service:

21  a) A radiocommunication service of transmissions to be received directly by the general public.

22  b) This service may include transmissions of sounds or transmissions by television, facsimile or other means.

Proposals

99  21. Replace the present text by the following:

a) A radio service in which the transmissions are designed for direct reception by the general public.

100  22. Replace the present text by the following:

b) These transmissions may be transmissions of sound, television transmissions, facsimile telegraphy or other transmissions, the appropriate terms being:

— Sound Broadcasting
— Television
— Facsimile Broadcasting.

101  India

22. Replace the present text by the following:

b) This service may include transmissions of sounds or transmissions by television or other means.

Reasons

The list of Broadcasting Stations published by the I.T.U. does not contain Facsimile Broadcasting Stations.
102 Australia (Commonwealth of)

22. After this No. insert the following new definition:

Harbour Mobile Service: A mobile service between harbour stations and ship stations or between ship stations for harbour control purposes.

Reasons
To meet the needs which arise from establishment of stations for harbour control purposes.

103 India

22. After this No. add the following new definition:

Tropical Broadcasting Service: Broadcasting Service in the tropical zone using the frequencies less than vertical incidence critical frequencies.

Reasons
Definition considered necessary.

23 Mobile Service: A service of radiocommunication between mobile and land stations, or between mobile stations.

24 Maritime Mobile Service: A mobile service between ship stations and coast stations, or between ship stations.

25 Aeronautical Mobile Service: A mobile service between aircraft stations and aeronautical stations, or between aircraft stations).

25.1) As regards public correspondence, see 255.

26 Land Mobile Service: A mobile service between base stations and land mobile stations, or between land mobile stations.

104 France, French O. P. T. A.

Present Provisions

United Kingdom

105 24. After this No. add the following new definition:

Port Operations Service: A mobile service between coast stations of a harbour authority and ship stations, or between ship stations in or near the port, in which messages are restricted to those related to the movement of ships and their safety.

Reasons

Used in the proposed revised Article 34.


Reasons

The footnote is unnecessary and inappropriate to the definition.

France, French O.P.T.A.

27. Replace the present text by the following:

Radiolocation Service: A service involving the use of radiolocation.

107 Radiolocation Service: A service ensuring radiolocation.

28. Replace the present text by the following:

Radionavigation Service: A radiolocation service involving the use of radionavigation.

108 Radionavigation Service: A radiolocation service for radionavigation.

U. S. S. R.

28. Replace the present text by the following:

Radionavigation Service: A service involving the use of radionavigation methods and radio direction-finding.

Reasons

Clarification.
### Present Provisions

<table>
<thead>
<tr>
<th></th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>Maritime Radionavigation Service: A radionavigation service intended for the benefit of ships.</td>
</tr>
<tr>
<td>30</td>
<td>Aeronautical Radionavigation Service: A radionavigation service intended for the benefit of aircraft.</td>
</tr>
<tr>
<td>31</td>
<td>Amateur Service: A service of self training, intercommunication and technical investigations carried on by amateurs, that is, by duly authorized persons interested in radio technique solely with a personal aim and without pecuniary interest.</td>
</tr>
<tr>
<td>32</td>
<td>Meteorological Aids Service: A service of emissions of special radio signals intended solely for meteorological, including hydrological, observations and exploration.</td>
</tr>
<tr>
<td>33</td>
<td>Standard Frequency Service: A radiocommunication service for the transmission of standard and specified frequencies of known high accuracy, intended for general reception.</td>
</tr>
</tbody>
</table>

### Proposals

<table>
<thead>
<tr>
<th></th>
<th>France, French O. P. T. A.</th>
</tr>
</thead>
</table>
| 110 | 29. Replace the present text by the following:  
Maritime Radionavigation Service: A radionavigation service for the benefit of shipping. |
| 111 | 30. Replace the present text by the following:  
Aeronautical Radionavigation Service: A radionavigation service for the benefit of aircraft. |
| 112 | 31. Replace the present text by the following:  
Amateur Service: A service of self training, intercommunication and technical investigation carried on by amateurs, that is, by duly authorized persons interested in radio solely with a personal aim and without pecuniary interest. |
| 113 | 32 and 33. Does not affect the English text. |

### U. S. S. R.

<table>
<thead>
<tr>
<th></th>
<th>Definition</th>
</tr>
</thead>
</table>
| 33 | After this No. add the following new definitions:  
Ionospheric Service: A service designed for research into the electromagnetic composition of the upper layers of the atmosphere. |

### Reasons

A term used in the Regulations.
<table>
<thead>
<tr>
<th>Present Provisions</th>
<th>Proposals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Safety service:</strong> A radio service used permanently or temporarily for the safeguard of human life and property.</td>
<td></td>
</tr>
<tr>
<td><strong>Reasons</strong></td>
<td>A new term used in the Regulations.</td>
</tr>
<tr>
<td><strong>Time Service:</strong> A service or a transmission of signals giving the exact time.</td>
<td></td>
</tr>
<tr>
<td><strong>Reasons</strong></td>
<td>A new term used in the Regulations.</td>
</tr>
<tr>
<td><strong>Special Service:</strong> A service not otherwise defined in this article carried on exclusively for specific needs of general utility, and not open to public correspondence.</td>
<td></td>
</tr>
<tr>
<td><strong>France, French O.P.T.A.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>34. Does not affect the English text.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>United Kingdom</strong></td>
<td></td>
</tr>
<tr>
<td><strong>34. After this No. add the following new definitions:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Tropospheric Scatter Service:</strong> A service involving the use of tropospheric scatter.</td>
<td></td>
</tr>
<tr>
<td><strong>Reasons</strong></td>
<td>Used in the proposed revised Article 5.</td>
</tr>
<tr>
<td><strong>Ionospheric Scatter Service:</strong> A service involving the use of ionospheric scatter.</td>
<td></td>
</tr>
<tr>
<td><strong>Reasons</strong></td>
<td>Used in the proposed revised Article 5.</td>
</tr>
</tbody>
</table>
Present Provisions

Section III. Stations

Station:

35 a) A separate transmitter or receiver or a combination of transmitters and receivers including the accessory equipment required for carrying on a definite radiocommunication service.

36 b) The station assumes the classification of the service in which it operates permanently or temporarily.

37 Fixed Station: A station in the fixed service.

38 Aeronautical Fixed Station: A station in the aeronautical fixed service.

39 Broadcasting Station: A station in the broadcasting service.

40 Land Station: A station in the mobile service not intended for operation while in motion.

41 Coast Station: A land station in the maritime mobile service carrying on a service with ship stations.

42 Aeronautical Station: A land station in the aeronautical mobile service, carrying on a service with aircraft stations. In certain instances an aeronautical station may be placed on board a ship.

43 Base Station: A land station in the land mobile service carrying on a service with land mobile stations.

44 Mobile Station: A station in a mobile service intended to be used while in motion or during halts at unspecified points.

45 Ship Station: A mobile station in the maritime mobile service located on board a vessel which is not permanently moored.

France, French O.P.T.A.

120 35. Replace the present text by the following:

Station:

a) A separate transmitter or receiver, or a combination of transmitters and receivers, including the accessory equipment required to carry on a particular radio service, at one of the terminals of the transmission or telecommunication channels in question.

121 36. Replace the present text by the following:

b) Each station shall be classified by the service in which it operates permanently or temporarily.

122 37 to 45. Does not affect the English text.
Present Provisions

Proposals

**Australia (Commonwealth of)**

123 41. After this No. add the following new definition:

*VHF Coast Station:* A VHF land station in the maritime mobile service carrying on a service between VHF ship stations and subscribers to the general telephone network.

**Reasons**

To provide a definition to cover VHF coast stations established for the purpose of providing a link between VHF ship stations and the general telephone network.

124 43. After this No. add the following new definition:

*Harbour Station:* A land station in the harbour mobile service carrying on a service with ship stations.

**Reasons**

To provide for the need which arises from the establishment of stations for harbour control purposes.

46  *Aircraft Station:* A mobile station installed on board any type of aircraft and continuously subject to human control.

125  *France, French O.P.T.A.*

46. Replace the present text by the following:

*Aircraft Station:* A mobile station on board an aircraft of any type.

126  *India*

46. Replace the present text by the following:

*Aircraft Station:* A mobile station in the aeronautical mobile service on board any aircraft.

**Reasons**

The words “and continuously subject to human control” are not necessary in view of the development of automatic aircraft equipment.
127 United Kingdom

46. Replace the present text by the following:

*Aircraft Station:* A mobile station in the aeronautical mobile service on board an aircraft.

**Reasons**

Clarification.

128 U. S. S. R.

46. Replace the present text by the following:

*Aircraft station:* A mobile station on board an aircraft.

**Reasons**

Clearer drafting.

47  *Land Mobile Station:* A mobile station in the land mobile service capable of surface movement within the geographical limits of a country or continent.

48  *Radiolocation Station:* A station in the radiolocation service.

49  *Radionavigation Station:* A station in the radionavigation service.

50  *Radionavigation Land Station:* A station in the radionavigation service not intended for operation while in motion.

51  *Radionavigation Mobile Station:* A station in the radionavigation service intended to be used while in motion or during halts at unspecified points.

129 47 to 51. *Does not affect the English text.*

52  *Radio Direction-Finding Station:* A radiolocation station intended to determine only the direction of other stations by means of transmissions from the latter.

130 52. Replace the present text by the following:

*Radio Direction-Finding Station:* A radiolocation station essentially comprising a radio direction-finding device.
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<tr>
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<tbody>
<tr>
<td><strong>131</strong> U.S.S.R.</td>
<td><strong>U.S.S.R.</strong></td>
</tr>
<tr>
<td>52. Replace the present text by the following:</td>
<td></td>
</tr>
<tr>
<td>Radio Direction-Finding station: A station which determines the bearings of other stations.</td>
<td></td>
</tr>
<tr>
<td><strong>Reasons</strong></td>
<td></td>
</tr>
<tr>
<td>Clearer drafting.</td>
<td></td>
</tr>
</tbody>
</table>

| **132** France, French O.P.T.A. | France, French O.P.T.A. |
| 53. Replace the present text by the following:  |
| Radiobeacon Station: A radionavigation station essentially comprising a radio beacon. |

| **133** Federal German Republic | Federal German Republic |
| 53. Delete the words: in relation to the radiobeacon station. |
| **Reasons** | |
| There exist some radiobeacon systems that require the operation of more than one transmitter and that furnish the information on position or direction in the form of indications on measuring equipment that must be read off and with the readings subsequently evaluated, e.g. by means of special maps, without making any direct reference to the position of a specific transmitting station. |

| **534** France, French O.P.T.A. | France, French O.P.T.A. |
| 53. After this No. insert the following new definition:  |
| Watch Radar Station: A radiolocation station essentially comprising a radar picture display. |

<p>| <strong>54</strong> Standard Frequency Station: | Standard Frequency Station: A station in the standard frequency service. |
| <strong>55</strong> Experimental Station: | Experimental Station: A station utilizing Hertzian waves in experiments with a view to the development of science or technique. This definition does not include amateur stations. |
| <strong>56</strong> Amateur Station: | Amateur Station: A station in the amateur service. |
| <strong>54 to 56.</strong> Does not affect the English text. | |</p>
<table>
<thead>
<tr>
<th>Present Provisions</th>
<th>Proposals</th>
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</thead>
<tbody>
<tr>
<td></td>
<td><strong>136</strong></td>
</tr>
<tr>
<td></td>
<td><strong>U. S. S. R.</strong></td>
</tr>
<tr>
<td><strong>54. After this No. add the following new definition:</strong></td>
<td></td>
</tr>
<tr>
<td>Ionospheric station: A station in the ionospheric service.</td>
<td></td>
</tr>
<tr>
<td><strong>Reasons</strong></td>
<td></td>
</tr>
<tr>
<td>A new term.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>137</strong></td>
</tr>
<tr>
<td>Denmark, Finland, Iceland Norway, Sweden</td>
<td></td>
</tr>
<tr>
<td><strong>55. After:</strong> Hertzian, <strong>add:</strong> radio.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>138</strong></td>
</tr>
<tr>
<td>United Kingdom</td>
<td></td>
</tr>
<tr>
<td><strong>55. Before:</strong> Hertzian, <strong>add:</strong> freely-propagated.</td>
<td></td>
</tr>
<tr>
<td><strong>Reasons</strong></td>
<td></td>
</tr>
<tr>
<td>See proposal 38.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>139</strong></td>
</tr>
<tr>
<td></td>
<td><strong>56. After this No. add the following new definition:</strong></td>
</tr>
<tr>
<td>Telemetry Station: A station set up for the purpose of telemetry.</td>
<td></td>
</tr>
<tr>
<td><strong>Reasons</strong></td>
<td></td>
</tr>
<tr>
<td>For completeness.</td>
<td></td>
</tr>
</tbody>
</table>

**Section IV. Technical Characteristics**

**57. Frequency Assigned to a Station:** The frequency coinciding with the centre of the frequency band in which the station is authorized to work. This frequency does not necessarily correspond to any frequency in an emission.

<table>
<thead>
<tr>
<th>140 France, French O.P.T.A., Morocco</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>57. Frequency Assigned to a Station:</strong></td>
</tr>
<tr>
<td>Transfer this definition (See proposal 153).</td>
</tr>
</tbody>
</table>
Present Provisions

Proposals

**Japan**

57. After this No. add the following new definitions:

141 *Characteristic Frequency:* A frequency which can be easily identified and measured in a given emission.

142 *Reference Frequency:* A frequency having a fixed and specified position with respect to the assigned frequency. The displacement of this frequency with respect to the assigned frequency has the same absolute value and sign that the displacement of the characteristic frequency has with respect to the centre frequency band occupied by the emission.

**Reasons**

It is deemed appropriate to adopt the definition contemplated in the proposed amendment to C.C.I.R. Recommendation No. 148 (Geneva, 1958).

**United Kingdom**

57. Replace the present text by the following:

*Frequency Assigned to a Station:* The frequency which coincides with the centre of the band of frequencies authorized to be occupied by an emission from the station. This frequency does not necessarily correspond to any frequency in the emission.

**Reasons**

Clarification. "Frequency band" has been changed to "band of frequencies" so as to avoid confusion with the band nomenclature in Article 2.

**France, French O.P.T.A., Morocco**

58. Replace the present text by the following:

*Bandwidth Occupied by an Emission:* A bandwidth such that, below the lower limit of the band and above the upper limit, the mean powers radiated are each equivalent to one half per cent of the total mean power radiated by the emission in question.

**Reasons**

Wording in harmony with the spirit of Recommendation No. 146 of the C.C.I.R., revised in Geneva at the interim meeting of its Study Group I.

145 *Cancelled.*
Present Provisions

Proposals

146 Japan

58. Delete in fine:

... extended to include any discrete frequency ... radiated power.

Reasons

It is deemed appropriate to amend as above, taking into consideration the proposed amendment to C.C.I.R. Recommendation No. 148 (Geneva, 1958).

147 Federal German Republic


Particularly, the following definitions should be included in the RR:

C.C.I.R. Recommendation No. 145:
1) Bandwidth occupied by an emission;
2) Bandwidth necessarily occupied by an emission;
3) Out-of-band radiation of an emission;
4) Build-up time of the signal.

C.C.I.R. Recommendation No. 147:
1) Spurious radiation;
2) Harmonic radiation;
3) Parasitic radiation;
4) Intermodulation products and radiation other than harmonic and parasitic.

Reasons

It seems desirable to adopt the more detailed definition of these terms given in C.C.I.R. Recommendations Nos. 145 and 147 as amended in Documents I/53, I/61, and TEMP. Doc. I/13 (Geneva 1958).

148 United Kingdom

58. Replace the present text by the following:

Bandwidth Occupied by an Emission: The band of frequencies in which is contained 99% of the total radiated power.

Reasons

To conform to C.C.I.R. Recommendation No. 146.
Present Provisions

Proposals

149 U. S. S. R.

58. Replace the present text by the following:

Bandwidth Occupied by an Emission: The band of frequencies comprising 99% of the total radiated power.

Reasons

In accordance with C.C.I.R. recommendations.

France, French O. P. T. A., Morocco

58. After this No. insert the following new definitions:

150 Bandwidth Required: For a particular class of emission, the minimum bandwidth such that, below the frequency marking the lower limit, and above the frequency marking the upper one, the mean powers radiated are each equivalent to one half per cent of the total mean power radiated, the minimum bandwidth being that required to transmit the information at the requisite speed and with the quality demanded of the system used, under definite technical conditions.

Reasons

Wording in harmony with the spirit of Recommendation No. 145, revised in Geneva, at the interim meeting of C.C.I.R. Study Group I.

151

Frequency Band Occupied by an Emission: A frequency band such that below the frequency marking its lower limit, and above the frequency marking its upper one, the mean powers radiated are each equivalent to one half per cent of the total mean power radiated by that particular emission.

152

Frequency Band Assigned to a Station: A frequency band the central frequency of which coincides with the frequency assigned to the station; its width is
Present Provisions

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equal to the width required, plus twice the frequency tolerance applicable to the emission in question.

Reasons
A wording in harmony with the spirit of Recommendation No. 148 of the C.C.I.R., revised in Geneva at the interim meeting of Study Group I.

153

*Frequency Assigned to a Station:* The centre of the frequency band assigned to the station.

Reasons
See proposal 152.

154

*Characteristic Frequency of an Emission:* In some particular transmission, a frequency that can be readily identified and measured.

Reasons
See proposal 152.

155

*Reference Frequency:* A frequency with a definite fixed position in relation to the frequency assigned. Its shift in relation to the frequency assigned is in sign and magnitude the same as that of the characteristic frequency in relation to the centre of the band occupied by the emission.

156

*N.B. 1:* A reference frequency is required because the central frequency in certain cases is by no means easy to identify and measure.
N.B. 2: For certain classes of emission, it will be necessary to specify one or more reference frequencies, at the same time as the assigned frequency. For example, with television stations, the characteristic frequencies are those of the picture and sound carriers, and the particular reference frequencies corresponding thereto must be specified.

Reasons
See proposal 152.

India

158 58. After this No. add the following new definitions:

Bandwidth Necessarily Occupied by an Emission: The minimum value of the bandwidth occupied by an emission, sufficient to ensure the transmission of information of required quality at the output of the receiving equipment for the class of emission, the system employed and for specified technical conditions. (See footnote *) below.)

Out-of-band radiation of an emission: The power radiated by an emission outside the bandwidth necessarily occupied. The out-of-band radiation does not include radiations on remote frequencies such as harmonics and parasitic emissions. (See footnote *) below.)

159

160

1). The bandwidth occupied by an emission which would be considered as perfect from the standpoint of bandwidth economy equals the bandwidth necessarily occupied. In this case the out-of-band radiation in general equals 1 1/2 of the total radiated power. For other cases the percentage will, in general, be higher.

Reasons
2. To indicate clearly the difference between bandwidth necessarily occupied by an emission and the bandwidth actually occupied by it. Appendix 5 of RR outlines the method of determining the bandwidth necessarily occupied.
Present Provisions

Proposals

Japan

58. After this No. add the following new definitions:

161 Bandwidth Necessarily Occupied by an Emission: The minimum value of the bandwidth occupied by an emission, sufficient to ensure the transmission of information of required quality at the output of the receiving equipment for the class of emission, the system employed, and for specified technical conditions.

162 Out-of-Band Radiation of an Emission: The power radiated by an emission outside the bandwidth necessarily occupied. The out-of-band radiation does not include radiations on remote frequencies such as harmonics and parasitic emissions.

Reasons

It is deemed appropriate to adopt the definitions included in C.C.I.R. Recommendation No. 145 (Warsaw, 1956).

United Kingdom

58. After this No. add the following new definitions and footnote:

163 Bandwidth Necessarily Occupied by an Emission: The minimum value of the bandwidth occupied by an emission, sufficient to ensure the transmission of information of required quality at the output of the receiving equipment for the class of emission, the system employed, and for specified technical conditions. 1bis).

Reasons

The term is used in the proposed revised Article 2. The definition is that of C.C.I.R. Recommendation No. 145, par. 1.2.
Present Provisions

United Kingdom (cont'd)

164

1bis) Such radiation useful for the good functioning of the receiving equipment as, for example, the radiation corresponding to the carrier of reduced-carrier systems should be included in the bandwidth necessarily occupied, and not in the out-of-band radiation.

Reasons

Clarity.

165

Spurious Emission: Emission on a frequency or frequencies which is outside the bandwidth occupied by an emission, and the level of which may be reduced without affecting the corresponding transmission of information.

Reasons

Used in the proposed revised 398. The definition is substantially that of C.C.I.R. Recommendation No. 147 par. 1.1.

166

Harmonic Emission: Spurious emission on frequencies which are whole multiples of those within the bandwidth occupied.

Reasons

The definition is a modified form of C.C.I.R. Recommendation No. 147 par. 1.2.

167

U.S.S.R.

58. After this No. add the following new definition:

Required Bandwidth: The minimum bandwidth occupied by the transmission required to produce communication of the requisite quality for a given class of emission and system used.

Reasons

In accordance with C.C.I.R. recommendations.
Present Provisions

59  _Frequency Tolerance_: The frequency tolerance, expressed as a percentage or in cycles per second, is the maximum permissible deviation, with respect to the reference frequency\(^1\), of the corresponding characteristic frequency of an emission; the reference frequency may differ from the frequency assigned to a station by a fixed and specified amount.

59.1 \(^1\) The concept of a reference frequency becomes necessary to include the many classes of emission now coming into use, including single sideband and multiple working. This is merely a frequency which is selected in any convenient way. The actual emission includes frequencies which are characteristic of the physical emission (for example, the carrier frequency itself, or a particular frequency in a sideband) as distinguished from the assigned frequency and the reference frequency, which may be regarded as mere numbers. It is intended that, consistent with the physical qualities of the apparatus, one of these characteristic frequencies shall always coincide with the reference frequency. This characteristic frequency may then be referred to as the one which corresponds to the reference frequency. It is the maximum permissible difference between these two frequencies, namely the reference frequency, which is a mere number, and the corresponding characteristic frequency, which represents a physical attribute of the emission, that is meant by frequency tolerance.

Proposals

France, French O.P.T.A., Morocco

168 59. Replace the present text by the following:

_Frequency Tolerance_: The maximum admissible deviation between the frequency assigned to a station and the frequency at the centre of the band occupied by the emission, or between the reference frequency and the characteristic frequency. The frequency tolerance is expressed in cycles per second or as a figure relative to the assigned frequency.

Reasons

See proposal 152.

Japan

170 59. Replace the present text by the following:

_Frequency Tolerance_: The frequency tolerance, expressed in parts in \(10^6\) or in cycles per second, is the maximum permissible deviation, with respect to the reference frequency, of the corresponding characteristic frequency of an emission.

Reasons

Expression in parts in \(10^6\) is more convenient than percentage; to be consistent with proposal 142.

171

59.1. Delete.

Reasons

To be consistent with proposals 142 and 170.
Present Provisions

Proposals

U. S. S. R.

172  59. Replace the present text by the following:

Frequency Tolerance: The frequency tolerance, expressed as a percentage or in cycles per second or as a digit times 10 to a certain minus power (such as 3.10⁻⁷, 5.10⁻⁸, etc.) is the maximum permissible deviation of the frequency in relation to its nominal value.

Reasons

In accordance with C.C.I.R. recommendations.

173

59.1 Delete.

Reasons

See proposal 172.

United Kingdom

174  60. Replace the present text by the following:

Power of a Radio Transmitter: The power of a radio transmitter is the peak envelope power unless otherwise specified.

Reasons

Conformity with 61 and 63.

175

60. After this No. add the following new definition and footnote:

If the peak envelope power does not suffice to characterize the practical properties of the emission, the mean power may be quoted in addition.¹)

Reasons

Incorporates the substance of 62 and 63, with some clarification.

176

¹) When the words “peak envelope power” or “mean power” are not used in the context, the figure for “peak envelope power” is to be followed by the letter “p” and that for “mean power” by the letter “m”.

Reasons

64 transferred to a more appropriate place.
Present Provisions

61. *Peak Power of a Radio Transmitter:* The mean power supplied to the antenna during one radio frequency cycle at the highest crest of the modulation envelope, taken under conditions of normal operation.

Proposals

177 France, French O.P.T.A., Morocco

61. Replace the present text by the following:

*Peak Power of a Radio Transmitter:* The mean power fed to the antenna by a transmitter in normal operation at the maximum amplitude of the modulation envelope during a high frequency cycle.

United Kingdom

178 61. Replace the present text by the following:

*Peak Envelope Power of a Radio Transmitter:* The average power supplied to an antenna over one radio-frequency cycle at the highest crest of the modulation envelope, taken under conditions of normal operation.

Reasons

The addition of the word "envelope" conforms to current practice.

179

62. Delete.

Reasons

Incorporated in proposal 175.

France, French O.P.T.A., Morocco

180 63. Replace the present text by the following:

*Mean Power of a Radio Transmitter:* The mean power supplied to the antenna in normal working order, assessed over a period of adequate length in relation to the period of the lowest frequency component of modulation.1)

63.1 1) In general a time of 1/10 second, during which the mean power is a maximum, will be selected.

181 63.1 Replace the present text by the following:

1) Thus, for example, for a radio transmitter, the time chosen will be equal to about a tenth of a second, during which the mean power is at its maximum.
United Kingdom

182 63. Replace the present text by the following:

Mean Power of a Radio Transmitter: The power supplied to the antenna during normal operation, averaged over a time sufficiently long compared with the period of the lowest frequency encountered in the actual modulation. In general a time of \( \frac{1}{10} \) second during which the mean power is greatest will be selected.

Reasons

Precision.

183 63.1. Delete.

Reasons

Incorporated in the proposed revised 63.

64 c) When the words “peak power” or “mean power” are not used in the context, the figure for “peak power” is to be followed by the letter “p” and that for “mean power” by the letter “m”.

184 64. Note by the S. G.

In this paragraph mention is made of the letters “p” and “m”.

Annexed to C.C.I.R. Recommendation No. 73 — Study of Relationships between Peak Power and Mean Power — is a conversion table giving these relationships, in which the symbols \( P_p \) and \( P_m \) represent respectively the peak and mean transmission power as defined in 64.

The question arises whether the letters “p” and “m” in 64 should be brought into harmony with the symbols used in Recommendation No. 73 of the C.C.I.R.

185 United Kingdom

64. Delete.

Reasons

Incorporated in proposal 176.
Present Provisions

Proposals

France, French O.P.T.A., Morocco

64. After this No. add the following new definitions:

186 Spurious Out-of-band Radiation: Radiation on a frequency (or frequencies) outside the band occupied by an emission; its level may be reduced without affecting the transmission of the information concerned.

Reasons
As in C.C.I.R. Recommendation No. 147 (Warsaw, 1956) with the addition of the term "Out-of-band". Spurious radiation may exist inside the band too, but is exceedingly difficult to regulate for.

187

Harmonic Radiation: Spurious radiation on frequencies which are whole multiples of those comprised in the band occupied.

Reasons
C.C.I.R. Recommendation No. 147 (Warsaw, 1956). There is no call, we feel, to include the two definitions studied by the C.C.I.R. for intermodulation products and parasitic radiation. These are of interest only with an eye to detailed application of the RR.

188

Cymomotive Force of an Antenna in a Given Direction: The product, expressed in volts, of the electric field of the antenna at a given point and the distance from this point to the antenna. This distance is assumed to be adequate for the field to be inversely proportional to distance towards the point in question.¹

189

¹) If the direction is not specified, the cymomotive force or gain indicated are assumed to be in the direction where the cymomotive force is at its maximum.

Reasons
France, French O.P.T.A.

190 Specific Cymomotive Force of an Antenna in a Given Direction: The cymomotive force in the given direction when the power supplied to the antenna is one kilowatt.

191

1) It will have to be specified in every case whether the power is peak power or mean power.

India

64. After this No. add the following new definition:

Peak Envelope Power of an Independent-Sideband Transmission: The peak envelope power (PEP) is the RMS power supplied to the antenna during the maximum of one radio-frequency cycle at the highest crest of the modulation envelope when making the two-tone test.

Reasons

The necessity of this definition has long been felt.

United Kingdom

64. After this No. add the following new definition and footnote:

193 Effective Radiated Power (E.R.P.): In a given direction, the power delivered by the transmitter to the antenna, multiplied by the gain of the antenna in that direction.

Reasons

To define a much-used term.

194

1) For broadcasting, the power quoted for the transmitter is usually that of the carrier.

Reasons

To conform with current practice.
65 Gain of an Antenna: The gain of an antenna in a given direction is the ratio, expressed in decibels, of the square of the field intensity radiated in this direction by the given antenna to the square of the field intensity radiated in its median plane by a perfect half-wave antenna isolated in space, where the fields are measured at a distance sufficiently-great. It is assumed that the real antenna and the perfect half wave antenna are supplied with equal power.

France, French O. P. T. A., Morocco

195 65. Replace the present text by the following:

Relative Gain of an Antenna in a Given Direction: The relation, in decibels, between the emfomotive forces of the antenna in question, in a given direction, and a half-wave doublet, taken in its median plane, isolated in space and without loss. (See proposal 189.)

65.1 When not specified otherwise, the figure expressing the gain of an antenna refers to the gain in the direction of the main beam.

196 65.1. Replaced by proposal 189.

United Kingdom

197 65. Add appropriate references to the new footnotes proposed below and insert the following three new footnotes:

198

2bis] The field intensity is sometimes compared with that due to an isotropic antenna in free space, i.e. an antenna which radiates uniformly in all directions; the values for gain so obtained are then 2.15 db higher. If such a datum is taken the gain should be expressed as "The Gain Relative to an Isotropic Antenna".

Reasons
The gain of an antenna is usually expressed relative to a dipole except in the microwave field where the gain of an antenna is usually expressed relative to an isotropic radiator. The term "Coefficient of Directivity" is not in common use.

199

2ter] It can be assumed that when an antenna is used for reception its gain will be the same as when used for transmission.

Reasons
To bring receiving aerials within the scope of the definition.
Present Provisions

Proposals

200

2quarter) In services using scatter propagation the full gain of an antenna may not be realizable in practice and the apparent gain may vary with time.

Reasons

To obviate misuse of the term “gain”.

66  *Coefficient of Directivity of an Antenna:* The coefficient of directivity of an antenna 1) in a given direction is the ratio, expressed in decibels, of the square of the field intensity radiated in this direction to the mean of the squares of the field intensity radiated in all directions in space, where the fields are measured at a distance sufficiently great.

66.1  1) When not specified otherwise the figure expressing the coefficient of directivity refers to that in the direction of the main beam. When it is not necessary to take into account antenna and earth losses the coefficient of directivity as defined above is 2.15 decibels higher than the gain of the antenna as defined in 65.

201  *Federal German Republic*

65 and 66. Replace the present text by the following:

202  *Gain of an Antenna:* The gain of an antenna in a given direction is the ratio expressed in decibels, of the square of the field intensity radiated in this direction by the given antenna to the square of the field intensity produced at the same location by a reference antenna which is supplied with the same power. The fields must be measured at a distance sufficiently great.

As reference antennae are used:

203  

a) A perfect half-wave antenna isolated in space with the field intensity in its central plane taken as reference value.

204  

b) An isotropic radiator, which produces identical field intensities in all points of the space having the same distance from the radiator.

205  

Accordingly, the gain of any antenna over a half-wave dipole is designated $G\lambda/4$, and the gain over an
isotropic radiator is designated \( G_{is} \). (The latter is also termed "Coefficient of Directivity of an Antenna").

**Reasons**

The acceptance of these sharper definitions of the two types of antenna gain and the use of the respective indices seems expedient since the former definitions are somewhat at variance with the antenna gain expressions universally used in radio engineering.

---

**206 France, French O.P.T.A.**

66. Replace the present text by the following:

Absolute Gain of an Antenna in a Given Direction;
Isotropic Gain of an Antenna in a Given Direction;
Coefficient of Directivity of an Antenna in a Given Direction: The ratio, in decibels, between the cymomotive forces of the particular antenna in the given direction, and those of an isotropic antenna, isolated in space and without loss.\(^1\)

(See proposal 189.)

---

**207 United Kingdom**

66 and 66.1. Delete.

**Reasons**

The term is not in current use. See proposal 198.

---

**Directivity Diagram of an Antenna:**

67  a) The directivity diagram of an antenna is the graphical representation of the gain of this antenna in the different directions of space.

68  b) The horizontal directivity diagram of an antenna is the representation of the gain in the different directions of a horizontal plane or, if necessary, in the different directions of a plane slightly inclined to the horizontal.

---

**208 France, French O.P.T.A., Morocco**

67 and 68. Replace the present text by the following:

Antenna Directivity Diagram: A curve representing, in polar or Cartesian coordinates, a quantity proportional to the cymomotive force in the various directions of a particular plane or cone, the maximum cymomotive force being represented by the unit length.

**Reasons**

Representation in space in 67 of the RR and the representation of gain in 67 and 68, are exceedingly unusual.
209 United Kingdom

67. Replace: directivity diagram by: polar diagram and: graphical representation by: polar representation.

Reasons
The term "polar diagram" is more usual and avoids confusion between "directivity diagram" and "coefficient of directivity".

210 Federal German Republic

68. Add the following new paragraph:

c) The vertical directivity diagram of an antenna is the representation of the gain in the different directions of the vertical plane.

Reasons
Besides the term "horizontal directivity diagram" also the term "vertical directivity diagram" is in general use.

211 United Kingdom

68. Replace the present text by the following:

b) The horizontal polar diagram of an antenna is the representation of the gain in the different directions in the horizontal plane or, if necessary, in the different directions at a small, constant angle of inclination to the horizontal.

Reasons
Precision. See proposal 209.

212 Federal German Republic

68. After this No. add the following new definition:

Half-power width: Angular range in which the radiation intensity does not fall below the half-power value of the maximum radiation intensity.

Reasons
Since for the notification and registration of transmitting stations the indication of the half-power width is very useful, the inclusion into the RR of this term is recommended. (See also List I, column 9b of Appendix 6, RR).
**Present Provisions**

**Proposals**

69. *Harmful Interference:* Any radiation or any induction which endangers the functioning of a radio-navigation service or of a safety service\(^2\) or obstructs or repeatedly interrupts a radio service operating in accordance with these Regulations.

69.1 \(^2\) Any radio service, the operation of which is directly related, whether permanently or temporarily, to the safety of human life and the safeguarding of property, shall be considered as a safety service.

---

**France, French O.P.T.A., Morocco**

213 69. *Harmful Interference: transfer this definition to Section VI. (See proposal 291).*

**Reasons**

This is an operating term.

---

**India**

215 69. *Read in fine:*

... repeatedly interrupts or degrades \(^{2bis}\) a radio-service... (remainder unchanged).

---

216

\(^{2bis}\) The operation of a radio service would be deemed to have suffered a degradation if:

a) the average speed of message reception; or

b) the average error rate; or

c) the average signal to interference ratio is adversely affected by the presence of the interfering transmission.

**Reasons**

"Harmful Interference" should cover the effect of degradation of the service.
Present Provisions

Proposals

217 Federal German Republic

69. After the last word of the definition add the following reference: 21ter),

and add the following footnote:

21ter) What should be regarded as interference, and how interferences can be avoided or reduced in any particular case is indicated in the pertinent recommendations of the C.C.I.R.

Reasons

C.C.I.R. Recommendations Nos. 161, 162, 163, and 164.

218 U.S.S.R.

69.1. Delete.

Reasons

Because of proposal 115.

France, French O.P.T.A., Morocco

69. After this No. add the following new definitions:

219 Signal: A figure characterizing a physical phenomenon, and representing a piece of information.

Reasons

See proposal 33.

220

Modulation: A combination of a quantity varying with time, called the “carrier” quantity, and one or more variables, called the modulating signal, with an eye to obtaining a variable quantity depending on the instantaneous values of the modulating signal or signals, and with a spectrum appropriately placed in the scale of frequencies.

221

Amplitude Modulation, Frequency Modulation, Phase Modulation: A modulation in which is varied the amplitude, the frequency, or the phase of the “carrier” quantity which is a sine wave of frequency greater than those of the essential components of the modulating signal.
Present Provisions

Proposals

France, French O.P.T.A., Morocco (cont'd)

222

_Pulse Modulation:_ A modulation in which the carrier quantity is modulated by pulses of the characteristic values of which, amplitude, position or width, is itself modulated by the modulating signal.

223

_Keying:_ Modulation by a telegraph signal.

France, French O.P.T.A.

224 _Heading, Read:_

Section V. Equipment and Systems

69. After this No. add the following new definitions:

225

_Radio Emission:_

226

1. The energy radiated in the form of radio waves in order to provide a radio communication.

227

2. Only exists in French.

228

_Do not affect the English text._

229

_Radio Transmitter:_

230

1. An apparatus designed to produce electromagnetic energy to provide a radio communication.

231

2. By extension, a group made up of a radio transmitter and its antenna.
France, French O.P.T.A., Morocco

Add the following new provisions:

232. Main Transmitter: The radio transmitter a ship ordinarily uses to pass its traffic.

233

Reserve Transmitter: The radio transmitter a ship uses to pass traffic in place of the main transmitter. Generally speaking, the power of the reserve transmitter is less than that of the main one.

234

Emergency Transmitter: A ship’s radio transmitter used only for distress transmissions on the distress frequencies.

235

Cancelled.

India

69. After this No. add the following new definitions:

236. Spurious Radiation: Radiation on a frequency or frequencies which are outside the band occupied by an emission, and the level of which may be reduced without affecting the corresponding transmission of information.

237

Harmonic Radiation: Spurious radiation on frequencies which are whole multiples of those comprised in the band occupied.
Present Provisions  

Proposals

India (cont'd)

238

*Parasitic Radiation:* Spurious radiation on frequencies which are not in harmonic relation with the fundamental frequency and are not intermodulation products.

239

*Intermodulation Products:*

240

a) Spurious radiation at frequencies resulting from intermodulation between the fundamental frequency or the harmonic frequencies of an emission and the fundamental frequencies or the harmonic frequencies of one or several other emissions originating from the same or different stations.

241

b) Spurious radiation at frequencies resulting from intermodulation between several frequencies appearing in the course of generation of the fundamental frequency of one or several emissions, which is not covered by the definition in a) above.

Reasons

Spurious radiation: Clarity.

242

*At the end of Section IV, add the following new definitions:*

*RADIO NOISE:* Radio noise is an electromagnetic disturbance, having a large number of frequency components, capable of causing interference to radio reception.

243

*Natural Radio Noise:* Atmospheric radio noise and cosmic radio noise are natural radio noise.
Present Provisions

Atmospheric Radio Noise: Radio noise originating from electrical discharges in the atmosphere of the earth. This includes precipitation noise.

Cosmic Radio Noise: Radio noise of extra-terrestrial origin. This includes solar noise and galactic noise.

Man-made Noise: Radio noise caused by the operation of electrical apparatus.

Definitions considered necessary.

Japan

69. After this No. add the following new definitions:

Spurious Radiation: Radiation on a frequency or frequencies which are outside the band occupied by an emission, and the level of which may be reduced without affecting the corresponding transmission of information.

Harmonic Radiation: Spurious radiation on frequencies which are whole multiples of those comprised in the band occupied.

Parasitic Radiation: Spurious radiation on frequencies which are not in harmonic relation with the fundamental frequency and are not intermodulation products.
Intermodulation Products Outside the Occupied Band:

Present Provisions

Proposals

Japan (cont'd)

250

Intermodulation Products Outside the Occupied Band:

251

a) Spurious radiation on frequencies resulting from intermodulation between the fundamental frequency or the harmonic frequencies of an emission and the fundamental frequencies or the harmonic frequencies of one or several other emissions originating from the same or different stations;

b) Spurious radiation on frequencies resulting from intermodulation between several frequencies appearing in the course of generation of the fundamental frequency of one or several emissions, which is not covered by a) above.

Reasons

It is deemed appropriate to adopt the definitions included in C.C.I.R. Recommendation No. 147 (Warsaw, 1956).

Australia (Commonwealth of)

70 Instrument Landing System: A system of radio-navigation, intended to facilitate aircraft in landing, which provides lateral and vertical guidance including indications of distance from the optimum point of landing.

71 Racon: A radionavigation system transmitting, automatically or in response to a predetermined received signal, a pulsed radio signal with specific characteristics.

72 Coded Passive Reflector: An object intended to reflect Hertzian waves and having variable reflecting properties according to a predetermined code, for the purpose of producing an indication on a radar receiver.

73 Radiosonde: An automatic radio transmitter in the meteorological aids service usually carried on an aircraft, free balloon, kite or parachute, which transmits meteorological data.
Present Provisions

Proposals

France, French O.P.T.A., Morocco

70. Replace the present text by the following:

254 Instrument Landing System: A radio system which provides aircraft with horizontal and vertical guidance just before and during landing, and — in certain zones — giving the distance to optimum touch-down point.

70. After this No. add the following new definitions:

255 Localizer: A system of lateral guidance embodied in the instrument landing system. It shows an aeroplane what its horizontal deviation is in relation to the axis of the runway.

256 Glide-path Indicator: A system of vertical guidance embodied in the instrument landing system. It shows an aeroplane how far it is above or below the optimum trajectory to touch-down.

257 Marker Beacon: A transmitter on the ground, transmitting vertically upwards in the form of an inverted cone.

258 Radio Altimeter: A radio device in an aeroplane which makes use of the reflection of radio waves from the ground to determine the altitude of the aircraft.
Doppler Navigation System: A radio device on board a vehicle which makes use of the reflection of radio waves from the ground to determine, in continuous fashion, the components of the vehicle's ground speed.

Radio Beacon: A radio transmitter the transmissions of which enable a mobile station to determine its bearing from the transmitter.

Scanning Radar: A fixed radar system for sea and air navigation only.

France, French O.P.T.A. Morocco (cont'd)

71. Does not affect the English text.

India

71. Delete.

The term "icon" is not prevalent.

U. S. S. R.

71. Delete.

No call for this.
Present Provisions

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<td>72.</td>
<td><em>Does not affect the English text.</em></td>
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</tbody>
</table>

| 266 | **U.S.S.R.** |
| 72. | *Delete.* |
|      | **Reasons** |
|      | No call for this. |

**France, French O.P.T.A., Morocco**

| 73. | *After this No. add the following new definitions:* |

| 267 | **Radio Relay System:** A radio system (generally using very high frequencies), made up of several relay sections. |

| 268 | **Radio Relay Link:** A radio system using very high frequencies (in general, the relay sections are linked by narrow electromagnetic beams). |

| 269 | **Double Sideband Emission:** An amplitude-modulated emission in which the two sidebands resulting from a modulation are transmitted in parallel. |

| 270 | **Single Sideband Emission (s.s.b.):** An amplitude-modulated transmission in which a single sideband is transmitted, the other being either very weak or non-existent. |

| 271 | **N.B.:** The carrier is often reduced, too. |
Present Provisions

Independent Sideband Emission (i. s. b.): An amplitude-modulated transmission in which each sideband corresponds to a distinct modulating signal.

Proposals

France, French O.P.T.A., Morocco (cont'd)

272

Independent Sideband Emission (i. s. b.): An amplitude-modulated transmission in which each sideband corresponds to a distinct modulating signal.

273

N. B.: The carrier is often reduced, too.

274

Reduced-Carrier Emission: An amplitude-modulated transmission in which the level of the carrier oscillation is less than what it should be to provide direct restitution of the signal without distortion by means of a linear detector.

275

Frequency-Shift Telegraphy: A telegraph system in which pure sine waves of different frequencies are continuously transmitted in each significant condition.

276

N. B.: There is, in general, phase continuity during transition from one significant condition to another.

277

Frequency Shift: The difference in frequency between two waves emitted in the steady state in two significant conditions of frequency-shift telegraphy.
Present Provisions

Four-Frequency Diplex Telegraphy (Diplex): Frequency-shift telegraphy in which each of the four possible combinations of signals corresponding to two telegraph channels is represented, in the steady state, by a separate frequency.

Reasons
C.C.I.R. Recommendation No. 152, amended.

Proposals
France, French O.P.T.A., Morocco (cont'd)

278

Section VI. Operating Terms

Transmission Channel: The various means used to ensure one-way transmission between two points.

279

N. B.: Several transmission channels may follow the same path and use common apparatus.

280

Telecommunication Channel: The various means used to provide two-way transmission between two points.

281

N. B.: Several telecommunication channels may follow the same path and use common apparatus.
Present Provisions

Proposals

France, French O.P.T.A., Morocco (cont'd)

282

General Telecommunication Channel Network: The various telecommunication channels open for public correspondence, except for the telecommunication channels used by mobile services.

Reasons

See proposal 35.

283

Unilateral Operation: An operating procedure under which transmission is one-way only.

284

Simplex Operation: An operating procedure under which transmission is possible first in one direction, then in the other, for example, by a manually-operated switch.¹)

285

Duplex Operation: An operating procedure under which transmission is possible in both directions at the same time.²)

286

Semi-duplex Operation: Simplex at one end of the channel, duplex at the other.³)

287

Proposed by France and French O.P.T.A.

¹) Generally speaking, when duplex and semi-duplex are used in radio, two frequencies are required. Simplex is feasible with one or two frequencies.
Present Provisions

Proposals

France, French O.P.T.A., Morocco (cont'd)

288

Telegram: Written matter intended to be transmitted by telegraphy; this term also includes radiotelegram unless otherwise specified.

(Reproduced from 17)

Reasons

No change was suggested by the Telegraph and Telephone Conference (Geneva, 1958).

289

Radiotelegram: Telegram originating in or intended for a mobile station, transmitted on all or part of its route over the radiocommunication channels of a mobile service.

(Reproduced from 18)

290

Interference: Disturbance to the reception of a useful signal by an undesired signal or a disturbance.

291

Harmful Interference: Interference which endangers the functioning of a radionavigation service or of a safety service or obstructs or repeatedly interrupts a radio service operating in accordance with these Regulations.

292

Safety service: A radio service related, whether permanently or temporarily, to the safety of life and property.

Reasons

A note from the RR (69.1) turned into a definition.
CHAPTER II

ARTICLE 2

Designation of Emissions

§ 1. Emissions are designated according to their classification and the width of the frequency band occupied by them.

293 United States of America

§ 1. Emissions are designated according to their classification and the bandwidth necessarily occupied by them.

Reasons

Appendix 5 to the RR and the latest Recommendations of the C.C.I.R. permit the calculation of the bandwidth necessarily occupied by an emission, rather than the bandwidth occupied by an emission. While it would be preferable to use the bandwidth occupied by an emission in the designation of emissions, it will be necessary to await further studies of the C.C.I.R. before this can be accomplished.

France, French O.P.T.A., Morocco

294 § 1. Emissions shall be designated according to their classification and the bandwidth required or occupied.

295 Japan

§ 1. Emissions are designated according to their classification and the bandwidth necessarily occupied by them.

Reasons

To be consistent with proposals 161 and 162.
Section I. Classification

§ 2. Emissions are classified and symbolized according to the following characteristics:

1. Type of modulation
2. Type of transmission
3. Supplementary characteristics.

France, French O.P.T.A., Morocco

§ 2. Emissions shall be classified and symbolized according to the following characteristics:

1. Type of modulation;
2. Type of signal;
3. Number of channels of similar characteristics to which frequencies are apportioned.

To designate an emission, symbols shall be written in the order (1), (2), and (3).

United Kingdom

75. Under (1), replace: Type of modulation by: Type of modulation of the main carrier.

Reasons

It is the method of modulating the main carrier that is indicated by the symbols A, F or P.

France, French O.P.T.A., Morocco

§ 3. (1) Types of modulation:

a) Amplitude
b) Frequency (or phase)
c) Pulse

Symbol

A F P

76. Replace the present text by the following:

§ 3. (1) Type of modulation:

a) Amplitude, two dependent sidebands

Single sideband, or independent sidebands:

Full carrier
Reduced carrier
No carrier

b) Frequency or phase

Symbol

A AB AR AS F
Present Provisions

Proposals

c) Pulses
   Pulses, exactly periodical (un-modulated) PO
   Pulses, amplitude-modulated PA
   Coded pulses PC
   Position (or phase) modulated pulses PH
   Width modulated pulses PL

d) Composite modulation
   Various combinations of the symbols A, F, P, PA, etc., shall be used. Where appropriate, the last letter would be the symbol for modulation by the information-carrying signal.

300 United Kingdom

76. Replace: Types of modulation by: Types of modulation of the main carrier.

Reasons

It is the method of modulating the main carrier that is indicated by the symbols A, F or P.

301 Australia (Commonwealth of)

77. Delete the existing sub-paragraph c) and in its place insert the following:

   c) Telegraphy by the keying of a modulated wave

302

After the present sub-paragraph f) insert the following new sub-paragraph:

   f bis) Telegraphy by the keying of a modulating audio frequency impressed on an uninterrupted continuous wave carrier

Reasons

To provide a symbol to define without ambiguity the emission of non-directional beacons employed for aeronautical purposes.
France, French O.P.T.A., Morocco

303 77. Replace the present text by the following:

(2) Type of signal

<table>
<thead>
<tr>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Absence of any modulating signal*)</td>
</tr>
<tr>
<td>b) Telegraphy without modulating audio frequency</td>
</tr>
<tr>
<td>c) Modulation by one or more sine oscillations of relatively low frequency. Telegraphy by keying of one or more audio frequency oscillations or by keying of the emission thus modulated, is represented by the same signal, without addition</td>
</tr>
<tr>
<td>d) Telephony; sound broadcasting</td>
</tr>
<tr>
<td>e) Facsimile; phototelegraphy</td>
</tr>
<tr>
<td>f) Television</td>
</tr>
<tr>
<td>g) Special radiolocation signals; radionavigation*)</td>
</tr>
<tr>
<td>h) Radio measurement</td>
</tr>
<tr>
<td>i) Radio control</td>
</tr>
<tr>
<td>j) Complex signals and cases not considered above</td>
</tr>
</tbody>
</table>

*) Emissions of pure continuous waves for radiolocation and radio navigation purposes shall always be represented by the symbol AO.

304

**) At its Warsaw Plenary Assembly, the C.C.I.R. proposed (Recommendation No. 152, sub-paragraph 4) that the symbol 6 be allotted to four-frequency diplex telegraphy. But this is not in harmony with the use made of the other figures, which are not numerous enough to stand for particular systems. Four-frequency diplex telegraphy is but one instance of frequency-shift telegraphy, with previous amplitude combination of the signals in the two channels. Hence the symbol FA1 we are proposing hereinafter.

306 India

77. Insert after sub-paragraph f):

f bis) Telegraphy using four adjacent radio frequencies 6

Reasons

Proposals

United Kingdom

**307** 77. Replace the present text of sub-paragraph c) by the following:

c) Telegraphy by the on-off keying of a modulating audio frequency or frequencies or by the on-off keying of a modulated emission (special case: an unkeyed modulated emission)

**Reasons**
To exclude frequency-shift and frequency-exchange keying.

**308**
Replace the present text of sub-paragraphs e) and g) by the following:

e) Facsimile by directly modulating the carrier

**309**
After sub-paragraph g) add the following two new sub-paragraphs:

h) Facsimile by frequency modulating a sub-carrier, which in turn modulates the main carrier

**310**
i) Composite transmissions and cases, e.g. telemetry, not covered by the above

**Reasons**
There is a need to distinguish various methods of transmitting facsimile.
The new symbol 6 is in accordance with C. C. I. R. Recommendation No. 152, paragraph 4 (Warsaw, 1956).
Present Provisions

(3) Supplementary characteristics:
   a) Double sideband, full carrier (none)
   b) Single sideband, reduced carrier
   c) Two independent sidebands, reduced carrier
   d) Other emissions, reduced carrier
   e) Pulse, amplitude modulated
   f) Pulse, width modulated
   g) Pulse, phase (or position) modulated

Proposals

United States of America

78. Delete the following words:

312 — in sub-paragraph a): “full carrier”;
313 — in sub-paragraph b): “reduced carrier”;
314 — in sub-paragraph c): “reduced carrier”;
315 — in sub-paragraph d): “reduced carrier”.

Reasons

Due to the possible misinterpretation of what is meant by terms “full carrier” and “reduced carrier”, and since they do not seem to be necessary for an adequate description of an emission for the purpose of the RR.

France, French O.P.T.A., Morocco

78. Replace the present text by the following:

(3) Number of channels of similar characteristics divided into assigned frequencies*)
   a) One channel none
   b) Two channels (double independent sideband emission, etc.)**)
   c) Three channels (three independent sidebands, one of them capable of subdivision into two sub-bands on either side of the carrier)**)
   d) Four channels (four independent sidebands, etc.)**)
   e) The following letters: e, f, g... can be used, if need be, to represent channels with 5, 6, 7 or more channels
   f) Multitudinous channels Letter z plus a digit showing how many channels there are

*) When the characteristics are different, the channels shall be considered as separate emissions.

**) See C.C.I.R. Recommendation No. 149 (Warsaw, 1956).
Present Provisions

Proposals

India

319

78. Insert after sub-paragraph g):

\[ g \text{ bis) Pulse code modulated} \]

Reasons

To provide for a prevalent system.

United Kingdom

320

78. Replace the present text of sub-paragraphs b), c), and d) by the following:

\[ b) \text{ Single sideband; suppressed, reduced or level-controlled carrier} \]
\[ c) \text{ Two independent sidebands; suppressed, reduced or level-controlled carrier} \]
\[ d) \text{ Other emissions; suppressed, reduced or level-controlled carrier} \]

Reasons

To cover classes of emission currently in use, without unduly complicating the system.

321

After sub-paragraph g), add the following two sub-paragraphs:

\[ h) \text{ Single sideband, full carrier} \]
\[ i) \text{ Vestigial sideband} \]

Reasons

To cater for emissions now in use.

U. S. S. R.

322

78. Read:

(3) Supplementary characteristics:

\[ a) \text{ double sideband and carrier.} \]
\[ b \text{ bis) single sideband and pilot.} \]

Other points unchanged.

Reasons

Clearer drafting.
323 India

78. After this No. add the following new sub-paragraph:

(3 bis) . . . .

a) Time division multiplex

b) Frequency division multiplex with constant arrangement of significant conditions

c) Frequency division multiplex with variable arrangement of significant conditions

d) Combination of multiplex processes: Combination of the letters at a), b), and c) above.

e) Telegraph channels of time division multiplex A, B, C, D, etc.

f) Subchannel of b) above U1, U2, U3, etc.

g) Subchannel of c) above V1, V2, V3, etc.

h) Subchannel of e) above A1, A2, etc. B1, B2, etc.

Reasons


79 § 4. Note: As an exception to the above principles, damped waves are designated by B

79 Delete.

Reasons

The use of damped waves is out-of-date.
Present Provisions

80 § 5. The classification of emissions is tabulated below:

<table>
<thead>
<tr>
<th>Type of Modulation</th>
<th>Type of Transmission</th>
<th>Supplementary Characteristics</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Amplitude</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modulated</td>
<td>Absence of any modulation</td>
<td></td>
<td>A0</td>
</tr>
<tr>
<td></td>
<td>Telegraphy without the use of modulating audio frequency (on-off keying)</td>
<td>—</td>
<td>A1</td>
</tr>
<tr>
<td></td>
<td>Telegraphy by the keying of a modulating audio frequency or audio frequencies or by the keying of the modulated emission (special case: an unkeyed modulated emission)</td>
<td>—</td>
<td>A2</td>
</tr>
<tr>
<td></td>
<td>Telephony</td>
<td>Double sideband, full carrier</td>
<td>A3</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>Single sideband, reduced carrier</td>
<td>A3a</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>Two independent sidebands, reduced carrier</td>
<td>A3b</td>
</tr>
<tr>
<td></td>
<td>Facsimile</td>
<td>—</td>
<td>A4</td>
</tr>
<tr>
<td></td>
<td>Television</td>
<td>—</td>
<td>A5</td>
</tr>
<tr>
<td></td>
<td>Composite transmissions and cases not covered by the above</td>
<td>—</td>
<td>A9</td>
</tr>
<tr>
<td></td>
<td>Composite transmissions</td>
<td>Reduced carrier</td>
<td>A9c</td>
</tr>
<tr>
<td><strong>Frequency (or phase) Modulated</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Absence of any modulation</td>
<td></td>
<td>F0</td>
</tr>
<tr>
<td></td>
<td>Telegraphy without the use of modulating audio frequency (frequency shift keying)</td>
<td>—</td>
<td>F1</td>
</tr>
<tr>
<td></td>
<td>Telegraphy by the keying of a modulating audio frequency or audio frequencies, or by the keying of the modulated emission (special case: an unkeyed emission modulated by audio frequency)</td>
<td>—</td>
<td>F2</td>
</tr>
<tr>
<td></td>
<td>Telephony</td>
<td>—</td>
<td>F3</td>
</tr>
<tr>
<td></td>
<td>Facsimile</td>
<td>—</td>
<td>F4</td>
</tr>
<tr>
<td></td>
<td>Television</td>
<td>—</td>
<td>F5</td>
</tr>
<tr>
<td></td>
<td>Composite transmissions and cases not covered by the above</td>
<td>—</td>
<td>F9</td>
</tr>
<tr>
<td><strong>Pulse Modulated</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Absence of any modulation intended to carry information</td>
<td>—</td>
<td>P0</td>
</tr>
<tr>
<td></td>
<td>Telegraphy without the use of modulating audio frequency</td>
<td>—</td>
<td>P1</td>
</tr>
</tbody>
</table>
Present Provisions

<table>
<thead>
<tr>
<th>Type of Modulation</th>
<th>Type of Transmission</th>
<th>Supplementary Characteristics</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telephony</td>
<td></td>
<td>Audio frequency or audio frequencies modulating the pulse in amplitude</td>
<td>P2d</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Audio frequency or audio frequencies modulating the width of the pulse</td>
<td>P2e</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Audio frequency or audio frequencies modulating the phase (or position) of the pulse</td>
<td>P2f</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Amplitude modulated</td>
<td>P3d</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Width modulated</td>
<td>P3e</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phase (or position) modulated</td>
<td>P3f</td>
</tr>
<tr>
<td>Composite transmissions and cases not covered by the above</td>
<td></td>
<td></td>
<td>P9</td>
</tr>
</tbody>
</table>

Proposals

United States of America

80. In the third column of the table (Supplementary characteristics), delete:

325 — the words “full carrier” opposite A3;
326 — the words “reduced carrier” opposite A3a, A3b and A9c.

Reasons

See proposals 312-315.

327 France, French O.P.T.A.

80. Replace the present text by the following:

§ 5. Hereinunder some examples of how emissions and symbols are classified:

<table>
<thead>
<tr>
<th>Type of Modulation</th>
<th>Type of Signal</th>
<th>Number of Channels *)</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amplitude Modulation</td>
<td>Absence of any modulating signal (example: standard frequency, radionavigation)</td>
<td></td>
<td>A0</td>
</tr>
<tr>
<td></td>
<td>Telegraphy without a modulating audio frequency</td>
<td>One</td>
<td>A1</td>
</tr>
</tbody>
</table>

328 *) These are frequency-division channels of similar characteristics (see 78).
<table>
<thead>
<tr>
<th>Type of Modulation (1)</th>
<th>Type of Signal (2)</th>
<th>Number of Channels (*) (3)</th>
<th>Symbol (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telegraphy by keying of a modulating audio frequency or by keying of the modulated emission (special case: unkeyed modulated emission)</td>
<td>One</td>
<td>A2</td>
<td></td>
</tr>
<tr>
<td>Two dependent sidebands</td>
<td>Telegraphy and broadcasting</td>
<td>One</td>
<td>A3</td>
</tr>
<tr>
<td>Single sideband, full carrier</td>
<td>Telephony</td>
<td>One</td>
<td>AB3</td>
</tr>
<tr>
<td>Single sideband, reduced carrier</td>
<td>Telephony</td>
<td>One</td>
<td>AR3</td>
</tr>
<tr>
<td>Four independent sidebands, reduced carrier</td>
<td>Telephony</td>
<td>Four</td>
<td>AR3d</td>
</tr>
<tr>
<td>Two dependent sidebands</td>
<td>Facsimile and phototelegraphy</td>
<td>One</td>
<td>A4</td>
</tr>
<tr>
<td>Two dependent sidebands</td>
<td>Television</td>
<td>One</td>
<td>A5</td>
</tr>
<tr>
<td>Single sideband with highly attenuated second sideband</td>
<td>Television</td>
<td>One</td>
<td>AB5</td>
</tr>
<tr>
<td>Frequency modulation</td>
<td>Frequency-shift telegraphy</td>
<td>One</td>
<td>F1</td>
</tr>
<tr>
<td></td>
<td>Four-frequency diplex telegraphy</td>
<td>FA1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Frequency-shift telegraphy the shift being in the frequency of an oscillation modulating the fixed carrier</td>
<td>One</td>
<td>F2</td>
</tr>
<tr>
<td></td>
<td>Telephony and broadcasting</td>
<td>One</td>
<td>F3</td>
</tr>
<tr>
<td></td>
<td>Facsimile and phototelegraphy</td>
<td>One</td>
<td>F4</td>
</tr>
<tr>
<td></td>
<td>Frequency modulation of a sub-carrier</td>
<td>Facsimile and phototelegraphy</td>
<td>One</td>
</tr>
<tr>
<td></td>
<td>Radionavigation (example: a frequency-modulation radio altimeter)</td>
<td></td>
<td>F6</td>
</tr>
</tbody>
</table>

*) These are frequency-division channels of similar characteristics (see 78).
<table>
<thead>
<tr>
<th>Type of Modulation</th>
<th>Type of Signal</th>
<th>Number of Channels</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency apportionment between four different instruments</td>
<td>Radio measurement</td>
<td>Four</td>
<td>F7d</td>
</tr>
<tr>
<td>Pulse modulated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exactly periodical pulses, unmodulated (as in radar)</td>
<td></td>
<td>P0</td>
</tr>
<tr>
<td>Amplitude-modulated pulses</td>
<td>Telegraphy (synchronous)</td>
<td></td>
<td>PA1</td>
</tr>
<tr>
<td>Coded pulses</td>
<td>Teledphony</td>
<td>One</td>
<td>PC3</td>
</tr>
<tr>
<td>Position-modulated pulses</td>
<td>Teledphony</td>
<td>Thirty-six (apportioned in time)</td>
<td>PH3</td>
</tr>
<tr>
<td>Composite modulation</td>
<td>Emission frequency-modulated by a sine oscillation and then pulse-modulated (for example, radar)</td>
<td></td>
<td>PF2</td>
</tr>
<tr>
<td></td>
<td>Twenty-four frequency-modulated channel telephony, the whole frequency-modulating a carrier</td>
<td>Twenty-four</td>
<td>FAF3x</td>
</tr>
</tbody>
</table>

*) These are frequency-division channels of similar characteristics (see 78).

329

India

80. In the 2nd column, insert opposite: Frequency (or phase) modulated, below: Television — F5, the following item:

Four frequency diplex (or twinplex) system — F6.

Reasons

*C.C.I.R. Recommendation No. 152 (Warsaw, 1956).*
Replace the present table by the following:

<table>
<thead>
<tr>
<th>Modulation of Main Carrier</th>
<th>Type of Transmission</th>
<th>Supplementary Characteristics</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amplitude Modulation</td>
<td>Absence of any modulation</td>
<td>—</td>
<td>A0</td>
</tr>
<tr>
<td></td>
<td>Telegraphy by on-off keying without the use of a modulating audio frequency.</td>
<td>—</td>
<td>A1</td>
</tr>
<tr>
<td></td>
<td>Telegraphy by the on-off keying of an amplitude-modulating audio frequency or frequencies or by the on-off keying of an amplitude-modulated emission (special case: an unkeyed emission amplitude modulated).</td>
<td>—</td>
<td>A2</td>
</tr>
<tr>
<td></td>
<td>Telephony</td>
<td>Double sideband, full carrier.</td>
<td>A3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Single sideband: suppressed, reduced or level-controlled carrier.</td>
<td>A3a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Two independent sidebands; suppressed, reduced or level-controlled carrier.</td>
<td>A3b</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Single sideband, full carrier.</td>
<td>A3g</td>
</tr>
<tr>
<td></td>
<td>Facsimile by directly amplitude modulating the carrier.</td>
<td>—</td>
<td>A4</td>
</tr>
<tr>
<td></td>
<td>Television</td>
<td>Double sideband, full carrier.</td>
<td>A5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vestigial sideband.</td>
<td>A5h</td>
</tr>
<tr>
<td></td>
<td>Facsimile by frequency modulating a subcarrier which in turn amplitude-modulates the main carrier</td>
<td>Double sideband, full carrier.</td>
<td>A7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Single sideband; suppressed, reduced or level-controlled carrier (with suppressed carrier symbol F4 could be used).</td>
<td>A7a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Two independent sidebands; suppressed, reduced or level-controlled carrier.</td>
<td>A7b</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Suppressed, reduced or level-controlled carrier.</td>
<td>A9</td>
</tr>
<tr>
<td></td>
<td>Composite transmissions and cases not covered by the above in which the main carrier is amplitude modulated.</td>
<td>—</td>
<td>A9c</td>
</tr>
<tr>
<td>Frequency (or phase) Modulation</td>
<td>Absence of any modulation</td>
<td>—</td>
<td>F0</td>
</tr>
<tr>
<td></td>
<td>Telegraphy by frequency-shift or frequency-exchange keying without the use of a modulating audio frequency; one of two frequencies being emitted at any instant.</td>
<td>—</td>
<td>F1</td>
</tr>
<tr>
<td></td>
<td>Telegraphy by the on-off keying of a frequency-modulating audio frequency or by the on-off keying of a frequency-modulated emission (special case: an unkeyed emission frequency modulated).</td>
<td>—</td>
<td>F2</td>
</tr>
<tr>
<td>Modulation of Main Carrier</td>
<td>Type of Transmission</td>
<td>Supplementary Characteristics</td>
<td>Symbol</td>
</tr>
<tr>
<td>----------------------------</td>
<td>----------------------</td>
<td>-------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td></td>
<td>Telephony</td>
<td></td>
<td>F3</td>
</tr>
<tr>
<td></td>
<td>Facsimile by directly frequency-modulating the carrier.</td>
<td></td>
<td>F4</td>
</tr>
<tr>
<td></td>
<td>Television</td>
<td></td>
<td>F5</td>
</tr>
<tr>
<td></td>
<td>Four-frequency diplex telegraphy (telegraphy by frequency-shift or frequency-exchange keying, one of four frequencies being emitted at any instant).</td>
<td></td>
<td>F6</td>
</tr>
<tr>
<td></td>
<td>Composite transmissions and cases not covered by the above in which the main carrier is frequency-modulated.</td>
<td></td>
<td>F9</td>
</tr>
<tr>
<td></td>
<td>A pulsed carrier without any modulation intended to carry information.</td>
<td></td>
<td>P0</td>
</tr>
<tr>
<td></td>
<td>Telegraphy by the on-off keying of a pulsed carrier without the use of a modulating audio frequency.</td>
<td></td>
<td>P1</td>
</tr>
<tr>
<td></td>
<td>Telegraphy by the on-off keying of a modulating audio frequency or frequencies or by the on-off keying of a modulated pulsed carrier (special case: an unkeyed modulated pulsed carrier).</td>
<td>Audio frequency or frequencies modulating the pulses in amplitude</td>
<td>P2d</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Audio frequency or frequencies modulating the width of the pulses.</td>
<td>P2e</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Audio frequency or frequencies modulating the phase (or position) of the pulses.</td>
<td>P2f</td>
</tr>
<tr>
<td></td>
<td>Telephony</td>
<td>Amplitude modulated pulses.</td>
<td>P3d</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Width modulated pulses.</td>
<td>P3e</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phase (or position) modulated pulses.</td>
<td>P3f</td>
</tr>
<tr>
<td></td>
<td>Composite transmissions and cases not covered by the above in which the main carrier is pulse-modulated.</td>
<td></td>
<td>P9</td>
</tr>
</tbody>
</table>

**Reasons**

For precision and to cater for new types of emission.

---

**U. S. S. R.**

80. *In the column headed Supplementary Characteristics, for: A3 Telephony Transmission, and in 84, § 9, sub-paragraphs 3 and 6, in the column headed Description, for: full carrier read: carrier.*

**Reasons**

Clearer drafting.
80. After this No. add the following new paragraph:

§ 5 bis. The following are the examples of the classification of multichannel arrangements:

<table>
<thead>
<tr>
<th>Type of Arrangement</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Third channel of frequency division multiplex with constant arrangement of significant conditions, modulated by channel B of time division multiplex</td>
<td>U3TB</td>
</tr>
<tr>
<td>(ii) Subchannel 2 of channel B indicated in (i) above</td>
<td>U3TB2</td>
</tr>
<tr>
<td>(iii) System at (i) and (ii) above applied to channel B of independent sideband telephone transmitter with reduced carrier</td>
<td>(i) BU3TB (ii) BU3TB2</td>
</tr>
</tbody>
</table>

Reasons

Present Provisions

Section II. Bandwidth

81 § 6. Wherever the full designation of an emission is necessary, the symbol for that class of emission, as given above, is prefixed by a number indicating the width in kilocycles of the frequency band occupied by it (see §58).

Proposals

333 United States of America

81. Read in fine:

... a number indicating, in kilocycles, the bandwidth necessarily occupied.

Reasons

See proposal 293.

334 France, French O.P.T.A.

81. Replace the present text by the following:

§ 6. Whenever an emission has to be fully designated, the symbol for that class of emission, as given above, is prefixed by a number showing the width in kilocycles of the band required or the band actually occupied.

335 India

81. Read in fine:

... is prefixed by a number indicating the width in kilocycles of the frequency band necessarily occupied by it. (See proposal 158.)

Reasons

Appendix 5 gives the figures for bandwidth necessarily occupied. The last paragraph of C.C.I.R. Recommendation No. 145 (Warsaw, 1956) permits calculations of the bandwidth necessarily occupied by an emission rather than of the bandwidth actually occupied by an emission.

336 Japan

81. Read in fine:

... by a number indicating in kilocycles the bandwidth necessarily occupied by it. (See proposal 161.)

Reasons

From the practical point of view, and to be consistent with proposal 161.
Present Provisions

Proposals

337 United Kingdom

81. *Read in fine:*

... is prefixed by a number indicating the bandwidth in kilocycles per second necessarily occupied by the emission.

Reasons

To make clear the intention of the Regulation.

France, French O.P.T.A.

81. *After this No. add the following new paragraphs:*

338 § 6 *bis.* When a category of emissions belonging to a certain class is designated, the number used shows the bandwidth required for that category.

339 § 6 *ter.* When a particular emission is designated, the number used shows the bandwidth occupied by that particular emission.

United States of America

82 § 7. Bandwidths of 10 kilocycles or less shall be expressed to a maximum of two significant figures after the decimal.

840 United States of America

82. *Replace the present text by the following:*

§ 7. Bandwidths shall be expressed to a maximum of two significant figures (See Appendix 5).

Reasons

Two significant figures adequately describe the bandwidths of an emission, regardless of its magnitude. Examples: 0.027; 0.27; 2.7; 27; 270; 27 000.
341 France, French O. P. T. A., Morocco

82. Replace the present text by the following:

§ 7. The numbers showing bandwidths comprise three significant digits at the most, the third digit being, almost always, a nought or a five.

Reasons

It is no easy matter to measure a bandwidth with an accuracy of less than a few parts in a hundred.

342 India

82. Read:

Bandwidths of less than 10 kilocycles shall be expressed ...

(remainder unchanged).

Reasons

Better drafting.

343 United Kingdom

82. After: kilocycles add: per second.

Reasons

To conform with the French text.

344 United States of America

83. Replace the present text by the following:

§ 8. For the bandwidths necessarily occupied by various classes of emissions, see Appendix 5.

Reasons

See proposal 293.

345 France, French O. P. T. A., Morocco

83. Replace the present text by the following:

§ 8. The bandwidths necessary are determined in accordance with the C. C. I. R. recommendations in force.
§ 8. For the bandwidths necessarily occupied by various classes of emissions, and for examples of the designation of emissions, see Appendix 5.

Reasons

1. See proposal 335.
2. Consequential to proposal 352.

347 Japan

§ 8. For the bandwidths necessarily occupied by various classes of emissions, see Appendix 5.

Reasons

To be consistent with proposal 161.

348 United Kingdom

§ 8. Replace the present text by the following:

See Appendix 5 for the determination of the bandwidth necessarily occupied by an emission as defined in Article 1.

Reasons

Precision.

349 France, French O. P. T. A.

§ 8 bis. The bandwidths occupied shall be determined in accordance with measurements made on a transmitter identical in type with the transmitter used, by means of the measurement methods described in the C. C. I. R. recommendations in force.
Present Provisions

84 § 9. The following are examples of the designation of emissions.

<table>
<thead>
<tr>
<th>Description</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Telegraphy 25 words per minute, International Morse Code, carrier modulated by keying only</td>
<td>0.1 A1</td>
</tr>
<tr>
<td>2. Telegraphy, 525 c/s tone, 25 words per minute, International Morse Code, carrier and tone keyed or tone only keyed</td>
<td>1.15 A2</td>
</tr>
<tr>
<td>3. Amplitude modulated telephony, 3000 c/s maximum modulation, double sideband, full carrier</td>
<td>6 A3</td>
</tr>
<tr>
<td>4. Amplitude modulated telephony, 3000 c/s maximum modulation, single sideband, reduced carrier</td>
<td>3 A3a</td>
</tr>
<tr>
<td>5. Amplitude modulated telephony, 3000 c/s maximum modulation, two independent sidebands, reduced carrier</td>
<td>6 A3b</td>
</tr>
<tr>
<td>6. Vestigial sideband television (one sideband partially suppressed), full carrier (including a frequency modulated sound channel)</td>
<td>6 000 A5, F3</td>
</tr>
<tr>
<td>7. Frequency modulated telephony, 3000 c/s modulation frequency, 20 000 c/s deviation</td>
<td>46 F3</td>
</tr>
<tr>
<td>8. Frequency modulated telephony, 15000 c/s modulation frequency, 75 000 c/s deviation</td>
<td>180 F3</td>
</tr>
<tr>
<td>9. One-microsecond pulses, unmodulated, assuming a value of 5 for K (See Appendix 5)</td>
<td>10 000 P0</td>
</tr>
</tbody>
</table>

Proposals

350 United States of America

84. Delete the whole of this No. including the table.

Reasons

Appendix 5 contains sufficient examples of emission designations.

351 France, French O. P. T. A., Morocco

84. Delete.

Reasons

France, French O. P. T. A.:

What is said in proposals 334, 338, 339, 341, 345 and 349 is straightforward enough for examples to be superfluous. Indeed, such examples could not but be restrictive in comparison with the very simple, but rather general formulae given in the C. C. I. R. recommendations in force (especially Warsaw Recommendation No. 145, revised in Los Angeles).

Morocco:

Unnecessary in view of the simple character of the general formulae.
352 India

84. Delete this No. including the examples.

Reasons
Appendix 5 contains more comprehensive examples of emission designations. 84 is an unnecessary duplication.

353 United Kingdom

84. Delete whole paragraph.

Reasons
Appendix 5 provides sufficient examples.

354 U.S.S.R.

84. See proposal 331.

355 France, French O. P. T. A.

84. After this No. add the following new section:

Section II bis. Designation of Channels

356

The procedures hereinafter described may be used when, for operational reasons, for example, some particular channel in a multiplex radio call has to be designated.

357

Channels shall be represented by a symbol made up of letters and digits, in the following order:

(1) Method of multiplex channel apportionment
(2) Designation of the particular channel

And, if necessary, if there be a second division of the channels:

(3) Method of channel apportionment, in the sub-divided channel
(4) Designation of the final channel.
(1) Method of multiplex channel apportionment:

a) Time-division

b) Frequency-division
   — Systems in which significant conditions are characterized by the emission of invariable frequencies
   — Systems in which significant conditions are characterized by the emission of variable frequencies

c) Systems using a combination of procedures
   — A combination of the letters T, U, and V above shall be used, the letters representing frequency apportionment (U or V) always being written first.

Reasons


(2) The particular channel shall be designated as follows:

a) The channels of frequency-division multiplex radiotelephone emissions shall be designated, starting with the carrier, by the symbols A1, B1, A2, B2, etc.
   — If the carrier is less than 10 Mc/s, the letter A shall be used for the channels of frequencies less than that of the carrier, the letter B for the channels of frequencies above this.
   — Should the carrier be above 10 Mc/s, the letter A shall be used for the channels of frequencies above that of the carrier, the letter B for the channels of lower frequencies.
   — The digit 1 shall be used for the channels closest to the carrier, the digit 2 for the next closest, and so on.

Reasons

In accordance with C.C.I.R. Recommendation No. 149 (Warsaw, 1956), it would be well not to standardize, in the Regulations, the use of the symbols C1 and C2, standing for the half-channels of certain three-channel systems, since these systems are used ever less often, and the symbols in question may be muddling.

b) The channels of frequency-division multiplex radiotelegraphy shall be designated by digits, in an ascending order of frequencies.

c) Time-division radiotelegraph or radiotelephone channels shall be successively designated in the time scale by the letters A, B, C, D...; when the channels themselves are sub-divided in the same fashion, the final channels shall be designated by digits following the previous letters, i.e., for example, A1, A2, A3, A4... B1, B2, B3, B4 ...

Reasons


The following examples show how these rules should be used:

a) When use is made of a frequency-division system in which the significant conditions are characterized by the emission of invariable frequencies (designated by U), and the third channel of this system is keyed by a time-division system (T), the channel B of this latter will be represented by U3TB

b) If this channel be itself sub-divided and if sub-channel 2 is used, it shall be represented by U3TB2

c) If the above systems are used in channel B1 of an independent sideband radiotelephone transmission, the designation will be UB1U3TB or UB1U3TB2
361 France, French O. P. T. A., Morocco

Section III.

*Replace the present heading by the following:*

*Designation of Frequencies, Bands and Wavelengths used in Radio*

362 India

Section III.

*Replace the present heading by the following:*

*Nomenclature of the Frequency and Wavelength Bands.*

Reasons

See proposal 365.
Present Provisions

§ 10. Frequencies shall be expressed in kilocycles per second (kc/s) at and below 30000 kilocycles per second and in megacycles per second (Mc/s) above this frequency.

<table>
<thead>
<tr>
<th>Frequency Sub-Division</th>
<th>Frequency Range</th>
<th>Metric Sub-Division</th>
</tr>
</thead>
<tbody>
<tr>
<td>VLF (Very Low Frequency)</td>
<td>Below 30 kc/s</td>
<td>Myriametric Waves</td>
</tr>
<tr>
<td>LF (Low Frequency)</td>
<td>30 to 300 kc/s</td>
<td>Kilometric Waves</td>
</tr>
<tr>
<td>MF (Medium Frequency)</td>
<td>300 to 3000 kc/s</td>
<td>Hectometric Waves</td>
</tr>
<tr>
<td>HF (High Frequency)</td>
<td>3000 to 30000 kc/s</td>
<td>Decametric Waves</td>
</tr>
<tr>
<td>VHF (Very High Frequency)</td>
<td>30000 kc/s to 300 Mc/s</td>
<td>Metric Waves</td>
</tr>
<tr>
<td>UHF (Ultra High Frequency)</td>
<td>30000 to 3000 Mc/s</td>
<td>Decimetric Waves</td>
</tr>
<tr>
<td>SHF (Super High Frequency)</td>
<td>30000 to 30000 Mc/s</td>
<td>Centimetric Waves</td>
</tr>
<tr>
<td>EHF (Extremely High Frequency)</td>
<td>30000 to 300000 Mc/s</td>
<td>Millimetric Waves</td>
</tr>
</tbody>
</table>

Proposals

France, French O.P.T.A., Morocco

85. *After the first sub-paragraph, add the following new sub-paragraphs:*

363 The radio spectrum shall be sub-divided into eleven frequency bands, the limits of which are shown in the table hereinunder. Each band shall be designated either by its number, or by the wavelength (in metres) measured in space:

<table>
<thead>
<tr>
<th>Band Number</th>
<th>Range (excluding lower, including upper limit)</th>
<th>Metric Sub-Division</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>3 to 30 kc/s</td>
<td>Myriametric Waves</td>
</tr>
<tr>
<td>5</td>
<td>30 to 300 kc/s</td>
<td>Kilometric Waves</td>
</tr>
<tr>
<td>6</td>
<td>300 to 3000 kc/s</td>
<td>Hectometric Waves</td>
</tr>
<tr>
<td>7</td>
<td>3000 to 30000 kc/s</td>
<td>Decametric Waves</td>
</tr>
<tr>
<td>8</td>
<td>30 to 300 Mc/s</td>
<td>Metric Waves</td>
</tr>
<tr>
<td>9</td>
<td>300 to 3000 Mc/s</td>
<td>Decimetric Waves</td>
</tr>
<tr>
<td>10</td>
<td>3000 to 30000 Mc/s</td>
<td>Centimetric Waves</td>
</tr>
<tr>
<td>11</td>
<td>30000 to 300000 Mc/s</td>
<td>Millimetric Waves</td>
</tr>
<tr>
<td>12</td>
<td>300000 to 3000000 Mc/s</td>
<td>Decimillimetric Waves</td>
</tr>
</tbody>
</table>

N.B.: “Band N” extends from $0.3 \times 10^N$ to $3 \times 10^N$ c/s.

364

When a service adopts a reference number or letter to designate a specific frequency band allocated to it and situated, wholly or for the most part, in “Band N” of the above nomenclature, the prefix N should normally precede the reference in question. For example, for the 41–68 Mc/s band, to which broadcast users give the reference “I”, the appropriate designation is Broadcast Band 8-I, since it refers to a part of “Band 8”.

Reasons

France, French O.P.T.A., Morocco (cont’d)

364 bis

85.1. *Does not affect the English text.*

365 India

85. Replace the present table by the following:

(See table in proposal 363.)

*Note 1:* “Band N” extends from $0.3 \times 10^N$ c/s to $3 \times 10^N$ c/s.

*Note 2:* When a service adopts a reference number or letter to designate a specific frequency band allocated to it and situated, wholly or for the most part, in “Band N” of the above nomenclature, the prefix N should normally precede the reference in question e.g.:

For 41 to 68 Mc/s band, to which the broadcast users give the reference I, the appropriate designation is *broadcast band 8-I* since it refers to a part of “Band 8”.

This practice is recommended to obviate the risk of confusion in designating the numerous frequency bands and sub-bands.

**Reasons**

To conform to C.C.I.R. Recommendation No. 225 (Warsaw, 1956).

366 Japan

85. Replace the present table by the following:

<table>
<thead>
<tr>
<th>Band Number</th>
<th>Frequency Range (lower limit exclusive, upper limit inclusive)</th>
<th>Metric Sub-Division</th>
<th>Frequency Sub-Division</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Below 30 kc/s</td>
<td>Myriametric Waves</td>
<td>VLF</td>
</tr>
<tr>
<td>5</td>
<td>30 to 300 kc/s</td>
<td>Kilometric Waves</td>
<td>LF</td>
</tr>
<tr>
<td>6</td>
<td>300 to 3 000 kc/s</td>
<td>Hectometric Waves</td>
<td>MF</td>
</tr>
<tr>
<td>7</td>
<td>3 000 to 30 000 kc/s</td>
<td>Decametric Waves</td>
<td>HF</td>
</tr>
<tr>
<td>8</td>
<td>30 000 kc/s to 300 Mc/s</td>
<td>Metric Waves</td>
<td>VHF</td>
</tr>
<tr>
<td>9</td>
<td>300 to 3 000 Mc/s</td>
<td>Decimetric Waves</td>
<td>UHF</td>
</tr>
<tr>
<td>10</td>
<td>3 000 to 30 000 Mc/s</td>
<td>Centimetric Waves</td>
<td>SHF</td>
</tr>
<tr>
<td>11</td>
<td>30 000 to 300 000 Mc/s</td>
<td>Millimetric Waves</td>
<td>EHF</td>
</tr>
<tr>
<td>12</td>
<td>300 000 to 3 000 000 Mc/s</td>
<td>Decimillimetric Waves</td>
<td>IHF*</td>
</tr>
</tbody>
</table>

*This is a tentative proposal; we are prepared to adopt any appropriate term to be decided at the Administrative Conference.*

**Reasons**

Band numbers should be adopted in accordance with C.C.I.R. Recommendation No. 225. However, as to the abolition of Frequency Sub-Division contemplated in the same Recommendation, the terms mentioned in the column “Frequency Sub-Division” should remain as they are, because they are in wide use already.
§ 10. Frequencies shall be expressed in kilocycles per second (kc/s) at and below 30 000 kc/s, in megacycles per second (Mc/s) between 30 000 kc/s and 30 000 Mc/s and in gigacycles per second (Gc/s) above 30 000 Mc/s.

In the last line of the table, in the second column, replace: 30 000 to 300 000 Mc/s by: 30 000 Mc/s to 300 Gc/s.

Reasons

To meet present requirements of the increased use of EHF.

369

United Kingdom

85. After the first sub-paragraph, add the following sub-paragraph:

Frequency bands shall be designated by Band Numbers, Band N extending from $0.3 \times 10^N$ to $3 \times 10^N$ cycles per second as shown in the table below (the lower limit being exclusive, the upper limit being inclusive).

Replace the present table by the following:

(See table in proposal 363.)

Reasons

The existing table uses initial letters, which are not common to all languages. The use of adjectives, superlatives and adverbs gives no direct indication of the range of frequencies referred to and does not readily permit of extension.

The suggested amendment, which is based on C.C.I.R. Recommendation No. 225, is universal, is unambiguous and can be extended to 0.3 c/s in one direction and without limit in the other, without resorting to negative numbers.

For some time the higher-frequency broadcasting bands have been called “Band I”, “Band II” etc., Roman numerals being used. Any confusion between broadcasting bands and bands designated according to the new table would be avoided if the former were called “Broadcasting Band I”, “Broadcasting Band II” etc.
Present Provisions

CHAPTER III

Frequencies

ARTICLE 3

General Rules for the Assignment and Use of Frequencies

§ 1. The countries, members of the Union, adhering to these Regulations, agree that in assigning frequencies to stations which, by their very nature, are capable of causing harmful interference to the services rendered by the stations of another country, they will make such assignments in accordance with the table of frequency allocations and other provisions of this chapter.

Proposals

India

§ 1. The countries, Members of the Union, adhering to these Regulations, agree that in assigning frequencies to stations which can cause harmful interference, in practice, to services rendered by stations of other countries, they will make such assignments in accordance with the table of frequency allocations and/or other provisions of this Chapter.

Reasons

To be consistent with 88.

United Kingdom

§ 1. The countries, members of the Union, adhering to these Regulations, agree that in assigning frequencies to stations which can cause harmful interference, in practice, to services rendered by stations of other countries, they will make such assignments in accordance with the table of frequency allocations and/or other provisions of this Chapter.

Reasons

1. To conform with the wording of the Convention;
2. The words "adhering to these Regulations" are redundant in view of Article 12 of the Convention.

and in fine replace: this chapter, by: these Regulations.

Reasons

To conform with the wording of 88.

Finland

§ 2. A country, member of the Union, shall not assign to a station any frequency in derogation of either the
Present Provisions

international protection from harmful interference as provided in article 11.

88 § 3. A country, member of the Union, shall not assign to a station any frequency in derogation of either the table of frequency allocations given in this chapter or the other provisions of these Regulations, except on the express condition that harmful interference shall not be caused to services carried on by stations operating in accordance with the provisions of the Convention and of these Regulations.

Proposals

table of frequency allocations or other provisions of these Regulations without the approbation of the I.F.R.B.

Reasons

By this insertion and by eliminating the latter part of the sentence, the temptation to use frequencies for services other than those for which these frequencies are reserved in the table of frequency allocations, is avoided. This is the only way of eliminating interference on the bands reserved e.g. to maritime mobile radio services.

374 France, French O.P.T.A.

88. Add in fine: (See 236 also).

Reasons

236 describes how an administration might be led to commit a breach of 88.

United Kingdom

375 88. Replace: A country, member of the Union, by: A Member or Associate Member.

Reasons

To conform with the wording of the Convention.

376 89. Replace the present text by the following:

§ 4. The frequency assigned to the station of a service shall be selected so that the bandwidth necessarily occupied by the emission from the station shall be confined within the band allocated to that service so as not to cause harmful interference to the services to which the frequency bands immediately adjoining are allocated.

Reasons

For precision and ease of interpretation.
Where a band of frequencies is allocated to different services in adjacent Regions or sub-Regions, the basic principle is the equality of right to operate. Accordingly, the stations of each service in one Region or sub-Region must operate so as not to cause harmful interference with services in the other Regions or sub-Regions.

Present Provisions

ARTICLE 4

Special Arrangements

Two or more countries, members of the Union, may, in accordance with article 40 of the Convention, conclude special arrangements regarding the sub-allocation of bands of frequencies to the appropriate services of the participating countries.

Two or more countries, members of the Union, may, in accordance with article 40 of the Convention, conclude special arrangements, as a result of a Conference to which all those members of the Union affected have been invited, regarding the assignment of frequencies to those of their stations which participate in one or more specific services within the frequency bands allocated to these services by article 5, either below 5 060 kc/s or above 27 500 kc/s, but not between those limits.

The countries, members of the Union, may, in accordance with article 40 of the Convention, conclude, on a world-wide basis and as a result of a Conference to which all members of the Union have been invited, special arrangements concerning the assignment of frequencies to those of their stations participating in a specific service, on condition that such assignments are within the frequency bands allocated exclusively to that service in article 5.

Proposals

India

After this No. add the following new paragraph:

§ 5 bis. The provisions of 90 shall not, however, prejudice the successful operation of stations in conformity with internationally or regionally accepted plans or frequency lists for the appropriate services.

Reasons

To be consistent with 92 and 93.

United States of America

At the beginning, replace: countries by: Members or Associate Members, and replace: article 40 by: Article 41.

Reasons

To be consistent with the provisions of the Convention.

Replace the present text by the following:

§ 2. Two or more Members or Associate Members of the Union, may, in accordance with Article 41 of the Convention, conclude special arrangements, as a result of a Conference to which all those Members or Associate Members affected have been invited, regarding the assignment of frequencies to those of their stations which participate in one or more specific services within the frequency bands allocated to these services by Article 5, either below 4 000 kc/s or above 30 000 kc/s, but not between those limits.

Reasons

To reflect more closely the propagation characteristics of radio waves in the high frequency spectrum, and to be consistent with the provisions of the Convention.

At the beginning, replace: countries, members by: Members and Associate Members, and replace:
Present Provisions

Proposals

article 40 by: Article 41. *In the middle, replace:* all members by: all Members and Associate Members.

Reasons
To be consistent with the provisions of the Convention.

381 France, French O. P. T. A., Morocco

Replace: Article 40 by: Article 41.

India

382 91. Replace: Article 40 by: Article 41.

Reasons
To accord with the Buenos Aires Convention.

383

92. Replace: Article 40 by: Article 41.

Reasons
To accord with the Buenos Aires Convention.

384

93. Replace: Article 40 by Article 41.

Reasons
To accord with the Buenos Aires Convention.

United Kingdom

385 91. Replace the present text by the following:

§ 1. Two or more Members or Associate Members may make special arrangements regarding the assignment of frequencies to those of their stations that participate in one or more specific services within the frequency bands allocated to those services by Article 5.
Such an arrangement may be concluded under the provisions of Article 41 or 42 of the Convention or by an Administrative Conference convened under Article 10 of the Convention.

386

92-93. Delete.

Reasons
To simplify the text and incorporate in the revised reference to Articles 10 and 41 of the Convention. (See proposal 385).

387

China

92. Add in fine: and excluding those circuits employing scatter systems.

Reasons
To avoid possible interferences to the radio services of other countries.

Switzerland

388 92. a) Replace: article 40, by: article 41.

389

b) Replace: 27 500 kc/s, by: 41 000 kc/s.

Reasons
Because of the harmful interference observed in this part of the spectrum, and to be in agreement with 234.

390

U. S. S. R.

92. Replace: either below 5 060 kc/s by: either below 4 000 kc/s.

Reasons
Because of propagation conditions it would be well if the band 4 000 to 5 060 kc/s were subject to world-wide apportionment.
§ 4. Special arrangements concluded in accordance with the provisions of 91, 92 and 93 shall not be in conflict with any of the provisions of these Regulations.

§ 5. The Secretary General of the Union shall be informed prior to the commencement of any Conference to be convened to conclude such an arrangement and shall be informed of the terms of the arrangement when concluded.

§ 6. In accordance with the provisions of article 10 the International Frequency Registration Board may be invited to send representatives to participate in an advisory capacity in the preparation of these arrangements, it being recognized that in the majority of cases such participation is desirable.

ARTICLE 5

Table of Frequency Allocations
10 kc/s to 10 500 Mc/s

391 United States of America
94. After: provisions of, add: Nos.

Reasons
Editorial.

392 United Kingdom
94. Delete 92 and 93.

Reasons
Consequent on proposals 385 and 386.

393 United States of America
95. Replace the present text by the following:

§ 5. The Secretary General shall be informed prior to the commencement of any Conference to be convened to conclude such an arrangement and shall be informed of the terms of the arrangement when concluded.

Reasons
Editorial.

394 China
96. Replace the present text by the following:

§ 6. In accordance with the provisions of Article 6 of the Convention, the International Frequency Registration Board shall be invited to send representatives to participate in an advisory capacity in the preparation of these arrangements.

Reasons
It is desirable to be definite.

395 United States of America
96. Replace: article by: Article.

Reasons
Editorial.

396 India

Heading. Read:
Table of frequency allocations 9 975 c/s to 30 000 Mc/s.

Reasons
To increase the scope of the table.
General Proposals Concerning Article 5

Danmark, Finland, Iceland, Norway, Sweden

Proposal Concerning the Modified Use of the Frequency 2 182 kc/s and the Consequential Provision of new International Ship-to-Shore Frequencies for Radiotelephony

As a preparation for the Baltic and North Sea Radiotelephone Conference (Göteborg 1955), the Swedish Board of Telecommunications made a thorough and comprehensive inquiry into service conditions on the international calling and distress frequency 2 182 kc/s.

The results of this inquiry were imparted to the Conference in a report, which summed up the situation as follows:

"The monitoring carried out has shown that the load on the channel 2 182 kc/s is very heavy. For this reason it is sometimes impossible or very difficult to hear distress calls. The complicated and varying propagation conditions for frequencies make it impossible to lay down certain definite service areas as it would be possible e.g. at VHF.

To improve the existing situation it is an urgent need to reduce the loading of 2 182 kc/s."

For the said purpose, the Göteborg Conference unanimously adopted resolutions and recommendations, the application of which constituted, in the sea areas concerned, a great step in the direction towards ameliorated service conditions in the bands between 1 605 and 3 800 kc/s and especially on the frequency 2 182 kc/s.

However, another monitoring on 2 182 kc/s carried out by the Swedish Administration in March and April, 1958, has shown that conditions on the frequency are far from ideal in the Baltic and North Sea areas despite the efforts made by the BNRC. Although there seems to have been a certain improvement as regards the passing over to traffic frequencies after the exchange of preparatory calls and replies on 2 182 kc/s, this frequency is in fact still used for too much traffic, not only calls and replies but also subsequent radiotelephone and radiotelegraph correspondence. The manner in which many stations — particularly ship stations — use this frequency leaves a great deal to be desired. The calls are often long and inconcise and the silence periods are not always observed. The possibilities of hearing weak or comparatively weak distress signals and distress calls originating from ship stations must therefore be considered rather small, particularly during the dark hours.

In view of this situation it is considered necessary to achieve a further reduction of the traffic exchanged on 2 182 kc/s and thus reserve this frequency to a greater extent for alarm, distress, urgency, and safety signals and messages. As the overload of traffic on 2 182 kc/s is mainly due to the exaggerated transmission of calls from ships to coast stations and subsequent replies and correspondence regarding the working frequencies to be used for the traffic, an efficient reduction could be brought about by means of restricting as far as possible the transmissions of ship stations on this frequency to alarm, distress, urgency, and safety signals and messages.

This limitation would be possible if to a larger extent ship stations called coast stations on the normal ship-to-shore working frequencies of the coast stations when possible.

On the other hand, there is, however, a definite need for using the frequency 2 182 kc/s not only for alarm and distress signals and distress traffic but also for calls from coast stations to ships that cannot otherwise be reached (e.g. by means of calls in traffic lists), and for announcements of such urgency and safety messages as should normally be transmitted on working frequencies.

Consequently, while after the reduction of traffic on 2 182 kc/s, this frequency would still be enough used by coast stations not to become a dead frequency, the traffic would be comparatively restricted, since the
experience and discipline of coast stations are no doubt a warrant for the desired limitation to transmissions that are necessary and also for their performance in as brief and concise a way as possible.

For these reasons and in conformity with Resolution No. 5 and Recommendation No. 6 of the E. A. R. C. (Geneva, 1951), and Recommendation No. 10, sub-paragraph 2 of the B. N. R. C. (Göteborg, 1955), it is proposed:

399

1. that the frequency 2 182 kc/s be used:
   - in the first place for transmitting the radiotelephony alarm signal, distress signals and distress messages;
   - in the second place for announcing such urgency and safety messages as should normally be transmitted on a stated working frequency;
   - in the third place for calls and replies, when there are no other means of establishing contact between stations.

Furthermore, it should be pointed out that a ship station carrying on correspondence with a coast station of another nationality often interferes with the correspondence of another coast station by using one of the working frequencies of that station. This kind of interference could be eliminated by the provision of one or two international ship-to-shore working frequencies. With this object in view and in accordance with Resolution No. 5 of the E. A. R. C. (Geneva, 1951), and Recommendations Nos. 3 and 4 of the B. N. R. C. (Göteborg, 1955), it is also proposed:

400

2. that for the purposes of relieving the frequency 2 182 kc/s from one of its present functions and of ameliorating the general working conditions on radiotelephony in the 2 Mc/s band, at least one international ship-to-shore working frequency be provided in the bands between 1 605 and 3 800 kc/s for use by ship stations that want to carry on correspondence with a coast station of another nationality but are unable to transmit on one of the normal ship-to-shore working frequencies of that coast station.

401

B

402 Provision of Common Intership Frequencies on a World-Wide Basis in the Band 2 000–2 850 kc/s.

Referring to:

a) Resolution No. 5 of the Extraordinary Administrative Radio Conference (Geneva, 1951), and

b) Recommendation No. 2 of the Baltic and North Sea Radiotelephone Conference (Göteborg, 1955).

403

it is proposed that at least one intership working frequency for radiotelephony in the band 2 000–2 850 kc/s common to Regions 1, 2 and 3 be provided.
Resolution

by the O.I.R. Technical Commission on the frequency band designed for VHF frequency-modulation broadcasting

The O.I.R. Technical Commission, bearing in mind:

a) that the Administrations of the O.I.R. Member-countries notified frequencies for FM broadcasting transmitters in those parts of Band I between 56.5 and 58.0 Mc/s and between 66.0 and 68.0 Mc/s, to the European Broadcasting Conference (Stockholm, 1952);

b) Note 66 (No. 180) in the Frequency Allocation Table shown in Article 5 of the Atlantic City Radio Regulations (1947);

c) That the Administrations of the other O.I.R. Member-countries are preparing to use frequencies in the manner described in Note 66;

d) The need to simplify the planning of frequency usage for FM broadcasting and television in Band I;

Hereby unanimously recommends:

1. That the Administrations of O.I.R. Member-countries forgo the use of the band 56.5-58.0 Mc/s for FM broadcasting;

2. That the Administrations of O.I.R. Member-countries, and the International Broadcasting Organization itself, together ask, at the forthcoming Administrative Radio Conference, that Band I be enlarged to include the band 66.0 to 73.0 Mc/s for broadcasting.
Considering:

that, in certain areas, for instance the Atlantic Ocean, the Atlantic City allocation of HF bands for radiotelephony is not sufficient for ensuring continuous coverage along the routes of the merchant ships, because frequencies between the 4 and 8 Mc/s bands necessary for coverage are not available (see Appendix 1, proposal 409),

that in the coming 6–8 years propagation conditions will make it necessary to transfer traffic from higher to lower frequencies,

that the development of the HF radiotelephone system has caused a rapid and progressive increase in the number of ship-shore radiotelephone calls (see Appendix 2, proposals 410–411),

that the deficient coverage might be remedied, if new 5 or 6 Mc/s bands could be allocated to the said service,

the Swedish Administration proposes

that the Atlantic City allocation of HF bands be reconsidered with a view to providing frequency bands around 5 or 6 Mc/s for HF maritime mobile radiotelephone service.

Appendix 1

Season. Summer.

I. Sun spot number maximum (150, June 1958)

A. Time 0000 local time

<table>
<thead>
<tr>
<th>Skipzone for 8 MHz ≈ 1200 km</th>
<th>LUF</th>
</tr>
</thead>
<tbody>
<tr>
<td>400 km</td>
<td>2,7   MHz</td>
</tr>
<tr>
<td>800 km</td>
<td>4,4   MHz</td>
</tr>
<tr>
<td>1200 km</td>
<td>4,4   MHz</td>
</tr>
</tbody>
</table>

B. Time 1200 local time

<table>
<thead>
<tr>
<th>Skipzone for 8 MHz ≈ 700 km</th>
<th>LUF</th>
</tr>
</thead>
<tbody>
<tr>
<td>400 km</td>
<td>&lt; 4 MHz</td>
</tr>
</tbody>
</table>

II. Sun spot number minimum (9, June 1954)

A. Time 0000 local time

<table>
<thead>
<tr>
<th>Skipzone for 8 MHz ≈ 2000 km</th>
<th>LUF</th>
</tr>
</thead>
<tbody>
<tr>
<td>400 km</td>
<td></td>
</tr>
<tr>
<td>800 km</td>
<td>2,9   MHz</td>
</tr>
<tr>
<td>1200 km</td>
<td>3,4   MHz</td>
</tr>
<tr>
<td>1600 km</td>
<td>3,9   MHz</td>
</tr>
</tbody>
</table>

B. Time 1200 local time

<table>
<thead>
<tr>
<th>Skipzone for 8 MHz = 800 km</th>
<th>LUF</th>
</tr>
</thead>
<tbody>
<tr>
<td>400 km</td>
<td>&lt; 1 MHz</td>
</tr>
</tbody>
</table>
Season. Winter.

I. Sun spot number maximum (150, Dec. 1957)

A. Time 0000 local time
   Skipzone for 8 MHz \( \approx \) 3500 km
   LUF " 400 km \( \approx \) 1 MHz
   "  800 km \( \approx \) 1,9 MHz
   "  1200 km \( \approx \) 2,4 MHz
   "  2400 km = 3,4 MHz
   "  3200 km = 4,1 MHz

B. Time 1200 local time
   Skipzone for 8 MHz = 0 km

II. Sun spot number minimum (11, Dec. 1954)

A. Time 0000 local time
   Skipzone for 8 MHz \( \geq \) 3000 km
   LUF " 400 km \( \approx \) 1 MHz
   "  800 km = 1,9 MHz
   "  1200 km = 2,4 MHz
   "  2400 km = 3,4 MHz
   "  3200 km = 4,1 MHz

B. Time 1200 local time
   Skipzone for 8 MHz = 0 km
Number of HF-radiotelephone calls over Swedish coast station GÖTEBORG RADIO SAG

Appendix 2-1
Average Number of Radiotelephone calls exchanged on HF in the years 1956 and 1957

Appendix 2-2
§ 1. In the table of frequency allocations which follows, the services to which each band is allocated are listed in alphabetical order. The order of listing does not, therefore, indicate relative priority.

§ 2.  
   a) A footnote reference which appears in the lower left-hand margin of any section of a column showing allocations, either "World-Wide" or "Regional", applies to the services listed in that section of the column.

   b) Any footnote reference placed immediately after a particular service listing applies only to that service.

§ 3. The three Regions (see Appendix 16) into which the world has been subdivided for the allocation of frequencies are:

   Region 1:
   Region 1 includes the area limited on the East by line A (lines A, B and C are defined below) and on the West by line B, excluding any of the territory of Iran which lies between these limits. It also includes that part of the territory of Turkey and the Union of Soviet Socialist Republics lying outside of these limits, the territory of the Mongolian Peoples' Republic, and the area to the North of the U.S.S.R. which lies between lines A and C.

   Region 2:
   Region 2 includes the area limited on the East by line B and on the West by line C.

   Region 3:
   Region 3 includes the area limited on the East by line C and on the West by line A, except the territories of the Mongolian Peoples' Republic, Turkey, the territory of the U.S.S.R. and the area to the North of the U.S.S.R. It also includes that part of the territory of Iran lying outside of those limits.

   The lines A, B, and C are defined as follows:

   Line A:
   Line A extends from the North Pole along meridian 40° East of Greenwich to parallel 40°
Present Provisions

North; thence by great circle arc to the intersection of meridian 60° East and the Tropic of Cancer; thence along the meridian 60° East to the South Pole.

105 Line B:

Line B extends from the North Pole along meridian 10° West of Greenwich to its intersection with parallel 72° North; thence by great circle arc to the intersection of meridian 50° West and parallel 40° North; thence by great circle arc to the intersection of meridian 20° West and parallel 10° South; thence along meridian 20° West to the South Pole.

106 Line C:

Line C extends from the North Pole by great circle arc to the intersection of parallel 65° 30' North with the international boundary in Bering Strait; thence by great circle arc to the intersection of meridian 165° East of Greenwich and parallel 50° North; thence by great circle arc to the intersection of meridian 170° West and parallel 10° North; thence along parallel 10° North to its intersection with meridian 120° West; thence along meridian 120° West to the South Pole.

107 § 4. The "European Area" is bounded on the West by the Western boundary of Region 1, on the East by the meridian 40° East of Greenwich and on the South by the parallel 30° North so as to include the western part of the U. S. S. R. and the territories bordering the Mediterranean, with the exception of the parts of Arabia and Saudi-Arabia included in this sector.

Proposals

412 France, French O. P. T. A.

106. Does not affect the English text.

413

107. Note by the S. G.

Inclusion of Iraq in the European Area

In its Resolution No. 31, the Plenipotentiary Conference of Buenos Aires, 1952, invited the next Administrative Radio Conference to consider the possibility of including Iraq in the European Area as defined in the RR.

The text of this Resolution is as follows:

RESOLUTION NO. 31

Inclusion of Iraq in the European Area

as defined in the Radio Regulations

The Plenipotentiary Conference of the International Telecommunication Union, Buenos Aires,

having examined the appeal of Iraq that this country be included in the European Area as defined in paragraph 107 of the Radio Regulations,

considering

1. that the geographical position of Iraq makes it more natural for all practical purposes to include Iraq in the European Area rather than in the African Area;
2. that a close co-operation between Iraq and nearby countries within the European Area would be of special importance for the preparation of frequency assignment plans for medium wave broadcasting stations in this Area;
3. that such co-operation would be facilitated by the participation of Iraq in the European Broadcasting Conferences;

invites

1. the next administrative radio conference to examine the possibility of including Iraq in the European Area as defined in the Radio Regulations;
2. the International Frequency Registration Board to give special assistance to Iraq in order to solve the frequency problems arising from the fact that Iraq is outside the European Area.
Present Provisions

§ 5. The allocation of frequency bands to the several services is shown in the following table:

Table of Frequency Allocations—10 kc/s to 10 500 Mc/s

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) kc/s</th>
<th>Allocation to Services</th>
<th>World-Wide</th>
<th>Region 1</th>
<th>Region 2</th>
<th>Region 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-14 (4)</td>
<td></td>
<td>Radionavigation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14-70 (56)</td>
<td>a) Fixed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Maritime mobile 1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70-90 (20)</td>
<td>a) Fixed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Maritime mobile 1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>c) Radionavigation 2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>90-110 (20)</td>
<td>a) Fixed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Maritime mobile 1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>c) Radionavigation 3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1) Limited to coastal telegraph stations using unmodulated emissions (A1 only).

2) In Region 1, Australia and New Zealand, the frequency bands 70–72 kc/s and 84–86 kc/s are reserved for the exclusive use of continuous wave systems of radionavigation.

3) The development of long distance radionavigation systems is authorized in this band which will become exclusively allocated wholly or in part for the use of any one such system as soon as it is internationally adopted. Other considerations being equal, preference should be given to the system requiring the minimum bandwidth for world-wide service and causing the least harmful interference to other services.

If a pulse radionavigation system is employed, the pulse emissions nevertheless must be confined within the band, and must not cause harmful interference outside the band to stations operating in accordance with the Regulations.

During the experimental period prior to the international adoption of any long-distance radionavigation system in this band, the rights of existing stations operating in this band will continue to be recognized.
Present Provisions

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) kc/s</th>
<th>Allocation to Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>World-Wide</td>
</tr>
<tr>
<td></td>
<td>Region 1</td>
</tr>
<tr>
<td>110–130 (20)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Maritime mobile</td>
</tr>
<tr>
<td></td>
<td>c) Radionavigation</td>
</tr>
<tr>
<td>130–150 (20)</td>
<td>Maritime mobile</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>150–160 (10)</td>
<td>a) Broadcasting</td>
</tr>
<tr>
<td></td>
<td>b) Maritime mobile*</td>
</tr>
<tr>
<td></td>
<td>b) Broadcasting</td>
</tr>
<tr>
<td></td>
<td>c) Maritime mobile</td>
</tr>
<tr>
<td></td>
<td>a) Aeronautical radionavigation</td>
</tr>
<tr>
<td></td>
<td>b) Aeronautical radionavigation</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*) In Region 1, Australia and New Zealand, the frequency bands 112–115 kc/s and 126–129 kc/s are reserved for the exclusive use of continuous wave systems of radionavigation.

*) The frequency 143 kc/s is the calling frequency for stations in the maritime mobile service using the band 110–160 kc/s. The conditions for its use are prescribed in article 33.

*) Limited to ship stations (telegraphy exclusively).

*) The fixed service is authorized, provided no harmful interference is caused to ship telegraphy in the North Atlantic and the Mediterranean areas.

*) By special arrangement.

*) The maritime mobile service must not cause harmful interference to the reception of broadcasting stations within the boundaries of the national territories in which the broadcasting stations are situated.

*) In the Union of South Africa, the territory under mandate of Southwest Africa, Northern Rhodesia and Southern Rhodesia, the band 160–200 kc/s is allocated for the fixed service and the band 200–285 kc/s is allocated for the aeronautical radionavigation and aeronautical mobile services.

*) The necessary special arrangements which will be made by an Administrative Conference for the European Area of Region 1 will take into account the following considerations:

a) In the western part of the European Area, the band 255–285 kc/s will be used for the aeronautical radionavigation service. Additionally the United Kingdom will share portions of the band with the maritime mobile service.
Present Provisions

122 b) In the U.S.S.R., the band 255-285 kc/s will be shared between the broadcasting and maritime mobile services.

123 c) The Norwegian broadcasting stations at present working in the band 255-285 kc/s may continue to do so if authorized by the above mentioned Conference.

124 12) Priority is given to the aeronautical fixed service in northern areas which are subject to auroral disturbances.

125 13) Priority is given to the aeronautical radionavigation service in Region 2, China, India and Pakistan.

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Allocation to Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Band and (Bandwidth) kc/s</td>
<td>World-Wide</td>
</tr>
<tr>
<td></td>
<td>Region 1</td>
</tr>
<tr>
<td></td>
<td>Maritime radionavigation (radiobeacons)</td>
</tr>
<tr>
<td></td>
<td>315-325 (10)</td>
</tr>
<tr>
<td></td>
<td>Aeronautical radionavigation</td>
</tr>
<tr>
<td>325-405</td>
<td>a) Aeronautical mobile</td>
</tr>
<tr>
<td></td>
<td>b) Aeronautical radionavigation</td>
</tr>
<tr>
<td></td>
<td>16)</td>
</tr>
</tbody>
</table>

126 14) In the U.S.S.R., the band 315-325 kc/s is used for the maritime radionavigation service, while the remainder of Region 1 uses this band for the aeronautical radionavigation service. The maritime radionavigation service will be operated so as not to interfere with the aeronautical radionavigation service in the North Sea area.

The aeronautical radionavigation service will be operated so as not to interfere with the maritime radionavigation service in the Black Sea and White Sea areas.

The maritime radionavigation and aeronautical radionavigation services will be operated in accordance with a frequency assignment plan agreed by the various interested administrations to avoid interference in the Baltic Sea area.

127 15) In Region 2, the aeronautical radionavigation service is permitted in the band 285-325 kc/s provided that no harmful interference is caused to the maritime radionavigation service.

128 16) In Region 3, the maritime radionavigation service has priority.

129 17) The aeronautical radionavigation service has priority except in New Zealand.

130 18) In Regions 1 and 3, the frequency 333 kc/s is the general calling frequency for aircraft stations operating in the band 325-405 kc/s.

131 19) This band is allocated exclusively to the aeronautical mobile and aeronautical radionavigation services. Nevertheless, in the European Area, subject to authorization by the regional agreement concluded by the next European Regional Broadcasting Conference and the conditions specified in that agreement, the administrations concerned may place in the bands 325-365 kc/s and 395-405 kc/s those of the following broadcasting stations which will not cause harmful interference to the aeronautical mobile and aeronautical radionavigation services.

The broadcasting stations now in operation in the whole of the band 325-405 kc/s are:

- Banska Bystrica
- Finnmark
- Bergen
- Lulea

132 20) The fixed stations in Scandinavia now operating in the band 385-395 kc/s may continue to do so by special arrangement.
### Present Provisions

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) kc/s</th>
<th>Allocation to Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>World-Wide</td>
</tr>
<tr>
<td></td>
<td>Region 1</td>
</tr>
<tr>
<td>405-415 (10)</td>
<td></td>
</tr>
<tr>
<td>a) Aeronautical radionavigation</td>
<td></td>
</tr>
<tr>
<td>b) Maritime radionavigation</td>
<td></td>
</tr>
<tr>
<td>(radio direction-finding)</td>
<td></td>
</tr>
<tr>
<td>c) Mobile except aeronautical</td>
<td></td>
</tr>
<tr>
<td>mobile</td>
<td></td>
</tr>
<tr>
<td>415-490 (75)</td>
<td></td>
</tr>
<tr>
<td>Maritime</td>
<td></td>
</tr>
<tr>
<td>490-510 (20)</td>
<td></td>
</tr>
<tr>
<td>Mobile</td>
<td></td>
</tr>
<tr>
<td>(distress and calling)</td>
<td></td>
</tr>
<tr>
<td>510-525 (15)</td>
<td></td>
</tr>
<tr>
<td>Maritime</td>
<td></td>
</tr>
<tr>
<td>Mobile</td>
<td></td>
</tr>
<tr>
<td>525-535 (10)</td>
<td></td>
</tr>
<tr>
<td>Broadcasting</td>
<td></td>
</tr>
<tr>
<td>535-1605 (1070)</td>
<td></td>
</tr>
<tr>
<td>Broadcasting</td>
<td></td>
</tr>
</tbody>
</table>

133 21) The frequency 410 kc/s is designated for the maritime radionavigation service (radio direction-finding). Other services shall not cause harmful interference to radio direction-finding.

134 22) The use of the band 405-415 kc/s by the radionavigation services is limited to radio direction-finding except as indicated in a) and b) below:

135 a) In the Baltic and North Sea areas this band may also be used for the maritime radionavigation service for radio-beacon stations of mean power not exceeding 10 watts and subject to not causing harmful interference to radio direction-finding.

136 b) In the U.S.S.R. this band may also be used for the aeronautical radionavigation service on the basis of not causing harmful interference to the service provided by the existing radio direction-finding stations and the radio beacon stations referred to in subparagraph a) above.

137 23) In Region 2, in addition to the provisions of Note 21), the aeronautical radionavigation service has priority over the aeronautical mobile service.

138 24) The band 415-490 kc/s is allocated exclusively for the maritime mobile service on a world-wide basis and the band 510-525 kc/s is allocated exclusively for that service in Region 1. Nevertheless, in the European Area, subject to authorization by the regional agreement concluded by the next European Regional Broadcasting Conference and to the conditions specified in that agreement, the administrations concerned may place in the bands 415-485 kc/s and 510-525 kc/s some of the following broadcasting stations as will not cause harmful interference to the maritime mobile service:

- Geneva
- Ostersund
- Hamar
- Oulu
- Innsbruck
Present Provisions

25) Limited to telegraphy.

26) The frequency 500 kc/s is the international distress and calling frequency. The conditions for its use are prescribed in article 33.

27) In Region 3, the maritime mobile service has priority in the band 510-525 kc/s.

28) In the Union of South Africa, the territory under mandate of Southwest Africa, Northern Rhodesia and Southern Rhodesia, the band 525-535 kc/s is used for the mobile service.

29) In the territory of the U.S.S.R., the band 1560-1605 kc/s is shared with the fixed service. In the European Area, the fixed service in the U.S.S.R. and the broadcasting service in the neighbouring countries operate subject to the condition of avoiding harmful interference on a reciprocal basis.

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) kc/s</th>
<th>Allocation to Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>World-Wide</td>
</tr>
<tr>
<td></td>
<td>Region 1</td>
</tr>
<tr>
<td></td>
<td>Region 2</td>
</tr>
<tr>
<td></td>
<td>Region 3</td>
</tr>
<tr>
<td>a) Fixed</td>
<td>a) Aeronautical radionavigation</td>
</tr>
<tr>
<td>b) Mobile except aeronautical mobile</td>
<td>b) Fixed</td>
</tr>
<tr>
<td></td>
<td>c) Mobile</td>
</tr>
<tr>
<td>1800-2000 (200)</td>
<td>1800-2000 (200)</td>
</tr>
<tr>
<td>a) Amateur</td>
<td>a) Amateur</td>
</tr>
<tr>
<td>b) Fixed</td>
<td>b) Fixed</td>
</tr>
<tr>
<td>c) Mobile except aeronautical mobile</td>
<td>c) Mobile</td>
</tr>
<tr>
<td>d) Radionavigation</td>
<td>d) Radionavigation</td>
</tr>
<tr>
<td>2000-2065 (65)</td>
<td>2000-2065 (65)</td>
</tr>
<tr>
<td>a) Fixed</td>
<td>a) Fixed</td>
</tr>
<tr>
<td>b) Mobile except aeronautical mobile</td>
<td>b) Mobile</td>
</tr>
<tr>
<td>2045-2065 (20)</td>
<td>Meteorological aids</td>
</tr>
</tbody>
</table>

30) Special arrangements will determine the conditions of operation of stations of the fixed and mobile services in order to protect these services from mutual harmful interference, having special regard to the difficulties of operation of the maritime mobile service.

31) In the band 1715-2000 kc/s Austria, Ireland, the Netherlands, Northern Rhodesia, Southern Rhodesia, Switzerland, the Union of South Africa and the United Kingdom may assign up to 200 kc/s for the amateur service provided that the mean power of any amateur station does not exceed 10 watts and that no harmful interference is caused to the authorized services of other countries.
Present Provisions

146.2) The operation of the existing Northeast Atlantic Standard Loran Chain (Iceland-Faroes-Hebrides) is authorized temporarily in the band 1 900–2 000 kc/s until 1st July 1949 provided that in the meantime all practicable measures are taken to minimise harmful interference from Loran transmissions to other services operating in the same or adjacent frequency bands and, in particular, to narrow the emitted bandwidth. If, however, nine months before the said date, at least three of the interested countries* declare to the Secretary General of the Union that they are of the opinion that aids to radionavigation which are suitable for the Northeast Atlantic area and designed for operation in frequency bands allocated for the radionavigation service under these Regulations, are not available, or cannot be made available by the 1st July 1949 a special Administrative Conference of the interested countries* shall be summoned within two months to review the matter.

146.1* The countries interested in this question are: Belgium, Canada, Denmark, Finland, France, Iceland, Ireland, the Netherlands, Norway, Poland, Portugal, Sweden, the United Kingdom of Great Britain and Northern Ireland, the United States of America, and the Union of Soviet Socialist Republics.

147.3) In any particular area the Loran system of radionavigation operates either on 1850 or 1950 kc/s, the band occupied being 1800–1900 kc/s or 1 900–2 000 kc/s. Any of the authorized services may employ whichever of these two bands is not required for Loran on condition that they do not cause harmful interference to Loran.

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth)</th>
<th>Allocation to Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>kc/s</td>
<td>World-Wide</td>
</tr>
<tr>
<td></td>
<td>Region 1</td>
</tr>
<tr>
<td>2 065–2 300 (235)</td>
<td>2 065–2 300 (235)</td>
</tr>
<tr>
<td></td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile except aeronautical mobile (R)34)</td>
</tr>
<tr>
<td>2 105–2 300 (195)</td>
<td>2 105–2 300 (195)</td>
</tr>
<tr>
<td></td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
</tr>
<tr>
<td>2 300–2 498 (198)</td>
<td>2 300–2 498 (198)</td>
</tr>
<tr>
<td></td>
<td>a) Broadcasting35)</td>
</tr>
<tr>
<td></td>
<td>b) Fixed</td>
</tr>
<tr>
<td></td>
<td>c) Mobile except aeronautical mobile (R)36)</td>
</tr>
<tr>
<td></td>
<td>(cont’d)</td>
</tr>
</tbody>
</table>

148.34) The frequency 2182 kc/s is the distress and calling frequency for the maritime mobile service (telephony). The interested administrations will ensure, by special arrangement where necessary, that an adequate guard-band is provided. The conditions for the use of this frequency are prescribed in article 34.

149.35) For the explanation of the terms “Aeronautical mobile (R)” and “Aeronautical mobile (OR)” see 256 and 257.

150.36) For the conditions of use of this band by the broadcasting service see 243, 244 and 250–254.

151.37) In Region 2, provision will be made for coastal telegraphy in the maritime mobile service by special arrangement.
### Present Provisions

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) kc/s</th>
<th>Allocation to Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>World-Wide</td>
</tr>
<tr>
<td></td>
<td>Region 1</td>
</tr>
<tr>
<td>2300–2850 (cont’d)</td>
<td>2 300–2 498 (cont’d)</td>
</tr>
<tr>
<td></td>
<td>2 498–2 502 (4) Standard frequency</td>
</tr>
<tr>
<td></td>
<td>2 502–2 625 (123)</td>
</tr>
<tr>
<td></td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile except aeronautical mobile (R) 35</td>
</tr>
<tr>
<td></td>
<td>2 625–2 650 (25)</td>
</tr>
<tr>
<td></td>
<td>a) Maritime mobile</td>
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<tr>
<td></td>
<td>b) Maritime</td>
</tr>
<tr>
<td></td>
<td>b) radionavigation</td>
</tr>
<tr>
<td></td>
<td>2 650–2 850 (200)</td>
</tr>
<tr>
<td></td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
</tr>
</tbody>
</table>

152 38) The standard frequency is 2 500 kc/s.

153 39) Special arrangements will determine the conditions of operation of stations of the fixed and mobile services in order to protect these services from mutual harmful interference having special regard to the difficulties of operation of the maritime mobile service and also to the needs of the fixed service in certain areas.
### Present Provisions

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) kc/s</th>
<th>Allocation to Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>World-Wide</td>
</tr>
<tr>
<td></td>
<td>Region 1</td>
</tr>
<tr>
<td>2 850-3 025 (175) Aeronautical mobile (R)</td>
<td></td>
</tr>
<tr>
<td>3 025-3 155 (130) Aeronautical mobile (OR)</td>
<td></td>
</tr>
<tr>
<td>3 155-3 200 (45) a) Fixed b) Mobile except aeronautical mobile (R)</td>
<td></td>
</tr>
<tr>
<td>3 200-3 230 (30) a) Broadcasting b) Fixed c) Mobile except aeronautical mobile</td>
<td></td>
</tr>
<tr>
<td>3 230-3 400 (170) a) Broadcasting b) Fixed c) Mobile except aeronautical mobile</td>
<td></td>
</tr>
<tr>
<td>3 400-3 500 (100) Aeronautical mobile (R)</td>
<td></td>
</tr>
<tr>
<td>3 500-4 000 (500) a) Amateur b) Fixed c) Mobile except aeronautical mobile</td>
<td>3 500-3 800 (300) a) Amateur b) Fixed c) Mobile except aeronautical mobile (R)</td>
</tr>
<tr>
<td></td>
<td>3 800-3 900 (100) a) Aeronautical mobile (OR) b) Fixed c) Land mobile</td>
</tr>
</tbody>
</table>
### Present Provisions

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) kc/s</th>
<th>Allocation to Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>World-Wide</td>
</tr>
<tr>
<td></td>
<td>Region 1</td>
</tr>
<tr>
<td>3 500–4 000 (cont'd)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 900–3 950 (50)</td>
</tr>
<tr>
<td></td>
<td>Aeronautical mobile (OR)</td>
</tr>
<tr>
<td></td>
<td>3 950–4 000 (50) a) Broadcasting b) Fixed</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>4 000–4 063 (63)</td>
<td>Fixed</td>
</tr>
<tr>
<td>4 063–4 438 (375)</td>
<td>Maritime mobile a) Fixed b) Mobile except aeronautical mobile (R) 35)</td>
</tr>
<tr>
<td>4 438–4 650 (212)</td>
<td>Fixed</td>
</tr>
<tr>
<td>4 650–4 700 (50)</td>
<td>Aeronautical mobile (R)</td>
</tr>
<tr>
<td>4 700–4 750 (50)</td>
<td>Aeronautical mobile (OR)</td>
</tr>
</tbody>
</table>

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

**155** 41) In addition to the provisions of 154, the band 4 063–4 438 kc/s may be used, exceptionally and on the essential condition that harmful interference is not caused to the maritime mobile service, by fixed stations of mean power not exceeding 50 watts communicating only within the national boundaries of the countries concerned. At the time of notification of these cases the attention of the International Frequency Registration Board is drawn to the above condition.
Present Provisions

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) kc/s</th>
<th>Allocation to Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>World-Wide</td>
</tr>
<tr>
<td></td>
<td>Region 1</td>
</tr>
<tr>
<td></td>
<td>Region 2</td>
</tr>
<tr>
<td></td>
<td>Region 3</td>
</tr>
<tr>
<td>4 750–4 850 (100)</td>
<td>a) Aeronautical mobile (OR) 35)</td>
</tr>
<tr>
<td></td>
<td>b) Broadcasting 36)</td>
</tr>
<tr>
<td></td>
<td>c) Fixed</td>
</tr>
<tr>
<td></td>
<td>d) Land mobile</td>
</tr>
<tr>
<td>4 850–4 995 (145)</td>
<td>a) Broadcasting 36)</td>
</tr>
<tr>
<td></td>
<td>b) Fixed</td>
</tr>
<tr>
<td></td>
<td>c) Land mobile</td>
</tr>
<tr>
<td>4 995–5 005 (10)</td>
<td>Standard frequency</td>
</tr>
<tr>
<td>5 005–5 060 (55)</td>
<td>a) Broadcasting 36)</td>
</tr>
<tr>
<td></td>
<td>b) Fixed</td>
</tr>
<tr>
<td>5 060–5 250 (190)</td>
<td>Fixed</td>
</tr>
<tr>
<td>5 250–5 480 (230)</td>
<td>5 250–5 430 (180) a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Land mobile</td>
</tr>
<tr>
<td></td>
<td>5 250–5 450 (200) a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Land mobile</td>
</tr>
<tr>
<td></td>
<td>5 430–5 480 (50) a) Aeronautical mobile (OR) 35)</td>
</tr>
<tr>
<td></td>
<td>b) Fixed</td>
</tr>
<tr>
<td></td>
<td>c) Land mobile</td>
</tr>
<tr>
<td>5 480–5 680 (200)</td>
<td>Aeronautical mobile (R) 35)</td>
</tr>
<tr>
<td>5 680–5 730 (50)</td>
<td>Aeronautical mobile (OR) 35)</td>
</tr>
</tbody>
</table>

45) The standard frequency is 5000 kc/s.
### Present Provisions

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) kc/s</th>
<th>Allocation to Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>World-Wide</td>
</tr>
<tr>
<td></td>
<td>Region 1</td>
</tr>
<tr>
<td>5 730–5 950 (220)</td>
<td>Fixed</td>
</tr>
<tr>
<td>5 950–6 200 (250)</td>
<td>Broadcasting</td>
</tr>
<tr>
<td>6 200–6 525 (325)</td>
<td>Maritime mobile</td>
</tr>
<tr>
<td>6 525–6 685 (160)</td>
<td>Aeronautical mobile (R)</td>
</tr>
<tr>
<td>6 685–6 765 (80)</td>
<td>Aeronautical mobile (OR)</td>
</tr>
<tr>
<td>6 765–7 000 (235)</td>
<td>Fixed</td>
</tr>
<tr>
<td>7 000–7 100 (100)</td>
<td>Amateur</td>
</tr>
<tr>
<td>7 100–7 300 (200)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7 100–7 150 (50)</td>
</tr>
<tr>
<td></td>
<td>a) Amateur b) Broadcasting</td>
</tr>
<tr>
<td></td>
<td>7 150–7 300 (150)</td>
</tr>
<tr>
<td></td>
<td>Broadcasting</td>
</tr>
</tbody>
</table>

157) The band 6 200–6 525 kc/s may be used, exceptionally and on the essential condition that harmful interference is not caused to the maritime mobile service, by fixed stations of mean power not exceeding 50 watts communicating only within the national boundaries of the countries concerned. At the time of notification of these cases the attention of the International Frequency Registration Board is drawn to the above condition.

158) In Region 1, the use of the band 7 100–7 150 kc/s by the amateur service is authorized provided that no harmful interference is caused to the broadcasting service. However, in the Union of South Africa and the territory under mandate of Southwest Africa, the band 7 100–7 150 kc/s will be used exclusively for the amateur service.

159) In Australia and the Netherlands East Indies, the band 7 100–7 150 kc/s, and in China and New Zealand, the band 7 100–7 300 kc/s, may be allocated for the amateur service. The administrations of the countries mentioned in this note shall take all practicable steps to avoid causing any harmful interference to the broadcasting service and will ensure that amateur stations do not use a peak power exceeding 100 watts. If, however, harmful interference to the broadcasting service is experienced, these administrations will consider reducing the use of these bands by the amateur service.
### Present Provisions

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) kc/s</th>
<th>Allocation to Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>World-Wide</td>
</tr>
<tr>
<td></td>
<td>Region 1</td>
</tr>
<tr>
<td>7 300-8 195 (895)</td>
<td>Fixed</td>
</tr>
<tr>
<td>8 195-8 815 (620)</td>
<td>Maritime mobile (R)</td>
</tr>
<tr>
<td>8 815-8 965 (150)</td>
<td>Aeronautical mobile (R)</td>
</tr>
<tr>
<td>8 965-9 040 (75)</td>
<td>Aeronautical mobile (OR)</td>
</tr>
<tr>
<td>9 040-9 500 (460)</td>
<td>Fixed</td>
</tr>
<tr>
<td>9 500-9 775 (275)</td>
<td>Broadcasting</td>
</tr>
<tr>
<td>9 775-9 995 (220)</td>
<td>Fixed</td>
</tr>
<tr>
<td>9 995-10 005 (10)</td>
<td>Standard frequency</td>
</tr>
<tr>
<td>10 005-10 100 (95)</td>
<td>Aeronautical mobile (R)</td>
</tr>
<tr>
<td>10 100-11 175 (1075)</td>
<td>Fixed</td>
</tr>
</tbody>
</table>

46) Between 8 615 and 8 815 kc/s, the U.S.S.R. will meet their special requirements for the fixed service with due regard to technical provisions (power, location, antenna, etc.) with a view to minimising the possibility of harmful interference with the maritime mobile service. Coast stations in the maritime mobile service will also have due regard to technical provisions (power, location, antenna, etc.) with a view to minimising the possibility of harmful interference with the fixed service in the U.S.S.R. The International Frequency Registration Board will be consulted regarding these arrangements.

47) The standard frequency is 10 000 kc/s.
### Present Provisions

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) kc/s</th>
<th>Allocation to Services</th>
<th>World-Wide</th>
<th>Regional</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Region 1</td>
<td>Region 2</td>
</tr>
<tr>
<td>11 175-11 275 (100)</td>
<td>Aeronautical mobile (OR)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 275-11 400 (125)</td>
<td>Aeronautical mobile (R)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 400-11 700 (300)</td>
<td>Fixed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 700-11 975 (275)</td>
<td>Broadcasting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 975-12 330 (355)</td>
<td>Fixed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 330-13 200 (870)</td>
<td>Maritime mobile</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 200-13 260 (60)</td>
<td>Aeronautical mobile (OR)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 260-13 360 (100)</td>
<td>Aeronautical mobile (R)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 360-14 000 (640)</td>
<td>Fixed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 000-14 350 (350)</td>
<td>Amateur</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

162. 45) In the U.S.S.R., the band 11 400-11 450 kc/s is used for the aeronautical mobile (OR) service on a shared basis.

163. 49) Between 12 925 and 13 200 kc/s the U.S.S.R. will meet their special requirements for the fixed service with due regard to technical provisions (power, location, antenna, etc.) with a view to minimising the possibility of harmful interference with the maritime mobile service. Coast stations in the maritime mobile service will also have due regard to technical provisions (power, location, antenna, etc.), with a view to minimising the possibility of harmful interference with the fixed service in the U.S.S.R. The International Frequency Registration Board will be consulted regarding these arrangements.
The present provisions are as follows:

### Frequency Allocation Table

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) kc/s</th>
<th>Allocation to Services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>World-Wide</strong></td>
<td><strong>Regional</strong></td>
</tr>
<tr>
<td></td>
<td>Region 1</td>
</tr>
<tr>
<td>14 350–14 990 (640)</td>
<td>Fixed</td>
</tr>
<tr>
<td>14 990–15 010 (20)</td>
<td>Standard frequency</td>
</tr>
<tr>
<td>15 010–15 100 (90)</td>
<td>Aeronautical mobile (OR)</td>
</tr>
<tr>
<td>15 100–15 450 (350)</td>
<td>Broadcasting</td>
</tr>
<tr>
<td>15 450–16 460 (1010)</td>
<td>Fixed</td>
</tr>
<tr>
<td>16 460–17 360 (900)</td>
<td>Maritime mobile</td>
</tr>
<tr>
<td>17 360–17 700 (340)</td>
<td>Fixed</td>
</tr>
<tr>
<td>17 700–17 900 (200)</td>
<td>Broadcasting</td>
</tr>
<tr>
<td>17 900–17 970 (70)</td>
<td>Aeronautical mobile (R)</td>
</tr>
<tr>
<td>17 970–18 030 (60)</td>
<td>Aeronautical mobile (OR)</td>
</tr>
</tbody>
</table>

51) The frequency 13 560 kc/s is designated for industrial, scientific and medical purposes. Emissions must be confined within the limits of ± 0.05% of this frequency. Radiocommunication services operating within those limits must accept any harmful interference that may be experienced from the operation of industrial, scientific and medical equipment.

52) In the U.S.S.R., the band 14 250–14 350 kc/s is also allocated for the fixed service.

53) The standard frequency is 15 000 kc/s.
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**Present Provisions**

167 43) Between 17160 and 17360 kc/s, the U.S.S.R. will meet their special requirements for the fixed service with due regard to technical provisions (power, location, antenna, etc.) with a view to minimising the possibility of harmful interference with the maritime mobile service. Coast stations in the maritime mobile service will also have due regard to technical provisions (power, location, antenna, etc.) with a view to minimising the possibility of harmful interference with the fixed service in the U.S.S.R. The International Frequency Registration Board will be consulted regarding these arrangements.

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) kc/s</th>
<th>Allocation to Services</th>
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<tr>
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<td>Regional</td>
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<tr>
<td></td>
<td>Region 1</td>
</tr>
<tr>
<td>18 030-19 990 (1960)</td>
<td>Fixed</td>
</tr>
<tr>
<td>19 990-20 010 (20)</td>
<td>Standard frequency</td>
</tr>
<tr>
<td>20 010-21 000 (990)</td>
<td>Fixed</td>
</tr>
<tr>
<td>21 000-21 450 (450)</td>
<td>Amateur</td>
</tr>
<tr>
<td>21 450-21 750 (300)</td>
<td>Broadcasting</td>
</tr>
<tr>
<td>21 750-21 850 (100)</td>
<td>Fixed</td>
</tr>
<tr>
<td>21 850-22 000 (150)</td>
<td>a) Aeronautical fixed</td>
</tr>
<tr>
<td></td>
<td>b) Aeronautical mobile (R)35)</td>
</tr>
<tr>
<td>22 000-22 720 (720)</td>
<td>Maritime mobile</td>
</tr>
<tr>
<td>22 720-23 200 (480)</td>
<td>Fixed</td>
</tr>
<tr>
<td>23 200-23 350 (150)</td>
<td>a) Aeronautical fixed</td>
</tr>
<tr>
<td></td>
<td>b) Aeronautical mobile (OR)35)</td>
</tr>
</tbody>
</table>

168 44) The standard frequency is 20 000 kc/s.
### Present Provisions

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) kc/s</th>
<th>Allocation to Services</th>
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<td>World-Wide</td>
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<td>Region 1</td>
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<tr>
<td>23 350-24 990 (1640)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Land mobile</td>
</tr>
<tr>
<td>24 990-25 010 (20)</td>
<td>Standard frequency</td>
</tr>
<tr>
<td>25 010-25 600 (590)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile except aeronautical mobile</td>
</tr>
<tr>
<td>25 600-26 100 (500)</td>
<td>Broadcasting</td>
</tr>
<tr>
<td>26 100-27 500 (1400)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile except aeronautical mobile</td>
</tr>
<tr>
<td>27 500-28 000 (500)</td>
<td>Meteorological aids</td>
</tr>
<tr>
<td></td>
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<tr>
<td>28 000-29 700 (1700)</td>
<td>Amateur</td>
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</tbody>
</table>

169 55) Inter-ship telegraphy in the maritime mobile service is permitted in the band 23 350-24 000 kc/s.

170 56) The standard frequency is 25 000 kc/s.

171 57) The frequency 27 120 kc/s is designated for industrial, scientific and medical purposes. Emissions must be confined within the limits of ± 0.6% of that frequency. Radiocommunication services operating within those limits must accept any harmful interference that may be experienced from the operation of industrial, scientific and medical equipment.

172 58) In Region 2, Australia, New Zealand, the Union of South Africa and the territory under mandate of Southwest Africa, the amateur service will operate within the band 26 960-27 230 kc/s.
### Present Provisions

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to Services</th>
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</thead>
<tbody>
<tr>
<td><strong>World-Wide</strong></td>
<td><strong>Regional</strong></td>
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<tr>
<td></td>
<td>Region 1</td>
</tr>
<tr>
<td>29-7-88 (58-3)</td>
<td>29-7-31.7 (2)</td>
</tr>
<tr>
<td></td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
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</tr>
<tr>
<td></td>
<td>31-7-41 (9-3)</td>
</tr>
<tr>
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<td>a) Fixed</td>
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<tr>
<td></td>
<td>b) Mobile</td>
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<tr>
<td></td>
<td>41-68 (27)</td>
</tr>
<tr>
<td>a) Broadcasting</td>
<td>a) Broadcasting</td>
</tr>
<tr>
<td>b) Fixed</td>
<td>b) Fixed</td>
</tr>
<tr>
<td>c) Mobile</td>
<td>c) Mobile</td>
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<td></td>
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<tr>
<td></td>
<td>54-72 (18)</td>
</tr>
<tr>
<td>a) Broadcasting</td>
<td>a) Broadcasting</td>
</tr>
<tr>
<td>b) Fixed</td>
<td>b) Fixed</td>
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<tr>
<td>c) Mobile</td>
<td>c) Mobile</td>
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<td></td>
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<td></td>
<td>68-70 (2)</td>
</tr>
<tr>
<td>Aeronautical radionavigation</td>
<td>(cont’d)</td>
</tr>
</tbody>
</table>

### Notes

- In the U.S.S.R., the band 29·7-30 Mc/s is allocated additionally for the aeronautical mobile service. (173)
- In Australia, the band 29·7-31·7 Mc/s is allocated for the aeronautical radionavigation service. (174)
- In the U.S.S.R., the band 30-31·7 Mc/s is allocated for the radionavigation service. (175)
- The frequency 40·68 Mc/s is designated for industrial, scientific and medical purposes. Emissions must be confined within the limits of ± 0.05 % of that frequency. Radiocommunication services operating within those limits must accept any harmful interference that may be experienced from the operation of industrial, scientific and medical equipment. (176)
- In Region 1, the aeronautical radionavigation service may be accommodated in the band 31·7-41 Mc/s. The operation of standard beam approach equipment, as described in 258, is to be protected by special arrangement. (177)
178 44) In the Union of South Africa, the territory under mandate of Southwest Africa, Northern Rhodesia and Southern Rhodesia, the band 41-44 Mc/s is allocated for the aeronautical radionavigation, fixed and mobile services; the bands 44-50 Mc/s and 54-68 Mc/s are allocated for the fixed and mobile services in addition to the broadcasting service, the band 50-54 Mc/s being used exclusively for the amateur service.

179 45) In the United Kingdom, the band 66-5-68 Mc/s may be used for the fixed and land mobile services under local arrangement with France in order to avoid mutual harmful interference.

180 46) In the U.S.S.R., the band 68-72 Mc/s is allocated for the broadcasting service. The aeronautical radionavigation service in other countries and the broadcasting service in the U.S.S.R. are subject to local arrangement in order to avoid mutual harmful interference.

181 47) In China, the bands 68-72 Mc/s and 76-88 Mc/s are allocated for the broadcasting, fixed and mobile services.

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to Services</th>
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</thead>
<tbody>
<tr>
<td><strong>World-Wide</strong></td>
<td><strong>Regional</strong></td>
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<tr>
<td></td>
<td>Region 1</td>
</tr>
<tr>
<td><strong>29-7-88 (cont’d)</strong></td>
<td><strong>54-72 (cont’d)</strong></td>
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<tr>
<td></td>
<td><strong>72-76 (4)</strong></td>
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<td></td>
<td><strong>75-2-78 (2-8)</strong></td>
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<tr>
<td></td>
<td><strong>78-80 (2)</strong></td>
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<td></td>
<td><strong>78-80 (7)</strong></td>
</tr>
<tr>
<td><strong>71)</strong></td>
<td><strong>80-83 (3)</strong></td>
</tr>
<tr>
<td></td>
<td><strong>b) Land mobile</strong></td>
</tr>
<tr>
<td><strong>72)</strong></td>
<td><strong>80-87 (7)</strong></td>
</tr>
<tr>
<td><strong>73)</strong></td>
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</tr>
</tbody>
</table>

182 48) In France and the U.S.S.R., the band 72-72-8 Mc/s is allocated for the amateur service.

183 49) In India, the bands 70-72-8 Mc/s and 76-85 Mc/s are allocated exclusively for the broadcasting service.

184 50) The frequency 75 Mc/s is designated for aeronautical marker beacons. In Region 1, the guardband is ±0-2 Mc/s; in Regions 2 and 3, ±0-4 Mc/s.

185 51) In the U.S.S.R., the band 76-108 Mc/s is allocated for the broadcasting service.

186 52) The broadcasting service in the U.S.S.R. and the radionavigation service in neighbouring countries are subject to local arrangement as regards avoiding mutual harmful interference.
### Present Provisions

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>World-Wide</th>
<th>Regional</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Region 1</td>
</tr>
<tr>
<td>29.7–88 (cont’d)</td>
<td>83–85 (2)</td>
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</tr>
<tr>
<td></td>
<td>Aeronautical radionavigation</td>
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</tr>
<tr>
<td></td>
<td>85–87.5 (2.5)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Fixed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
<td></td>
</tr>
<tr>
<td></td>
<td>87.5–88 (0.5)</td>
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</tr>
<tr>
<td></td>
<td>Broadcasting</td>
<td></td>
</tr>
<tr>
<td>88–100 (12)</td>
<td>72) Broadcasting</td>
<td></td>
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<tr>
<td></td>
<td>80)</td>
<td></td>
</tr>
<tr>
<td>100–108 (8)</td>
<td>Mobile except aeronautical mobile (R)</td>
<td></td>
</tr>
<tr>
<td>108–118 (10)</td>
<td>Aeronautical radionavigation</td>
<td></td>
</tr>
<tr>
<td>118–132 (14)</td>
<td>Aeronautical mobile (R)</td>
<td></td>
</tr>
</tbody>
</table>

- **187** 72) In the United Kingdom, the band 85–90 Mc/s is allocated for the maritime radionavigation service on a shared basis.
- **188** 74) In Australia and New Zealand, the band 85–90 Mc/s is allocated for the maritime radionavigation service.
- **189** 76) In China, the band 88–108 Mc/s is allocated for the broadcasting and fixed services.
Present Provisions

190  76) In France, India and the United Kingdom, the meteorological aids service may be operated in the band 94-5-95 Mc/s.
191  77) In the United Kingdom, the fixed and land mobile services may be operated in the band 95-100 Mc/s.
192  78) In India, the band 95-97.5 Mc/s is allocated for the fixed and mobile services.
193  79) In the Union of South Africa, the territory under mandate of Southwest Africa, Northern Rhodesia and Southern Rhodesia, the band 100-108 Mc/s is allocated for the broadcasting service and the bands 132-144 Mc/s and 146-174 Mc/s for the fixed and mobile services.
194  80) In Australia, the band 100-108 Mc/s is allocated for the aeronautical mobile (OR) service until required for the broadcasting service and in New Zealand it is allocated for the broadcasting and mobile services.
195  81) The frequency 121.5 Mc/s is the aeronautical emergency frequency in this band.

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>World-Wide</td>
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<tr>
<td></td>
<td>Region 1</td>
</tr>
<tr>
<td>132-144 (12)</td>
<td>Aeronautical mobile (OR)</td>
</tr>
<tr>
<td></td>
<td>a) Fixed</td>
</tr>
<tr>
<td>144-146 (2)</td>
<td>Amateur</td>
</tr>
<tr>
<td>146-235 (89)</td>
<td>146-156 (10)</td>
</tr>
<tr>
<td></td>
<td>Aeronautical mobile (OR)</td>
</tr>
<tr>
<td></td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>146-148 (2)</td>
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<tr>
<td></td>
<td>Amateur</td>
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<tr>
<td></td>
<td>148-174 (26)</td>
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<tr>
<td></td>
<td>a) Fixed</td>
</tr>
<tr>
<td>156-174 (18)</td>
<td>(cont'd)</td>
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</tbody>
</table>
|                                     | a) Fixed | b) Mobile except aeronautical mobile (OR) (85)
|                                     | (cont'd)           |

196  85) In Australia and New Zealand, the bands 132-144 Mc/s and 148-156 Mc/s are allocated exclusively for the aeronautical mobile (OR) service.
197  86) In Region 1, the meteorological aids service may be operated in the band 151-154 Mc/s.
198  87) The frequency 156.80 Mc/s is designated for world-wide use for safety, calling, and intership and harbour control communications in the maritime mobile service (simplex telephony). Any other use of this frequency should be avoided in areas where such other use is liable to cause harmful interference to the maritime mobile service. The interested administrations will ensure, by special arrangements where necessary, that an adequate guard-band is provided. In Region 2, its use for this purpose will be restricted to the frequency modulated type of transmission (F3) and it is strongly recommended that the same type of transmission be adopted for this purpose in Regions 1 and 3.
199  88) In France, the band 162-174 Mc/s is allocated for the broadcasting service.
### Present Provisions

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<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to Services</th>
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<td><strong>Region 1</strong></td>
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<td>146-235 (cont’d)</td>
<td>156-174 (cont’d)</td>
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<tr>
<td></td>
<td>174-216 (42)</td>
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<td>Broadcasting</td>
<td>Broadcasting</td>
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<tr>
<td>Aeronautical radionavigation</td>
<td>216-235 (19)</td>
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<td></td>
<td>radionavigation</td>
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<tr>
<td>220-225 (5)</td>
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<td>225-235 (10)</td>
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<tr>
<td>200-235 (35)</td>
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</tr>
<tr>
<td>In Australia, the band 170–178 Mc/s is allocated for the aeronautical radionavigation service.</td>
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</tr>
<tr>
<td>In the United Kingdom, the band 174–200 Mc/s is also allocated for the fixed service, and the band 200–216 Mc/s is allocated for the aeronautical radionavigation service.</td>
<td></td>
</tr>
<tr>
<td>In the Union of South Africa, the territory under mandate of Southwest Africa, Northern Rhodesia and Southern Rhodesia, the band 174–216 Mc/s is also allocated for the fixed and land mobile services.</td>
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<tr>
<td>In the United Kingdom, distance measuring equipment will be operated in the band 200–235 Mc/s until such time as world standardisation at 1000 Mc/s has been accomplished.</td>
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<tr>
<td>In the U.S.S.R., the band 216–260 Mc/s is allocated for the radionavigation service.</td>
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<tr>
<td>In the Union of South Africa, the territory under mandate of Southwest Africa, Northern Rhodesia and Southern Rhodesia, the band 220–225 Mc/s is allocated for the amateur service.</td>
<td></td>
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<tr>
<td>In China, the band 200–216 Mc/s is allocated for the broadcasting, fixed and mobile services, and the bands 216–220 Mc/s and 225–235 Mc/s for the fixed and mobile services, the band 220–225 Mc/s being allocated for the amateur service.</td>
<td></td>
</tr>
<tr>
<td>In Region 2, distance measuring equipment in the aeronautical radionavigation service may be operated in the band 220–231 Mc/s until the 1st January 1952 in accordance with appropriate bilateral or multilateral arrangements.</td>
<td></td>
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Present Provisions

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<th>Frequency Band and (Bandwidth) Mc/s</th>
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<tr>
<td>235-328-6 (93-6)</td>
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<td>b) Mobile</td>
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<tr>
<td>335-4-420 (84-6)</td>
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<td>420-450 (30)</td>
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<td>radionavigation</td>
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<td>b) Amateur</td>
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<tr>
<td>450-460 (10)</td>
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<td></td>
<td>radionavigation</td>
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<tr>
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<td>b) Amateur</td>
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<td>460-470 (10)</td>
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<td>b) Mobile</td>
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<td>Broadcasting</td>
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<td>585-610 (25)</td>
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<td>Radionavigation</td>
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<tr>
<td>610-940 (330)</td>
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<td></td>
<td>99) Broadcasting</td>
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</table>

99) The meteorological aids service (radio-sonde) may be operated in the band 400-420 Mc/s.

95) In the U.S.S.R., the band 412-460 Mc/s is allocated for the radionavigation service.

94) In the band 420-460 Mc/s the aeronautical radionavigation service has priority. The other services are admitted to this band only on condition that harmful interference is not caused to the aeronautical radionavigation service.

97) In Region 2, the allocation for the aeronautical radionavigation service in the band 420-460 Mc/s is temporary and is exclusively for altimeters.

98) In Region 2, the frequency 915 Mc/s is designated for industrial, scientific and medical purposes. Emissions must be confined within the limits of ±25 Mc/s of that frequency. Radiocommunication services operating within those limits must accept any harmful interference that may be experienced from the operation of industrial, scientific and medical equipment.

99) In France and Italy, the band 585-685 Mc/s is allocated for the fixed and broadcasting services.

100) In Region 2, the fixed service may operate in the band 890-940 Mc/s.
Present Provisions

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
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<th>Region 2</th>
<th>Region 3</th>
</tr>
</thead>
<tbody>
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<td>940-960 (20)</td>
<td>Broadcasting</td>
<td>Broadcasting</td>
<td>Fixed</td>
<td>Broadcasting</td>
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<tr>
<td>960-1215 (255)</td>
<td>Aeronautical radionavigation</td>
<td></td>
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</tr>
<tr>
<td>1215-1300 (85)</td>
<td>Amateur</td>
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</tr>
<tr>
<td>1300-1700 (400)</td>
<td>1300-1600 (300)</td>
<td>1300-1600 (300)</td>
<td>1300-1700 (400)</td>
<td>a) Aeronautical radionavigation</td>
<td>a) Aeronautical radionavigation</td>
</tr>
<tr>
<td></td>
<td>a) Fixed</td>
<td>b) Mobile</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>1600-1700 (100)</td>
<td>1660-1700 (40)</td>
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<tr>
<td></td>
<td>Aeronautical radionavigation</td>
<td>Meteorological aids (radio sonde)</td>
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<tr>
<td>1700-2300 (600)</td>
<td>a) Fixed</td>
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<tr>
<td></td>
<td>b) Mobile</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2300-2450 (150)</td>
<td>Amateur</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

101) In the U.S.S.R., the band 1215–1300 Mc/s is allocated for the fixed service, primarily for relaying television.

102) In Region 2, the band 1300–1660 Mc/s is intended for an integrated system of electronic aids to air navigation and traffic control. Administrations of the other Regions should envisage the possibility of the future application of such a system on a world-wide basis.

103) In the U.S.S.R., the band 1300–1600 Mc/s is allocated for the aeronautical radionavigation service.

104) In Region 2 and the United Kingdom, the use of the band 1300–1365 Mc/s is restricted to surveillance radar.

105) In Regions 1 and 3, the meteorological aids service may be operated in the band 1700–1750 Mc/s.

106) In Region 2, Australia, New Zealand, Northern Rhodesia, Southern Rhodesia, the Union of South Africa, the territory under mandate of Southwest Africa, and the United Kingdom, the frequency 2450 Mc/s is designated for industrial, scientific and medical purposes. Emissions must be confined within the limits of ± 50 Mc/s of that frequency. Radiocommunication services operating within those limits must accept any harmful interference that may be experienced from the operation of industrial, scientific and medical equipment.
### Present Provisions

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 450-2 700 (250)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
</tr>
<tr>
<td>2 700-2 900 (200)</td>
<td>Aeronautical radionavigation</td>
</tr>
<tr>
<td>2 900-3 300 (400)</td>
<td>Radionavigation</td>
</tr>
<tr>
<td>3 300-3 900 (600)</td>
<td>3 300-3 900 (600)</td>
</tr>
<tr>
<td></td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
</tr>
<tr>
<td></td>
<td>c) Radionavigation</td>
</tr>
<tr>
<td>3 900-4 200 (300)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
</tr>
<tr>
<td>4 200-4 400 (200)</td>
<td>Aeronautical radionavigation</td>
</tr>
<tr>
<td>4 400-5 000 (600)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
</tr>
<tr>
<td>5 000-5 250 (250)</td>
<td>Aeronautical radionavigation</td>
</tr>
</tbody>
</table>

221 106) In the U.S.S.R., the band 2 450-2 700 Mc/s is allocated for the aeronautical mobile and the aeronautical radionavigation services.

222 108) The meteorological aids service may be operated in the band 2 700-2 900 Mc/s.

223 109) The band 3 246-3 266 Mc/s is designated for racons.

224 110) In the band 2 900-3 300 Mc/s shipborne radar in merchant ships is confined within the band 3 000-3 246 Mc/s.

225 111) In China, the band 4 200-4 400 Mc/s may be used for the fixed service provided that harmful interference is not caused to the aeronautical radionavigation service.
### Present Provisions

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>World-Wide</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>5 250–5 650 (400)</td>
<td>Radionavigation</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>5 650–5 850 (200)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>5 850–5 925 (75)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
</tr>
<tr>
<td>5 925–8 500 (2 575)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
</tr>
<tr>
<td>8 500–9 800 (1 300)</td>
<td>Radionavigation</td>
</tr>
<tr>
<td>9 800–10 000 (200)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Radionavigation</td>
</tr>
<tr>
<td>10 000–10 500 (500)</td>
<td>Amateur</td>
</tr>
<tr>
<td>Above 10 500</td>
<td>Not allocated</td>
</tr>
</tbody>
</table>

226 112) The band 5 440–5 460 Mc/s is designated for racons.

227 113) In the band 5 250–5 650 Mc/s shipborne radar in merchant ships is confined within the band 5 460–5 650 Mc/s.

228 114) In Region 2, Australia, New Zealand, Northern Rhodesia, Southern Rhodesia, the Union of South Africa, the territory under mandate of Southwest Africa, and the United Kingdom, the frequency 5 850 Mc/s is designated for industrial, scientific and medical purposes. Emissions must be confined within the limits of ±75 Mc/s of that frequency. Radiocommunication services operating within those limits must accept any harmful interference that may be experienced from the operation of industrial, scientific and medical equipment.

229 115) In the U.S.S.R., the band 6 900–7 050 Mc/s may be used for the meteorological aids service.

230 116) The band 9 300–9 320 Mc/s is designated for racons.

231 117) In the band 8 500–9 800 Mc/s shipborne radar in merchant ships is confined within the band 9 320–9 500 Mc/s.
Note by the S.G.

Table of Frequency Allocations

There have been many and varied proposals to modify this table.

The systematic arrangement of proposals from various countries in the present volume has raised complex problems. If the frequency bands given in the present table had been taken as a basis, as would have been reasonable, it would have been very difficult to split up the proposals submitted by each individual country, for they often refer to bands which do not coincide with those of the existing table.

This being so, it seemed advisable to submit the proposals from each country in one group. They are included below in the normal alphabetical order of the countries.

However, it was noted that some countries have submitted proposals which are often identical with those of several other countries. Proposals by these countries have therefore been grouped together and inserted in conjunction with the first of the countries concerned (in alphabetical order), with an indication of the proposals common to several countries and of those which contain some differences or which are submitted separately.

To facilitate examination of the whole of the proposals concerning the table of frequency allocations, a table with a list of the countries which have submitted proposals concerning a given frequency band has been placed opposite each of the bands of the existing table. It will be found below immediately after the text of the proposals relative to Article 5. As regards the proposals by the countries which have been grouped together, the names of countries submitting similar proposals are shown in brackets; when proposals by these countries contain some differences, or are submitted separately, the names of the countries concerned are quoted individually, but in the order in which their proposals are reproduced below.

Proposals

Australia (Commonwealth of)

109. See proposals 5–7 ... in connection with Annexes 5, 6, 7, 8 and 9 to the Final Acts of the E.A.R.C.

Table of Frequency Allocations

Note: Unless otherwise specified, all the modification proposals hereafter refer to Region 3.

70–90 kc/s. Under World-Wide, read:

a) Fixed
b) Maritime mobile
c) Radionavigation

Reasons

In view of the possibility that a standard long-range aeronautical navigation aid will operate in this band, it is considered the allocation should be world-wide for the three services indicated.
130. (a) After: In Regions 1 and 3, add: (Australia excepted).

Reasons
The frequency 333 kc/s is not now used for this purpose in Australia.

419


Reasons
Australia has no requirement in this band for the mobile service and proposes that it be used instead for broadcasting.

420

1 605–1800 kc/s Read:
   a) Aeronautical radionavigation
   b) Fixed
   c) Mobile

Reasons
There is a requirement in Australia for the aeronautical radionavigation service to operate in this band.

421

3 500–3 900 kc/s Read:
   3 500–3 700
   Amateur
   3 700–3 900,
   a) Fixed
   b) Mobile

Reasons
Australia does not favour the sharing of bands between the amateur and the fixed and mobile services. Its great need in this part of the spectrum is for fixed and mobile services. It considers that the band 3 500–3 700 kc/s provides adequately for its amateur service and it proposes to employ the band 3 700–3 900 kc/s for the fixed and mobile service.

422

4 063–4 438 kc/s

155. After this No. add the following new footnote:

41bis) In Australia the band 4 238–4 438 kc/s may be used exceptionally and on the essential condition that harmful interference is not caused to the maritime mobile service, by fixed and mobile stations of mean power not exceeding 500 watts communicating only within the national boundaries.

Reasons
It is considered that stations of the fixed and mobile service operating at inland locations in Australia could be accommodated in this band without causing harmful interference to the maritime mobile service. It is proposed, therefore, that such stations be permitted to operate in this band under the conditions stated.
In view of the need for additional channels to accommodate the high frequency broadcasting service, it is proposed that the band 7 100–7 150 kc/s be allocated exclusively to the broadcasting service.

Reasons

To conform with proposal 423.

It is proposed that the provisions of the three paragraphs in question be re-considered with a view to providing that some reasonable power limitation be imposed on fixed stations operating in the bands concerned in order to avoid interference with coast stations operating in those bands.

Reasons

Reception of transmission from coast stations in the bands 8 615–8 815 kc/s, 12 925–13 200 kc/s and 17 160–17 360 kc/s has been seriously interfered with on occasions by transmissions from fixed stations operating in these bands with signal characteristics which indicate use of very high power. The proposal is put forward with a view to overcoming such difficulties in the future.

Between 14 000 and 15 450 kc/s replace the present allocations by the following:

14 000–14 250 Amateur
14 250–14 995 Fixed
14 995–15 005 Standard frequency
15 005–15 095 Aeronautical mobile (OR)
15 095–15 450 Broadcasting

In view of the great difficulties experienced in obtaining urgently needed additional frequencies for long distance fixed services, it is proposed that the amateur service be allocated the band 14 000–14 250 kc/s, that the band 14 250–14 995 kc/s be allocated to the fixed service and that the band 14 995–15 005 kc/s be allocated to the standard frequency service.

In view of the need for additional channels for the broadcasting service, it is proposed that the aeronautical (OR) service be allocated the band 15 005–15 095 kc/s and the broadcasting service the band 15 095–15 450 kc/s.

Between 18 030 and 21 000 kc/s, replace the present allocations by the following:

18 030–19 995 Fixed
19 995–20 005 Standard frequency
20 005–21 000 Fixed

To provide additional channels for the fixed service, it is proposed that the bands 18 030–19 995 kc/s and 20 005–21 000 kc/s be allocated to the fixed service and that the band 19 995–20 005 kc/s be allocated to the standard frequency service.
Replace the present allocations by the following:

29.7-44 Mc/s
- 29.7-30 Amateur
- 30-44
  a) Fixed 60bis)
  b) Mobile

Delete.

After this No. add the following new footnote:

63bis). In Australia, fixed stations employing the ionospheric scatter technique may operate in the band 37-44 Mc/s.

Reasons

The band 29.7-31.7 Mc/s is no longer required in Australia for the aeronautical radionavigation service. It is proposed, therefore, that Regulation 174 be deleted, that the band 29.7-30 Mc/s be allocated to the amateur service, and the band 30-44 Mc/s be allocated to the fixed and mobile services, with provision for fixed stations employing ionospheric scatter techniques to operate in the 37-44 Mc/s portion of the band.

Replace the present allocations by the following:

44-49
- a) Fixed
- b) Mobile

49-56
- a) Broadcasting
- b) Fixed
- c) Mobile

56-58 Amateur

58-63
- a) Fixed
- b) Mobile

63-70
- a) Broadcasting
- b) Fixed
- c) Mobile

Reasons

The band 44-49 Mc/s is not required in Australia for the broadcasting service and it is proposed that it be employed by the fixed and mobile services.

The band 49-56 Mc/s is required for the broadcasting (television), fixed and mobile services.

The band 50-54 Mc/s band now allocated to the amateur service is required for the broadcasting (television), fixed and mobile services. It is proposed, therefore, to allocate the band 56-58 Mc/s to the amateur service, the band 58-63 Mc/s to the fixed and mobile services and the band 63-70 Mc/s to the broadcasting (television), fixed and mobile services.

Replace the present allocations in the column Region 3 or World-Wide accordingly by the following:

78-85
- a) Fixed
- b) Mobile

85-88
- a) Broadcasting
- b) Radionavigation
88–90
  a) Broadcasting
  b) Fixed
  c) Mobile
90–108 Broadcasting

Reasons
The existing 78–80 Mc/s allocation for aeronautical radionavigation purposes is not now required. The band 85–92 Mc/s is required for the broadcasting (television) service with provision for the radionavigation service to operate in the 85–88 Mc/s portion and the fixed and mobile service in the 88–90 Mc/s portion. It is proposed to employ the band 92–108 Mc/s for the broadcasting (FM) service.

433

188. 84) Delete: Australia and

Reasons
As indicated above, the 85–88 Mc/s portion only of the band 85–90 Mc/s is required for the maritime radionavigation service.

434

194. 86) Read: In New Zealand, the band 100–108 Mc/s is allocated for the broadcasting and mobile services.

Reasons
The band 100–108 Mc/s is not now required by the aeronautical mobile (OR) service. The provision concerning Australia in 194 can therefore be deleted.

435

132–144 Mc/s Replace the present allocations by the following:
  Aeronautical mobile (OR) 82bis)

Reasons
The band 132–144 Mc/s is required for the aeronautical mobile (OR) service until 1st July 1963, after which the band 132–146 Mc/s will be allocated to the broadcasting (television) service and the band 146–150 Mc/s to the amateur service.

436

196. 85) Delete: Australia and

Reasons
The band 150–151 Mc/s will continue to be used by the aeronautical mobile (OR) service but the band 151–156 Mc/s is no longer required for that service.

437

196. After this No. add the following new footnote:

82bis). In Australia, as from 1st July 1963, the band 132–146 Mc/s will be allocated exclusively to the broadcasting service and the band 146–150 Mc/s will be allocated exclusively to the amateur service.

Reasons
See proposal 435.
148–328.6 Mc/s

In column Region 3 replace the present allocations by the following:

<table>
<thead>
<tr>
<th>Frequency Range</th>
<th>Service Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>148–150</td>
<td>Fixed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mobile</td>
<td></td>
</tr>
<tr>
<td>150–151</td>
<td>Aeronautical mobile (OR)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Full band</td>
<td></td>
</tr>
<tr>
<td>151–174</td>
<td>Fixed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mobile</td>
<td></td>
</tr>
<tr>
<td>174–202</td>
<td>Broadcasting</td>
<td></td>
</tr>
<tr>
<td>202–209</td>
<td>Aeronautical radionavigation</td>
<td></td>
</tr>
<tr>
<td>209–216</td>
<td>Broadcasting</td>
<td></td>
</tr>
<tr>
<td>216–225</td>
<td>Aeronautical radionavigation</td>
<td></td>
</tr>
<tr>
<td>225–328.6</td>
<td>Fixed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mobile</td>
<td></td>
</tr>
</tbody>
</table>

**Reasons**

It is proposed that the aeronautical mobile (OR) service and the fixed and mobile services share the band 150–151 Mc/s. It is proposed that the 151–174 Mc/s band be employed for the fixed and mobile services instead of the existing allocation of 148–170 Mc/s.

To meet the needs of the broadcasting (television) service, it is proposed that the band 174–202 Mc/s be allocated for that purpose.

The band 209–216 Mc/s is required for the broadcasting (television) service.

198. *) Replace the present text by the following:

The frequency 156.8 Mc/s is the frequency designated for world-wide use on a simplex basis in the maritime mobile service for calling and safety purposes. It may also be used for messages preceded by the urgency signal and, if necessary, for distress messages. Any other use of this frequency should be avoided in areas where such other use is liable to cause harmful interference to the maritime mobile service. The interested administrations will ensure, by special arrangements where necessary, that an adequate guard-band is provided. Its use for this purpose will be restricted to the frequency modulated type of transmission (F3).

**Reasons**

In order to bring this regulation into line with existing usage of the 156.8 Mc/s channel.

200. *) Delete.

**Reasons**

There is no requirement for the aeronautical radionavigation service in the 170–178 Mc/s band.

208. *) Replace: 420 by: 406.

**Reasons**

It is proposed that the needs of the meteorological aids service be met by permitting operations in the band 400–406 Mc/s.
420–470 Mc/s. In column Region 3 replace the present allocations by the following:

443

211. After this No. add the following new footnote:

97bis). In Australia, fixed and mobile services may operate in the band 420–470 Mc/s, provided that harmful interference is not caused to the aeronautical radionavigation service.

Reasons

To meet the needs of the aeronautical radionavigation service in this portion of the spectrum, it is proposed that the band 420–470 Mc/s be allocated with provision for the fixed and mobile services to use the band on condition that harmful interference is not caused to the aeronautical radionavigation service.

444

470–960 Mc/s. In column Region 3 replace the present allocations by the following:
470–500  a) Fixed
       b) Mobile
500–820  Broadcasting 97ter)
820–960  Fixed 97quater) 99bis)

445

211. After this No. add the following two new footnotes:

97ter). In Australia, radionavigation services may operate in the band 585–610 Mc/s provided that harmful interference is not caused to the broadcasting services.

97quater). In Australia, fixed stations employing scatter techniques may operate in the band 820–865 Mc/s.

447

213. After this No. add the following new footnote:

99bis). In Australia, radionavigation services may operate in the band 890–942 Mc/s, provided harmful interference is not caused to the fixed service.

Reasons

It is proposed that the band 470–500 Mc/s be used by the fixed and mobile services instead of by the broadcasting service to which the band is allocated at present.

It is proposed that the band 500–820 Mc/s be allocated to the broadcasting service with provision for the radionavigation service to employ the 585–610 Mc/s portion, provided that no interference is caused to the broadcasting service.

The requirements of the fixed services in this portion of the spectrum are to be met by allocation of the band 820–960 Mc/s for this purpose, instead of for the broadcasting service. Provision is made for fixed stations employing scatter techniques to operate in the 820–865 Mc/s portion and for radionavigation services to operate in the 890–942 Mc/s portion, provided no interference is caused to the fixed service.
960–1 216 Mc/s.  Add the following reference: 100bis).

214. After this No. add the following new footnote:

100bis). In Australia, fixed stations employing scatter techniques may operate in the band 960–1 215 Mc/s, provided harmful interference is not caused to the aeronautical radionavigation service.

Reasons
To accommodate fixed stations employing scatter techniques, it is proposed that they be permitted to operate in the band 960–1 215 Mc/s provided no interference is caused to the aeronautical radionavigation service.

Replace the present allocation by:

1 215–1 300 Mc/s.

a) Amateur
b) Radionavigation

Reasons
It is proposed that the amateur and radionavigation services shall share the band 1 215–1 300 Mc/s.

Replace the present allocations by the following:

1 300–1 365 Aeronautical radionavigation 101bis)
1 365–1 670 a) Aeronautical radionavigation
b) Fixed
c) Mobile
1 670–1 700 Meteorological aids
1 700–2 200 Fixed 105bis)
2 200–2 300 a) Fixed
b) Mobile
2 300–2 450 a) Amateur
b) Radionavigation

215. After this No. add the following footnote:

101bis). In Australia, fixed and mobile services may operate in the band 1 300–1 365 Mc/s, provided that harmful interference is not caused to the aeronautical radionavigation service.

219. After this No. add the following new footnote:

105bis). In Australia, fixed stations employing scatter techniques may operate in the band 1 700–2 200 Mc/s.
Reasons

It is proposed that the fixed and mobile services be permitted to operate in the band 1 300–1 365 Mc/s on condition that harmful interference is not caused to the aeronautical radionavigation service.

In view of the need for meteorological aids to operate in this portion of the spectrum, it is proposed that the band 1 670–1 700 Mc/s be allocated for this purpose.

It is proposed that the band 1 700–2 200 Mc/s be allocated for the fixed service only, instead of the fixed and mobile services as at present, and that provision be made for fixed stations employing scatter techniques to operate in this band.

In view of the requirements of the radionavigation service, it is proposed that the band 2 300–2 450 Mc/s be shared by the amateur and radionavigation services.

2 900–3 300 Mc/s. *Add the following reference: 108bis*.

222. *After this No. add the following new footnote:*

108bis). In Australia, the frequency 3000 Mc/s is designated for meteorological wind finding purposes.

Reasons

Provision is made in the band 2 900–3 300 Mc/s for the allocation of 3 000 Mc/s for meteorological wind finding purposes.

3 300–3 900 Mc/s. *Replace the present allocations by the following:*

\[ a) \text{ Fixed} \\
  b) \text{ Mobile} \\
  c) \text{ Radionavigation} \]

Reasons

Because of the needs of the fixed, mobile and radionavigation services in this band, it is proposed that the allocation of this service to the amateur service be withdrawn.

4 400–5 250 Mc/s. *Replace the present allocations by the following:*

\[ 4 400–4 800 \ a) \text{ Fixed} \\
  b) \text{ Mobile} \\
  4 800–5 250 \text{ Aeronautical radionavigation} \]

Reasons

It is proposed that the 4 400–4 800 Mc/s band be allocated to the fixed and mobile services, instead of the band 4 400–5 000 Mc/s and that band 5 000–5 250 Mc/s allocated to the aeronautical radionavigation service be extended to 4 800–5 250 Mc/s.

5 650–5 850 Mc/s. *Replace the present allocations by the following:*

\[ a) \text{ Amateur} \\
  b) \text{ Radionavigation} \]

Reasons

In view of the requirements of the radionavigation service, it is proposed that it shall share the band 5 650–5 850 Mc/s with the amateur service.
10 000–10 500 Mc/s. Replace the present allocations by the following:

a) Amateur
b) Radionavigation

Reasons

In view of the requirements of the radionavigation service, it is proposed that it shall share the band 10 000–10 500 Mc/s with the amateur service.

Belgium, France, French O.P.T.A., Italy, Netherlands

109. SOME PROPOSALS FOR AMENDMENT OF THE FREQUENCY ALLOCATION TABLE* (ATLANTIC CITY, 1947)

109. After this No. add the following new note:

* Administrations authorizing the use of frequencies below 10 kc/s for special national purposes must ensure that no harmful interference is caused thereby to the authorized services in the bands above 10 kc/s.

<table>
<thead>
<tr>
<th>Frequency band and (Bandwidth) kc/s</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>World-Wide</td>
<td>Region 1</td>
</tr>
<tr>
<td>462 10-110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>463 110-130 (20)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>464 130-325</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

465

110. Replace the present text by the following:

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

466

113. After this No. add the following new note:

4bis) Aeronautical stations, but not aircraft stations, shall be authorized to work in the 110–130 kc/s band.

467

124. 13) Delete.
125. Replace the present text by the following:

In Regions 2 and 3, aeronautical radio navigation shall have priority in the 200–285 kc/s band, and the aeronautical mobile service shall cause no harmful interference thereto.

<table>
<thead>
<tr>
<th>Frequency band and (Bandwidth) kc/s</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>World-Wide</td>
<td>Region 1</td>
</tr>
<tr>
<td>325–405 (80)</td>
<td>Aeronautical radionavigation</td>
<td>17 bis 20)</td>
</tr>
</tbody>
</table>

128. Delete.

129. Delete.

129. After this No. add the following new footnote:

17bis). In the 325–405 kc/s band, the aeronautical mobile service may in certain circumstances be authorized to use frequencies, subject to coordination. It must cause no harmful interference to aeronautical radionavigation, for example, to A3 radiotelephony used in conjunction with radiobeacons.

130. Delete.

131. Delete.

Belgium

<table>
<thead>
<tr>
<th>1 605–2 000 (395)</th>
<th>1 605–1 800 (195)</th>
<th>29 bis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 800–2 000 (200)</td>
<td>a) Fixed</td>
<td></td>
</tr>
<tr>
<td>b) Mobile except aeronautical mobile</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Aeronautical radionavigation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Unchanged
France, French O.P.T.A., Italy, Netherlands

<table>
<thead>
<tr>
<th>Frequency band and (Bandwidth) kc/s</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>World-Wide</td>
<td>Region 1</td>
</tr>
<tr>
<td>32)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Belgium, France, French O.P.T.A., Italy, Netherlands

143. After this No. add the following new note:

29 bis) In the tropical zone of Region 1 (see 252), the 1605–1800 kc/s band may be used for aeronautical radionavigation (radiobeacons), provided always that no harmful interference be caused to other services in this band.

France, French O.P.T.A., Italy, Netherlands

146. Replace the present text by the following:

32) For the time being, the Standard Loran Chain existing in the North-East Atlantic (Iceland-Faroes-Hebrides) may go on being operated in the band 1925–1975 kc/s, provided that everything possible is done to reduce harmful interference caused to other services in this or the adjacent bands. Use of the chain shall be discontinued after consultation among the countries concerned.

France, French O.P.T.A., Netherlands

147. Replace the present text by the following:

33) In any particular area, the Loran Chain operates either on 1850 kc/s (band assigned: 1825–1875 kc/s) or 1950 kc/s (band assigned: 1925–1975 kc/s). Authorized services other than Loran may use whichever of these two bands is not required for Loran, on condition that they cause no harmful interference to Loran transmissions.

Italy

147. Replace the present text by the following:

33) In any particular area, the Loran working frequency shall be either 1850 kc/s (band occupied 1825–1875 kc/s) or 1950 kc/s (band occupied 1925–1975 kc/s).
### Frequency Band and (Bandwidth) kc/s

<table>
<thead>
<tr>
<th>World-wide</th>
<th>Region 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>2045-2065 (20)</td>
<td>2045-2065 (20)</td>
</tr>
<tr>
<td>a) Fixed</td>
<td>a) Fixed</td>
</tr>
<tr>
<td>b) Mobile</td>
<td>b) Mobile</td>
</tr>
</tbody>
</table>

#### Frequency Band: 2170-2194 kc/s

- **Mobile (distress and calling)**

#### Frequency Band: 7100-7300 kc/s

- **Amateur**
  - 7100-7150 (50)
  - 7150-7300 (150)
- **Broadcasting**
  - 7100-7150 (50)
  - 7150-7300 (150)

---

### 148

Replace the present text by the following:

34) 2182 kc/s is the maritime mobile radiotelephone distress and calling frequency. It may be used by aircraft for distress, urgency and safety calls. The rules governing the use of this frequency are set forth in Article 34.

### 158

Replace the present text by the following:

35) The 7100-7150 kc/s band may be allocated to amateurs using stations with a peak power of less than 100 watts, provided they cause no harmful interference to broadcasting. But in the Union of South Africa and the Territory of Southwest Africa, this band shall be reserved for amateurs only.

### 159

Delete.
### Italy

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth)</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>23200–23350 (150)</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Netherlands

<table>
<thead>
<tr>
<th></th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>23200–23350 (150)</strong></td>
<td>Fixed</td>
<td></td>
</tr>
</tbody>
</table>

### Belgium, France, French O.P.T.A., Italy, Netherlands

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth)</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
</table>
| **25 010–25 600 (590)** | *a*) Fixed  
b) Mobile, except aeronautical mobile | A band some 100 kc/s wide ought to be allocated exclusively for maritime mobile communications. |
| **26 100–27 500 (1 400)** | *a*) Fixed  
b) Mobile, except aeronautical mobile | A band some 100 kc/s wide ought to be allocated exclusively for maritime mobile communications. |

### Belgium, France, French O.P.T.A., Italy, Netherlands

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth)</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>27-5–28 (0.5)</strong></td>
<td>Meteorological aids</td>
<td>This allocation, we suggest, should be extended to Regions 2 and 3 too.</td>
</tr>
<tr>
<td><strong>28–29 (1)</strong></td>
<td>Amateur</td>
<td></td>
</tr>
<tr>
<td><strong>29–29-7 (0.7)</strong></td>
<td>Fixed</td>
<td></td>
</tr>
</tbody>
</table>

### Belgium

<table>
<thead>
<tr>
<th></th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
</table>
| **29-7-68 (38.5)** | **29-7-31-7 (2)**  
a) Fixed  
b) Mobile | |
| | | |
### Italy

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Me/s</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>29-7-68 (38-3)</td>
<td>29-7-31-7 (2)</td>
<td></td>
</tr>
</tbody>
</table>

**Observations**

177 **Delete.**

### Belgium, France, French O.P.T.A., Italy, Netherlands

177 **Delete.**

### France, French O.P.T.A.

<table>
<thead>
<tr>
<th>29-7-68:5 (38-8)</th>
<th>29-7-41 (11:3)</th>
<th>In the 29-7-68 Me/s band it will doubtless be necessary to reserve a few sub-bands for forward-scatter purposes.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a) Fixed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
<td></td>
</tr>
<tr>
<td></td>
<td>41-68 (27)</td>
<td>Broadcasting.</td>
</tr>
<tr>
<td></td>
<td>68-68:5 (0:5)</td>
<td>Meteorological aids.</td>
</tr>
<tr>
<td></td>
<td>68-68:5</td>
<td>This allocation, we suggest, should be extended to Regions 2 and 3 too.</td>
</tr>
</tbody>
</table>

### Belgium

<table>
<thead>
<tr>
<th>68-70 (2)</th>
<th>68-68:5 (0:5) Meteorological aids</th>
<th>It would be well were this allocation to be extended to Regions 2 and 3.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>68-5-70 (1:5) Aeronautical radio-navigation</td>
<td></td>
</tr>
</tbody>
</table>

### Italy

<table>
<thead>
<tr>
<th>68-70 (2)</th>
<th>68-70 (2)</th>
<th>68-70 (2)</th>
</tr>
</thead>
</table>
178

**Netherlands**

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>68-70 (2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Fixed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Mobile except aeronautical mobile</td>
<td></td>
</tr>
</tbody>
</table>

**France, French O.P.T.A.**

<table>
<thead>
<tr>
<th>68-5-70 (1-5)</th>
<th>Aeronautical radio-navigation</th>
</tr>
</thead>
</table>

**Belgium, France, French O.P.T.A.**

184. Replace the present text by the following:

20) 75 Mc/s is the frequency set aside for aeronautical marker beacons, with a ± 0-2 Mc/s guardband. But the fixed and mobile services must refrain from assigning frequencies close to the limits of this guardband to stations which, because of their power or position, might jeopardize the services rendered by marker beacons.

**Belgium, Italy**

<table>
<thead>
<tr>
<th>70-74-8 (4-8)</th>
<th>72-8-74-8 (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Fixed</td>
<td>b) Fixed</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Mobile except aeronautical mobile</td>
</tr>
</tbody>
</table>

**France, French O.P.T.A.**

<table>
<thead>
<tr>
<th>70-74-8 (4-8)</th>
<th>a) Fixed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b) Mobile except aeronautical mobile</td>
</tr>
</tbody>
</table>

**Netherlands**

<table>
<thead>
<tr>
<th>72-8-75-2 (2-4)</th>
<th>a) Fixed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b) Mobile except aeronautical mobile</td>
</tr>
</tbody>
</table>
### Belgium

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>74.8–75.2 (0.4) 70)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### France, French O. P. T. A.

<table>
<thead>
<tr>
<th>74.8–75.2 (0.4) 70)</th>
<th>Aeronautical radio-navigation</th>
<th></th>
</tr>
</thead>
</table>

### Italy

| 74.8–75.2 (0.4) 70) | | |
|---------------------| | |

### France, French O. P. T. A.

<table>
<thead>
<tr>
<th>78–80 (2)</th>
<th>Aeronautical radio-navigation</th>
<th></th>
</tr>
</thead>
</table>

### Italy

| 78–80 (2) | | |
|-----------| | |

### Netherlands

| 78–80 (2) | | a) Fixed  
b) Mobile except aeronautical mobile |
|-----------| |---|
### Netherlands

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>World-wide</td>
<td>Region 1</td>
</tr>
<tr>
<td>80–83 (3)</td>
<td>a) Fixed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Mobile except aeronautical mobile</td>
<td></td>
</tr>
<tr>
<td>83–85 (2)</td>
<td>a) Fixed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Mobile except aeronautical mobile</td>
<td></td>
</tr>
</tbody>
</table>

### Belgium, France, French O.P.T.A., Italy

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>World-wide</td>
<td>Region 1</td>
</tr>
<tr>
<td>80–88 (6)</td>
<td>80–87.5 (7-5)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Fixed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Mobile, except aeronautical mobile</td>
<td></td>
</tr>
</tbody>
</table>

190. *Delete (as far as France is concerned at any rate).*

### Belgium

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>100–108 (8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>We shall be making proposals very shortly.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Belgium, France, French O.P.T.A., Italy, Netherlands

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>132–144 (12)</td>
<td>132–144 (12)</td>
<td>Aeronautical mobile</td>
</tr>
</tbody>
</table>
### France, French O. P. T. A.

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>146–156 (10)</td>
<td>146–148 (2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Fixed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Mobile except aeronautical mobile (R)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>148–151 (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aeronautical mobile (OR)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>151–154 (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Meteorological aids</td>
<td></td>
</tr>
<tr>
<td></td>
<td>154–155 (1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aeronautical mobile (OR)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>155–156 (1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Fixed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Mobile except aeronautical mobile (R)</td>
<td></td>
</tr>
</tbody>
</table>

This allocation, we suggest, should be extended to Regions 2 and 3 too.

### Italy

| 146–156 (10) | — — — — — | 

### France, French O. P. T. A.

197. Delete.

### Belgium, France, French O. P. T. A., Italy, Netherlands

<table>
<thead>
<tr>
<th>156–174 (18)</th>
<th>156–174 (18)</th>
<th>Unchanged</th>
</tr>
</thead>
<tbody>
<tr>
<td>84) 84bis</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

198. Replace the present text by the following:

84) 156–80 Mc/s shall be the calling and safety frequency to be used throughout the world for simplex
maritime radiotelephony. It may be used for transmission of messages preceded by the urgent signal, too, and, if necessary, for the transmission of distress messages as described in 865.

523 **Belgium, France, French O.P.T.A., Italy**

198. *After this No. add the following new note:*

84bis) In the bands 156-025-157-425, 160-625-160-975, and 161-475-162-025 Mc/s, Administrations which assign frequencies to authorized stations other than maritime mobile ones must avoid harmful interference to international VHF maritime mobile radiotelephony.

524 **Netherlands**

198. *After this No. add the following new note:*

84bis) In the bands 156-025-158-025 Mc/s, 160-625-162-625 Mc/s, Administrations which allocate frequencies to authorized service stations other than maritime mobile ones must make every effort to avoid harmful interference to the international maritime mobile VHF radiotelephony.

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>216-235 (19)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>World-wide</td>
<td></td>
</tr>
<tr>
<td></td>
<td>216-223 (7) Broadcasting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Region 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unchanged</td>
<td></td>
</tr>
</tbody>
</table>

84bis) The 328-6-335-4 Mc/s band shall be reserved for instrument landing systems (glide-path indicator).
### France, French O. P. T. A.

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>World-wide</td>
<td>Region 1</td>
</tr>
<tr>
<td><strong>529</strong> 335.4-400 (64-6)</td>
<td>a) Fixed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
<td></td>
</tr>
</tbody>
</table>

### Netherlands

<table>
<thead>
<tr>
<th>530</th>
<th>335.4-400</th>
</tr>
</thead>
</table>

It would be desirable to introduce one or more sub-bands contained in the band 335.4-470 Mc/s which would be allocated to the maritime mobile service for “multiplex” radiotelephony with liners.

### Belgium, France, French O. P. T. A., Italy

<table>
<thead>
<tr>
<th>531</th>
<th>400-406 (6)</th>
<th>Meteorological aids</th>
</tr>
</thead>
</table>

### Netherlands

<table>
<thead>
<tr>
<th>532</th>
<th>400-406 (6)</th>
<th>Meteorological aids</th>
</tr>
</thead>
</table>

It would be desirable to introduce one or more sub-bands contained in the band 335.4-470 Mc/s which would be allocated to the maritime mobile service for “multiplex” radiotelephony with liners.

### Belgium, France, French O. P. T. A., Italy, Netherlands

208. *Delete.*

### France, French O. P. T. A.

<table>
<thead>
<tr>
<th>534</th>
<th>406-410 (4)</th>
</tr>
</thead>
</table>

a) Meteorological aids 
b) Fixed 
c) Mobile
### Italy

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>406-410 (4)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Netherlands

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>406-410 (4)</td>
<td></td>
<td>It would be desirable to introduce one or more sub-bands contained in the band 335.4-470 Mc/s which would be allocated to the maritime mobile service for &quot;multiplex&quot; radiotelephony with liners.</td>
</tr>
</tbody>
</table>

### France, French O. P. T. A.

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>410-420 (10)</td>
<td>a) Fixed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
<td></td>
</tr>
</tbody>
</table>

### Netherlands

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>410-420 (10)</td>
<td></td>
<td>It would be desirable to introduce one or more sub-bands contained in the band 335.4-470 Mc/s which would be allocated to the maritime mobile service for &quot;multiplex&quot; radiotelephony with liners.</td>
</tr>
</tbody>
</table>

### Belgium

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>420-440 (20)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>420-430 (10)</td>
<td>a) Fixed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
<td></td>
</tr>
<tr>
<td>430-440 (10)</td>
<td>Amateur</td>
<td></td>
</tr>
<tr>
<td>96 b/s</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### France, French O.P.T.A.

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Me/s</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>420-440 (20)</td>
<td>a) Amateur</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Aeronautical radionavigation 96bis)</td>
<td></td>
</tr>
</tbody>
</table>

### Italy

541

<table>
<thead>
<tr>
<th>420-440 (20)</th>
<th></th>
</tr>
</thead>
</table>

### Netherlands

542

<table>
<thead>
<tr>
<th>420-440 (20)</th>
<th>a) Fixed</th>
<th>b) Mobile</th>
<th>96bis)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>It would be desirable to introduce one or more sub-bands contained in the band 335.4-470 Mc/s which would be allocated to the maritime mobile service for &quot;multiplex&quot; radiotelephony with liners.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### France, French O.P.T.A.

210. After this No. add the following new note:

96bis) Radio altimeters may be used in the 400-460 Mc/s band until such time as they become obsolete or are shifted to another aeronautical radionavigation band.

### Belgium, Italy, Netherlands

210. After this No. add the following new note:

96bis) Radio altimeters may be used in the band 420-460 Mc/s until they are transferred into another aeronautical radionavigation band, or until such time as they are no longer necessary.

### Netherlands

210. After this No. add the following new note:

96ter) In the Netherlands the use of observation radar is permitted in this band.
Belgium

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>World-wide</td>
<td>Region 1</td>
</tr>
<tr>
<td>440–460 (20)</td>
<td>440–460 (20)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Fixed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
<td>96bis</td>
</tr>
</tbody>
</table>

France, French O. P. T. A., Italy

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>440–460 (20)</td>
<td>a) Fixed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
<td>96bis, 96quater</td>
</tr>
</tbody>
</table>

548

210. After this number add the following new note:

96quater) In France, amateurs may use the 440–460 Mc/s band, subject to a special authorization from the French authorities.

Netherlands

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>440–460 (20)</td>
<td>440–460 (20)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Fixed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
<td>96bis</td>
</tr>
</tbody>
</table>

551

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unchanged</td>
<td></td>
</tr>
</tbody>
</table>
### Frequency Band and Allocation to Services

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>World-wide</td>
<td></td>
</tr>
<tr>
<td>585-610 (25)</td>
<td>Radionavigation 99)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>99)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>99bis)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>99ter)</td>
<td></td>
</tr>
</tbody>
</table>

### Observations

213. Replace the present text by the following:

99) In Italy, the 585-685 Mc/s band is allocated to the fixed and broadcasting services.

213. After this No. add the following new note:

99bis) In France and in the Federal German Republic, the 585-610 Mc/s band is allocated for broadcasting.

### Belgium, France, French O. P. T. A., Italy

213. After this No. add the following new note:

99ter) In Belgium, the 585-610 Mc/s band is shared between broadcasting and radionavigation.

### Belgium

| 610-960 (350) | We shall be submitting certain proposals very shortly now. |

### France, French O. P. T. A.

<table>
<thead>
<tr>
<th>610-860 (250)</th>
<th>Broadcasting</th>
</tr>
</thead>
</table>

| 860-960 (100) | a) Fixed  
b) Broadcasting |

### Italy

| 790-960 (170) | ————  
————— |
### France, French O.P.T.A.

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) MHz</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>World-wide</td>
<td>Region 1</td>
</tr>
<tr>
<td>960–1325 (365)</td>
<td>Aeronautical radio-navigation 104bis)</td>
<td></td>
</tr>
</tbody>
</table>

### Italy

<table>
<thead>
<tr>
<th>1215–1350 (135)</th>
<th></th>
</tr>
</thead>
</table>

### Belgium

<table>
<thead>
<tr>
<th>1300–1600 (300)</th>
<th>1300–1350 (50) Aeronautical radio-navigation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1350–1535 (185) Unchanged</td>
</tr>
<tr>
<td></td>
<td>1535–1600 (65) Aeronautical radio-navigation</td>
</tr>
</tbody>
</table>

### Netherlands

<table>
<thead>
<tr>
<th>1300–1350 (50)</th>
<th>Aeronautical radio-navigation</th>
</tr>
</thead>
</table>

### France, French O.P.T.A.

<table>
<thead>
<tr>
<th>1325–1350 (25)</th>
<th>a) Amateur b) Aeronautical radionavigation 104bis)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1350–1600 (250)</td>
<td>Fixed</td>
</tr>
</tbody>
</table>
Belgium, France, French O.P.T.A., Italy, Netherlands

216. 102) Delete.

France, French O.P.T.A., Italy, Netherlands

218. 101) Delete.

France, French O.P.T.A.

Add the following new note:

104 bis) The 1300–1350 Mc/s band may be used for aeronautical radio navigation purposes by ground-based radar only.

### Italy

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>World-wide</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Region 1</td>
<td></td>
</tr>
</tbody>
</table>

569 1350–1600 (250) |

### Netherlands

570 1600–1660 (60) | Aeronautical radio-navigation |

### France, French O.P.T.A.

571 1600–1700 (100) | a) Fixed, b) Radiolocation |

### Italy

572 1600–1700 (100) | a) Fixed, b) Radiolocation |
### Netherlands

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1660–1700 (40)</td>
<td>Meteorological aids</td>
<td></td>
</tr>
</tbody>
</table>

### Belgium, France, French O.P.T.A.

| 1700–2700 (106) | Radioastronomy (1000) | Unchanged |

### Italy, Netherlands

220. 104) Add: the Netherlands.

### Belgium, France, French O.P.T.A., Italy, Netherlands

| 2700–3400 (700) | Radiolocation (108) | 110 | Unchanged |

222. Replace the present text by the following:

108) The aeronautical radionavigation service and the meteorological aids service may use the band 2700–2900 Mc/s for ground radar only.

223. 109) Delete.

224. Replace the present text by the following:

110) In the band 2700–3400 Mc/s racons and shipborne radar in merchant ships shall be confined to the band 3000–3266 Mc/s.
### Belgium

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>World-wide</td>
<td></td>
</tr>
<tr>
<td>3 400–3 600 (200)</td>
<td>Radiolocation</td>
<td></td>
</tr>
</tbody>
</table>

### France, French O.P.T.A.

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 400–3 900 (500)</td>
<td>a) Fixed b) Mobile</td>
<td></td>
</tr>
</tbody>
</table>

### Italy

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 400–3 900 (500)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Belgium

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 600–3 900 (300)</td>
<td>Fixed</td>
<td></td>
</tr>
</tbody>
</table>

### Belgium, France, French O.P.T.A., Italy, Netherlands

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 000–5 650 (650)</td>
<td>Radiolocation 111bis</td>
<td></td>
</tr>
<tr>
<td>5 650–5 850 (200)</td>
<td>114)</td>
<td>Unchanged</td>
</tr>
</tbody>
</table>

225. *After this No. add the following new note:*

111 bis) The 5 250–5 460 Mc/s band may be used by the aeronautical radionavigation service for ground-based radar only.
Belgium

228. Add: Belgium.

France, French O. P. T. A.

228. Replace the present text by the following:

114) In Region 2, the Netherlands, the Federal German Republic, the United Kingdom of Great Britain and Northern Ireland, Australia, New Zealand, the Federation of Rhodesia and Nyasaland, France, and the Union of South Africa and Territory of Southwest Africa, 5800 Mc/s shall be assigned for industrial purposes. Emissions must be kept within ± 75 Mc/s of that frequency, and radio services wishing to work within these limits must expect interference.

Italy

228. Add: France, Netherlands, Federal German Republic.

Netherlands

228. Add: the Netherlands.

Belgium, France, French O. P. T. A., Italy, Netherlands

230. Delete.

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) , Mc/s</th>
<th>Allocation to Services</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>World-wide</td>
<td>Region 1</td>
</tr>
<tr>
<td>8500–9800</td>
<td>Radiolocation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>117)</td>
<td></td>
</tr>
</tbody>
</table>

Belgium

231. Replace the present text by the following:

117) In the 8500–9800 Mc/s band, the band 9200–9500 Mc/s only may be used for racons and merchant-vessel radar.

France, French O. P. T. A., Italy, Netherlands

231. Replace the present text by the following:

117) In the band 8500–9800 Mc/s racons and shipborne radar in merchant ships shall be confined to the band 9300–9500 Mc/s.
Bulgaria (People's Republic of)

595

In column Region 1, read:

41–73 Mc/s. Broadcasting

596

73–75.2 Mc/s. Aeronautical navigation

Reasons

The proposal is intended to widen the band for the broadcasting service in Region 1 from 41–68 Mc/s to 41–73 Mc/s. In the Stockholm plan for the assignment of very high frequencies to broadcasting stations (sound transmissions) in the European region, frequencies in the 56.5–58 and 66–68 Mc/s bands are assigned to the People's Republic of Bulgaria. When the plans for VHF broadcasting were drawn up, our country and many other European countries Members of the International Broadcasting Organization were obliged to give up using frequencies in the 56.5–58 Mc/s band. We realized that it would be better to extend our broadcasting network by using frequencies in the 66–73 Mc/s band. For this purpose it is necessary to widen the 66–68 Mc/s band to 73 Mc/s in accordance with the provisions of Note 66, Article 5, of the RR (Atlantic City, 1957).

China

597

148. Delete the second sentence: The interested administrations ... is provided (remainder unchanged).

Reasons

The deleted portion is more appropriately treated in Article 8.

598

198. Delete the third sentence: The interested administrations ... is provided (remainder unchanged).

Reasons

The deleted portion is more appropriately treated in Article 8.

599

Frequency band 1300–1700 Mc/s, column World-Wide, add the new footnote reference 102bis).

600

216. After this No. add the following new footnote:

102bis) The frequency 1420 Mc/s is designated for the exclusive use of the radio astronomy research.

Reasons

There is radiation (H line) coming from the galactic hydrogen at 1420 Mc/s.
220. Replace the present text by the following:

The ideal frequency allocation for industrial, scientific and medical uses in all Regions will provide a number of bands above 2000 Mc/s as follows:

- 2435–2465 Mc/s (30)
- 4870–4930 Mc/s (60)
- 9740–9860 Mc/s (120)
- 19480–19720 Mc/s (240)

**Reasons**

The frequency bands are in harmonic relation and the bandwidths are limited to reach a compromise between the cost of suppressing the harmful radiation and of maintaining adequate frequency stability.

602 **Denmark, Finland, Iceland, Norway, Sweden**

113. Replace the present text by the following:

4) The frequency bands 112–117.6 kc/s and 126–129 kc/s are reserved for the exclusive use of continuous wave systems of radionavigation.

603

130–150 kc/s. *In column Region 1, read:*

   a) Fixed
   b) Maritime mobile *)

604


605

129, 130 and 131. *Delete.*

606


607

27 500–28 000 kc/s. *In column Region 1 read:*

   a) Fixed
   b) Mobile except aeronautical mobile
177. Delete.

41–47 Mc/s. *In column Region 1 read:*

a) Fixed  
b) Mobile  
63bis)

177. *After this No. add the following new footnote:*

63bis) Broadcasting stations listed in the Stockholm plan may operate in this band.

68–70 Mc/s. *In column Region 1 read:*

a) Fixed  
b) Mobile  
66)

72.8–74.8 Mc/s. *In column Region 1 read:*

a) Fixed  
b) Mobile

74.8–75.2 Mc/s. *In column World-Wide read:*

Aeronautical radionavigation.

78–80 Mc/s. *In column Region 1 read:*

a) Fixed  
b) Mobile  
71) 72)
83–85 Mc/s. In column Region 1 read:
   a) Fixed
   b) Mobile

100–108 Mc/s. In column Region 1 read:
   a) Fixed
   b) Mobile except aeronautical mobile (R)


235–328.6 Mc/s. Add the following new footnote reference 93bis).

207. After this No. add the following new footnote:
   93bis) The frequency 243 Mc/s with adequate guard-band is designated for distress transmissions.

450–460 Mc/s. In column Region 1 read:
   a) Aeronautical radionavigation
   b) Fixed
   c) Mobile

210. After this No. add the following new footnote:
   96bis) The allocation for the aeronautical radionavigation service in the band 420–460 Mc/s is exclusively for altimeters and temporarily until such time as these altimeters are moved to another frequency band, allocated to the aeronautical radionavigation service, or until they are no longer required.
Delete.

3 500–3 900 Mc/s.  In column Region 1 read:  
a) Fixed  
b) Mobile

5 460–5 650 Mc/s.  In column World wide read:  
Radionavigation except aeronautical radionavigation.

Delete.

India

109. Heading, read:  
Table of frequency allocations 9 975 c/s to 30 000 Mc/s

Reasons

Consequential to proposal 396.

Amend as follows the Table of Frequency Allocations:

Replace: 10–14 by: 9,975–14

(4) (4.025)

Reasons

Consequential to proposal 396.

70–90 kc/s. Note 3) to apply to Region 3 against the spectrum block 70–80 kc/s.

Reasons

To provide for Decca Navigator Systems.
630 Maritime Radionavigation to be added as allocation c) for Region 3.

Reasons
Same as for proposal 629.

631 110–130 kc/s. Opposite this band under Region 3, insert:

   c) Maritime radionavigation, and a reference to note 3 (No. 112).

160–285 kc/s.


Reasons
Shortage of aero radionavigation channels in the higher bands.

635 122. Replace the present text by the following:

   b) Broadcasting operation in Region 1 in the band 185–285 kc/s should be on non-interference basis to the radionavigation services in Region 3.

Reasons
Consequential to 90. Considerable interference is experienced in India from broadcasting stations in Region 1 in this band.

636 125. Delete: China, India and Pakistan.

637 Delete in column Region 3 the reference to footnote 13).

Reasons
Consequential to proposal 636.
325-405 kc/s. Delete:
   a) Aeronautical mobile.

**Reasons**
This band needs to be exclusively allocated to aeronautical radionavigation.

---

**639**

130. *Read:* In Region 1, the frequency... *(remainder unchanged).*

**Reasons**
1. Consequential to proposal 638.
2. Frequency 333 kc/s has no use as a general calling frequency for aircraft stations.

---

**640**


**Reasons**
Shortage of navigation channels.

---

**641**

415-490 kc/s. In Region 3, band 415-450 kc/s may be made available to aeronautical radionavigation *(with references to footnotes numbered 25bis and 25ter).*

**Reasons**
Shortage of navigation channels.

---

**642**

139. *After this No. add the following new footnotes:*

25bis) The aeronautical radionavigation service should operate with power less than 100 watts strictly on the basis of non-interference to maritime mobile operations.

**Reasons**
Consequential to proposal 641.

---

**643**

25ter) No allocation to aeronautical radionavigation service shall, however, be made within the band 423-427 kc/s to protect the channel 425 kc/s which is used for WT international ship operations of the maritime mobile service.

**Reasons**
To protect frequency 425 kc/s.

**Reasons**

Shortage of broadcast frequencies in the lower portion of the medium wave band.

---


---

Delete: except aeronautical mobile in sub-paragraph c).

**Reasons**

Shortage of aeronautical mobile channels on the lower Mc/s band for use during low sun spot periods.

---

3 500–3 900 kc/s.

A spectrum width of 10 kc/s may be exclusively earmarked for use of amateurs in the band 3 500–3 900 kc/s, preferably in the band 3 500 to 3 550 kc/s. The exact location could be arranged anywhere in the range. The Conference may decide upon the location by common agreement.

**Reasons**

Due to acute spectrum congestion, it is difficult to allot the whole band for amateur working. Exclusive allocation of a limited spectrum appears to be a better solution both for amateurs and other services.

---

4 063–4 438 kc/s. Add: Aeronautical mobile (OR).

**Reasons**

The general shortage of “OR” allocations and operational convenience of aircraft-ship communication needs.

---

155. In the middle replace: 50 watts by: 100 watts.

**Reasons**

The increase in power from 50 W to 100 W is compatible with maritime operations under a variety of propagation conditions resulting in the better utilisation of the spectrum.
650
6200–6525 kc/s. *Add: Aeronautical mobile (OR).*

*Reasons*
The same as under band 4063–4438 kc/s.

651
157. *In the middle replace: 50 watts by: 100 watts.*

*Reasons*
The same as under band 4063–4438 kc/s.

652
7100–7150 kc/s. *In column Region 3 delete: a) Amateur.*

*Reasons*
In view of exclusive 100 kc/s wide spectrum available to amateurs in the 7 Mc/s band and in view of increasing demands of broadcasting service this amendment is necessary.

653
14 000–14 990 kc/s. *Read:*

14 000–14 200 Amateur
(200)
14 200–14 990 Fixed
(790)

*Reasons*
To allow for the increasing need of the fixed services and to accommodate broadcasting in the 15 Mc/s band with a resulting cut in the fixed allocation.

654
15 000–16 460 kc/s. *Read:*

15 100–15 600 Broadcasting
(500)
15 600–16 460 Fixed
(860)

*Reasons*
In view of increasing demands of broadcasting service in the course of recent years.

655
17 360–17 900 kc/s. *Read:*

17 360–17 650 Fixed
(290)
17 650–17 900 Broadcasting
(250)

*Reasons*
See proposal 654.
In the last sentence, delete: In Region 2 and it is strongly recommended ... in Regions 1 and 3.

Reasons

World-wide adoption of FM on 156.80 Mc/s for VHF maritime mobile service (Simplex Telephony).

450–460 Mc/s. In column Region 3, read:

450–458, Aeronautical Radionavigation
(8)
458–460, Amateur
(2)

Reasons

To give greater safety to radionavigation services.

Delete footnote 96 (210) in column Region 3.

Reasons

Consequential to proposal 657.

Japan

Table of Frequency Allocations 10 kc/s to 10 500 Mc/s to be amended as follows for the reasons stated below:

Reasons

1. The current Table of Frequency Allocations (to be called the Table hereinafter) is deemed satisfactory for most of the frequency bands below 27 500 kc/s. Japan in particular wishes to continue the application of the present Table, except for certain bands below 2 000 kc/s, as it has, since the E.A.R.C., endeavoured to implement the Atlantic City Allocation Table in a spirit of international cooperation. As for the bands below 2 000 kc/s, we would like to propose a few revisions, mainly in the radionavigation service.

2. As for the frequency bands above 27 500 kc/s, amendments will be made to the present Table to meet the present and future demands of radio services, inasmuch as, with the technical progress after the Atlantic City Conference, considerable changes have been introduced in the scope and forms of utilization of radio.

   The main objects of the present revision are:
   a) Expansion of the frequency bands for the TV and FM broadcasting;
   b) Provision of frequency bands for the scatter communication;
   c) Expansion or revision of some frequency bands to meet the demands in the fixed and mobile services;
   d) Sharing use of the frequency bands above 1 000 Mc/s allocated to the amateur service with the fixed, mobile and radio-location services.

3. Only those portions of the Table of Frequency Allocation which Japan proposes for revision are indicated below.
14–70 kc/s. To be amended as follows:

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth), kc/s</th>
<th>Allocation to Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>14–19.95 (5.95)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Maritime mobile¹)</td>
</tr>
<tr>
<td>19.95–20.05 (0.1)</td>
<td>Standard frequency</td>
</tr>
<tr>
<td>20.05–70 (49.95)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Maritime mobile¹)</td>
</tr>
</tbody>
</table>

663

70–90 kc/s. In column Region 3 read:

a) Fixed
b) Maritime mobile¹)
2) 2bis)

664

111. After this No. add the following new footnote:

2bis) In Japan, the band 70–90 kc/s may be used for the radionavigation service using continuous wave systems.

665

110–130 kc/s. In column Region 3 read:

a) Fixed
b) Maritime mobile
4) 4bis)

666

113. After this No. add the following new footnote:

4bis) In Japan, the band 110–130 kc/s may be used for the radionavigation service using continuous wave systems.

667

160–285 kc/s. In column Region 3 read:

160–200 (40)

a) Aeronautical radionavigation
b) Fixed
12bis)

200–285 (85)

a) Aeronautical mobile
b) Aeronautical radionavigation¹)
13)

13bis)
124. After this No. add the following new footnote:

12bis) In Region 3, the aeronautical radionavigation service is permitted in the band 160–200 kc/s on condition that no harmful interference is caused to the fixed service.

125. After this No. add the following new footnote:

13bis) In Region 3, the aeronautical radionavigation service has preference in the band 200–285 kc/s and the aeronautical mobile service shall not cause harmful interference to that service.

325–405 kc/s. In column World-Wide read:

Aeronautical radionavigation
17)
17bis)
18)
19)
20)

129. After this No. add the following new footnote:

17bis) In the band 325–405 kc/s, the aeronautical mobile service may, in certain areas, be authorized to use frequencies on an operationally coordinated basis, and shall not cause harmful interference to the aeronautical radionavigation service.

130. At the beginning of the footnote replace: In Regions 1 and 3 by: In Region 1.

405–415 kc/s. In column Region 3 read:

a) Aeronautical radionavigation
b) Maritime radionavigation
(radio direction-finding)
23bis)

137. After this No. add the following new footnote:

23bis) In Region 3, in the band 405–415 kc/s, the aeronautical mobile service may be authorized on condition that no harmful interference is caused to other services.
675

1605–2000 kc/s. In column Region 3 read:

1605–1800 (195)

a) Fixed
b) Mobile

30bis)

1800–2000 (200)

a) Amateur
b) Fixed
c) Mobile (except aeronautical mobile)
d) Radionavigation

33)

676

144. After this No. add the following new footnote:

30bis) In Japan, the band 1605–1800 kc/s may be used for the maritime radionavigation service using continuous wave systems.

677

147. Replace the present text by the following:

33) The Loran System of radionavigation has preference. Any of the authorized services may employ frequencies not required for Loran on condition that they do not cause harmful interference to Loran.

All practicable measures shall be taken to minimize harmful interference from Loran transmissions to other services operating in the same or adjacent bands and, in particular, to narrow the emitted bandwidth.

678

2065–2300 kc/s. In column Region 3 read:

2065–2105 (40)

Maritime mobile

33bis)

2105–2300 (195)

a) Fixed
b) Mobile

679

147. After this No. add the following new footnote:

33bis) The frequency 2091 kc/s is the calling frequency for the maritime mobile service (telegraphy) in Regions 2 and 3.
148. Replace the present text by the following:

34) The frequency 2182 kc/s is the distress and calling frequency for the maritime mobile service (telephony) and may be used by aircraft stations for distress, urgency and safety traffic. The conditions for the use of this frequency are prescribed in Article 34.

28000–29700 kc/s. In column World-Wide read:

Amateur

58bis)

172. After this No. add the following new footnote:

58bis) In Japan, the band 29200–29700 kc/s may be used for the fixed and mobile services of small power.

29.7–88 Mc/s. In column Region 3 bands 31.7–44 Mc/s, 44–50 Mc/s, 68–70 Mc/s, 78–80 Mc/s and 80–87 Mc/s to be amended as follows:

31.7–44 (12.3)

a) Fixed
b) Mobile

63bis)

44–50 (6)

a) Broadcasting
b) Fixed
c) Mobile

63bis)

68–70 (2)

a) Aeronautical radionavigation
b) Fixed
c) Mobile

67)

78–80 (2)

a) Aeronautical radionavigation
b) Fixed
c) Mobile
688 80–87
(7)
   a) Broadcasting
   b) Fixed
   c) Mobile
   74).

689 177. After this No. add the following new footnote:

63bis) In Region 3, fixed stations employing the ionospheric scatter technique may be operated in the bands 34.6–35 Mc/s, 36.6–37 Mc/s, 46.6–47 Mc/s and 49.6–50 Mc/s.

690 146–235 Mc/s. In column Region 3 bands 146–148 Mc/s, 170–200 Mc/s and 200–235 Mc/s to be amended as follows:

691 146–148
(2)
   Amateur
   82bis)

692 170–222
(52)
   a) Broadcasting
   b) Fixed
   c) Mobile
   86)

693 222–235
(13)
   Aeronautical radionavigation
   92)

694 196. After this No. add the following new footnote:

82bis) In Japan, the band 146–148 Mc/s may be used for the fixed and mobile services.

695 450–460 Mc/s. In column Region 3 read:

   a) Aeronautical radionavigation
   b) Amateur
   96)
   97bis)
211. After this No. add the following new footnote:
97bis) In Japan, the band 450–460 Mc/s may be used for the fixed and mobile services.

585–610 Mc/s. In column Region 3 read:
Broadcasting
99bis)

213. After this No. add the following new footnote:
99bis) In Japan, the band 585–610 Mc/s may be used for the radionavigation service on condition that no harmful interference is caused to the broadcasting service.

610–940 Mc/s. In column World-Wide read:
Broadcasting
99)
100)
100bis)

214. After this No. add the following new footnote:
100bis) In Region 3, the band 610–940 Mc/s may be used for the fixed and mobile services on condition that no harmful interference is caused to the broadcasting service.

940–960 Mc/s. In column Region 3 read:
a) Fixed
b) Mobile

1215–1300 Mc/s. In column World-Wide read:
Amateur
101)
101bis)

215. After this No. add the following new footnote:
101bis) In Region 3, the band 1215–1300 Mc/s may be used for the fixed, mobile and radiolocation services.
209

2300–2 450 Mc/s. In column World-Wide read:

Amateur
106 bis)

220. After this No. add the following new footnote:

106 bis) In Region 3, the band 2300–2450 Mc/s may be used for the fixed, mobile and radiolocation services.

3 300–3 900 Mc/s. In column Region 3 read:

3 300–3 900 Mc/s.
(600)

a) Amateur
b) Fixed
c) Mobile
d) Radionavigation
110 bis)

224. After this No. add the following new footnote:

110 bis) In Region 3, the fixed and mobile services have preference in the band 3 500–3 900 Mc/s. Only on condition that no harmful interference is caused to these services, this band may be used for other services.

5 250–5 650 Mc/s. In column World-Wide read:

Radionavigation
112)
113)
113 bis)

227. After this No. add the following new footnote:

113 bis) In Region 3, the meteorological aids service may be operated in the band 5 250–5 350 Mc/s.

5 650–5 850 Mc/s. In column World-Wide read:

Amateur
114 bis)
After this No. add the following new footnote:

114bis) In Region 3, the band 5 650-5 850 Mc/s may be used for the fixed, mobile and radiolocation services.

10 000–10 500 Mc/s. In column World-Wide read:
Amateur
117bis)

After this No., add the following new footnote:

117bis) In Region 3, the band 10 000–10 500 Mc/s may be used for the fixed, mobile and radiolocation services.

Norway

123. Replace the present text by the following:

c) Norwegian stations of the aeronautical fixed service situated in northern areas subject to auroral disturbances are allowed to continue operation in the band 255–285 kc/s.

Reasons
Norwegian broadcasting stations operating in this band ceased to do so in 1950. In the Region 1 plan of the E.A.R.C. the frequency 276 kc/s was allotted to Norway for meteorological transmissions. A change has taken place in the requirements of the civil aviation and experience has proved the necessity of at least one frequency in the said band for the aeronautical fixed service in the Arctic area.

132. Replace the present text by the following:

20) Norwegian stations of the fixed service situated in northern areas subject to auroral disturbances are allowed to continue operation in the band 385–395 kc/s for transmissions comprising mainly meteorological messages.

Reasons
In the Region 1 plan of the E.A.R.C. two frequencies, viz. 387.5 kc/s and 394.7 kc/s, were allotted to Norway. Norway is now the only Scandinavian country maintaining a fixed service in this band. Experience has proved the necessity of at least two frequencies for transmission of meteorological messages between Norway and a number of distant meteorological observation stations in the Arctic area. The messages are of great importance for the meteorological service in general and for the polar flight route in particular.

Table of Frequency Allocations

I. The band 29.7–31.7 Mc/s, now allocated to aeronautical radionavigation, should be reallocated to the fixed and mobile services in Region 1.

Reasons
There is no radionavigation aid operating in this band, which has been standardized by the International Civil Aviation Organization, and it is not likely that any aid operating in this band will be standardized. Norway has ceased operation of the old radionavigation aids (S.B.A.) in this band. On the other hand there is a strong demand for frequency channels in the same band, primarily for mobile stations of low power.
II. The band 174-216 Mc/s, now allocated to the broadcasting service, should be extended upwards to 223 Mc/s.

Reasons

A closer examination of the Stockholm Plan has shown that one additional television channel will be necessary in order to obtain satisfactory coverage of the country with one television programme. The proposed extension is assumed to be the most suitable solution of this problem.

Poland (People's Republic of)

109. Table of Frequency Allocations – 10 kc/s to 10 500 Mc/s.

It is proposed that in the People's Republic of Poland the frequency bands between 10 kc/s and 27 500 kc/s be allocated to the various radio services as follows:

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) kc/s</th>
<th>Allocation to services</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-14 (4)</td>
<td>Radionavigation</td>
</tr>
<tr>
<td>14-24 (10)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Maritime mobile</td>
</tr>
<tr>
<td>24-26 (2)</td>
<td>Standard frequency – 25 kc/s</td>
</tr>
<tr>
<td>26-48 (22)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Maritime mobile</td>
</tr>
<tr>
<td>48-52 (4)</td>
<td>Standard frequency – 50 kc/s</td>
</tr>
<tr>
<td>52-70 (18)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Maritime mobile</td>
</tr>
<tr>
<td>70-80 (10)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Maritime mobile</td>
</tr>
<tr>
<td></td>
<td>c) Radionavigation</td>
</tr>
<tr>
<td>80-150 (70)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
</tr>
<tr>
<td></td>
<td>c) Radionavigation</td>
</tr>
<tr>
<td>150-160 (10)</td>
<td>a) Maritime mobile</td>
</tr>
<tr>
<td></td>
<td>b) Broadcasting</td>
</tr>
<tr>
<td>160-255 (95)</td>
<td>Broadcasting</td>
</tr>
<tr>
<td>255-285 (30)</td>
<td>a) Maritime mobile</td>
</tr>
<tr>
<td></td>
<td>b) Broadcasting</td>
</tr>
<tr>
<td></td>
<td>c) Aeronautical radionavigation</td>
</tr>
<tr>
<td>Frequency Band and (Bandwidth)</td>
<td>Allocation to services</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------------------------</td>
</tr>
</tbody>
</table>
| 285-315 (30)                  | a) Maritime radionavigation (radiobeacons)  
b) Aeronautical radionavigation. |
| 315-325 (10)                  | Aeronautical radionavigation |
| 325-405 (80)                  | a) Aeronautical mobile  
b) Aeronautical radionavigation |
| 405-415 (10)                  | a) Mobile  
b) Aeronautical radionavigation  
c) Maritime radionavigation (Radio direction-finding) |
| 415-490 (75)                  | Maritime mobile |
| 490-510 (20)                  | Guard-band for 500 kc/s - calling and distress frequency |
| 510-525 (15)                  | Maritime mobile |
| 525-1605 (1080)               | Broadcasting |
| 1605-2065 (460)               | a) Fixed  
b) Mobile, except aeronautical mobile |
| 2065-2170 (105)               | a) Fixed  
b) Mobile, except aeronautical mobile (R) |
| 2170-2194 (24)                | The guard-band for the calling and distress frequency for the maritime mobile radiotelephone service. |
| 2194-2300 (106)               | a) Fixed  
b) Mobile, except aeronautical mobile (R) |
| 2300-2498 (198)               | a) Fixed  
b) Mobile, except aeronautical mobile (R) |
| 2498-2502 (4)                 | Standard frequency (2500 kc/s) |
| 2502-2625 (123)               | a) Fixed  
b) Mobile, except aeronautical mobile (R) |
| 2625-2650 (25)                | a) Maritime mobile  
b) Maritime radionavigation |
| 2650-2850 (200)               | a) Fixed  
b) Mobile, except aeronautical mobile (R) |
<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) kc/s</th>
<th>Allocation to services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>747</strong> 2 850-3 155 (305)</td>
<td>Aeronautical mobile</td>
</tr>
<tr>
<td><strong>748</strong> 3 155-3 200 (45)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile, except aeronautical mobile (R)</td>
</tr>
<tr>
<td><strong>749</strong> 3 200-3 230 (30)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile, except aeronautical mobile (R)</td>
</tr>
<tr>
<td><strong>750</strong> 3 230-3 400 (170)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile, except aeronautical mobile</td>
</tr>
<tr>
<td><strong>751</strong> 3 400-3 500 (100)</td>
<td>Aeronautical mobile</td>
</tr>
<tr>
<td><strong>752</strong> 3 500-3 650 (150)</td>
<td>a) Amateur</td>
</tr>
<tr>
<td></td>
<td>b) Fixed</td>
</tr>
<tr>
<td></td>
<td>c) Mobile, except aeronautical mobile</td>
</tr>
<tr>
<td><strong>753</strong> 3 650-3 800 (150)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile, except aeronautical mobile</td>
</tr>
<tr>
<td></td>
<td>c) Amateur</td>
</tr>
<tr>
<td><strong>754</strong> 3 800-3 900 (100)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
</tr>
<tr>
<td><strong>755</strong> 3 900-3 950 (50)</td>
<td>Aeronautical mobile</td>
</tr>
<tr>
<td><strong>756</strong> 3 950-4 063 (113)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Broadcasting</td>
</tr>
<tr>
<td><strong>757</strong> 4 063-4 438 (375)</td>
<td>Maritime mobile</td>
</tr>
<tr>
<td><strong>758</strong> 4 438-4 650 (212)</td>
<td>Fixed</td>
</tr>
<tr>
<td><strong>759</strong> 4 650-4 750 (100)</td>
<td>Aeronautical mobile</td>
</tr>
<tr>
<td><strong>760</strong> 4 750-4 850 (100)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Aeronautical mobile (OR)</td>
</tr>
<tr>
<td></td>
<td>c) Land mobile</td>
</tr>
<tr>
<td><strong>761</strong> 4 850-4 995 (145)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Land mobile</td>
</tr>
<tr>
<td><strong>762</strong> 4 995-5 005 (10)</td>
<td>Standard frequency - 5000 kc/s</td>
</tr>
<tr>
<td>Frequency Band and (Bandwidth) kc/s</td>
<td>Allocation to services</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>5 005–5 060 (55) Fixed</td>
<td></td>
</tr>
<tr>
<td>5 060–5 250 (190) Fixed</td>
<td></td>
</tr>
<tr>
<td>5 250–5 430 (180) a) Fixed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Land mobile</td>
</tr>
<tr>
<td>5 430–5 480 (50) a) Fixed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Aeronautical mobile (OR)</td>
</tr>
<tr>
<td></td>
<td>c) Land mobile</td>
</tr>
<tr>
<td>5 480–5 730 (250) Aeronautical mobile</td>
<td></td>
</tr>
<tr>
<td>5 730–5 900 (170) a) Fixed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Land mobile</td>
</tr>
<tr>
<td>5 900–6 200 (300) Broadcasting</td>
<td></td>
</tr>
<tr>
<td>6 200–6 525 (325) Maritime mobile</td>
<td></td>
</tr>
<tr>
<td>6 525–6 765 (240) Aeronautical mobile</td>
<td></td>
</tr>
<tr>
<td>6 765–7 000 (235) a) Fixed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Land mobile</td>
</tr>
<tr>
<td>7 000–7 100 (100) Amateur</td>
<td></td>
</tr>
<tr>
<td>7 100–7 350 (250) Broadcasting</td>
<td></td>
</tr>
<tr>
<td>7 350–8 195 (845) Fixed</td>
<td></td>
</tr>
<tr>
<td>8 195–8 815 (620) Maritime mobile</td>
<td></td>
</tr>
<tr>
<td>8 815–9 040 (225) Aeronautical mobile</td>
<td></td>
</tr>
<tr>
<td>9 040–9 500 (460) Fixed</td>
<td></td>
</tr>
<tr>
<td>9 500–9 800 (300) Broadcasting</td>
<td></td>
</tr>
<tr>
<td>Frequency Band and (Bandwidth)</td>
<td>Allocation to services</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>9800–9995 (195)</td>
<td>Fixed</td>
</tr>
<tr>
<td>9995–10005 (10)</td>
<td>Standard frequency – 10000 kc/s</td>
</tr>
<tr>
<td>10005–10100 (95)</td>
<td>Aeronautical mobile</td>
</tr>
<tr>
<td>10100–11175 (1075)</td>
<td>Fixed</td>
</tr>
<tr>
<td>11175–11200 (25)</td>
<td>Aeronautical mobile</td>
</tr>
<tr>
<td>11200–11250 (50)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
</tr>
<tr>
<td>11250–11360 (110)</td>
<td>Aeronautical mobile</td>
</tr>
<tr>
<td>11360–11370 (10)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
</tr>
<tr>
<td>11370–11400 (30)</td>
<td>Aeronautical mobile</td>
</tr>
<tr>
<td>11400–11700 (300)</td>
<td>Fixed</td>
</tr>
<tr>
<td>11700–12075 (375)</td>
<td>Broadcasting</td>
</tr>
<tr>
<td>12075–12320 (245)</td>
<td>Fixed</td>
</tr>
<tr>
<td>12320–12330 (10)</td>
<td>Aeronautical mobile</td>
</tr>
<tr>
<td>12330–13200 (870)</td>
<td>Maritime mobile</td>
</tr>
<tr>
<td>13200–13220 (20)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
</tr>
<tr>
<td>13220–13260 (40)</td>
<td>Aeronautical mobile</td>
</tr>
<tr>
<td>13260–13300 (40)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
</tr>
<tr>
<td>Frequency Band and (Bandwidth) kc/s</td>
<td>Allocation to services</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>13 300–13 360 (60)</td>
<td>Aeronautical mobile</td>
</tr>
<tr>
<td>13 360–14 000 (640)</td>
<td>Fixed</td>
</tr>
<tr>
<td>(The frequency 13 560 kc/s is designated for industrial, scientific and medical purposes. Emissions must be confined within the limits of ±0.05 % of this frequency. Fixed services operating within those limits must accept any harmful interference that may be experienced from the operation of industrial, scientific and medical equipment.)</td>
<td></td>
</tr>
<tr>
<td>14 000–14 350 (350)</td>
<td>Amateur</td>
</tr>
<tr>
<td>14 350–14 370 (20)</td>
<td>Aeronautical mobile</td>
</tr>
<tr>
<td>14 370–14 990 (620)</td>
<td>Fixed</td>
</tr>
<tr>
<td>14 990–15 010 (20)</td>
<td>Standard frequency – 15 000 kc/s</td>
</tr>
<tr>
<td>15 010–15 100 (90)</td>
<td>Aeronautical mobile</td>
</tr>
<tr>
<td>15 100–15 550 (450)</td>
<td>Broadcasting</td>
</tr>
<tr>
<td>15 550–16 440 (890)</td>
<td>Fixed</td>
</tr>
<tr>
<td>16 440–16 460 (20)</td>
<td>Aeronautical mobile</td>
</tr>
<tr>
<td>16 460–17 160 (700)</td>
<td>Maritime mobile</td>
</tr>
</tbody>
</table>
| 17 160–17 360 (200) | a) Fixed  
b) Maritime mobile |
<p>| 17 360–17 700 (340) | Fixed |
| 17 700–17 900 (200) | Broadcasting |
| 17 900–18 030 (130) | Aeronautical mobile |</p>
<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) kc/s</th>
<th>Allocation to services</th>
</tr>
</thead>
<tbody>
<tr>
<td>812 18 030–19 990 (1 960)</td>
<td>Fixed</td>
</tr>
<tr>
<td>813 19 990–20 010 (20)</td>
<td>Standard frequency – 20 000 kc/s</td>
</tr>
<tr>
<td>814 20 010–21 000 (990)</td>
<td>Fixed</td>
</tr>
<tr>
<td>815 21 000–21 450 (450)</td>
<td>Amateur</td>
</tr>
<tr>
<td>816 21 450–21 750 (300)</td>
<td>Broadcasting</td>
</tr>
<tr>
<td>817 21 750–21 850 (100)</td>
<td>Fixed</td>
</tr>
<tr>
<td>818 21 850–22 000 (150)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td>819 22 000–22 720 (720)</td>
<td>Maritime mobile</td>
</tr>
<tr>
<td>820 22 720–23 200 (480)</td>
<td>Fixed</td>
</tr>
<tr>
<td>821 23 200–23 350 (150)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td>822 23 350–24 990 (1 640)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td>823 24 990–25 010 (20)</td>
<td>Standard frequency – 25 000 kc/s</td>
</tr>
<tr>
<td>824 25 010–25 600 (590)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td>825 25 600–26 100 (500)</td>
<td>Broadcasting</td>
</tr>
<tr>
<td>826 26 100–27 500 (1 403)</td>
<td>a) Fixed</td>
</tr>
</tbody>
</table>

(The frequency 27 120 kc/s is designated for industrial, scientific and medical purposes. Emissions must be confined within the limits of ±0.6 % of that frequency.)
The following modifications of the Frequency Allocation Table are proposed:

133. Add in fine:
In the band 405–415 kc/s no frequency is assigned to the coast stations.

**Reasons**

E.A.R.C. Agreement, No. 39.

<table>
<thead>
<tr>
<th>Present Frequency Bands</th>
<th>Proposed Frequency Bands and Allocation to Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency Band and (Bandwidth)</td>
</tr>
<tr>
<td>828 kc/s 2 000–2 065 (65)</td>
<td>828 kc/s 2 045–2 065 (20)</td>
</tr>
<tr>
<td>829 Mc/s 29.7–88 (58.3)</td>
<td>829 Mc/s 29.7–87.5 (58)</td>
</tr>
<tr>
<td>830 88–100 (12)</td>
<td>830 87.5–100 (12.5)</td>
</tr>
<tr>
<td>831 146–235 (89)</td>
<td>831 146–235 (89)</td>
</tr>
<tr>
<td>Present Frequency Bands Mc/s</td>
<td>Proposed Frequency Bands and Allocation to Services</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------------------------------------------</td>
</tr>
<tr>
<td>Frequency Band and (Bandwidth) Mc/s</td>
<td>World-Wide</td>
</tr>
<tr>
<td>152-174 (22)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td>79) Mobile except</td>
<td>b) Mobile except</td>
</tr>
<tr>
<td>83) aeronautical</td>
<td>85) mobile</td>
</tr>
<tr>
<td>174-223 (49)</td>
<td>a) Broadcasting</td>
</tr>
<tr>
<td>87)</td>
<td>88)</td>
</tr>
<tr>
<td>223-235 (12)</td>
<td>Aeronautical Radionavigation</td>
</tr>
<tr>
<td>89)</td>
<td>90)</td>
</tr>
<tr>
<td>335.4-420 (84.6)</td>
<td>335.4-400 (64.6)</td>
</tr>
<tr>
<td>b) Mobile</td>
<td></td>
</tr>
<tr>
<td>420-450 (30)</td>
<td>400-430 (30)</td>
</tr>
<tr>
<td>94)</td>
<td>95)</td>
</tr>
<tr>
<td>450-460 (10)</td>
<td>430-440 (10)</td>
</tr>
<tr>
<td>440-460 (20)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td>b) Mobile</td>
<td></td>
</tr>
<tr>
<td>460-470 (10)</td>
<td>460-470 (10)</td>
</tr>
<tr>
<td>b) Mobile</td>
<td></td>
</tr>
</tbody>
</table>

The frequency 461.04 Mc/s is designated for industrial, scientific and medical purposes. Emissions must be confined within the limits of ±0.2% of this frequency. Radiocommunication services operating within those limits must accept any harmful interference that may be experienced from the operation of industrial, scientific and medical equipment.
<table>
<thead>
<tr>
<th>Present Frequency Bands</th>
<th>Proposed Frequency Bands and Allocation to Services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mc/s</strong></td>
<td><strong>Frequency Band and (Bandwidth) Mc/s</strong></td>
</tr>
<tr>
<td>836</td>
<td>470–585 (115)</td>
</tr>
<tr>
<td>837</td>
<td>585–610 (25)</td>
</tr>
<tr>
<td>838</td>
<td>610–940 (330)</td>
</tr>
<tr>
<td>839</td>
<td>940–960 (20)</td>
</tr>
<tr>
<td>840</td>
<td>1215–1300 (85)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>841</td>
<td>2300–2450 (150)</td>
</tr>
<tr>
<td>842</td>
<td>2450–2700 (250)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>843</td>
<td>2900–3300 (400)</td>
</tr>
<tr>
<td>844</td>
<td>3300–3900 (600)</td>
</tr>
<tr>
<td>845</td>
<td>3900–4200 (300)</td>
</tr>
<tr>
<td>Frequency Band and Allocation to Services</td>
<td>World-Wide</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td><strong>Proposed Frequency Bands and Allocation to Services</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Present Frequency Bands Mc/s</strong></td>
<td><strong>Frequency Band and (Bandwidth) Mc/s</strong></td>
</tr>
<tr>
<td><strong>World-Wide Region 1 Notes</strong></td>
<td></td>
</tr>
<tr>
<td>5650–5850 (200)</td>
<td>5650–5775 (125)</td>
</tr>
<tr>
<td>5850–5925 (75)</td>
<td>5775–6625 (850)</td>
</tr>
<tr>
<td>5925–8.500 (2575)</td>
<td>6625–7425 (800)</td>
</tr>
<tr>
<td></td>
<td>7425–8025 (600)</td>
</tr>
<tr>
<td></td>
<td>8025–8.500 (475)</td>
</tr>
<tr>
<td>10 000–10 500 (500)</td>
<td>10 000–10 250 (250)</td>
</tr>
<tr>
<td></td>
<td>10 250–10 500 (250)</td>
</tr>
<tr>
<td>above 10 500</td>
<td>10 500–11 500 (1 000)</td>
</tr>
<tr>
<td></td>
<td>11 500–12 500 (1 000)</td>
</tr>
</tbody>
</table>
852 Sweden

Table of Frequency Allocation.

Editorial change:

109. The references in the table of frequency allocations to the notes under the table ought to be made by insertion of the relevant RR-numbers instead of the present special note-numbers. The reference numbers in the table ought to be printed with larger types.

853 110–160 kc/s. Insert a new note with the content of 233.

854 130–150 kc/s. Insert the following new note:

6bis) A Swedish transportable radionavigation station on 132.774 kc/s may operate in this band.

855 2045–2065 kc/s. In column Region 1, read:

a) Fixed
b) Mobile, except aeronautical mobile

856 148. Replace the present text by the following:

34) The frequency 2182 kc/s is the distress and calling frequency for the maritime mobile service (telephony) and may be used by aircraft stations for the transmission of the radiotelephone alarm signal and for distress urgency and safety traffic. The conditions for the use of this frequency are prescribed in Article 34.

857 29.7–31.7 Mc/s. In column Region 1, read:

a) Fixed
b) Mobile

858 328.6–335.4 Mc/s. Insert the following new note:

This band is for the use of the Instrument Landing System (glidepath). See 259.

859 5250–5460 Mc/s. In column World wide read:

Aeronautical radionavigation

860 226. Delete.
109. Allocation of Frequency Bands between 10 kc/s and 10 500 Mc/s.

No change will be made in apportionment of frequencies between 10 kc/s and 29.7 Mc/s, and Nos. 110 to 172 remain unchanged.

Only the bands and footnotes to be modified are mentioned below.

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth)</th>
<th>Allocation to Services</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>World-wide</td>
<td>Region 1</td>
</tr>
<tr>
<td><strong>862</strong> 29-7-88 (58:3)</td>
<td>29-7-31:7 (2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Fixed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
<td></td>
</tr>
<tr>
<td></td>
<td>41-47 (6)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Fixed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
<td></td>
</tr>
<tr>
<td></td>
<td>47-68 (21)</td>
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</tr>
<tr>
<td></td>
<td>Broadcasting</td>
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<tr>
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<td></td>
</tr>
<tr>
<td><strong>863</strong> 29-7-88 (cont.)</td>
<td>68-70 (2)</td>
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</tr>
<tr>
<td></td>
<td>a) Fixed</td>
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<tr>
<td></td>
<td>b) Mobile</td>
<td></td>
</tr>
<tr>
<td></td>
<td>72-8-74:8 (2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Fixed</td>
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</tr>
<tr>
<td></td>
<td>b) Mobile</td>
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</tr>
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<td></td>
<td>74-8-75:2 (0-4)</td>
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<tr>
<td></td>
<td>Aeronautical</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Radionavigation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>78-80 (2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Fixed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
<td></td>
</tr>
<tr>
<td></td>
<td>83-85 (2)</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
<td></td>
</tr>
</tbody>
</table>

177. Delete.
<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to Services</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>World-wide</td>
<td>Region 1</td>
</tr>
<tr>
<td>864</td>
<td>100–108 (8)</td>
<td></td>
</tr>
<tr>
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<td>100–104 (4)</td>
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</tr>
<tr>
<td></td>
<td>Broadcasting</td>
<td>71)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>72)</td>
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<tr>
<td></td>
<td>104–108 (4)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mobile, except for aeronautical mobile (R)</td>
<td>23)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>71)</td>
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<td>72)</td>
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<td>865</td>
<td>216–235 (19)</td>
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<td></td>
<td>216–230 (14)</td>
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</tr>
<tr>
<td></td>
<td>Broadcasting</td>
<td>89)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>90)</td>
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<td>91)</td>
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<td></td>
<td>230–235 (5)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Fixed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
<td></td>
</tr>
<tr>
<td></td>
<td>89)</td>
<td></td>
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<td>90)</td>
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<td>91)</td>
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<td>866</td>
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<td>210. Delete.</td>
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<td>867</td>
<td>420–450 (30)</td>
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<td>420–432 (12)</td>
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</tr>
<tr>
<td></td>
<td>a) Fixed</td>
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<tr>
<td></td>
<td>97)</td>
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<td>432–438 (6)</td>
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<tr>
<td></td>
<td>Amateur</td>
<td>97)</td>
</tr>
<tr>
<td></td>
<td>438–450 (12)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aeronautical radionavigation</td>
<td>97)</td>
</tr>
<tr>
<td>Frequency Band and (Bandwidth) Mc/s</td>
<td>Allocation to Services</td>
<td>Comments</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>------------------------</td>
<td>----------</td>
</tr>
<tr>
<td></td>
<td>World-wide</td>
<td>Region 1</td>
</tr>
<tr>
<td>450–460 (10)</td>
<td>450–460 (10)</td>
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<td>Broadcast</td>
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<tr>
<td></td>
<td>610–790 (180)</td>
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</tr>
<tr>
<td></td>
<td>Broadcasting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>940–960 (20)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fixed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mobile</td>
<td></td>
</tr>
<tr>
<td>1215–1300 (85)</td>
<td>Amateur</td>
<td></td>
</tr>
<tr>
<td>2300–2450 (150)</td>
<td>a) Fixed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
<td></td>
</tr>
<tr>
<td>2450–2700 (250)</td>
<td>2450–2600 (150)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Fixed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2600–2700 (100)</td>
<td></td>
</tr>
</tbody>
</table>
215. After this No. add the following new footnote:

In Region 1, the basic frequency 1230 Mc/s shall be assigned for industrial, scientific and medical purposes. When the frequency is used for such purposes, the power transmitted shall remain within a band the lower limit of which is 15 Mc/s below the basic frequency, so that interference must be expected by other users within this band.

221. After this No. add the following new footnote:

In Region 1, the basic frequency 2650 Mc/s shall be assigned for industrial, scientific and medical purposes. When the frequency is used for such purposes, the power transmitted shall remain within a band the lower limit of which is 50 Mc/s below, and the upper limit 50 Mc/s above the basic frequency, so that interference must be expected by other users within this band.

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Mc/s</th>
<th>Allocation to Services</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>World-wide</td>
<td>Region 1</td>
</tr>
<tr>
<td>3300–3900 (600)</td>
<td></td>
<td>3300–3600 (300) Radionavigation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3600–3900 (300) Fixed</td>
</tr>
<tr>
<td>3900–4200 (300)</td>
<td>Fixed</td>
<td></td>
</tr>
<tr>
<td>5650–5850 (200)</td>
<td>Amateur</td>
<td></td>
</tr>
<tr>
<td>9800–10 000 (200)</td>
<td>Radionavigation</td>
<td></td>
</tr>
<tr>
<td>10 500–13 250</td>
<td>a) Fixed b) Mobile</td>
<td></td>
</tr>
</tbody>
</table>

228. Replace the present text by the following:

The basic frequency for scientific and medical purposes shall be 5750 Mc/s. When the frequency is used for these purposes, the power transmitted shall remain within a band the lower limit of which is 75 Mc/s below, the upper limit 75 Mc/s above the basic frequency, so that interference must be expected by other users within this band.
U.S.S.R.

PROPOSAL

concerning modifications to be made to the Table of Frequency Allocations between 10 kc/s and 27 500 kc/s, and to the provisions of Article 5 of the RR relative to Region 1.

Only the bands and footnotes to be modified are mentioned below.

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) kc/s</th>
<th>Allocation to services</th>
</tr>
</thead>
<tbody>
<tr>
<td>10–14 (4)</td>
<td>Radionavigation</td>
</tr>
<tr>
<td>14–24 (10)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td>24–26 (2)</td>
<td>Standard frequency</td>
</tr>
<tr>
<td>26–48 (22)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td>48–52 (4)</td>
<td>Standard frequency</td>
</tr>
<tr>
<td>52–70 (18)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td>70–80 (10)</td>
<td>a) Fixed</td>
</tr>
</tbody>
</table>

110. After this No. add the following new footnotes:

1bis) The standard frequency is 25 kc/s.

1ter) The standard frequency is 50 kc/s.

1quater) In the U.S.S.R., the 60–80 kc/s band can be used for industrial, scientific and medical purposes.

111. At the beginning delete the reference to Region 1.
<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) kc/s</th>
<th>Allocation to services</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-150 (70)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile 4)</td>
</tr>
<tr>
<td></td>
<td>c) Radionavigation 4bis)</td>
</tr>
<tr>
<td>150-160 (10)</td>
<td>a) Maritime mobile</td>
</tr>
<tr>
<td></td>
<td>b) Broadcasting</td>
</tr>
<tr>
<td>160-255 (95)</td>
<td>Broadcasting</td>
</tr>
<tr>
<td>255-285 (30)</td>
<td>a) Maritime mobile 9)</td>
</tr>
<tr>
<td></td>
<td>b) Broadcasting</td>
</tr>
<tr>
<td></td>
<td>c) Aeronautical radionavigation</td>
</tr>
</tbody>
</table>

894. At the beginning delete the reference to Region 1.

895. After this No. add the following new footnote:
   4bis) In port areas, the maritime mobile service has priority in the 130-150 kc/s band.

896. Replace the present text by the following:
   5) The frequency 143 kc/s is the calling frequency for stations in the maritime mobile service. The conditions for use of this frequency are prescribed in Article 33.

897. Delete, as sharing of this band is permitted.


899. Replace the present text by the following:
   9) The maritime mobile service must not cause harmful interference to the reception of a broadcasting station in the territory of the country in which the broadcasting station is located.

900. Delete, as having been taken into consideration in subsequent agreements.
<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) kc/s</th>
<th>Allocation to Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>285-315 (30)</td>
<td>Maritime Radionavigation (Radio beacon)</td>
</tr>
<tr>
<td>315-325 (10)</td>
<td>Aeronautical Radionavigation</td>
</tr>
</tbody>
</table>
| 325-405 (80)                       | a) Aeronautical mobile  
|                                    | b) Aeronautical Radionavigation |
|                                    | 14)  |
| 405-415 (10)                       | a) Mobile  
|                                    | b) Aeronautical radionavigation  
|                                    | c) Maritime radionavigation (radio direction-finding) |

907 125. After this No. add the following new footnote:

\[13\text{bis} \] In the U.S.S.R., the 285-315 kc/s band can also be used for aeronautical radionavigation.

908 126. Replace the present text by the following:

\[14\] In the U.S.S.R., the 315-325 kc/s band can also be used for maritime radionavigation.

909 129. After this No. add the following new footnote:

\[17\text{bis} \] In the U.S.S.R., the 315-405 kc/s band may be used by the broadcasting service in regions situated East of 40° East.

910 130. Replace the present text by the following:

\[18\] 333 kc/s is the general calling frequency for aircraft stations operating in the 325-405 kc/s band.

911 131.

912 134.

Delete, as having been taken into consideration in subsequent agreements.

913 135.

914 136.
<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) Allocation to Services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>kc/s</strong></td>
</tr>
<tr>
<td><strong>915</strong></td>
</tr>
<tr>
<td>415-490 (75)</td>
</tr>
<tr>
<td><strong>916</strong></td>
</tr>
<tr>
<td>490-510 (20)</td>
</tr>
<tr>
<td><strong>917</strong></td>
</tr>
<tr>
<td>510-525 (15)</td>
</tr>
</tbody>
</table>

138. Delete, covered by the Copenhagen Broadcasting Plan.

138. After this No. add the following new footnote:

24 bis) In the U.S.S.R., the 415-490 kc/s band may also be used by the aeronautical radionavigation service, provided no interference is caused to the maritime mobile service.

140. Replace the present text by the following:

26) The use of the frequency 500 kc/s is governed by Article 33.

140. After this No. add the following new footnote:

28 bis) In the U.S.S.R., the 510-525 kc/s band may also be used by the aeronautical radionavigation service, provided no interference is caused to the maritime mobile service.

<table>
<thead>
<tr>
<th>525-1605 (1080)</th>
<th>Broadcasting 29 bis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>922</strong></td>
<td>Broadcasting</td>
</tr>
<tr>
<td>1605-2065 (460)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile, except aeronautical mobile</td>
</tr>
<tr>
<td><strong>923</strong></td>
<td></td>
</tr>
<tr>
<td>2065-2170 (105)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile, except aeronautical mobile (R)</td>
</tr>
<tr>
<td>2170-2194 (24)</td>
<td>Guard-band for the calling and distress frequency of the maritime mobile radiotelephone service (2182 kc/s) 34 bis</td>
</tr>
<tr>
<td>2194-2300 (106)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile, except aeronautical mobile (R) 33</td>
</tr>
<tr>
<td><strong>924</strong></td>
<td></td>
</tr>
<tr>
<td>2300-2498 (198)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile, except aeronautical mobile (R) 33</td>
</tr>
<tr>
<td></td>
<td>c) Broadcasting     34</td>
</tr>
</tbody>
</table>

143. Delete. Superfluous.
After this No., add the following new footnote:

29bis) In the U.S.S.R., the 525–850 kc/s band may also be used by the aeronautical radionavigation service.

Delete, covered in later agreements.

After this No. add the following new footnote:

34bis) The use of frequency 2182 kc/s is governed by Article 34.

Replace the present text by the following:

35) The explanation of the terms "R" and "OR" is given in the Regulations.

Replace the present text by the following:

36) The use of this band by the broadcasting service is governed by 243, 244 and 250 to 254.

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth)</th>
<th>Allocation to services</th>
</tr>
</thead>
<tbody>
<tr>
<td>2502–2625 (123)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile, except aeronautical mobile (R) 35</td>
</tr>
<tr>
<td>2625–2650 (25)</td>
<td>a) Mobile maritime</td>
</tr>
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<td>b) Maritime radionavigation</td>
</tr>
<tr>
<td>2650–2850 (200)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile, except aeronautical mobile (R) 35</td>
</tr>
<tr>
<td>2850–3155 (305)</td>
<td>Aeronautical mobile</td>
</tr>
<tr>
<td>3155–3200 (45)</td>
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</tr>
<tr>
<td></td>
<td>b) Mobile, except aeronautical mobile (R) 35</td>
</tr>
<tr>
<td>3200–3230 (30)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile, except aeronautical mobile (R) 35</td>
</tr>
<tr>
<td></td>
<td>c) Broadcasting</td>
</tr>
<tr>
<td>3230–3400 (170)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile, except aeronautical mobile</td>
</tr>
<tr>
<td></td>
<td>c) Broadcasting        34</td>
</tr>
<tr>
<td>3400–3500 (100)</td>
<td>Aeronautical mobile</td>
</tr>
<tr>
<td>3500–3650 (150)</td>
<td>a) Amateur</td>
</tr>
<tr>
<td></td>
<td>b) Fixed</td>
</tr>
<tr>
<td></td>
<td>c) Mobile, except aeronautical mobile</td>
</tr>
<tr>
<td>3650–3800 (150)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile, except aeronautical mobile</td>
</tr>
<tr>
<td>3800–3900 (100)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
</tr>
<tr>
<td>3900–3950 (50)</td>
<td>Aeronautical mobile</td>
</tr>
<tr>
<td>Frequency Band and (Bandwidth) kc/s</td>
<td>Allocation to services</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>3950–4063 (113)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Broadcasting</td>
</tr>
<tr>
<td>4063–4438 (375)</td>
<td>Maritime mobile</td>
</tr>
<tr>
<td>4650–4750 (100)</td>
<td>Aeronautical mobile</td>
</tr>
<tr>
<td>4750–4850 (100)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Aeronautical mobile (OR)</td>
</tr>
<tr>
<td></td>
<td>c) Land mobile</td>
</tr>
<tr>
<td></td>
<td>d) Broadcasting</td>
</tr>
</tbody>
</table>

**Frequent 154. Delete. Covered in 155.**

**Frequent 155. Replace the present text by the following:**

41) Provided harmful interference is not caused to the maritime mobile service, the 4063–4438 kc/s band may be used by fixed stations of low power communicating only within the national boundaries of the countries concerned.

**Frequent 155. After this No. add the following new footnote:**

41 bis) In the U.S.S.R., the 4750–4995 kc/s band may be used for regional broadcasting in regions situated east of 40° East, provided the U.S.S.R. broadcasting stations do not cause harmful interference to the services of other countries.

<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) kc/s</th>
<th>Allocation to services</th>
</tr>
</thead>
<tbody>
<tr>
<td>4850–4995 (145)</td>
<td>a) Fixed</td>
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<tr>
<td></td>
<td>b) Land mobile</td>
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<td></td>
<td>c) Broadcasting</td>
</tr>
<tr>
<td></td>
<td>41 bis)</td>
</tr>
<tr>
<td>4995–5005 (10)</td>
<td>Standard frequency 42)</td>
</tr>
<tr>
<td>5005–5060 (55)</td>
<td>a) Fixed</td>
</tr>
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<td></td>
<td>b) Broadcasting</td>
</tr>
<tr>
<td>5060–5250 (190)</td>
<td>Fixed</td>
</tr>
<tr>
<td>5480–5730 (250)</td>
<td>Aeronautical mobile</td>
</tr>
<tr>
<td>Frequency Band and (Bandwidth) kc/s</td>
<td>Allocation to services</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>------------------------</td>
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<tr>
<td>5730–5900 (170)</td>
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</tr>
<tr>
<td></td>
<td>b) Land mobile</td>
</tr>
<tr>
<td>5900–6200 (300)</td>
<td>Broadcasting</td>
</tr>
<tr>
<td>6200–6525 (325)</td>
<td>Maritime mobile 43bis)</td>
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<tr>
<td>6525–6765 (240)</td>
<td>Aeronautical mobile</td>
</tr>
<tr>
<td>6765–7000 (235)</td>
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</tr>
<tr>
<td></td>
<td>b) Land mobile</td>
</tr>
<tr>
<td>7000–7100 (100)</td>
<td>Amateur</td>
</tr>
<tr>
<td>7100–7350 (250)</td>
<td>Broadcasting</td>
</tr>
<tr>
<td>7350–8195 (845)</td>
<td>Fixed</td>
</tr>
<tr>
<td>8195–8815 (620)</td>
<td>Maritime mobile 44)</td>
</tr>
<tr>
<td>8815–9040 (225)</td>
<td>Aeronautical mobile</td>
</tr>
<tr>
<td>9040–9500 (460)</td>
<td>Fixed</td>
</tr>
<tr>
<td>9500–9800 (300)</td>
<td>Broadcasting</td>
</tr>
<tr>
<td>9800–9995 (195)</td>
<td>Fixed</td>
</tr>
</tbody>
</table>

963 157. After this No. add the following new footnote:

43bis] Provided no harmful interference is caused to the maritime mobile service, the 6200–6525 kc/s band may be used by fixed stations of low power communicating only within the national boundaries of the countries concerned.

964 158. Delete the reference to Region 1 where this band may be used only for broadcasting.

965 160. Delete in fine: The International Frequency Registration Board will be consulted regarding these arrangements.
<table>
<thead>
<tr>
<th>Frequency Band and Allocation to services</th>
<th>(Bandwidth)</th>
</tr>
</thead>
</table>
| 966                                      | 9 995–10 005 (10) | Standard frequency 47)  
| 967                                      | 10 005–10 100 (95) | Aeronautical mobile  
| 968                                      | 10 100–11 175 (1075) | Fixed  
| 969                                      | 11 175–11 200 (25) | Aeronautical mobile  
|                                           | 11 200–11 250 (50) | a) Fixed  
|                                           | 11 250–11 360 (110) | b) Mobile  
|                                           | 11 360–11 370 (10) | Aeronautical mobile  
|                                           | 11 370–11 400 (30) | a) Fixed  
|                                           |                        | b) Mobile  
| 970                                      | 11 400–11 700 (300) | Fixed  
| 971                                      | 11 700–12 075 (375) | Broadcasting  
|                                           | 12 075–12 320 (245) | Fixed  
|                                           | 12 320–12 330 (10) | Aeronautical mobile  
| 972                                      | 12 330–13 200 (870) | Mobile maritime 49)  

973 162. **Delete. No longer necessary.**

974 163. **Delete in fine:** The International Frequency Registration Board will be consulted regarding these arrangements.
<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) kc/s</th>
<th>Allocation to services</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 200–13 220 (20)</td>
<td>a) Fixed, b) Mobile.</td>
</tr>
<tr>
<td>13 220–13 260 (40)</td>
<td>Aeronautical mobile.</td>
</tr>
<tr>
<td>13 260–13 300 (40)</td>
<td>a) Fixed, b) Mobile.</td>
</tr>
<tr>
<td>13 300–13 360 (60)</td>
<td>Aeronautical mobile.</td>
</tr>
<tr>
<td>13 360–14 000 (640)</td>
<td>Fixed ⑩)</td>
</tr>
<tr>
<td>14 000–14 350 (350)</td>
<td>Amateur ⑪)</td>
</tr>
<tr>
<td>14 350–14 370 (20)</td>
<td>Aeronautical mobile.</td>
</tr>
<tr>
<td>14 370–14 990 (620)</td>
<td>Fixed</td>
</tr>
<tr>
<td>14 990–15 010 (20)</td>
<td>Standard frequency ⑫)</td>
</tr>
<tr>
<td>15 010–15 100 (90)</td>
<td>Aeronautical mobile.</td>
</tr>
<tr>
<td>15 100–15 550 (450)</td>
<td>Broadcasting.</td>
</tr>
<tr>
<td>15 550–16 440 (890)</td>
<td>Fixed</td>
</tr>
<tr>
<td>16 440–16 460 (20)</td>
<td>Aeronautical mobile.</td>
</tr>
<tr>
<td>16 460–17 360 (900)</td>
<td>Maritime mobile ⑬)</td>
</tr>
<tr>
<td>17 360–17 700 (340)</td>
<td>Fixed</td>
</tr>
</tbody>
</table>

985 167. Delete in fine: The International Frequency Registration Board will be consulted regarding these arrangements.
<table>
<thead>
<tr>
<th>Frequency Band and (Bandwidth) kc/s</th>
<th>Allocation to services</th>
</tr>
</thead>
<tbody>
<tr>
<td>17 700–17 900 (200)</td>
<td>Broadcasting</td>
</tr>
<tr>
<td>17 900–18 030 (130)</td>
<td>Aeronautical mobile</td>
</tr>
<tr>
<td>18 030–19 990 (1 960)</td>
<td>Fixed</td>
</tr>
<tr>
<td>19 990–20 010 (20)</td>
<td>Standard frequency</td>
</tr>
<tr>
<td>20 010–21 000 (990)</td>
<td>Fixed</td>
</tr>
<tr>
<td>21 000–21 450 (450)</td>
<td>Amateur</td>
</tr>
<tr>
<td>21 450–21 750 (300)</td>
<td>Broadcasting</td>
</tr>
<tr>
<td>21 750–21 850 (100)</td>
<td>Fixed</td>
</tr>
<tr>
<td>21 850–22 000 (150)</td>
<td>a) Fixed</td>
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<td>b) Mobile</td>
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<tr>
<td>22 000–22 720 (720)</td>
<td>Maritime mobile</td>
</tr>
<tr>
<td>22 720–23 200 (480)</td>
<td>Fixed</td>
</tr>
<tr>
<td>23 200–23 350 (150)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile</td>
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<tr>
<td>23 350–24 990 (1 640)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Land mobile</td>
</tr>
<tr>
<td>24 990–25 010 (20)</td>
<td>Standard frequency</td>
</tr>
<tr>
<td>25 010–25 600 (590)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile, except aeronautical mobile</td>
</tr>
<tr>
<td>25 600–26 100 (500)</td>
<td>Broadcasting</td>
</tr>
<tr>
<td></td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile, except aeronautical mobile</td>
</tr>
<tr>
<td>26 100–27 500 (1 400)</td>
<td>a) Fixed</td>
</tr>
<tr>
<td></td>
<td>b) Mobile, except aeronautical mobile</td>
</tr>
</tbody>
</table>

1003 170. After this No. add the following new footnote:

In the U.S.S.R. the band 25 600–26 100 kc/s is also allocated to the land mobile service.
### Note by the S.G.

**Lists of Countries making Proposals for Changes in the Frequency Allocation Table**

Lists of the countries which have submitted proposals in connection with the frequency bands shown in the left-hand column of the Frequency Allocation Table, or in connection with footnotes thereto, are given below for each band and footnote concerned. When countries have submitted identical proposals, the countries in question are shown as far as possible in brackets. When a country or group of countries has submitted several proposals relating to the same band or the same note, they are listed once only opposite the band or note in question.

<table>
<thead>
<tr>
<th>Frequency bands</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-14</td>
<td>(Belgium, France, French O.P.T.A., Italy, Netherlands) — India — Poland (People's Rep. of) — U.S.S.R.</td>
</tr>
<tr>
<td>14-70</td>
<td>(Belgium, France, French O.P.T.A., Italy, Netherlands) — Japan — Poland (People's Rep. of) — U.S.S.R.</td>
</tr>
<tr>
<td>70-90</td>
<td>Australia (Commonwealth of) — (Belgium, France, French O.P.T.A., Italy, Netherlands) — India — Japan — Poland (People's Rep. of) — U.S.S.R.</td>
</tr>
<tr>
<td>90-110</td>
<td>(Belgium, France, French O.P.T.A., Italy, Netherlands) — Poland (People's Rep. of) — U.S.S.R.</td>
</tr>
<tr>
<td>110</td>
<td>(Belgium, France, French O.P.T.A., Italy, Netherlands) — U.S.S.R.</td>
</tr>
<tr>
<td>111</td>
<td>Japan — U.S.S.R.</td>
</tr>
<tr>
<td>112</td>
<td>India</td>
</tr>
<tr>
<td>110-130</td>
<td>(Belgium, France, French O.P.T.A., Italy, Netherlands) — India — Japan — Poland (People's Rep. of) — Sweden — U.S.S.R.</td>
</tr>
<tr>
<td>130-150</td>
<td>(Belgium, France, French O.P.T.A., Italy, Netherlands) — (Denmark, Finland, Iceland, Norway, Sweden) — Poland (People's Rep. of) — Sweden — U.S.S.R.</td>
</tr>
<tr>
<td>150-160</td>
<td>(Belgium, France, French O.P.T.A., Italy, Netherlands) — Poland (People's Rep. of) — Sweden — U.S.S.R.</td>
</tr>
<tr>
<td>113</td>
<td>(Denmark, Finland, Iceland, Norway, Sweden) — Japan — U.S.S.R.</td>
</tr>
<tr>
<td>114</td>
<td>U.S.S.R.</td>
</tr>
<tr>
<td>115</td>
<td>U.S.S.R.</td>
</tr>
<tr>
<td>117</td>
<td>U.S.S.R.</td>
</tr>
<tr>
<td>118</td>
<td>U.S.S.R.</td>
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<tr>
<td>120</td>
<td>U.S.S.R.</td>
</tr>
<tr>
<td>121</td>
<td>U.S.S.R.</td>
</tr>
<tr>
<td>122</td>
<td>India — U.S.S.R.</td>
</tr>
<tr>
<td>123</td>
<td>Norway — U.S.S.R.</td>
</tr>
<tr>
<td>124</td>
<td>(Belgium, France, French O.P.T.A., Italy, Netherlands) — Japan.</td>
</tr>
<tr>
<td>125</td>
<td>(Belgium, France, French O.P.T.A., Italy, Netherlands) — India — Japan — U.S.S.R.</td>
</tr>
<tr>
<td>Frequency bands</td>
<td>Notes</td>
</tr>
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<td>----------------</td>
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<tr>
<td>126</td>
<td>U.S.S.R.</td>
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<tr>
<td>128</td>
<td>(Belgium, France, French O.P.T.A., Italy, Netherlands).</td>
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<tr>
<td>325-405</td>
<td>(Belgium, France, French O.P.T.A., Italy, Netherlands) — (Denmark, Finland, Iceland, Norway, Sweden) — India — Japan — Poland (People's Rep. of) — U.S.S.R.</td>
</tr>
<tr>
<td>129</td>
<td>(Belgium, France, French O.P.T.A., Italy, Netherlands) — (Denmark, Finland, Iceland, Norway, Sweden) — Japan — U.S.S.R.</td>
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<tr>
<td>130</td>
<td>Australia (Commonwealth of) — (Belgium, France, French O.P.T.A., Italy, Netherlands) — (Denmark, Finland, Iceland, Norway, Sweden) — India — Japan — U.S.S.R.</td>
</tr>
<tr>
<td>131</td>
<td>(Belgium, France, French O.P.T.A., Italy, Netherlands) — (Denmark, Finland, Iceland, Norway, Sweden) — U.S.S.R.</td>
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<tr>
<td>132</td>
<td>Norway.</td>
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<tr>
<td>405-415</td>
<td>(Denmark, Finland, Iceland, Norway, Sweden) — India — Japan — Poland (People's Rep. of) — U.S.S.R.</td>
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<tr>
<td>133</td>
<td>Federal German Rep.</td>
</tr>
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<td>134</td>
<td>U.S.S.R.</td>
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<td>136</td>
<td>U.S.S.R.</td>
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<td>137</td>
<td>Japan.</td>
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<td>415-490</td>
<td>India — Poland (People's Rep. of) — U.S.S.R.</td>
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<td>Poland (People's Rep. of) — U.S.S.R.</td>
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<tr>
<td>525-535</td>
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<td>535-1605</td>
<td>Poland (People's Rep. of) — U.S.S.R.</td>
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<td>139</td>
<td>India.</td>
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<tr>
<td>140</td>
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<td>143</td>
<td>(Belgium, France, French O.P.T.A., Italy, Netherlands) — U.S.S.R.</td>
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<td>144</td>
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<td>146</td>
<td>(France, French O.P.T.A., Italy, Netherlands).</td>
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<td>(France, French O.P.T.A., Netherlands) — Italy — Japan.</td>
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<td>2300-2850</td>
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<td>Frequency bands</td>
<td>Notes</td>
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<tr>
<td>148</td>
<td>(Belgium, France, French O.P.T.A., Italy, Netherlands) — China — Japan — Sweden — U.S.S.R.</td>
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<td>149</td>
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<td>U.S.S.R.</td>
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<td>155</td>
<td>Australia (Commonwealth of) — India — U.S.S.R.</td>
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<td>India — U.S.S.R.</td>
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Present Provisions

ARTICLE 6

Special Rules Relating to Use of Classes of Emissions

§ 1. The use of class B emissions is forbidden in all stations. However, it is permitted for emergency (reserve) installations in ships and for lifeboats, liferaft and survival craft equipments under the conditions fixed by article 33 (see 712).

§ 2. Only classes A1 or F1 emissions are authorized for stations of the fixed and maritime mobile services working on frequencies in the band 110 to 160 kc/s. As an exception to this rule, class A2 emissions may be employed within the band 110-125 kc/s exclusively for the transmission of time signals.

Proposals

1005 China

232. Delete the second sentence.

Reasons

The deleted portion is unnecessary.

1006 France, French O.P.T.A.

232. Delete (reserve).

Reasons

See proposals 232, 233 and 234.

1007 Morocco

232. Replace the present text by the following:

§ 1. Class B emissions shall be forbidden in all stations, but such relief equipment as may be carried by ships on 1 January, 1960, shall be authorized to use them as laid down in Article 33 (see 712) until 1 January, 1965.

Reasons

Class B is inefficient because of excessive energy dispersion.

1008 United Kingdom

232. Delete second sentence.

Reasons

To make complete the ban on class B emissions.

1009 U.S.S.R.

232. Replace the present text by the following:

§ 1. The use of class B emissions shall be forbidden in all stations.

Reasons

The use of damped waves is out-of-date.
Present Provisions

Proposals

1010 France, French O. P. T. A., Morocco

233. Delete: As an exception ... time signals.

Reasons


1011 U. S. S. R.

233. Replace the present text by the following:

§ 2. Only classes A1 or F1 emissions are authorized for stations of the fixed and maritime mobile services, working on frequencies in the band 80–160 kc/s. As an exception to this rule, class A2 emissions may be used for the transmission of time signals only.

Reasons

See our proposals for changes in the Frequency Allocation Table.

1012 Netherlands

232 and 233. Delete.

Reasons

Both paragraphs are so closely related to the mobile service that they should be transferred to Article 33 (see proposals 1945 and 1952).

1013 Sweden

232-233. It is proposed that these paragraphs be either revised so as to cover all the frequency bands concerned or included in the special provisions regarding the various bands. (See 574, 711, and 752, and also the general proposal (proposal 13) submitted by Sweden, in conjunction with Denmark, Finland, Iceland and Norway, concerning an editorial revision of Chapters XIII, XIV and XV of the Radio Regulations.)

Reasons

For the sake of completeness.
Present Provisions

ARTICLE 7

Special Rules for the Assignment
and Use of Frequencies

§ 1. (1) The countries, members of the Union, recognize that among frequencies which have long distance propagation characteristics, those between 5000 and 30000 kc/s are particularly useful for long distance communications, and agree to make every possible effort to reserve this band for such communications. Whenever frequencies in this band are used for short or medium distance communications, the minimum power necessary shall be employed.

Proposal 1014

India

234. Delete.

Reasons

No clear purpose is served by its presence.

Proposal 1015

United Kingdom

234. Replace: The countries, members of the Union by: Members and Associate Members of the Union.

Reasons

To conform with the wording of the Convention.

Proposal 1016

and replace: 5000 by 4000.

Reasons

4000 is a more accurate figure.

Proposal 1017

U.S.S.R.

234. Replace: 5000 and 30000 kc/s by: 4000 and 30000 kc/s.

Reasons

See proposal 1011.

Proposal 235

(2) In order to reduce the requirements for frequencies in this band, and thus to prevent harmful interference to long distance radiocommunications, the administrations are encouraged to use every other means of communication wherever practicable.

Proposal 1018

India

235. Replace: this band by: the band between 5000 and 30000 kc/s.

Reasons

See proposal 1014.
Present Provisions

Proposals

1019 Japan

235. After this No. add the following new sub-paragraph:

(2 bis) Administrations are urged to introduce the single sideband technique in communications, and, wherever practicable, replace the double sideband telephony on frequencies below 30 Mc/s by the single sideband telephony especially in the fixed and mobile services.

Reasons

It is necessary to introduce the SSB system as a practical measure for the relief of frequency congestion below 30 Mc/s.

236 § 2. When special circumstances make it indispensable to do so, an administration may, as an exception to the normal methods of working authorized by these Regulations, have recourse to the special methods of working enumerated below, on the sole condition that the characteristics of the stations still conform to those inserted in the Master International Frequency Register:

a) a fixed station may, as a secondary service, transmit to mobile stations on its normal frequencies;

b) a land station may communicate, on a secondary basis, with fixed stations or other land stations of the same category.

1020 United Kingdom

236. In fine, delete: of the same category.

Reasons

To facilitate emergency working between aeronautical stations and coast stations in case of distress.

237 § 3. Any administration may assign a frequency in a band allocated to the fixed service to a station authorized to transmit by the unilateral method from one specified fixed point to a number of other specified fixed points, provided that such transmissions are not intended to be received directly by the general public.

238 § 4. Any mobile station the emission of which complies with the frequency tolerances required of coast stations may transmit on the same frequency as the coast station with which it communicates on condition that the coast station requests such transmission and that no harmful interference results to other stations.

1021 France, French O.P.T.A., Morocco

238. Delete.

Reasons

France, French O.P.T.A.:

When the E.A.R.C. plans were being drawn up, it was recognized that in most cases there was a risk of harmful interference if a mobile station used frequencies assigned to a coast one.
Present Provisions

§ 5. In certain cases, for which provision is made in articles 33 and 34, aircraft stations are authorized to use frequencies in the maritime mobile bands between 4000 and 23000 kc/s for the purpose of entering into communication with stations of the maritime mobile service.

ARTICLE 8

Protection of Distress Frequencies

§ 1. In the band 475–535 kc/s, no class of emission capable of rendering inoperative distress, alarm, safety or urgency signals transmitted on 500 kc/s is allowed.

Proposals

1022 United Kingdom

239. Delete: between 4000 and 23 000 kc/s.

Reasons

To make the Regulation less restrictive and give greater scope for the operation of 571.

1023 Denmark, Finland, Iceland, Norway, Sweden

240. It is proposed that the frequency 2182 kc/s be introduced and that adequate guard-bands for the frequencies 500 kc/s and 2182 kc/s be considered with a view to the technical progress, which has taken place. (See E.A.R.C. Agreement, No. 42.)

1024 France, French O.P.T.A.

240. Replace the present text by the following:

§ 1. Administrations must proscribe any emission that might render inoperative the alarm, distress, safety or urgency signals emitted on 500 or 2182 kc/s.

Reasons

a) 2182 kc/s has to be protected too.
b) Alarm, distress, safety or urgency signals may be rendered inoperative for reasons which may have nothing to do with the class of the interfering emission.

1025 Morocco

240. Replace the present text by the following:

§ 1. Administrations shall take steps to forbid transmissions that might render the following inoperative:

1. Alarm, distress, safety and urgency signals on 500 kc/s or 2 182 kc/s;
2. Distress signals on 8 364 kc/s.
Present Provisions

Proposals

1026 Federal German Republic

240. Replace the present text by the following:

§ 1. In the bands 475–535 and 2150–2215 kc/s, no class of emission capable of rendering inoperative distress, alarm, safety or urgency signals, and messages transmitted on 500 or 2182 kc/s, respectively, is allowed.

Reasons

Extension of the band mentioned in E.A.R.C. Nos. 40, 42, and 64 with a view to provide the distress frequency 2182 kc/s with a protection equivalent to that existing for the distress frequency 500 kc/s.

1027 United Kingdom

240. Replace the present text by the following:

§ 1. No emission capable of rendering inoperative distress, alarm, safety or urgency signals transmitted on the international distress frequencies of 500 kc/s or 2182 kc/s is allowed.

Reasons

To include 2182 kc/s.

1028 Sweden

240. Replace the present text by the following:

§ 1. In the band ........ kc/s, no class of emission capable of rendering inoperative alarm signals and distress, urgency or safety communications transmitted on 500 kc/s is allowed.

Reasons

To give the rule a more general applicability.

1029 U.S.S.R.

240. Replace the present text by the following:

§ 1. In the bands 475–535 and 2170–2194 kc/s no class of emission capable of rendering distress, alarm, safety, or urgency signals transmitted on 500 kc/s and 2182 kc/s inoperative shall be allowed.

Reasons

The decisions taken by the Göteborg Conference (1955).
Present Provisions

Proposals

1030 Japan

240. After this No. add the following new paragraph:

§ 1 bis. In the band 2170–2194 kc/s, no class of emission capable of rendering inoperative distress, safety or urgency signals transmitted on 2182 kc/s is allowed.

Reasons

It is necessary to protect 2182 kc/s as the distress frequency.

1031 Netherlands

240. After this No. add the following new paragraph:

§ 1 bis. In the band 2170–2194 kc/s, all transmissions are forbidden, apart from the authorized transmissions on the frequency 2182 kc/s.

Reasons

In accordance with No. 42 E.A.R.C. (Geneva, 1951).

1032 Sweden

240. After this No. add the following new paragraph:

§ 1 bis. In the band _______ kc/s no class of emission capable of rendering inoperative alarm signals and distress, urgency or safety communications transmitted on 2182 kc/s is allowed.

Reasons

The protection of the distress frequency 2182 kc/s should also be prescribed in Article 8.

241 § 2. In Regions 1 and 3, in the band 325 to 345 kc/s, no class of emission capable of rendering inoperative distress, safety or urgency signals transmitted on 333 kc/s is allowed.

1033 Australia (Commonwealth of)

241. Delete.

Reasons

The frequency 333 kc/s is not now used in Australia as the general calling frequency for aircraft stations operating in the band 325–405 kc/s.
1034 Denmark, Finland, Iceland, Norway, Sweden

241. Delete.

1035 France, French O. P. T. A.

241. Delete.

Reasons

(The use made of 333 kc/s is no longer as described in this paragraph.

1036 India

241. Delete.

Reasons

Consequential to proposal 638 for the band 325-405 kc/s.

1037 Japan

241. At the beginning, replace: Regions 1 and 3 by: Region 1.

Reasons

The frequency 333 kc/s is not used in Region 3, nor is it expected to be used in the future.

1038 United Kingdom

241. Delete.

Reasons

Consequent on proposals for 109.

1039 China

241. After this No. add the following new paragraph:

§ 2bis. The interested Administrations will ensure, by special arrangements where necessary, that ade-
Present Provisions

Proposals

quate guard-bands are provided for all frequencies other than the above which may be used for distress purposes such as 2182 kc/s, 121.50 Mc/s and 156.80 Mc/s.

Reasons

See 195, 815, 830, 869 and 870.

1040

India

241. After this No. add the following new paragraph:

§ 2bis. In the band 2177-2187 kc/s, no class of emission capable of rendering inoperative the radio telephone distress, safety, alarm or urgency signals transmitted on 2182 kc/s is allowed.

Reasons

To provide for the protection of radiotelephony distress frequency 2182 kc/s.

1041

Denmark, Finland, Iceland, Norway, Sweden

242. After this No. add the following new sub-paragraph:

§ 1. (...) The establishment and use of broadcasting stations (sound broadcasting and television broadcasting stations) on board ships or any other floating objects in international waters is prohibited.

243 (1) In principle, the power of broadcasting stations which employ frequencies below 5060 kc/s must not exceed (except in the band 3900-4000 kc/s) a value which permits of maintaining economically an effective national service of good quality within the limits of the country concerned.

1042

Federal German Republic

243. After: ... which employ frequencies below 5060 kc/s ... add: and above 41 Mc/s (remainder unchanged).

Reasons

The provision specified in 243 should likewise apply to frequencies above 41 Mc/s.
Present Provisions

1043 Switzerland

243. Replace the present text by the following:

(1) The rules applicable to broadcasting stations using frequencies below 1,605 kc/s shall be as set forth in the agreements reached by regional broadcasting conferences.

Reasons

To provide for what is at present the case. 243 becomes 1045.

1044 U.S.S.R.

243. Replace: 3,900–4,000 kc/s by: 3,900–4,063 kc/s.

Reasons

See our proposals for the Frequency Allocation Table.

244 (2) The use by the broadcasting service of the bands listed below is restricted to the Tropical Zone as defined in 252:

- 2,300–2,498 kc/s (Region 1)
- 2,300–2,495 kc/s (Regions 2 and 3)
- 3,200–3,400 kc/s (All Regions)
- 4,750–4,995 kc/s (All Regions)
- 5,005–5,060 kc/s (All Regions)

1045 Switzerland

244. After this No. add the text of former 243.

1046 United Kingdom

245. Read: § 2 European Broadcasting Area. 1)

245.1 1) See 107 for the definition of the European Area.

246 (1) So far as broadcasting in the European Area is concerned, the following restrictions are accepted in the application of the principle stated in 88. These may be annulled or modified by arrangement among the countries of the European Area.

247 (2) In the absence of previous arrangements among the countries of the European Area, the option mentioned in 88 may not be exercised, within the limits of the European Area, for the purpose of effecting a broadcasting service outside the bands allocated to that service by these Regulations on frequencies below 1,605 kc/s.

1047


Reasons

Consequent on proposal 1046.
Present Provisions

248 (3) In principle, the previous arrangements referred to in the preceding paragraph are concluded at Broadcasting Conferences of the countries of the European Area. However, if a country desires to establish such a service or to obtain a modification of the conditions fixed by a previous arrangement relating to such a service (frequency, power, geographical position of the stations, etc.) in the interval between two such conferences, it shall so inform the countries of the European Area at least three months in advance through the medium of the Secretary General of the Union. Any country which has not answered within a period of six weeks after receipt of the communication in question shall be considered as having given its consent.

249 (4) In the case of a broadcasting station in the European Area working outside the authorized bands of frequencies, it is understood that such previous arrangement will also be necessary on every occasion when a change which might affect the conditions of international interference is to be made in the characteristics which have been previously inserted in the Master International Frequency Register.

1048 Switzerland

245. Delete.
Reasons
See proposal 1055.

1049 France, French O.P.T.A., Morocco

245 to 249. Delete.
Reasons
France, French O.P.T.A.:
The questions dealt with in 245 to 249 are usually dealt with by European Broadcasting Conferences. If these numbers were to be kept, their wording would have to be appreciably amended.
Morocco:
Questions dealt with by European Broadcasting Conferences.

1050 Switzerland

246. Delete.
Reasons
See proposal 1055.

1051 United Kingdom

246 to 249. Replace: European Area, wherever it occurs, by: European Broadcasting Area.
Reasons
Consequent on proposal 1046.

1052 Switzerland

247. Delete.
Reasons
See proposal 1055.
Present Provisions

Proposals

1053 United Kingdom

248. In the first sentence, replace: Broadcasting Conferences of the countries of the European Area by: special conferences of the countries of the European (Broadcasting) Area convened under Article 10 of the Convention.

Reasons
To conform with Article 10 of the Convention (which does not mention Broadcasting Conferences specifically).

Switzerland

1054 248. Delete.

Reasons
See proposal 1055.

1055

249. Delete.

Reasons
These paragraphs were included in the RR because of the position in which European broadcasting was at the time of the Atlantic City Conference. There is no longer any call to make an exception by speaking of broadcasting in Region I, while overlooking that in the other Regions. The new 243 replaces those paragraphs which are to be deleted.

250 § 3. Broadcasting in the Tropical Zone.

251 (1) In these Regulations, the expression "broadcasting in the Tropical Zone" indicates a type of broadcasting, for internal national use in countries in the zone defined in 252, where it may be shown that because of difficulty of high atmospheric noise level and propagation it is not possible to furnish economically a more satisfactory service through the use of low, medium or very high frequencies.

1056 France, French O.P.T.A., Morocco

251. Read in fine:
... a more satisfactory service through the use of kilometric, hectometric or metric waves.

Reasons
Further to 85 of the RR.

1057 India

251. Delete.

Reasons
A definition of "Tropical broadcasting service" has been suggested.
Present Provisions

(2) The Tropical Zone (see appendix 16) is defined as:

a) the whole of that area in Region 2 contained between the Tropics of Cancer and Capricorn;

b) the whole of that area in Regions 1 and 3 contained between the parallels 30° North and 35° South, with the addition of the area contained between the meridians 40° East and 80° East of Greenwich and the parallels 30° North and 40° North;

c) the zone may be extended, in Region 2, to parallel 33° North, subject to appropriate special arrangements between the countries concerned in that Region.

(3) Within the Tropical Zone, the broadcasting service has priority over the other services with which it shares those bands listed in 244.

(4) The broadcasting service operating outside the Tropical Zone, and other services operating outside the Zone, are subject to the provisions of 90.

Section II. Aeronautical Mobile Service

§ 4. Administrations shall not permit public correspondence in the frequency bands allocated exclusively to the aeronautical mobile service, unless allowed by special aeronautical regulations adopted by an aeronautical administrative conference to which all interested members of the Union have been invited. Such regulations must recognize the absolute priority of safety and control messages.

Proposals

U. S. S. R.

252. Replace under (2)b) in fine: parallels 30° North and 40° North by: parallels 30° North and 43° North.

France, French O. P. T. A.

255. Delete the following, at the end of the first sentence of the paragraph:

adopted by an aeronautical administrative conference to which all interested members of the Union have been invited.

Reasons

The E. A. R. C. Agreement has taken into account the provisions of the I. A. A. R. C.

United Kingdom

255. In the middle, read: regulations adopted by a conference to which all interested Members and Associate Members have been invited.

Reasons

Editorial.
§ 5. Frequencies in any band allocated to the aeronautical mobile (R) service are reserved for communications between any aircraft and those aeronautical stations primarily concerned with the safety and regularity of flight along national or international civil air routes.

§ 6. Frequencies in any band allocated to the aeronautical mobile (OR) service are reserved for communications between any aircraft and aeronautical stations other than those primarily concerned with flight along national or international civil air routes.

Section III. Aeronautical Radionavigation Service

§ 7. (1) Standard beam approach equipment, to be accommodated in the band 31.7 – 41 Mc/s in Region 1, consists of a localizer and markers used to assist aircraft in making landing approach.

1061 Denmark, Finland, Iceland, Norway, Sweden

258. Delete.

1062 France, French O.P.T.A., Morocco

258. Delete.

Reasons
This sub-paragraph is redundant.

1063 United Kingdom

258. Delete.

Reasons
Not required after 1961.

1064 Switzerland

258. Delete.

Reasons
Such equipment no longer exists.
<table>
<thead>
<tr>
<th>Present Provisions</th>
<th>Proposals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reasons</td>
</tr>
<tr>
<td></td>
<td>There is no call for this.</td>
</tr>
</tbody>
</table>

| 1066 Japan         | 258 to 261. Delete. |
|                    | Reasons |
|                    | No longer required, or contained in the Allocation Table. |

259 (2) The band 328.6 — 335.4 Mc/s is for the use of the Instrument Landing System (glide path).

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reasons</td>
</tr>
<tr>
<td></td>
<td>France, French O.P.T.A.:</td>
</tr>
<tr>
<td></td>
<td>See proposal 528.</td>
</tr>
<tr>
<td></td>
<td>Morocco:</td>
</tr>
<tr>
<td></td>
<td>This sub-paragraph has become unnecessary.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1068 United Kingdom</th>
<th>259. Delete.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reasons</td>
</tr>
<tr>
<td></td>
<td>Covered by a proposed new footnote to 109.</td>
</tr>
</tbody>
</table>

|                     | Reasons |
|                     | Unnecessary. |
Present Provisions

260  (3) The band 4200 – 4400 Mc/s is for the use of radio altimeters.

Proposals

1070 France, French O.P.T.A., Morocco

260. Delete.

Reasons
This paragraph is now redundant.

1071 U.S.S.R.

260. Delete.

Reasons
Unnecessary.

1072 United Kingdom

260 and 261. Delete.

Reasons
Covered by a proposed new footnote to 109 covering development of airborne electronic aids to air navigation.

261  (4) The band 5000 – 5250 Mc/s is for the use of instrument landing systems.

1073 France, French O.P.T.A., Morocco

261. Delete.

Reasons
This sub-paragraph is now redundant.

1074 U.S.S.R.

261. Delete.

Reasons
Unnecessary.
Present Provisions

Section IV. Maritime Mobile Service

262 § 8. Ship stations authorized to work in the band 415 – 535 kc/s must, as far as possible, transmit on the frequencies indicated in article 33 (see 730).

Proposals

1075 France, French O.P.T.A., Morocco

262. Delete: as far as possible.

Reasons

This deletion has also been proposed in Article 33 (730).

1076 United Kingdom

262. Delete: as far as possible.

Reasons

To accord with amendment proposed to 730.

1077

262. After this No. add the following new paragraph:

§ 8bis. In Region 1, frequencies assigned to stations of the 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:

1 605–1 625 kc/s Telegraphy exclusively.
1 625–1 670 kc/s Low-power Telephony
1 670–1 950 kc/s Coast stations.
1 950–2 045 kc/s Ship stations working to Coast stations.
2 065–2 176 kc/s Ship stations working to Coast stations.
2 176–2 188 kc/s Guárd-band for the distress frequency 2182 kc/s.
2 188–2 440 kc/s Intership working.
2 440–2 578 kc/s Ship stations working to Coast stations.
2 578–2 850 kc/s Coast stations.
3 155–3 340 kc/s Ship stations working to Coast stations.
3 340–3 400 kc/s Intership working.
3 500–3 600 kc/s Intership working.
3 600–3 800 kc/s Coast stations.

Reasons

To include 40 of the E.A.R.C. Agreement.
### Present Provisions

#### § 9. (1) The frequency bands allocated to the maritime mobile service between 4000 and 23000 kc/s (see article 5), are sub-divided into the following categories:

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Description</th>
<th>Categorization</th>
</tr>
</thead>
<tbody>
<tr>
<td>4063 - 4133 kc/s</td>
<td>Ship stations, telephony</td>
<td>a)</td>
</tr>
<tr>
<td>8195 - 8265 kc/s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12300 - 12400 kc/s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16460 - 16530 kc/s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22000 - 22070 kc/s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4368 - 4438 kc/s</td>
<td>Ship stations, telegraphy</td>
<td>c)</td>
</tr>
<tr>
<td>6200 - 6357 kc/s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8265 - 8476 kc/s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12400 - 12714 kc/s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16530 - 16952 kc/s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22070 - 22400 kc/s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4133 - 4238 kc/s</td>
<td>Ship stations, telegraphy</td>
<td>d)</td>
</tr>
<tr>
<td>6200 - 6357 kc/s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8265 - 8476 kc/s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12400 - 12714 kc/s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16530 - 16952 kc/s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22070 - 22400 kc/s</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### (2) Within the bands listed in (1), the following bands are reserved exclusively for calling:

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Description</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>4177 - 4187 kc/s</td>
<td>United Kingdom</td>
<td>Consequent upon proposals in Article 33 for additional wideband channels.</td>
</tr>
<tr>
<td>6265.5 - 6280.5 kc/s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8354 - 8374 kc/s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12531 - 12561 kc/s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16708 - 16748 kc/s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22220 - 22270 kc/s</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### (3) In Region 2, the frequency band 2088.5—2093.5 kc/s is reserved exclusively for calling (telegraphy only).

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Description</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>2091 kc/s</td>
<td>Japan</td>
<td>To cater for the calling frequency 2091 kc/s as adopted by the E.A.R.C. (Geneva, 1951).</td>
</tr>
</tbody>
</table>
Present Provisions

§ 10. In order to minimize interference in the frequency bands allocated for radiotelephony in the maritime mobile service between 4000 and 23000 kc/s administrations agree to apply the following rules:

a) radiotelephone emissions of ship stations, and of aircraft stations when communicating with stations of the maritime mobile service, shall comply with the frequency tolerance requirements prescribed for coast stations in appendix 3;

b) the recommendations for radiotelephony operation given in article 34, including duplex channelling, should be applied wherever possible.

Proposals

Japan (cont’d)

1080

269. After this No. add the following new sub-paragraph:

(3bis) In Region 3, the frequency band 2634–2642 kc/s is reserved exclusively for intership working frequency 2638 kc/s (telephony only).

Reasons

To cater for the intership working frequency 2638 kc/s as adopted by the E.A.R.C. (Geneva, 1951).

270 § 10. France, French O. P. T. A.

270 to 272. Delete.

Reasons

It would seem more appropriate to indicate in Appendix 3, without ambiguity, the frequency tolerances applicable to ship stations operating in telephony in the bands between 4000 and 23000 kc/s; further, the recommendations in Article 34 are sufficient.

1082 Japan

270 to 272. Delete.

Reasons

270 and 271 are no longer required because of the revision of frequency tolerances. 272 is not necessary in this article, as a provision to that effect is contained in the existing Article 34.
<table>
<thead>
<tr>
<th>Present Provisions</th>
<th>Proposals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1083</strong> United Kingdom</td>
<td><strong>1084</strong> Morocco</td>
</tr>
<tr>
<td><em>270 to 272. Delete.</em></td>
<td><em>270 to 276. Delete.</em></td>
</tr>
</tbody>
</table>

**Reasons**

271 can be catered for in Appendix 3, and 272 is considered superfluous. 270 therefore becomes unnecessary.

*See Appendix 3 for frequency tolerances. At present the bands reserved for radiotelephony should be used for radiotelephony alone.*

<table>
<thead>
<tr>
<th><strong>1085</strong> Australia (Commonwealth of)</th>
<th><strong>1086</strong> Denmark, Finland, Iceland, Norway, Sweden</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>273 to 276. Delete.</em></td>
<td><em>273 to 276. Replace these four Nos. by the following text:</em></td>
</tr>
</tbody>
</table>

§ 11. Radiotelegraph ship and coast stations are not permitted to operate in the bands allocated to the maritime mobile radiotelephone service between 4 000 and 23 000 kc/s.

**Reasons**

The provisions of 273, 274, 275 and 276 are redundant so far as this Administration is concerned and may therefore be deleted.

<table>
<thead>
<tr>
<th><strong>1087</strong> France, French O. P. T. A.</th>
<th><strong>1086</strong> Denmark, Finland, Iceland, Norway, Sweden</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>273 to 276. Delete.</em></td>
<td><em>273 to 276. Replace these four Nos. by the following text:</em></td>
</tr>
</tbody>
</table>

§ 11. Radiotelegraph ship and coast stations of bands allocated for radiotelephony is no longer admissible.
1088  Italy

273 to 276. Delete.

Reasons
The provisions of this paragraph were of a provisional nature, and we propose to omit them in the new RR.

1089  Japan

273. Replace the present text by the following:
§ 11. Radiotelegraph coast stations operating in the band between 4000 and 23 000 kc/s may share the frequencies allotted to the radiotelephone coast stations (see 265) on condition that harmful interference is not caused to the radiotelephone service.

Reasons
To relieve the operational difficulties of radiotelegraph coast stations in certain areas.

1090  United Kingdom

273 to 276. Delete.

Reasons
No longer necessary.

1091  Japan

274 to 276. Delete.

Reasons
These are transitional provisions, which are no longer required.

1092  United Kingdom

276. After this No. add the following new paragraph:
§ 11bis. Frequencies assigned to the maritime mobile service operating in the bands between 156 and
§ 12. The frequency 8364 kc/s is designated for the use of survival craft equipped to transmit on frequencies between 4000 and 23000 kc/s and wishing to establish, with stations of the maritime mobile service, communications relating to search and rescue.

Section V. Fixed Service

§ 13. Selection of Frequencies for the International Exchange of Police Information.

(1) The frequencies needed for the international exchange of information necessary to assist in the apprehension of criminals will be selected, if necessary, by special arrangement among the interested administrations in the bands of frequencies allocated to the fixed service.

(2) It is recognized that, in order to realize the maximum economy of frequencies, the International Frequency Registration Board should be consulted by the administrations concerned whenever such arrangements are under discussion on a regional or world-wide basis.

174 Mc/s (Article 5) must be in accordance with Article 34, Section IV.

Reasons

To provide for maritime VHF working.

1093 U. S. S. R.

276. Delete.

Reasons

Obsolete.

1094 Morocco

277. Replace the present text by the following:

§ 12. 8364 kc/s shall be the frequency used by lifeboats, life-rafts, and other safety craft transmitters for the A2 radiotelegraph transmission of distress messages and calls. This frequency shall not be assigned to a ship as normal calling frequency.

1095 United Kingdom


Reasons

To introduce an appropriate reference to the Convention.

1096 Switzerland

280. Delete.

Reasons

Already covered in 292, 293 and 295.
Present Provisions

281 § 14. Selection of Frequencies for the International Exchange of Synoptic Meteorological Information.

282 (1) The frequencies needed for the international exchange of synoptic meteorological information will be selected, if necessary, by special arrangement among the interested administrations in the bands of frequencies allocated to the fixed service.

283 (2) It is recognized that, in order to realize the maximum economy of frequencies, the International Frequency Registration Board should be consulted by the administrations concerned whenever such arrangements are under discussion on a regional or world-wide basis.

CHAPTER IV

Notification and Registration of Frequencies

International Frequency Registration Board

Proposals

1097 United Kingdom


Reasons
To introduce an appropriate reference to the Convention.

1098 Switzerland

283. Delete.

Reasons
Already covered in 292, 293 and 295.

1099 U. S. S. R.

Replace the present heading by the following:

CHAPTER IV

Notification and Registration of Frequencies
The International Frequency Registration Bureau (IFRB)

Reasons
See our proposals for changes in the Convention.

1100 Belgium

General proposal. All matters relating to membership of the International Frequency Registration Board, the qualifications demanded of its members and the procedures for their election, come within the province of the Plenipotentiary Conference and should not appear in the Regulations. Hence we suggest that everything relating to these matters should be deleted from the Regulations (297 and 299 to 307).
Present Provisions

ARTICLE 10

General Provisions

§ 1. The essential duties of the International Frequency Registration Board shall be:

a) to effect an orderly recording of frequency assignments made by the respective countries so as to establish, in accordance with the procedure provided for in these Regulations, the date, purpose and technical characteristics of each of these assignments, with a view to ensuring formal international recognition thereof;

286

b) to render advice to the members of the International Telecommunication Union with a view to the operation of the maximum practicable number of radio channels in those portions of the spectrum where international interference may occur.

Proposals

1101 France, French O.P.T.A.

General Proposal. Questions concerning the membership of the International Frequency Registration Board, the method of election and the qualifications of its members are within the competence of the Plenipotentiary Conference and should not be included in the RR. Hence we propose that all provisions relating to these questions (Nos. 297 and 299 to 307) be deleted.

1102 Belgium

Replace the present text by the following:

§ 1. The essential tasks of the International Frequency Registration Board are defined in the Convention as follows (Article 6, § 1).

Reasons

See proposal 1112.

1103 France, French O.P.T.A., Morocco

Replace the present text by the following:

§ 1. The essential duties of the International Frequency Registration Board are defined as follows in the Convention (Article 6, § 1).

Reasons

France, French O.P.T.A.:

See proposal 1112.

1104 China

Delete the whole of Article 10.

Reasons

More appropriate to be treated in the Convention.
1105 United Kingdom

284 to 286. Delete.

Reasons
The substance of these provisions is proper to, and covered in the Convention of Buenos Aires (Article 6).

1106 Belgium

285. Replace the present text by the following:

a) to effect an orderly recording of frequency assignments made by countries, so as to establish, in accordance with the procedure laid down in the Radio Regulations and the decisions of relevant Union conferences, the date...

(remainder unchanged).

Reasons
See proposal 1112.

1107 France, French O.P.T.A., Morocco

285. Replace: in these Regulations, by: in the Radio Regulations and in accordance with any decisions which may be taken by competent conferences of the Union.

Reasons
France, French O.P.T.A.:
See proposal 1112.

1108 Belgium

286. Replace the present text by the following:

b) to advise Members and Associate Members, with a view to the operation of as many radio channels as possible in those portions of the spectrum where harmful interference may occur.
1109 France, French O. P. T. A., Morocco

286. Replace the present text by the following:

b) to furnish advice to Members and Associate Members with a view to the operation of the maximum practicable number of radio channels in those portions of the spectrum where harmful interference may occur.

Reasons

France, French O. P. T. A.:
See proposal 1112.

1110 U. S. S. R.

286. Replace the present text by the following:

b) To render advice to the Members and Associate Members of the Union at their request with a view to the operation of as many radio channels as possible in those portions of the spectrum where harmful interference may occur.

Belgium, France, French O. P. T. A., Morocco

286. After this No. add the following two paragraphs:

1111,

b bis) to perform any additional duties, concerned with the assignment and utilization of frequencies, prescribed by a competent conference of the Union, or by the Administrative Council with the consent of the majority of the Members of the Union in preparation for or in pursuance of the decisions of such a conference;

1112

b ter) to maintain such essential records as may be related to the performance of its duties.
Present Provisions

The functions of the Board shall include:

a) the recording of radio frequency assignments made in accordance with 285 for inclusion in the Master International Frequency Register;

b) the compilation in collaboration with, and for publication in suitable form and at appropriate intervals by the Secretary General of the Union of frequency lists and other material relating to the assignment and use of frequencies;

c) the collection of such results of monitoring observations as administrations and organizations may be able to supply and the making of arrangements, through the Secretary General of the Union, for their publication in suitable form;

d) the periodic review of entries in the Frequency Register with a view to eliminating, in agreement with the country which made the assignment, inactive entries;

e) the investigation, at the request of one or more of the interested countries, of harmful interference and the formulation of recommendations with respect thereto;

f) the prosecution of studies of frequency utilization, and the recommendation to administrations, where appropriate, of adjustments in the use of frequencies in order to allow the establishment of new circuits;

Reasons

Belgium, France, French O.P.T.A.:
Although the essential duties of the Board are set forth in the Convention, it would be well to include them at the beginning of the article of the RR relating to the Board. The above text is that of article 6—paragraph 1, of the Buenos Aires Convention. Should the Plenipotentiary Conference make any amendments to this text, they would have to be inserted in the RR.

1113 United Kingdom


Reasons
Consequential on the deletion of 284.
Present Provisions

294 g) the formulation and reference to C.C.I.R. of all general technical questions arising from the Board's examination of frequency assignments; and

295 h) the participation in an advisory capacity, upon invitation by the organization or countries concerned in the formulation of service or regional agreements.

Belgium, France, French O.P.T.A., Morocco

295. Replace the present text by the following:

h) attendance in an advisory capacity, upon invitation by the organization or countries concerned, at conferences and meetings where questions relating to the assignment and the utilization of frequencies are discussed.

Reasons
Belgium, France, French O.P.T.A.:
The presence of members of the I.F.R.B. can be of use at such conferences even if they do not lead to a regional or service agreement.

§ 3. (1) The International Frequency Registration Board shall be composed of a body of eleven independent members, all nationals of different countries members of the Union.

Belgium, France, French O.P.T.A.

296. Replace the present text by the following:

§ 3. (1) The membership of the Board, the method of election and the qualifications of its members shall be as set forth in the Convention (Article 6).

Reasons
See the general proposal at the beginning of the article.

(2) The members of the Board shall be thoroughly qualified by technical training in the field of radio and shall possess practical experience in the assignment of frequencies.

(3) The members of the Board shall perform all their functions on a world-wide basis and in

United Kingdom

296 to 308. Delete.

Reasons
See proposal 1105.
the interest of the most effective use of the radio spectrum. In particular, they shall reach their decisions on frequency assignments (see 285) solely on an engineering basis.

However, for the more effective understanding of the problems coming before the Board under provision 286, each member shall be familiar with geographic, economic and demographic conditions within a particular area of the world.

(4) The members of the Board shall serve, not as representatives of their respective countries, or of a region, but as custodians of an international public trust.

(5) No member of the Board shall request or receive instructions relating to the exercise of his duties from any government or a member thereof or from any public or private organization or person. Furthermore, each member of the Union must respect the international character of the Board and of the functions of its members and shall refrain from any attempt to influence any of them in the performance of their functions.

No member of the Board nor any of its staff may take any part or have any financial interest whatsoever in any branch of telecommunication. 1)

2) The term “financial interest” is not to be construed as applying to the continuation of retirement benefits accruing in respect of previous employment or services.

§ 4. (1) Members of the Board shall be elected by each ordinary Administrative Radio Conference according to the procedure established by that Conference.

(2) Members of the Board elected by said Conference shall take up their duties on the date determined by that Conference. They shall remain in office until the members elected by the following Conference have taken up their duties.

(3) Each Conference shall determine the number of the members of the Board and the method of their election with a view to ensuring a balanced selection of the members from the various parts of the world.
306 (4) Members of the Board shall be eligible for reelection.

307 (5) Should a member of the Board relinquish his duties before the end of his normal term of office, he shall be replaced as soon as possible by a new member from the country to which the former member belonged. If this country is unable to provide a replacement member, the Administrative Council shall appoint a new member from a country belonging to the same region.

308 § 5. The Board shall have the assistance of a small specialized secretarial staff, who shall work under the direction of the Chairman in organizing and carrying out the work of the Board. The technical members of this staff shall be selected by the Board; but the staff shall be attached to the General Secretariat of the Union for general administrative purposes.

1120 Belgium, France, French O.P.T.A.

308. Replace the present text by the following:

§ 5. The Board shall have the assistance of a specialized secretarial staff, working under the direction of the Chairman in organizing and carrying out the work of the Board.

Reasons

a) The adjective “small”, before the word “specialized” has been deleted for experience has shown it to be inappropriate.

b) The second sentence of the number dealing with the recruiting and the status of the Board secretarial staff has been deleted as this question is dealt with in the Convention [Article 8 — paragraph 2b)].

1121 Morocco

308. Replace the present text by the following:

§ 5. The Board shall have the assistance of a specialized secretarial staff working under the direction of the Chairman in organizing and carrying out the work of the Board.

Reasons

Status of the secretariat as indicated in Article 8 of the Convention.
ARTICLE 11

Procedure in Connection with the International Frequency Registration Board

1122  Note by the S.G.

With regard to the terms Master Radio Frequency Record and Radio Frequency Record, the provisions of No. 205 of the E.A.R.C. Agreement, reproduced below, should be borne in mind:

205. E.A.R.C.
§ 2. "The terms 'Master Radio Frequency Record' and 'Radio Frequency Record', in this Agreement, shall have the same significance as the terms 'Master International Frequency Register' and 'International Frequency List' (List I, Appendix 6), respectively, in the Radio Regulations, until otherwise decided."

1123  Belgium, France, French O. P. T. A., Italy

GENERAL COMMENTS

1) This proposal is submitted in three sections:

Section I. Procedure applicable to frequency assignments in bands for which plans or lists have been adopted.

Section II. Procedure applicable to frequency assignments in the other bands.

Section III. Joint provisions.

2) It is desirable that a new International List of Frequencies covering the whole of the frequency bands between 10 kc/s and 27.5 Mc/s (or 41 Mc/s) should be adopted at the next Administrative Radio Conference.

If this were the case, Sections I and III only of the present proposal should be retained, Section II being then redundant.

3) It is with an eye to the very serious difficulties likely to be encountered in the preparation of a complete new List that the present proposal has been submitted. Two separate procedures are suggested:

— a procedure applicable to frequency assignments in frequency bands for which plans or lists have been adopted (Section I),

— a procedure applicable to frequency assignments in the other bands (Section II).

In this latter case, the proposal would stand as a whole.

4) We wish to present the new Article 11 as a whole and request that our proposal be not split up into numbers.
### Present Provisions

Belgium, France, French O.P.T.A., Italy (cont'd)

<table>
<thead>
<tr>
<th>No. in the RR</th>
<th>No.</th>
<th>Proposed Amendments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1124</td>
<td>Heading</td>
<td>Procedure for the Recording of Frequency Assignments in the Master International Frequency Register</td>
</tr>
<tr>
<td></td>
<td>Reasons</td>
<td>The present title of Article 11 is too restrictive as this Article contains specifications some of which apply to administrations and others to the I.F.R.B.</td>
</tr>
<tr>
<td></td>
<td>Section I. Procedure Applicable to Frequency Assignments in Bands for which Plans or Lists have been Adopted.</td>
<td></td>
</tr>
<tr>
<td>309</td>
<td>§ 1. (1)</td>
<td>All of the frequency assignments to fixed, land, broadcasting, radionavigation land and standard frequency stations to be used for international communication or capable of causing harmful interference with any service of another country shall be notified to the Board and shall be recorded in the Master International Frequency Register in either of two columns.</td>
</tr>
<tr>
<td>310</td>
<td>(2)</td>
<td>Any frequency assignment which is in full conformity with all provisions of the Radio Regulations shall be recorded in the REGISTRATION COLUMN.</td>
</tr>
<tr>
<td>311</td>
<td></td>
<td>Such a frequency assignment shall have the right to international protection from harmful interference.</td>
</tr>
<tr>
<td>312</td>
<td>(3)</td>
<td>Any frequency assignment which, in any measure, contravenes the provisions of the Radio Regulations, but on the use of which the notifying country insists, shall be recorded in the NOTIFICATION COLUMN.</td>
</tr>
</tbody>
</table>

### Proposals

Belgium, France, French O.P.T.A., Italy (cont'd)

<table>
<thead>
<tr>
<th>No. in the RR</th>
<th>No.</th>
<th>Proposed Amendments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1127</td>
<td>309</td>
<td>11-01</td>
</tr>
<tr>
<td>1128</td>
<td>310</td>
<td>11-02</td>
</tr>
<tr>
<td>1129</td>
<td>311</td>
<td>11-03</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Such a frequency assignment shall have the right to international protection from harmful interference resulting from assignments recorded later in the Master International Frequency Register or from assignments not recorded therein.</td>
</tr>
<tr>
<td></td>
<td>Reasons</td>
<td>To make the text more intelligible.</td>
</tr>
<tr>
<td>1130</td>
<td>312</td>
<td>11-04</td>
</tr>
</tbody>
</table>
Present Provisions

313 Such a record shall be made in order that the members of the International Telecommunication Union may take into account the fact that the frequency in question is in use; and an entry in the NOTIFICATION COLUMN shall not give the right of international protection to that frequency assignment except as provided for in 329.

Section II. Notification of Frequency Assignments

314 § 2. (1) In order to obtain international recognition of a frequency assignment, each country, upon the assignment by it of a frequency to a fixed, land, broadcasting, radionavigation land, or standard frequency station within its jurisdiction or control, or upon changing an existing frequency assignment or any of the particulars (specifically set forth in 318), shall notify the Board by any means of suitable record communication.

315 (2) Similar notice shall be given of the assignment of a frequency to be used for reception by a land station in the operation of a particular service with mobile stations.

316 (3) Specific frequencies prescribed by the present Regulations for common use by stations of a given service (for example, 500 kc/s) shall not be notified to the Board.

317 § 3. Notification under the provisions of § 2 of this article must be made to the Board before the frequency is brought into use and in time to enable administrations to make such representations as seem necessary to them to ensure the proper working of their services. However, where an urgent requirement must be met and it is clear that the use of a frequency assignment will not create international interference, the assignment need not be notified in advance.
### Present Provisions

**§ 4.** (1) Each notice shall include at least the following information:

- Name of the notifying country;
- Frequency;
- Class of station;
- Location of station;
- Class of emission and bandwidth;
- Power;
- Hours of operation;
- Points of intended reception where applicable (otherwise area to which communications are directed);
- Date of use; and
- If such assignment is made pursuant to a service or regional agreement, the identity of such agreement.

It is recommended that the notifying country also include the additional data called for in appendix 1 and may include other information.

**§ 4.** (2) Preliminary telegraphic notices may be transmitted to the Board in brief form including at least the frequency, location and class of station, advising that a complete notice is being transmitted.

**§ 4.** (3) The date of first receipt by the Board of such notice in either complete or preliminary form shall establish the order of its consideration; provided, however, that the date of receipt of a preliminary notice shall be applicable only where the complete notice is received by the Board within 30 days thereafter.  

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### Proposals

<table>
<thead>
<tr>
<th>No. in the</th>
<th>No.</th>
<th>Proposed Amendments</th>
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<tbody>
<tr>
<td>RR</td>
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<tr>
<td>1138</td>
<td>319</td>
<td>11–11</td>
</tr>
<tr>
<td>1139</td>
<td>320</td>
<td>11–12</td>
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<td>1140</td>
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<tr>
<td>1141</td>
<td>321</td>
<td>11–13</td>
</tr>
<tr>
<td>1142</td>
<td>322</td>
<td>11–14</td>
</tr>
<tr>
<td>1143</td>
<td>323</td>
<td>11–15</td>
</tr>
<tr>
<td>1144</td>
<td>324</td>
<td>11–16</td>
</tr>
</tbody>
</table>

C. Procedure for the Examination of Notices.

A country which has not communicated with the Board within four weeks at the latest of the date of the receipt of the circular will be assumed to have no objection or comment.

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<thead>
<tr>
<th>No. in the</th>
<th>No.</th>
<th>Proposed Amendments</th>
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<tbody>
<tr>
<td>RR</td>
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<tr>
<td>1145</td>
<td>325</td>
<td>11–17</td>
</tr>
<tr>
<td>1146</td>
<td>326</td>
<td>11–18</td>
</tr>
<tr>
<td>1147</td>
<td>327</td>
<td>11–19</td>
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<tr>
<td>1148</td>
<td>328</td>
<td>11–20</td>
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<tr>
<td>1149</td>
<td>329</td>
<td>11–21</td>
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<tr>
<td>1150</td>
<td>330</td>
<td>11–22</td>
</tr>
<tr>
<td>1151</td>
<td>331</td>
<td>11–23</td>
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<tr>
<td>1152</td>
<td>332</td>
<td>11–24</td>
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<tr>
<td>1153</td>
<td></td>
<td></td>
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<tr>
<td>1154</td>
<td>333</td>
<td>11–25</td>
</tr>
</tbody>
</table>

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**§ 5.** Upon the receipt of a complete notice, the Board shall record it; the date of the receipt of each notice shall be acknowledged immediately to the notifying country.

**§ 6.** (1) At intervals of one week, the Board shall circulate by air mail in the form of a circular addressed to all countries, members of the Union, certified copies of all notices received by it.

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**Section III. Procedure for the Examination of Notices**

**§ 7.** In the event of undue delay in the delivery of a notice by post or telegraph, that event, if and when verified, shall not in any way prejudice the priority of consideration of the registration for the country which submitted the notice.
Present Provisions

323 (2) Any country which wishes to present objections or comments with regard to this notice, shall notify the Board by telegram of the main basis of its objection or comment within two weeks of the date of the receipt of the circular in which the details of the notice are published.

324 (3) Any country which has not communicated with the Board within this two-week period will be deemed to have no objection or comment.

325 (4) Within a further period of two weeks a letter shall be sent to the Board amplifying the objections or comments already telegraphed.

326 § 7. (1) The Board shall examine each notice with respect to:

327 a) its conformity with the table and the rules for allocation of frequencies;

328 b) its conformity with the other provisions of the Convention and the Radio Regulations (with the exception of those relating to the probability of harmful interference);

329 c) the probability of harmful interference either to any service rendered by a station for which a frequency assignment has already been recorded in the Master International Frequency Register with a date in the REGISTRATION COLUMN or to a service operating in accordance with the provisions of 327 and 328, on a frequency recorded with a date in the NOTIFICATION COLUMN, but which has not, in fact, caused harmful interference.

330 (2) Where appropriate, the Board shall also examine the notice as regards its conformity with a regional or a service agreement.

331 § 8. In examining notices of assignment of frequencies to stations the Board shall bear in mind that in many instances, several stations may share the use of a single frequency.

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Proposals

Belgium, France, French O.P.T.A., Italy (cont’d)

<table>
<thead>
<tr>
<th>No. in the RR</th>
<th>No.</th>
<th>Proposed Amendments</th>
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</thead>
<tbody>
<tr>
<td>1155</td>
<td>11-26</td>
<td><em>Read: Finding favourable with respect to 11-19, 11-20 and 11-21 (remainder unchanged).</em></td>
</tr>
<tr>
<td>1156</td>
<td>11-27</td>
<td><em>Read: Findings unfavourable with respect to 11-20 (remainder unchanged).</em></td>
</tr>
<tr>
<td>1157</td>
<td>11-28</td>
<td><em>Read: Finding favourable with respect to 11-19 and 11-20 but unfavourable with respect to 11-21 (remainder unchanged).</em></td>
</tr>
<tr>
<td>1158</td>
<td>11-29</td>
<td><em>Replace: 334 by: 11-26.</em></td>
</tr>
<tr>
<td>1159</td>
<td>11-30</td>
<td><em>Unchanged.</em></td>
</tr>
</tbody>
</table>
| 1160          | 11-31 | *Add the following new sub-paragraph:*  

If, however, the Board should find, after examination of a notice, that there is a probability of harmful interference, but that it is slight or only occurs during short periods of the day or of the solar cycle, the assignment shall be recorded in the Master International Frequency Register and the date shall be shown in the REGISTRATION COLUMN. However, a note shall be appended to show that a probability of interference exists and hence precautions must be taken in the use of the assignment to avoid harmful interference to assignments already appearing in the Register.
Present Provisions

§ 9. When a service or a regional agreement has been concluded, the Board shall be informed of the details of this agreement. The procedure to be followed in connection with frequency assignments made pursuant to such service or regional agreement shall be as specified in § 7 of this article except that the Board shall not consider the question of interference among the parties to such an agreement.

Section IV. Recording of Frequency Assignments

§ 10. (1) Depending upon the findings of the Board subsequent to the examination prescribed in § 7, further action shall be as follows:

(2) Finding favourable with respect to 327, 328 and 329.

The assignment shall be recorded in the Master International Frequency Register, the date of receipt of the first notice by the Board being shown in the REGISTRATION COLUMN.

(3) Findings unfavourable with respect to 328.

The notice shall be returned immediately by air mail to the notifying country with the reasons of the Board for this finding.

(4) Finding favourable with respect to 327 and 328 but unfavourable with respect to 329.

The notice shall be returned immediately by air mail to the notifying country, with the reasons of the Board for this finding and with such suggestions as the Board may be able to offer with a view to the satisfactory solution of the problem.

If the notifying country resubmits the notice with modification which results after re-examination in a favourable finding by the Board, the assignment shall be recorded in the Register as provided under 334, the date of receipt by the Board of the modified notice being shown in the REGISTRATION COLUMN.

Should the notifying country, however, insist upon reconsideration of the original notice unchanged, and should the Board's finding remain unchanged, the assignment shall be recorded in the Mas-

Proposals

Belgium, France, French O.P.T.A., Italy (cont'd)

<table>
<thead>
<tr>
<th>No in the RR</th>
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<th>Proposed Amendments</th>
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</thead>
<tbody>
<tr>
<td>1161</td>
<td>339</td>
<td>11-32 Read: Finding favourable with respect to 11–20 and 11–21 but unfavourable with respect to 11–19 (remainder unchanged).</td>
</tr>
<tr>
<td>1162</td>
<td>346</td>
<td>11-33 Add the following new sub-paragraph: Amendments to existing assignments:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>When a change is made in the basic data as specified in 11–10, recorded against a frequency assignment, this amendment shall be notified to the Board, which shall study it as though it were a new assignment. Should the Board arrive at the conclusion that this change of data will probably cause no harmful interference to a frequency assignment already recorded, the amended assignment shall retain the original date of registration. Should this not be the case, the date shown is that at which assignment was amended.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reasons</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The new paragraph is prompted by 346, wrongly placed under</td>
</tr>
</tbody>
</table>
Present Provisions

The frequency assignment shall be recorded in the Master International Frequency Register, the date of receipt of the first notice by the Board being shown in the NOTIFICATION COLUMN. However, if harmful interference to the reception of any station operating in accordance with the frequency allocation table is caused by the use of this frequency assignment, the station using this frequency assignment must immediately suspend operations upon receipt of advice of this harmful interference.

Section V. Review of Findings

§ 11. (1) The reconsideration of a finding by the Board may be requested:
— by the notifying country, or
— by any other country interested in the question, but in the latter case only on the grounds of harmful interference either anticipated or actual.

(2) Prior to reconsideration, the Board shall circulate by air mail such requests to all countries members of the Union. The latter shall telegraph their objections or comments within two weeks of receipt of the circular and shall, within a further two-week period, dispatch a letter to the Board amplifying their telegram.

(3) The Board, in the light of all the data thus received shall render such further findings as the circumstances warrant.

§ 12. (1) If, in accordance with provisions 336 and 338 an entry has been made in the Master International Frequency Register with the date in the NOTIFICATION COLUMN, the Board, upon request of the notifying country, and after the station has been in operation for a reasonable period, shall review the matter, first having given the interested countries an opportunity to present their views.

Proposals

Belgium, France, French O.P.T.A., Italy (cont'd)

<table>
<thead>
<tr>
<th>No. in RR</th>
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<th>Proposed Amendments</th>
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<tbody>
<tr>
<td>339</td>
<td></td>
<td>(5) Finding favourable with respect to 328 and 329 but unfavourable with respect to 327.</td>
</tr>
<tr>
<td>340</td>
<td>11-34</td>
<td>Unchanged.</td>
</tr>
<tr>
<td>341</td>
<td>11-35</td>
<td>Unchanged.</td>
</tr>
<tr>
<td>342</td>
<td>11-36</td>
<td>Replace the present text by the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The Board shall re-examine the question and shall reach its finding in the light of 11-19, 11-20 and 11-21.</td>
</tr>
<tr>
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<td></td>
<td>Reasons</td>
</tr>
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<td></td>
<td>The new text is clearer than the existing one.</td>
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<tr>
<td></td>
<td></td>
<td>Replace the present text by the following:</td>
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<tr>
<td></td>
<td></td>
<td>If, in accordance with 11-29 and 11-30 an entry has been made in the Master International Frequency Register with the date in the NOTIFICATION COLUMN, the Board, upon request of the notifying country, and after the station has been in</td>
</tr>
</tbody>
</table>
Present Provisions

344  (2) If the Board's finding is then favourable, the date shall be transferred from the NOTIFICATION COLUMN to the REGISTRATION COLUMN without change. If the finding with respect to probable harmful interference is still unfavourable, the date shall be left in the NOTIFICATION COLUMN.

345  (3) If, on the contrary, the Board makes a finding that harmful interference actually exists, it shall be "prima facie" evidence that the operation is in violation of these Regulations. If, however, after not more than six years of operation, the Board has not made a finding of the existence of harmful interference, the date shall be transferred to the REGISTRATION COLUMN without change.

346  § 13. Should a change be made in the basic data as specified in 318, recorded against a frequency assignment, the latter shall be subject to new registration, the record specifying the new data and the date of their receipt by the Board. However, should the Board arrive at the conclusion that the use of the frequency assignment based on the new data will not cause harmful interference with the service of a station for which a frequency assignment has been recorded, the amended assignment shall retain the original date of registration.

Section VI. Cancellation of Frequency Recordings

347  § 14. (1) As a general rule, the Board, after consulting the notifying country, shall cancel the recording of any frequency assignment if it finds that regular operation has not begun within two years following the date of its receipt of the first notice, unless it finds that the circumstances warrant the retention of the notice, in which case the entry may be retained for not more than one further period of one year.

348  (2) Exceptionally, however, and only in the case of a frequency assigned to a working service for use during years of high or low sunspot activity if the frequency has not been brought into use when three years have elapsed from the date of receipt of the first notice, and the Board finds, after consultation with the notifying country, that the circumstances warrant the

Proposals

Belgium, France, French O.P.T.A., Italy (cont'd)

<table>
<thead>
<tr>
<th>No. in the RR</th>
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<tbody>
<tr>
<td>344</td>
<td>11-38</td>
<td>Delete the second sentence.</td>
</tr>
<tr>
<td>345</td>
<td>11-39</td>
<td>Replace the present text by the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If the Board still feels that interference is likely, the date shall remain in the NOTIFICATION COLUMN. Should the Board find that harmful interference is not only probable but certain, this finding shall be &quot;prima facie&quot; evidence that the station is operating contrary to the present RR.</td>
</tr>
</tbody>
</table>

| 1168 | 11-40 | If, in spite of a finding to the effect that harmful interference is likely, the Board finds that this interference did not actually occur, though the assignment was in fact utilised throughout all phases of the solar cycle, the date shall be transferred to the REGISTRATION COLUMN without change. |
Present Provisions

retention of the notice, the entry may be retained for not more than one further period of three years.

349. (3) Frequencies assigned to a working service for use during years of high or low sunspot activity may be notified to the Board for any other service for use on an interim basis and without prejudice to the earlier frequency assignment.

350. § 15. In case of permanent discontinuance of the use of any listed frequency, the notifying country shall inform the Board within three months of such discontinuance, whereupon the entry shall be removed from the Register.

351. § 16. If the Board finds that a recorded frequency assignment has been out of use for three years it shall, in agreement with the notifying country, cancel the entry in the Register except in the case of a frequency intended for re-use by a working service during years of high or low sunspot activity, in which case the entry may be retained for one further period of three years.

Section VII. Studies and Recommendations

352. § 17. If it is requested by any country member of the Union and if the circumstances appear to warrant, the Board shall make a study and issue a report on the following problems of frequency utilization:

353. a) in cases arising under 336 as to a possible alternative frequency assignment to avoid probable interference; and

354. b) in cases where a need arises for additional channels within a specific portion of the frequency spectrum.

355. § 18. If one or more of the interested countries so request, the Board shall investigate any contravention or non-observance of these Regulations or any harmful interference and shall issue through the Secretary General of the Union a report containing its findings and recommendations for the solution of the problem.

<table>
<thead>
<tr>
<th>No. in the RR</th>
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<th>Proposed Amendments</th>
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<tbody>
<tr>
<td>346</td>
<td></td>
<td>Reasons</td>
</tr>
<tr>
<td></td>
<td>a) 345 not being clear, it has been necessary to redraft it; this has resulted in a different distribution between 11-38, 11-39 and 11-40;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) the reference to “six years of operation” did not ensure that no interference would take place during the whole of the solar cycle.</td>
<td></td>
</tr>
<tr>
<td>309</td>
<td>11-41</td>
<td>Delete in fine: in either of two columns.</td>
</tr>
<tr>
<td>310</td>
<td>11-42</td>
<td>Replace the present text by the following:</td>
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<tr>
<td></td>
<td>For any frequency assignment which is in full conformity with all provisions of the Radio Regulations a date shall be shown in the PUTTING INTO SERVICE COLUMN.</td>
<td></td>
</tr>
<tr>
<td>311</td>
<td>11-43</td>
<td>Replace the present text by the following:</td>
</tr>
<tr>
<td></td>
<td>Such a record is made in order that Administrations may choose their future assignments so as not to cause harmful interference to that assignment.</td>
<td></td>
</tr>
</tbody>
</table>
Present Provisions

§ 19. If the Board finds that a change in the frequency of one or more stations will:

a) accommodate a new station;

b) facilitate the solution of an interference problem; or

c) otherwise facilitate the more effective use of a particular portion of the radio spectrum,

and if such change is acceptable to the country or countries directly concerned, the change in frequency shall be recorded in the Master International Frequency Register without change in the original date or dates.

Section VIII. Availability of Records

§ 20. The Board shall make available to the interested countries, for their information, and to the Secretary General of the Union for prompt publication, all reports of its findings and reasons therefor.

§ 21. In case a country member of the Union avails itself of the provisions of article 25 of the Convention, the Board shall, upon request, make its records available for such proceedings as are prescribed in the Convention for the settlement of international disagreements.

Proposals

Belgium, France, French O.P.T.A., Italy (cont'd)

<table>
<thead>
<tr>
<th>No. in the RR</th>
<th>No.</th>
<th>Proposed Amendments</th>
</tr>
</thead>
<tbody>
<tr>
<td>312 11-44</td>
<td></td>
<td>Replace the present text by the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>For any frequency assignment which, in any measure, contravenes the provisions of the Radio Regulations, a date shall also be shown in the PUTTING INTO SERVICE COLUMN and further, a special sign shall be shown in the REMARKS COLUMN to distinguish the assignment from the assignment referred to in 11-42.</td>
</tr>
<tr>
<td>313 11-45</td>
<td></td>
<td>Replace the present text by the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Such an entry shall be made in order that Members of the I.T.U. may take into account the fact that the frequency is in use, but it shall not give any right of protection to that assignment except as provided for in 11-61.</td>
</tr>
<tr>
<td>315 11-47</td>
<td></td>
<td>Unchanged.</td>
</tr>
<tr>
<td>316 11-48</td>
<td></td>
<td>Unchanged.</td>
</tr>
</tbody>
</table>
### Proposed Amendments

<table>
<thead>
<tr>
<th>No. in the RR</th>
<th>No. in the RR</th>
<th>Proposed Amendments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1181</td>
<td>317 11-49</td>
<td>Replace the present text by the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>§ 3a. Notification under § 2a of this Article shall reach the Board, in principle, before the frequency is brought into use, but not more than three months beforehand. However, where an urgent requirement must be met and it is clear that the use of a frequency assignment will not create international interference, the assignment need not be reported in advance.</td>
</tr>
<tr>
<td>1182</td>
<td>318 11-50</td>
<td>Replace: Hours of operation by:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hours of operation of each of the circuits (towards each locality or area), for which the frequency is utilized.</td>
</tr>
<tr>
<td>1183</td>
<td>319 11-51</td>
<td>Unchanged.</td>
</tr>
<tr>
<td>1184</td>
<td>320 11-52</td>
<td>Unchanged.</td>
</tr>
<tr>
<td>1185</td>
<td></td>
<td>C. Procedure for the Examination of Notices.</td>
</tr>
<tr>
<td>1186</td>
<td>321 11-53</td>
<td>Unchanged.</td>
</tr>
<tr>
<td>1187</td>
<td>322 11-54</td>
<td>Unchanged.</td>
</tr>
<tr>
<td>1188</td>
<td>323 11-55</td>
<td>Unchanged.</td>
</tr>
<tr>
<td>No. in the RR</td>
<td>No.</td>
<td>Proposed Amendments</td>
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<tr>
<td>--------------</td>
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</tr>
<tr>
<td>1189</td>
<td>324</td>
<td>Replace the present text by the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A country which has not communicated with the Board within four weeks at the latest from the date of receipt of the circular, shall be assumed to have no objection or comment.</td>
</tr>
<tr>
<td>1190</td>
<td>325</td>
<td>Unchanged.</td>
</tr>
<tr>
<td>1191</td>
<td>326</td>
<td>Unchanged.</td>
</tr>
<tr>
<td>1192</td>
<td>327</td>
<td>Unchanged.</td>
</tr>
<tr>
<td>1193</td>
<td>328</td>
<td>Unchanged.</td>
</tr>
<tr>
<td>1194</td>
<td>329</td>
<td>Replace by:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c) the probability of harmful interference either to a frequency assignment which has been recorded in the Master International Frequency Register in accordance with 11–42 or to an assignment recorded in accordance with 11–44, subject to the provisions of 11–59 and 11–60 and which has not, in fact, caused harmful interference.</td>
</tr>
<tr>
<td>1195</td>
<td>330</td>
<td>Unchanged.</td>
</tr>
<tr>
<td>1196</td>
<td>331</td>
<td>Unchanged.</td>
</tr>
<tr>
<td>1197</td>
<td>332</td>
<td>Unchanged.</td>
</tr>
<tr>
<td>No. in the RR</td>
<td>No.</td>
<td>Proposed Amendments</td>
</tr>
<tr>
<td>--------------</td>
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<td>---------------------</td>
</tr>
<tr>
<td>1198</td>
<td></td>
<td><strong>D. Recording of Frequency Assignments.</strong></td>
</tr>
<tr>
<td>1199</td>
<td>333</td>
<td><strong>Unchanged.</strong></td>
</tr>
</tbody>
</table>
| 1200         | 344  | **Replace the present text by the following:**  

Finding favourable with respect to 11-59, 11-60 and 11-61.  

The assignment shall be recorded in the Master International Frequency Register, the date of putting into service given on the notice being shown in the PUTTING INTO SERVICE COLUMN. However, if this date is more than ten days previous to the date at which the Board received the notice, the date recorded in the Register must be prior by ten days to the date of receipt by the Board.  

| 1201         | 335  | **Read:**  

Findings unfavourable with respect to 11-60 (remainder unchanged). |
| 1202         | 336  | **Read:**  

Finding favourable with respect to 11-59 and 11-60, but unfavourable with respect to 11-61 (remainder unchanged). |
| 1203         | 337  | **Replace the present text by the following:**  

If the notifying country resubmits the notice with modifications which result, after
<table>
<thead>
<tr>
<th>No. in the RR</th>
<th>No.</th>
<th>Proposed Amendments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1204</td>
<td>338</td>
<td>11-70</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Replace the present text by the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Should the notifying country, however, insist upon reconsideration of the original notice unchanged, the assignment shall be recorded in the Master International Frequency Register, the date of putting into service of this assignment being shown in the PUTTING INTO SERVICE COLUMN but a special sign shall appear in the REMARKS COLUMN to indicate that the assignment has been recorded in the Register because the Administration has insisted in spite of the Board's unfavourable finding.</td>
</tr>
<tr>
<td>1205</td>
<td></td>
<td>11-71</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If, however, the Board, after examination of a notice, should find that harmful interference is probable but that this interference would be slight, or can only occur during short periods of the day or of the solar cycle, the assignment shall be recorded in the PUTTING INTO SERVICE COLUMN.</td>
</tr>
</tbody>
</table>
However, an observation shall then be included to show that this probability exists and hence precautions must be taken in the use of the assignment to avoid harmful interference to assignments already recorded in the Master International Frequency Register.

Replace the present text by the following:

Finding favourable with respect to 11–60 and 11–61 but unfavourable with respect to 11–59.

The frequency assignment shall be recorded in the Master International Frequency Register, the date of putting into service being shown in the PUTTING INTO SERVICE COLUMN, and an appropriate sign shown in the REMARKS COLUMN. However, if harmful interference to any station operating in accordance with the frequency allocation table is caused by the use of this assignment, the station using the assignment shall, when informed of such harmful interference, immediately suspend operations.

Replace by:

Amendments to existing Assignments:
Should a change be made in the basic data, as specified
Present Provisions

Proposals

Belgium, France, French O.P.T.A., Italy (cont'd)

<table>
<thead>
<tr>
<th>No. in the RR</th>
<th>No.</th>
<th>Proposed Amendments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>in 11–50, recorded against a frequency assignment, the Board shall be notified of this amendment and shall study it as though it were a new assignment. Should the Board arrive at the conclusion that this change of data is unlikely to cause harmful interference to a frequency assignment already recorded, the amended assignment shall retain the original date of registration. On the contrary, should this not be the case, the date shown shall be that on which the assignment was amended.</td>
</tr>
</tbody>
</table>

1208

1209 340 11–74 Unchanged.

1210 341 11–75 Unchanged.

1211 342 11–76 Replace the present text by the following:

(3) The Board shall review the question in the light of 11–59, 11–60 and 11–61 and shall find accordingly.

1212 343 11–77 Replace the present text by the following:

§ 12a (1) If, in accordance with 11–68 and 11–70, an entry has been made in the
Present Provisions

<table>
<thead>
<tr>
<th>No. in the RR</th>
<th>No.</th>
<th>Proposed Amendments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Master International Frequency Register with a special sign in the REMARKS COLUMN, the Board, upon request by the notifying country, and after the station has been in operation for a reasonable period, shall review the matter, having first consulted the Administrations concerned.</td>
</tr>
<tr>
<td>1213</td>
<td>344</td>
<td>11-78 Replace the present text by the following: (2) If the Board's finding is then favourable, the special sign shall be deleted in the REMARKS COLUMN.</td>
</tr>
<tr>
<td>1214</td>
<td>345</td>
<td>11-79 Replace the present text by the following: (3) If the Board still finds that harmful interference is likely, no amendment shall be made in the entry appearing in the Master International Frequency Register. If the Board finds that harmful interference is not only probable but certain, this shall be &quot;prima facie&quot; evidence that the station is operating contrary to these Regulations.</td>
</tr>
<tr>
<td>1215</td>
<td></td>
<td>11-80 (4) If, nevertheless, the Board observes that no harmful interference actually occurred, even though the as-</td>
</tr>
<tr>
<td>No. in the RR</td>
<td>No.</td>
<td>Proposed Amendments</td>
</tr>
<tr>
<td>--------------</td>
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<td>---------------------</td>
</tr>
<tr>
<td>1216</td>
<td>346</td>
<td>Delete.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reasons</td>
</tr>
<tr>
<td></td>
<td></td>
<td>See 11-73.</td>
</tr>
<tr>
<td>1217</td>
<td></td>
<td>Section III. Common Provisions.</td>
</tr>
<tr>
<td>1218</td>
<td></td>
<td>A. Cancellation of Frequency Recordings.</td>
</tr>
<tr>
<td>1219</td>
<td>347</td>
<td>11–81 Unchanged.</td>
</tr>
<tr>
<td>1220</td>
<td>348</td>
<td>11–82 Unchanged.</td>
</tr>
<tr>
<td>1221</td>
<td>349</td>
<td>11–83 Unchanged.</td>
</tr>
<tr>
<td>1222</td>
<td>350</td>
<td>11–84 Unchanged.</td>
</tr>
<tr>
<td>1223</td>
<td>351</td>
<td>11–85 Unchanged.</td>
</tr>
</tbody>
</table>

Assignment was used throughout all phases of the solar cycle, the special sign shall be deleted from the REMARKS COLUMN.
<table>
<thead>
<tr>
<th>No. in the RR</th>
<th>No.</th>
<th>Proposed Amendments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1224</td>
<td></td>
<td>B. Studies and Recommendations.</td>
</tr>
<tr>
<td>1225</td>
<td>352</td>
<td>11-86 Unchanged.</td>
</tr>
<tr>
<td>1226</td>
<td>353</td>
<td>11-87 Replace 336 by 11-28 or 11-68.</td>
</tr>
<tr>
<td>1227</td>
<td>354</td>
<td>11-88 Unchanged.</td>
</tr>
<tr>
<td>1228</td>
<td>355</td>
<td>11-89 Unchanged.</td>
</tr>
<tr>
<td>1229</td>
<td>356</td>
<td>11-90 Unchanged.</td>
</tr>
<tr>
<td>1230</td>
<td>357</td>
<td>11-91 Unchanged.</td>
</tr>
<tr>
<td>1231</td>
<td>358</td>
<td>11-92 Unchanged.</td>
</tr>
<tr>
<td>1232</td>
<td>359</td>
<td>11-93 c) Unchanged.</td>
</tr>
<tr>
<td>1233</td>
<td>359</td>
<td>11-94 Second sub-paragraph, read: and if such change is acceptable to the country or countries directly concerned, the change in frequency shall be recorded in the Master International Frequency Register without change in the original date or dates.</td>
</tr>
<tr>
<td>1234</td>
<td></td>
<td>C. Availability of Records.</td>
</tr>
<tr>
<td>1235</td>
<td>360</td>
<td>11-95 Unchanged.</td>
</tr>
<tr>
<td>1236</td>
<td>361</td>
<td>11-96 Unchanged.</td>
</tr>
</tbody>
</table>
Present Provisions

Proposals

1237 United Kingdom

309 to 313. Delete.

Reasons

309 is not required in view of the proposal to reword 314. The substance of 310-313, suitably modified, it is proposed to include in new paragraphs following 339.

U. S. S. R.

311. Replace the present text by the following:

1238 Such a frequency assignment, registered by the Bureau, shall have the right to international protection from harmful interference.

1239

313. Replace the present text by the following:

Such a record shall be made in order that Members and Associate Members of the International Telecommunication Union may take into account the fact that the frequency in question is in use! An entry of this frequency assignment in the NOTIFICATION COLUMN shall not bestow any right to international protection.

1240 United Kingdom

314. Replace the present text by the following:

§ 2. (1) Every change in frequency usage at a station other than a mobile or amateur station shall be notified to the Board if the frequency is to be used for international communication, or is capable of causing harmful interference with any service of another country, or if international recognition of the use of the frequency is desired.

Reasons

Reworded to cover the present 309 and to use the term "change in frequency usage", which it is proposed to define in Article 1.
United Kingdom

1241 315: Replace the present text by the following:

(2) Similar notice shall be given of frequencies to be used in the operation of a particular service by mobile stations for working with land stations or other mobile stations.

Reasons
To include frequencies used between mobile stations.

1242

315. After this No. add the following new sub-paragraph:

(2 bis) Frequencies assigned to a working’service for use during years of high or low sunspot activity may be notified to the Board for any other service for use on an interim basis and without prejudice to the earlier frequency assignment.

Reasons
349 transferred to a more appropriate place.

1243

316. Add in fine:

The Board shall, however, make appropriate entries in the Master International Frequency Register with respect to such frequencies.

Reasons
To provide for entries to be made by the Board.

1244

316. After this No. add the following new paragraphs:

§ 2 bis. Notifications shall be recorded in the Master International Frequency Register which shall be compiled and maintained by the Board in accordance with the provisions of this Article.
Present Provisions

§ 2 ter. The Board shall enter in the Master International Frequency Register, as initial data, the following categories of assignments which appear in the Master Radio Frequency Record on the effective date of this article:

1) Assignments with dates in Column 2c only and assignments with dates in Columns 2c and 13 indicated by the symbol "P" which were notified in accordance with the provisions of 272 of the E. A. R. C. Agreement. If the assignment conforms with the table and the rules for the allocation of frequencies the date appearing in Column 2c or Column 13 of the Master Radio Frequency Record, whichever is earlier shall be entered in Column 2a of the Register, otherwise it shall be entered in Column 2b. In either case the letter "U" shall be entered in column 13 of the Register.

2) Assignments with dates in Columns 2a and 2c or 2b and 2c. These dates shall be entered in the corresponding Columns of the Register unchanged.

3) Other assignments with dates in Column 2c only or in Columns 2c and 13 only. For each assignment, the date on which the notice of the change in frequency usage was received by the Board shall, if the notice was the subject of an unqualified favourable finding by it, be entered in Column 2a of the Register, otherwise it shall be entered in Column 2b. The date on which the change was stated to have occurred shall, in either case, be entered in Column 2c of the Register.

§ 2 quater. The Board shall transfer to Column 13 of the Register such remarks in Column 13 of the Master Radio Frequency Record as in its opinion are necessary and are not inconsistent with the provisions of § 2 ter, a), b) and c).

Reasons

To provide for the transfer to the Master International Frequency Register of entries in the Master Frequency Record, when appropriate.
317. Replace the present text by the following:

§ 3. Whenever practicable, notification of a change in frequency usage under the provisions of 314 must be made to the Board before the change has taken place. As a general rule, it should be made not earlier than three months before the date of the change.

Reasons
To set a time limit on advance notification, but allow earlier notification in exceptional cases.


Reasons
To provide the I.F.R.B. with information which must be taken into consideration in making an effective engineering investigation of an assignment.

318. Replace the present text by the following:

§ 4 (1) Except as provided in (1 bis) (see proposal 1254) each notice must include the following information:

Name of notifying Member or Associate Member;
Frequency;
Date of use;
Call sign;
Name and geographical position of the station;
Localities or areas of intended reception;
Class of station and nature of service;
Bandwidth necessarily occupied and class of emission;
Peak power in kW;
Present Provisions

Proposals

United Kingdom (cont’d)

Azimuth of maximum radiation of antenna in degrees (clockwise) from true North;
Maximum hours of use in G.M.T. for each locality or area of intended reception.

For this purpose it is recommended that the notifying Member or Associate Member should use a form similar to the specimen given in Appendix 1 and should also include the additional data called for in that Appendix. They may include other information.

Reasons

To provide for notices to be submitted in common form and to bring the description and extent of the minimum particulars for all assignments virtually into line with those required under the interim procedure of the E.A.R.C. Agreement for assignments below 27 500 kc/s.

1253 U. S. S. R.

318. Replace the present text by the following:

§ 4. (1) Each notice shall include at least the following information:

Name of the notifying country;
Frequency;
Class of station;
Location of station;
Class of emission and bandwidth;
Power;
Hours of operation;
Points of intended reception where applicable (otherwise, the area to which communications are directed);
The date of bringing into use, and a reference to the regional or service agreement, if the frequency assignment has been made pursuant to such an agreement.

It is recommended that the notifying country also include the additional data called for in Appendix 1.

United Kingdom

1254 318. After this No. insert the following new subparagraph:

(1 bis) In the case of frequencies notified under 315 the minimum essential information is as follows:
Present Provisions

Proposals

United Kingdom (cont'd)

Name of notifying Member or Associate Member;
Frequency;
Date of use;
Area or areas of use;
Nature of service;
Bandwidth necessarily occupied and class of emission.

Reasons
To make clear what particulars are essential in these cases.

1255

320. After this No. add at the beginning of Section III the following new paragraph:

§ 4 bis. Upon receipt of a notice (other than a preliminary telegraphic notice) incomplete in respect of essential information the Board shall return it by air mail to the notifying Member or Associate Member giving its reasons for this action and shall make no entry in the Master International Frequency Register.

Reasons
To provide that no entry in the Register is to be made in these circumstances.

1256

321. Replace the present text by the following:

§ 5. Upon the receipt of a complete notice, the Board shall communicate its date of receipt immediately to the notifying Member or Associate Member.

Reasons
To make clear that no entry in the Register is made at this stage.

1257

323 to 325. Delete.

Reasons
It is doubtful whether the procedure would be workable over the whole range of frequencies. The I.F.R.B. must carry out its own examination of the notice before registration, and this should adequately protect the interests of other countries concerned.
§ 7. (1) The Bureau shall examine each notice with respect to:

a) its conformity with the Table and the rules for allocation of frequencies;

b) its conformity with the other provisions of the Convention and Radio Regulations.

U.S.S.R.

1258  326 to 328. Replace the present text by the following:

A notice in conformity with the table and the rules for allocation of frequencies shall not, however, be examined with respect to 329 if it relates to a frequency above 30 Mc/s (other than a frequency to be used at an ionospheric scatter, trophospheric scatter or broadcasting station) unless the Board is specifically requested to apply that provision by the notifying administration when it submits the notice or by another administration concerned within 30 days of the date of receipt of the circular in which details of the notice are published.

Reasons

To conserve the resources of the Board by exempting assignments in these bands from examination with respect to the probability of harmful interference unless an administration concerned considers this to be necessary.

U.S.S.R.

1259  329. Delete.

1260  United Kingdom

329. After this No. add the following new sub-paragraph:

A notice in conformity with the table and the rules for allocation of frequencies shall not, however, be examined with respect to 329 if it relates to a frequency above 30 Mc/s (other than a frequency to be used at an ionospheric scatter, trophospheric scatter or broadcasting station) unless the Board is specifically requested to apply that provision by the notifying administration when it submits the notice or by another administration concerned within 30 days of the date of receipt of the circular in which details of the notice are published.

Reasons

To conserve the resources of the Board by exempting assignments in these bands from examination with respect to the probability of harmful interference unless an administration concerned considers this to be necessary.

U.S.S.R.

331. Delete.
Present Provisions

Proposals

1262 United Kingdom

332. Add in fine:

The Board shall insert a suitable note in Column 13 in respect of such assignments.

Reasons

To identify the service or regional agreement.

U. S. S. R.

1263 332. Replace the present text by the following:

§ 9. When a service or a regional agreement has been concluded, the Bureau shall be informed of the details thereof. The procedure to be followed with frequency registrations made in connection with such agreements shall be as specified in § 7 of this Article.

1264

333. Replace the present text by the following:

§ 10. (1) On the basis of the examination provided for in § 7, the Bureau shall enter the frequency assignment.

1265 United Kingdom

334. Replace: assignment by: change in frequency usage.

Reasons

To adopt the use of this expression as defined in the proposal for Article 1.

1266 United Kingdom

334. Replace: assignment by: change in frequency usage.

U. S. S. R.

334. Replace the present text by the following:

(2) Frequency assignments which conform to the provisions of 327 and 328 shall be recorded in the Master International Frequency Register, the date of receipt of the first notice by the Bureau being shown in the REGISTRATION COLUMN.
Present Provisions | Proposals
--- | ---

1267 **United Kingdom**

335. *Replace:* country *by:* Member or Associate Member.

**Reasons**

To conform with the wording of the Convention.

1267* **U. S. S. R.**

335. *Delete.*

1268 **United Kingdom**

336. *Replace:* country *by:* Member or Associate Member.

**Reasons**

To conform with the wording of the Convention.

1269 **U. S. S. R.**

336. *Delete.*

1270 **United Kingdom**

337. 1. *Replace:* country *by:* Member or Associate Member.

**Reasons**

To conform with the wording of the Convention.

1271

2. *Replace:* assignment *by:* change in frequency usage.

**Reasons**

To adopt the use of this expression as defined in the proposal for Article 1.

1272 **U. S. S. R.**

337. *Delete.*
Present Provisions

Proposals

1273 United Kingdom

338. Replace the present text by the following:

However, if the notifying Member or Associate Member re-submits the original notice unchanged and informs the Board that the change in frequency usage has been made without any reports of harmful interference having been received, the change in frequency usage shall, if the Board's finding remains unchanged, be recorded in the Master International Frequency Register, the date of receipt of the first notice by the Board being shown in the NOTIFICATION COLUMN.

Reasons

To introduce requirements to be satisfied before the notice is recorded.

1274 U.S.S.R.

338. Delete.

1275 China

339. Delete.

Reasons

It is the obligation of all Members and Associate Members of the Union to follow the Frequency Allocation Table strictly and no violation should be allowed.

1276 United Kingdom

339. Replace: frequency assignment, by: change in frequency usage, and add in fine: A remark to this effect shall be entered in Column 13 of the Register.

Reasons

To adopt the use of this expression as defined in the proposal for Article I.
To identify the assignments concerned in the Register.
Present Provisions

Proposals

1277

U. S. S. R.

339. Replace the present text by the following:

(5) Frequency assignments which do not conform to the provisions of 327 and 328 shall be recorded in the Master Radio Frequency Record with the date of receipt of the first notice by the Bureau being shown in the NOTIFICATION COLUMN. But, if harmful interference to the reception of any station operating in accordance with the Frequency Allocation Table is caused by the use of this frequency assignment, the station using it must, upon receipt of advice of this harmful interference, immediately suspend operations.

United Kingdom

339. After this No. add the following new sub-paragraph and paragraphs:

1278 (5 bis) Finding favourable with respect to 327 and 328 but examination with respect to 329 not required.

The change in frequency usage shall be recorded in the Master International Frequency Register, the date of receipt of the first notice by the Board being shown in the NOTIFICATION COLUMN.

Reasons

Consequential on proposal 1260.

1279

§ 10 bis. However, if any notice relates to a change in the basic characteristics of an existing assignment (other than a change of frequency, a material change in the geographical location of the station, an increase in the bandwidth of emission or of the power, a change in the azimuth of maximum radiation in the case of a directional transmission, or an extension of the maximum hours of use) and the Board finds that the change will not increase the probability of harmful interference with the service of a station for which a frequency assignment has been recorded, the amended assignment shall retain the existing dates in Column 2 of the Master International Frequency Register.
Present Provisions

Present Provisions

Proposals

United Kingdom (cont’d)

Reasons

To set out, in place of 346, the circumstances in which the dates in Column 2 of the Register may be retained upon an amendment to an existing assignment.

1280

§ 10 ter. (1) Operations on assignments with dates in Column 2a of the Register which are in full conformity with all the provisions of the Radio Regulations shall have the right to international protection from harmful interference.

Reasons

311 amended and transferred to a more appropriate place.

1281

(2) Operations on assignments with dates in Column 2b of the Register shall not have the right to international protection except as provided for in 329.

Reasons

313 amended and transferred to a more appropriate place.

1282

340. 1. After: notifying replace: country by: Member or Associate Member.

Reasons

To conform with the wording of the Convention.

1283

2. Replace: harmful interference either anticipated or actual, by: actual harmful interference.

Reasons

To provide that actual interference should be the only criterion.
Present Provisions

Proposals

**United Kingdom**

1284  343. 1. *After 338, add: or sub-paragraphs b) and c) of 316 § 2 ter (see proposals 1247 and 1248).*

**Reasons**

To cater for the initial entries in the Register.

1285

2. *In the middle replace: country by: Member or Associate Member.*

**Reasons**

To conform with the wording of the Convention.

1286

3. *Replace: in operation by: in actual use in accordance with the notified information.*

**Reasons**

Clarification.

1287

345. *Delete the second sentence.*

**Reasons**

It seems better to leave the transfer of entries to the REGISTRATION COLUMN to the operation of 343 and 344.

1288

346. *Delete.*

**Reasons**

Consequential on proposals 1265 and 1278.
346. After this No. add (in Section VI) the following new paragraph:

§ 13 bis. In case of permanent discontinuance of the use of any listed frequency, the notifying Member or Associate Member shall inform the Board within three months of such discontinuance, whereupon the entry shall be removed from the Register.

Reasons
350 transferred to a more appropriate place.

1290

347. Replace the present text by the following:

§ 14. (1) As a general rule, the Board, after consulting the notifying Member or Associate Member, shall cancel the recording of any frequency assignment if it finds that regular operation has not begun within two years following the effective date of this Article, or within two years following the date of its receipt of the first notice, whichever is the later, unless it finds that the circumstances warrant the retention of the entry, in which case it may be retained, subject to review every two years.

Reasons
To provide when the two-year period should start in the case of initial entries in the Register; and to allow an entry to be retained for more than three years where appropriate.

1291

U.S.S.R.

347 to 349. Delete.

Reasons
See proposal 1296.

United Kingdom

1292

348. Replace the present text by the following:

(2) Exceptionally, however, in the case of a frequency assigned to a working service for use during years of high or low sunspot activity, if the frequency has not been brought into use within three years following the
Present Provisions

Proposals

United Kingdom (cont'd)
effective date of this Article or within three years following the date of its receipt of the first notice, whichever is the later, and the Board finds that the circumstances warrant the retention of the entry, it may be retained subject to review every three years.

Reasons
To provide when the three-year period should start in the case of initial entries, and to allow an entry to be retained for more than six years where appropriate.

1293

349. Delete.

Reasons
Transferred to a more appropriate place as § 2 (2bis) (see proposal 1242).

1294

350. Delete.

Reasons
Transferred to a more appropriate place as § 13bis (see proposal 1289).

1295

351. Replace in fine: for one further period of three years by: subject to review by the Board every three years.

Reasons
To extend the period of retention if the incidence of use in relation to the sunspot cycle warrants it.

1296

U.S.S.R.

351 to 359. Delete.

Reasons
Only a country has a right to cancel a frequency assignment entry.
Present Provisions

Proposals

**United Kingdom**

1297 356. Replace: the frequency of by: frequency usage at.

**Reasons**

To include changes of other basic characteristics of an assignment.

1298

359. After: frequency add: usage.

**Reasons**

See proposal 1297.

1299  **Note by the S. G.**

360. This provision should be supplemented on the lines of Administrative Council Resolution 70 (amended), so as to show in what languages the documents in question are to appear. The documents are those referred to in the Convention, Article 14, paragraph 3 (2). Hence read: "... for prompt publication in the three working languages of the Union, all reports..."

1300  **United Kingdom**

360. Add in fine:

These shall be published in the working languages of the Union as defined in the Convention.

**Reasons**

To conform with current practice and to Administrative Council Resolution 70 (amended).

1301  **U. S. S. R.**

360. Replace the present text by the following:

§ 20. The Bureau shall make available to the countries interested, for their information, and to the General Secretariat, for prompt publication, all documents concerning questions of frequency usage and registration.
GENERAL COMMENTS

The work of the Board, in accordance with the Rules of Procedure defined in Article 12, may have met with certain difficulties which Administrations will have to take into account in considering whether any changes in these Rules are called for.

The time is not yet ripe, we feel, to suggest amendments before the Board has officially announced that difficulties have been encountered.

However, we propose a new wording of 363, better adapted to present circumstances.

Delete this article.

Reasons

* The proposed changes are necessary in connection with the change in frequency registration procedure and changes in the functions of the Bureau.

Replace the present text by the following:

§ 2. (1) Members of the Board shall elect a Chairman and a Vice-Chairman, from among their number, each to hold office for one year or until their successors are duly elected. Thereafter, the Vice-Chairman shall succeed annually to the Chairmanship and a new Vice-Chairman shall be elected.

(2) In the unavoidable absence of the Chairman and Vice-Chairman, the Board shall elect a temporary Chairman for the occasion from among its members.

To be amended, if necessary, should the report by the Board to the next Administrative Radio Conference show the need for any such amendments.
§ 3. (1) Each member of the Board, including the Chairman, shall have one vote. Voting by proxy or by correspondence is not allowed. Moreover, no member is entitled to vote on any given question if he has not been present at that part of a meeting at which that question was discussed.

(2) The minutes shall indicate whether a finding was unanimous or by a majority. In the latter case, the vote of each member present may be recorded on request of a member, but shall not be made public.

(3) Problems of a purely non-technical nature shall be decided by the Board on the basis of a two-thirds vote of the members present. In the consideration of problems having technical characteristics, the Board shall endeavour to reach its decisions by unanimous agreement. If, after reconsideration of such a problem over a period not exceeding 14 days, the Board fails to reach a unanimous decision, it shall immediately thereafter decide the problem on the basis of a two-thirds majority vote of the members present.

(4) A quorum of the Board shall be one-half of the number of members of the Board. If, however, the verdict of such a quorum on a question coming before it is not unanimous, the question shall be referred for decision at a later meeting at which at least two-thirds of the total number of members of the Board are present. If these calculations result in a fraction, the fraction shall be rounded up to a whole number.

§ 4. Notices shall be considered by the Board within one week of the expiration of the period for receipt of objection or comments provided in article 11 and cannot be postponed unless the Board lacks sufficient data to render a decision in connection therewith. However, the Board shall not act upon any notice which has a technical bearing on an earlier notice still under consideration by the Board, until such time as it has reached a finding with respect to such earlier notice.

§ 5. The Board shall keep a complete record of all official actions and minutes of all meetings; for which purpose the necessary personnel and facilities shall be provided by the General Secretary of the
Present Provisions

Union. A copy of all records and minutes of the Board shall be filed with the General Secretary of the Union and shall be available for public inspection. All records of the Board shall be kept in the official languages of the Union.

§ 6. Each country shall have the right to send, at its own expense, a technical representative to appear before the Board in support of, or in opposition to, any notice or other matter under consideration in which his country has a direct interest.

CHAPTER V

Interference. Measures against Interference

ARTICLE 13

Interference and Tests

Section I. General Interference

§ 1. Unnecessary transmissions and transmission of superfluous signals and correspondence are forbidden to all stations.

§ 2. All stations shall radiate only as much power as is necessary to ensure a satisfactory service.

§ 3. In order to avoid interference:
   — locations of transmitting stations must be selected with particular care;
   — radiation in unnecessary directions shall be minimized, where the nature of the service permits, by taking the maximum practicable advantage of the properties of directional antennas.

§ 4. Taking into account practical and technical considerations as well as the service to be performed, the class of emissions making use of the narrowest frequency band should be employed.

Proposals

question are among those referred to in the Convention, Article 4, § 3 (2). This matter was raised in the Administrative Council, which adopted Resolution 70 (amended) in connection therewith. Hence the last sentence of Article 12, § 5 should run: All records of the Board shall be kept in the three working languages of the Union.

United Kingdom

370. 1. In the first and second sentences replace: General Secretary by: Secretary General.

Reasons

Drafting.

2. Read in fine: ...in the working languages of the Union as defined in the Convention.

Reasons

See proposal 1300.

France, French O.P.T.A.

For: Section I. Read: Section II. General Interference.

France, French O.P.T.A., Morocco

375. Replace the present text by the following:

§ 4. To provide any particular service, use shall be made of the class of emission requiring the smallest possible bandwidth, appropriate allowance being made for technical and practical considerations.

Reasons

This draft covers the new definitions in Article 1.
376 § 5. If, while complying with the provisions of article 17, a transmitter causes harmful interference through the intensity of its harmonics or other non-essential emissions, special measures must be taken to eliminate such interference.

1309 United States of America

376. Replace: article by: Article.

Reasons
Editorial.

1310 France, French O.P.T.A., Morocco

376. Replace the present text by the following:

§ 5. If, while complying with Article 17, a transmitter causes harmful interference by spurious radiation, special action must be taken to eliminate such interference.

Reasons
France, French O.P.T.A.:
The term "intensity of its harmonics or other non-essential emissions" has been replaced by the term "spurious radiation", in accordance with the definitions in paragraph 1.1. of Recommendation No. 147 of the C.C.I.R. (Warsaw, 1956).

Morocco:
Definitions given in Recommendation No. 147 of the C.C.I.R.

1311 Japan

376. Replace: the intensity of its harmonics or other non-essential emissions by: its spurious radiations.

Reasons
To be consistent with proposals 247 to 257.

1312 United Kingdom

Replace: transmitter by: station.

Reasons
To cover interference due to receivers or ancillary equipment.
Present Provisions

Section II. Industrial Interference

§ 6. Administrations shall take all practicable and necessary steps to ensure that the operation of electrical apparatus or installations of any kind does not cause harmful interference to a radio service operating in accordance with the provisions of the present Regulations.

Section III. Special Cases of Interference

§ 7. Except in cases of distress, communications between ship stations or between ship and aircraft stations must not interfere with the work of coast stations. When this work is thus interfered with, the ship or aircraft station which causes it must stop transmitting or change frequency upon the first request of the coast station concerned.

Section IV. Tests

§ 8. (1) Before authorizing tests and experiments in any station each administration, in order to avoid harmful interference, shall prescribe the taking of all possible precautions such as the choice of frequency and of time and the reduction or, if possible, the suppression of radiation. Any harmful interference resulting from tests and experiments shall be eliminated as soon as possible.

Proposals

1313 France, French O.P.T.A.

For: Section II. Read: Section III: Industrial Interference.

1314 United States of America

377. In fine replace: the present by: these.

Reasons

Editorial.

1315 India

377. Replace: electrical apparatus or installations by: electrical apparatus, installations or networks and in fine: the present Regulations by: these regulations.

Reasons

1. To cover power line carrier interference etc.
2. Drafting.

1316 France, French O.P.T.A.

For: Section III. Read: Section IV: Special Cases of Interference.

1317 France, French O.P.T.A.

For: Section IV. Read: Section V: Tests.

1318 France, French O.P.T.A., Morocco

380. Replace: as soon as possible by: without delay.

Reasons

France, French O.P.T.A.:
The expression "as soon as possible" has been replaced by "without delay", as interference caused by tests must be eliminated immediately.

Morocco:
Interference caused by tests must be eliminated immediately.
(2) Signals for testing and adjustment must be chosen in such a manner that no confusion will arise with a signal, abbreviation, etc., having a special meaning defined by these Regulations or by the International Code of Signals.

(3) For testing in mobile stations see 679 and 680.

382 After: mobile stations see add: Nos.

Section V. Identification of emissions

For: Section V. Read: Section I: Identification of Emissions.

§ 9. Any radiocommunication without identification is forbidden to all stations.

§ 9. The transmission of signals without identification is forbidden to all stations.

383 Replace the present text by the following:

§ 9. Any radiocommunication without identification is forbidden to all stations.

France, French O.P.T.A.:
The term "transmission of signals" has been replaced by the term "any radiocommunication", the latter being defined in Article I, No. 4.

India

383 Delete.

Covered by Article 19.
Present Provisions

Proposals

1323  China

383 to 385. Delete.

Reasons

More appropriate to be treated under Article 19.

1324  United States of America

Section V.

383 to 385. Delete the whole of Section V (383, 384 and 385).

Reasons

More appropriate for treatment in Article 19.

1325  India

384 and 385. Transfer these two Nos. to Article 19 at the beginning of that Article.

Reasons

Subject continuity.

ARTICLE 14

Procedure in a Case of Interference

1326  Netherlands

386 § 1. If a case of interference so justifies, the administration of the country having jurisdiction over the transmitting station interfered with or, in certain cases, the centralising office for monitoring, shall seek the co-operation of other administrations, centralising

Heading. Read:  Procedure in case of harmful interference.
Present Provisions

offices, or other organizations in making observations and measurements necessary for the identification of the source and the establishment of the responsibility for the interference.

387 § 2. Having determined the source and characteristics of the interference, the administration or centralising office referred to in 386 shall inform the administration of the country having jurisdiction over the interfering station or, where appropriate, the centralising office of that country, giving all useful information in order that that administration or its centralising office may take such steps as may be necessary to eliminate the interference.

388 § 3. The administration of the country having jurisdiction over the receiving station experiencing the interference, or the centralising office of that country, may also approach the administration of the country having jurisdiction over the interfering station or its centralising office, respectively.

389 § 4. If the interference persists in spite of the preceding actions, the administration having jurisdiction over the transmitting station interfered with, as well as the administration having jurisdiction over the receiving station experiencing interference, may address to the administration having jurisdiction over the interfering transmitting station a report of irregularity or infraction in the form indicated in appendix 2.

390 § 5. If there is a specialized international organization for a particular service, complaints and reports of irregularities and of infractions relating to interference caused by the stations in this service may be addressed to such organization at the same time as to the administration or centralising office concerned.

391 § 6. If the preceding actions do not produce satisfactory results, the administration concerned shall forward the file of the case to the International Frequency Registration Board for information, and, if it so desires, it may request the Board to act in accordance with provisions 355.

Proposals

Netherlands (cont’d)

386 to 391. Replace the present provisions by the following:

1327 (New) Should a station whose frequency assignment was made under the provisions of 88 of these Regulations cause harmful interference to a station whose assignment was made pursuant to 87 the station using the former assignment must suspend operations immediately upon being informed of this harmful interference.

1328 (New) Should a station which has got an entry in the NOTIFICATION COLUMN of the Master International Frequency Register cause harmful interference to a station whose frequency has been recorded in the REGISTRATION COLUMN the former must suspend operations immediately upon being informed of this harmful interference.

1329 (387 modified) Having determined the source and characteristics of the interference whether or not by following the procedure of identification laid down in Article 18, the administration of the country whose station experiences it approaches the administration of the country having jurisdiction over the interfering station interfered with and the administration of the country having jurisdiction over the interfering station supplying all useful information in order that such steps may be taken as may be necessary to eliminate the interference by all the administrations interested.

1330 (New) Communication between the administrations in matters where rapid action is required, shall be transmitted by the most expeditious means available. The following particulars about the interference shall be given whenever practicable:

(1) Name, call sign or category of transmitting station causing the interference;
(2) Frequency;
(3) Emission;
(4) Nature;
(5) Name, call sign or class of transmitting station which is subject to interference;
(6) Frequency;
(7) Receiving station experiencing the interference;
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<td><strong>Netherlands (cont'd)</strong></td>
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<td>(8) Dates and times on which interference was experienced;</td>
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<td>(9) Other particulars, if any.</td>
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<td>1331</td>
<td>389. Unchanged.</td>
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<td>1332</td>
<td>390. Unchanged.</td>
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<td>1333</td>
<td>391. Unchanged.</td>
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<td>1334</td>
<td><strong>(New)</strong> Should difficulties arise in the course of actions for the elimination of harmful interference, the administrations concerned and as the case may be, also the I.F.R.B. shall give full recognition to the fact that beside the respective dates in the Master International Frequency Register there are other facts that could be taken into account to eliminate the interference, for instance:</td>
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<td>(1) The actual use of the frequencies in point over a significant period of time, and the nature and purpose of their use, which are of particular importance;</td>
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<td>1335</td>
<td>(2) The mutual benefit to be derived by all countries in the employment of frequency conservation techniques and equipments, with special attention to:</td>
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<td>a) the degree of efficiency of utilization of the frequency spectrum and</td>
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<td>b) the measures available to the stations experiencing the interference to avoid it, for example, by the use of adequately selective receivers and well designed antennas, recognizing, in each case, the advantages which result from the application of the more modern techniques and equipments in accordance with good engineering practices;</td>
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</table>
Present Provisions

Proposals

Netherlands (cont'd)

1337

(3) The degree of compliance with the principles of 234, 235 and 373-376 of these Regulations which has been achieved.

Reasons

According to many years' practice, the procedure in cases of harmful interference laid down in the RR, Article 14 should be changed to the effect that the initial effort to eliminate the interference should be laid in the hands of the administration whose receiving station experiences it, for the simple reason that this administration is in a position to supply the best information about the interference.

The Netherlands administration is of the opinion that in the majority of cases this will give sufficient results.

However, should this action not lead to a satisfactory solution, then the procedure of the existing Article 14 could be followed on the understanding that, at any rate in many cases, it will not be necessary to renew observations and measurements for identification of the interfering station (see 386 of the RR).

United Kingdom

1338 387. Read in fine:

... or, where appropriate, the centralising office of that country, giving frequency, times and places at which the interference is experienced, together with all other useful information, in order that that administration or its centralising office may take such steps as may be necessary and appropriate to eliminate the interference.

Reasons

To ensure that the basic information is provided.

With regard to the addition of the words "and appropriate", the administration concerned may have a prior claim to the frequency.

1339

390. Replace: in this service shall be addressed by: in this service may be addressed.

Reasons

To conform to the French text.

1340 France, French O. P. T. A., Morocco

391. Read:

§ 6. When it considers it necessary, and in particular if the preceding action has given no satisfactory results, the Administration concerned ... (remainder unchanged).
Present Provisions

Proposals

Reasons

France, French O.P.T.A.: To inform the I.F.R.B., in important cases, of interference, even when direct negotiation between Administrations produces satisfactory results.

Morocco: To inform the I.F.R.B. of important cases of interference.

1341 India


Reasons

The case file in original cannot be sent out.

1342 U.S.S.R.

391. Replace the present text by the following:

§ 6. If the above action does not give satisfactory results, priority in the use of the frequency shall be given to the Administration which first notified the frequency to the I.T.U. as shown by the date in column 2c of the Radio Frequency Record.

ARTICLE 15
Reports of Infringements

392 § 1. Infringements of the Convention or Radio Regulations are reported to their administration by the control organization, stations, or inspectors detecting them. For this purpose they use forms similar to the specimen given in appendix 2.

1343 United States of America

392. In fine, replace: appendix by: Appendix.

Reasons

Editorial.

1344 India

392. Read:

.....or Radio Regulations shall be reported to.....

Reasons

Drafting.
§ 2. In the case of a station committing serious infringements, representations relating to them must be made to the administration of the country to which the station belongs, by the administrations which detect them.

394 § 3. If an administration has information of an infringement of the Convention or Radio Regulations, committed in a station which it has authorized, it ascertains the facts, fixes the responsibility, and takes the necessary action.

CHAPTER VI
Technical Provisions Concerning Equipment and Emissions

ARTICLE 16
Choice of Apparatus

§ 1. The choice of apparatus and devices to be used in a station shall be unrestricted, provided that the performance thereof and the emissions therefrom satisfy the provisions of these Regulations.

1345 United States of America

§ 2. Representations relating to observed infringements are made to the appropriate administration by the administrations which detect them. The form indicated in Appendix 2 is used for this purpose. Whenever desirable an abbreviated report may precede the regular report so the administration receiving it may be able to investigate the possibility of taking immediate corrective action.

Reasons
Changes in this Article are to bring it into agreement with practices and with the changes suggested in Article 14 relating to the forms for reporting interference and infractions.

1346 India

Read in fine: it shall ascertain the facts, fix the responsibility and take necessary action.

Reasons
Drafting.

1347 United Kingdom

§ 1. The performance of apparatus and devices to be used in a station and any emissions therefrom shall satisfy the provisions of these Regulations.

Reasons
It is desirable to avoid the expression "shall be unrestricted" which might be regarded as prohibiting any restriction of choice under national regulations. Moreover, the paragraph as re-drafted is more consistent with the succeeding paragraph which indicates that the choice must be guided by C.C.I.R. Recommendations, etc.

The change from "the emissions" to "any emissions" is to make it clear that this refers to all unwanted emissions and is not restricted to apparatus designed to emit.
Present Provisions

396 § 2. However, within limits consistent with practical considerations, the choice of transmitting, receiving and measuring apparatus must be guided by the latest technical progress, particularly as indicated in the recommendations of the C.C.I.R.

France, French O.P.T.A., Morocco

396. Read, in fine:

In the recommendations of the C.C.I.R. and in the tables annexed thereto, particularly those tables which give receiver characteristics.

Reasons

France, French O.P.T.A.: This addendum was suggested by Study Group II of the C.C.I.R.

India

396. Replace: must be guided by: would be guided.

Reasons

Drafting.

United Kingdom

396. Replace: However by: Also.

United States of America

397. In fine, replace: appendix by: Appendix.

Reasons

Editorial.

France, French O.P.T.A.

397. Replace the present text by the following:

§ 1. Stations must conform to the frequency tolerances as specified:

— in Appendix 3,
or
— in C.C.I.R. Recommendation No.….1) (Los Angeles, 1959)
or
— in the latest recommendations of that Committee, on the dates indicated for the entry into force of the various provisions thereof.

Reasons

See proposals 1356 and 1363.

1) The number of the recommendation which will replace Recommendation 148 (Warsaw, 1956).
§ 2. The bandwidths of emissions, level of radio frequency harmonics, and non-essential emissions must be kept at the lowest value which the state of technique and the nature of the service permit. Appendices 4 and 5 must be considered as a guide in this respect, until more recent recommendations of the C.C.I.R. are published.

1354 Australia (Commonwealth of)

Replace the second sentence by the following:

The actual values used should, so far as practicable, be in accordance with the most recent C.C.I.R. recommendations.

Reasons

In view of the techniques now available, it is considered that C.C.I.R. recommendations should apply in respect of these matters.

1355 United States of America

Read:

§ 2. The bandwidths of emissions, and the level of radio frequency spurious radiations must be kept...

(remainder unchanged).

Reasons

The general term “Spurious Radiation”, recommended by C.C.I.R. (Warsaw, 1956) Recommendation No. 147, and defined as proposed in Article 1, Section IV above, is preferred. Also, the term “Spurious Radiation” is used in the proposed revision of Appendix 4 below, and § 398 should be consistent therewith.

1356 France, French O.P.T.A.

Replace the present text by the following:

§ 2. As far as the state of technique and the nature of the service permit, the bandwidth occupied by each emission shall be kept as low as possible and as close as possible to the bandwidth required as specified for the class of emission concerned.
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<td><strong>France, French O.P.T.A. (cont'd)</strong></td>
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<tr>
<td>— in Appendix 5,</td>
<td>— in C.C.I.R., Recommendation No.... ²) (Los Angeles, 1959)</td>
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<tr>
<td>or</td>
<td>or — in the latest recommendations of that Committee.</td>
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<tr>
<td>Subject to the same reservations, the out-of-band spectrum transmitted shall be kept below the spectrum limits specified in... (same documents).</td>
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</table>

1357 ²) The number of the recommendation which will replace Recommendation No. 145 (Warsaw, 1956).

| 1358     | **India** |
| 398 Read: | § 2. The bandwidths of emissions and the level of radio frequency spurious emissions must be kept... (remainder unchanged). |
| Reasons  | 1. The general term “spurious radiation” recommended by the C.C.I.R. Recommendation No. 147, (Warsaw, 1956) is more representative than “harmonics and non-essential emissions”. |
|          | 2. Consequential to amendment to Appendix 4 (proposal 2715). |

1359 **Japan** 398. At the beginning, read: § 2. The bandwidths of emissions and spurious radiations must be kept... (remainder unchanged). Reasons
To be consistent with proposals 247 to 252.

1360 **Morocco** 398. Replace the present text by the following: § 2. As far as may be technically possible, and as far as the requirements of the service permit, the bandwidth
Present Provisions

occupied by any transmission shall be kept to a minimum and as close as possible to the bandwidth laid down in Appendix 4 for the particular class of emission.

1361 Federal German Republic

398. a) In the first sentence replace: level of radio frequency harmonics, and non-essential emissions by: level of spurious emissions.

b) Add, in fine:
Single-sideband transmissions should be used to the maximum extent possible in accordance with the relevant C.C.I.R. recommendations.

Reasons

a) Extension of the scope of the definition “spurious emissions” as contained in the German proposal to RR 58 (proposal 147) based on C.C.I.R. Recommendation No. 147, para. 1.1 (as amended by Doc. 1/61, Geneva 1958).
b) The proposal regarding the use of single-sideband transmissions evolves from C.C.I.R. Recommendation No. 40, para. 2.1.

1362 United Kingdom

398. Replace the present text by the following:

§ 2. The bandwidths of wanted emissions and the levels of spurious emissions must be kept at the lowest value which the state of technique and the nature of the service permit. Stations must conform to the tolerances given in Appendix 4 where these are specific. The remainder of this Appendix and the whole of Appendix 5 should be considered as a guide until further specific tolerances have been formulated.

Reasons

To accord with the definition of “spurious radiation” given in C.C.I.R. Recommendation No. 147, and the definition of “spurious emission” proposed under Article 1. Also to accord with the proposed revised Appendices 4 and 5.
Present Provisions

Proposals

France, French O. P. T. A.

1363 398. After this No. add the following new paragraph:

§ 2 bis) So far as the state of technique and the nature of the service permit, the level of spurious radiation must be kept below the limits specified:

— in Appendix 4,
— in C. C. I. R. Recommendation No. 147 (Los Angeles, 1956)
or
— in the latest recommendations of that Committee.

1364 1) The number of the recommendation which will replace Recommendation No. 147 (Warsaw, 1956).

Reasons

The three possibilities indicated in each case in proposals 1352, 1356 and 1363 correspond to three different decisions we have proposed for consideration by the Administrative Radio Conference.

1. The Conference may decide to retain Appendices 3, 4 and 5, in which case the Appendices can only reproduce Recommendations 148, 145 and 147 (Warsaw, 1956) as they will be revised in Los Angeles, subject to such corrections of form as may be adopted by the Conference.

2. The Conference may decide not to keep Appendices 3, 4 and 5 and to refer to the same Recommendations as revised in Los Angeles. This solution, which would have the same signification as the preceding one, would have the advantage of shortening the RR and reducing publishing costs, but would require reference to another document in each case. The revised Los Angeles recommendations should be retained in later editions of Volume I of the C. C. I. R.

3. The Conference may decide to approve, in advance, the changes made in the recommendations by each Plenary Assembly until the next Administrative Conference meets. In this case, the C. C. I. R. would be asked not to make more rigorous the provisions applicable to cases already examined. The intervening Plenary Assemblies would simply correct the
Present Provisions

Proposals

France, French O.P.T.A. (cont'd)

old provisions, without increasing their rigour, and would add the new provisions applicable to classes of emission and to cases not covered by the former texts. The full redrafting of the recommendations would be done only by the Plenary Assembly preceding the next Administrative Radio Conference to which the revised recommendations would be submitted. This last alternative would appreciably reinforce the authority of the C.C.I.R. and would offer the best assurance of the Regulations' being kept up-to-date.

Note. – Whatever decision is reached by the Conference, we consider that it should apply equally to proposals 1352, 1356 and 1363, since the best use of the radio frequency spectrum depends upon improving the quality of transmission, i.e. on the observation of tolerances which are applicable not only to transmission stability but also to the bandwidth occupied and to the level of spurious radiation.

1365 Morocco

398. After this No. add the following new paragraph:

§ 2 bis) As far as may be technically possible, and as far as the requirements of the service permit, spurious out-of-band radiation shall be kept below the limits laid down in Appendix 5.

399 § 3. To ensure compliance with these Regulations the administrations will take necessary steps for frequent checks to be made of the emissions of the stations under their jurisdiction, the technique of measurements being in accordance with the most recent recommendations of the C.C.I.R.

1366 United States of America

399. Replace: will by: shall.

Reasons

Editorial.

1367 United States of America

400. In fine, replace: article by: Article.

Reasons

Editorial.

1368 Cancelled.
Present Provisions

ARTICLE 18

International Monitoring

401 § 1. The provisions of 399 may be implemented by means of monitoring stations. Such stations may be operated by an administration or by a public or private enterprise recognized by its administration or by a common monitoring service established by two or more countries or by some international organization.

402 § 2. Administrations agree to cooperate in the establishment of an international frequency monitoring system and, to the extent practicable, in the establishment of other monitoring based on recommendations of the C.C.I.R. The stations referred to in 401 may participate in this system.

403 § 3. (1) Meanwhile, administrations will, as far as they consider practicable, carry out such monitoring as may be required by the International Frequency Registration Board (I.F.R.B.) or by other administrations of countries members of the Union or by other organizations operating within the framework of the Union. The results of such monitoring shall be forwarded to the I.F.R.B. as well as to the administration or organization directly concerned, in order that the results may be noted by the I.F.R.B.

404 (2) As far as may be deemed practicable by the administration concerned, all of the monitoring stations of one country or one international organization participating in this international monitoring work shall report and transmit results of measurements through one centralizing office. Where such an office exists, it shall receive directly all requests for monitoring originating in the I.F.R.B., or in similar offices of other countries or international organizations concerned; it shall similarly forward the results to the organization which has requested the monitoring, as well as to the I.F.R.B.

405 § 4. However, these provisions shall not affect private monitoring arrangements made for special purposes by administrations, international organizations, or public or private enterprises.

Proposals

Netherlands

1369 Heading. Read: International Monitoring Service.

401 to 411. Replace the present provisions by the following:

1370 (401 modified) Administrations agree to cooperate to the extent practicable in the continued development of an international monitoring service for the purpose of implementing the applicable provisions of these Regulations.

Monitoring stations participating in the international monitoring service may be operated by an administration or by a public or private enterprise recognized by its administration or by a common monitoring service established by two or more countries or by some international organization.

1371 (403 modified) Administrations will, as far as they consider practicable, conduct such monitoring as may be required by the I.F.R.B., or by other administrations. The results of such monitoring shall be forwarded to the I.F.R.B. as well as to the administration directly concerned, in order that the results may be noted by the Board.

1372 (404 modified) All of the monitoring stations of one country or one international organization participating in this international monitoring work shall report and transmit results of monitoring through one centralizing office. Centralizing offices shall receive directly all requests for monitoring originating in the I.F.R.B., or in similar offices of other countries or international organizations concerned; they shall similarly forward the results to the organization which has requested the monitoring, as well as to the I.F.R.B.
Present Provisions

406 § 5. (1) After the C.C.I.R. has made a recommendation as to the technical standards for performance to be observed by various classes of monitoring stations and after the expiration of any time limits associated with that recommendation for the application of the new technical standards, the I.F.R.B. may recognize these provisionally as optimum practicable technical standards.

407 (2) Administrations or international organizations shall be responsible for determining whether their monitoring stations meet these technical standards. They shall notify to the Secretary General of the Union the names and locations of the stations which may participate and the postal and telegraphic addresses to which requests for monitoring information should be sent. The notification shall include a statement of the standards of measurements maintained by these stations.

408 (3) The Secretary General shall publish periodically a list of the stations referred to in 407, and other information so notified, including a statement of the current standards recognized by the I.F.R.B.

409 (4) Where the results supplied by any monitoring station appear to the I.F.R.B. to be questionable or insufficient for its purposes, the I.F.R.B. shall, through the Secretary General of the Union, advise the administration or international organization concerned, giving the appropriate details.

410 § 6. The I.F.R.B. shall maintain a record of the results supplied by the monitoring stations participating. For each series of measurements, it shall state the estimated accuracy and the procedures of measurement followed by the monitoring station.

411 § 7. The I.F.R.B. shall prepare periodically, with the assistance of, and for publication by, the Secretary General of the Union, summaries of the useful monitoring data received by the Board, including a list of the stations contributing the data.

Proposals

1373 (New) Communication between the I.F.R.B. and the centralizing offices, and among centralizing offices, in matters where rapid action is required, shall be transmitted by the most expeditious means available.

1374 405. Unchanged.

1375 (406 modified) The technical standards recommended by the C.C.I.R. for performance to be observed by monitoring stations shall be recognized by the I.F.R.B. as the optimum practicable technical standards for monitoring stations participating in the international monitoring service.

However, to meet special needs for monitoring data, the I.F.R.B. may accept reports on an interim basis from monitoring stations meeting lower technical standards than those contained in current C.C.I.R. recommendations.

1376 407. Unchanged.

1377 409. Unchanged.

1378 410. Unchanged.

1379 (New) Apart from taking into account the provisions of Article 14, the centralizing office of the country whose station experiences harmful interference or observes an infraction shall, if necessary, seek the cooperation of other centralizing offices for monitoring in making observations and measurements necessary for the identification of the source and the determination of the facts concerning the interference or infraction.

1380 (New) To ensure that published monitoring data is current and worldwide in nature, administrations having jurisdiction over monitoring stations listed in the List of International Monitoring Stations (see Article 20) shall make every effort, as practicable, to arrange for monitoring observations to be made by all such stations and submitted to the I.F.R.B. as soon as possible after the date of observation.
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<tbody>
<tr>
<td><strong>1381</strong></td>
<td><strong>411. Unchanged.</strong></td>
</tr>
</tbody>
</table>

**Reasons**

Participation in the suggested "International Monitoring Service" will not be obligatory.

However, in case of participation an administration is obliged to establish a "Centralizing Office". "Monitoring" does not only include the measurement of frequencies up to 30 Mc/s, but also of field strength and bandwidth.

However, certain stations may not participate in the whole field of monitoring but may operate only within a limited part of that field, which is in accordance with paragraph d) of the consideration of C.C.I.R. Recommendation No. 19.

---

**1382** United Kingdom

402. Replace the present text by the following:

§ 2. Administrations agree to co-operate as far as practicable in the establishment and operation of an international frequency monitoring system. The stations referred to in 401 may participate in this system.

**Reasons**

To provide for the operation as well as the establishment of an international monitoring system.

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**1383** France, French O.P.T.A.

403. Read:

§ 3. (1) Meanwhile, Administrations shall as far as possible do such monitoring.... (remainder unchanged).

**Reasons**

a) Delete the first word "provisoirement" (which is incorrect and does not mean the same thing as the English "meanwhile") from the French version.

b) In the first sentence, replace the words "as far as they consider practicable" by "as far as possible". Appendix C, the deletion of which is proposed elsewhere, draws Administrations' attention to the importance of international monitoring. It would be well, in Article 18, to emphasize the importance of international monitoring.
§ 3. (1) As far as possible, Administrations shall carry out such monitoring as may be required by the International Frequency Registration Board (I.F.R.B.) or by other Administrations of Union Member-countries or by other organizations operating under I.T.U. auspices. The results of such monitoring shall be forwarded to the International Frequency Registration Board and to the Administration or organizations directly concerned.

Reasons
The word "provisoirement" has been deleted from the French version.

U.S.S.R.

1385 403. Delete.

Reasons
Obsolete.

1386 404. Delete.

Reasons
Not in accordance with present practice in exchange of monitoring data.

United Kingdom

406. Replace the present text by the following:

§ 5. (1) The technical standards recommended by the C.C.I.R. for performance to be observed by monitoring stations shall be recognized by the I.F.R.B. as optimum practical technical standards for the international monitoring system.

Reasons
Editorial. The C.C.I.R. has now made certain recommendations.
U.S.S.R.

1388  Delete.

Reasons

obsolete.

1389

Delete, in fine:

...including a statement of the current standards recognized by the I.F.R.B.

Reasons

Greater clarity.

1390 United Kingdom

Interchange these two Nos.

Reasons

Editorial. The suggested sequence is more logical.

U.S.S.R.

1391 Delete.

Reasons

The assessment of monitoring data must not come within the terms of reference of the future I.F.R.B.

1392

Delete the second sentence: For each series ... monitoring station.

Reasons

See proposal 1391.

India

Add the following new Article:

ARTICLE 18 bis
Standard Frequency and Time Broadcast Service.
Present Provisions

§ 1. Standard frequency and time broadcast service shall conform to the provisions of this Article and those of Appendix 5bis.

§ 2. Administrations will endeavour to provide on an international basis a coordinated system of standard frequency and time signal transmissions.

§ 3. Each administration, which provides this service shall promptly publish:
   i) the provisional measured values of frequencies and time signals for each day at a specified time or for each group of 5 days at a specified time;
   ii) the date, time and magnitude of adjustments to the time signals;
   iii) the date, time and magnitude of adjustments to the frequency which exceed one part in $10^{-9}$ per day;

§ 4. Each administration which provides this service, shall cooperate through C.C.I.R. in collation and distribution of the following:
   i) the final measured values of frequencies and time signals for each calendar year, the values being given for each group of 5 days at a specified time;
   ii) the date, time and magnitude of adjustments to the time signals;
   iii) the date, time and magnitude of adjustments to the frequency which exceed one part in $10^{-9}$ per day.

§ 5. Each administration should coordinate with the C.C.I.R. any new standard frequency broadcasts or any changes in existing standard frequency broadcasts.
§ 6. Each administration should send all pertinent new information on standard frequency broadcasting stations to the C.C.I.R.

§ 7. No new standard frequency station operating in the standard frequency bands, shall be notified to the I.F.R.B. until experimental investigations and coordination have been completed as recommended by C.C.I.R.

§ 8. Any standard frequency station operating in accordance with the provisions of this Article and found to be causing harmful interference within the service areas of other established stations should eliminate such interference.

Wherever appropriate, administrations will endeavour to evolve a schedule of time shared broadcasts in such a way that the reception area common to two or more systems on any specified frequency will be illuminated for at least a sizeable proportion of the reception period without interference to one another.

§ 9. Administrations which have not already done so should clear the bands exclusively allocated for standard frequency broadcasts and time signals as soon as possible.

§ 10. As regards time signal broadcasts, the countries, members of the Union, will also coordinate on an international basis with the International Time Bureau and other competent international organizations having a direct and substantial interest in the subject.

Reasons

This new article is necessary due to the importance of the standard frequency and time broadcast service in the use of the radio frequency spectrum (C.C.I.R. Recommendation No. 179, Warsaw, 1956).
CHAPTER VII
Identification of stations

ARTICLE 19

Call Signs

Section I. Allocation and Notification

§ 1. (1) All stations open to the international service of public correspondence, all amateur stations, and other stations which are capable of causing harmful interference beyond the boundaries of the country to which they belong, must have call signs from the international series assigned to each country in the table given in 419.

(2) However, it is not compulsory to assign call signs from the international series to stations which are easily identified by other means and whose signals of identification or characteristics of emission are published in international documents.

§ 2. (1) When a fixed station uses more than one frequency in the international service, each frequency shall be identified by a separate call sign used solely for this frequency.

(2) When a broadcasting station uses more than one frequency in the international service, each frequency shall be identified by a separate call sign used solely for this frequency or by some other appropriate means, such as announcing the name of the place and frequency used.

(3) When a land station uses more than one frequency, such frequencies may, if desired, be identified by separate call signs.

1404 United Kingdom

414. Read in fine:

... by a separate call sign, in accordance with 421 and 422, used solely for this frequency.

Reasons
To encourage the use of figure suffixes.

1405 Federal German Republic

416. After this No. add the following new sub-paragraph:

3bis) It is recommended that coast stations use a common call sign for each series of frequencies²).
Present Provisions

Proposals

Federal German Republic (cont'd)

1406

Add the following new foot-note:

1) By a "series of frequencies" is meant a group of frequencies comprising one frequency each assigned in the different bands between 4000 kc/s and 23000 kc/s exclusively allocated to the maritime mobile service.

Reasons

Simplification of traffic operation.

417 § 3. (1) Each country shall choose the call signs of its stations from the international series allocated to it and shall, in accordance with article 20, notify to the Secretary General of the Union the call signs which it has assigned. These notifications do not include call signs assigned to amateur and experimental stations.

(2) The Secretary General of the Union shall ensure that the same call sign is not allotted more than once and that call signs which might be confused with distress signals, or with other signals of the same nature, are not allotted.

1407 France, French O.P.T.A., Morocco

417. Read in fine:

... which it has assigned, as well as the data to be shown in Lists I to VII. These notifications... (remainder unchanged).

Reasons

France, French O.P.T.A.:
The I.T.U. General Secretariat prepares List VIII (Call Signs) from the other lists. Hence there is no call for separate notification.

Morocco:
A separate notification of the call sign is not necessary.

Section II. Allocation of International Series

419 § 4. The first character or the first two characters of the call signs given in the following table show the nationality of the stations.

1408 Note by the S.G.

Table of Allocation of Call Signs

Subject to confirmation by the forthcoming Administrative Radio Conference, the Administrative Council has authorised the Secretary-General, by its Resolution No. 151 (amended) to deal provisionally with questions relating to call signs. The series hereafter, followed by the
<table>
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<tr>
<th>Country</th>
<th>Call Signs</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States of America</td>
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</table>

### Present Provisions

Reference 1) has been provisionally allocated, under the conditions mentioned in Resolution No. 151 (amended).

Besides, it would be advisable to bring up to date all the names of the countries appearing in the Table.
### Present Provisions

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<th>Call Signs</th>
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<td>China</td>
<td>XSA-XSZ</td>
</tr>
<tr>
<td>France and Colonies and Protectorates</td>
<td>XTA-XWZ</td>
</tr>
<tr>
<td>Portugal</td>
<td>XWA-XZW</td>
</tr>
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<td>Burma</td>
<td>XZA-XZZ</td>
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<td>Afghanistan</td>
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<td>Netherlands Indies</td>
<td>YBA-YHZ</td>
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<tr>
<td>Iraq</td>
<td>YIA-YIZ</td>
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<tr>
<td>New Hebrides</td>
<td>YJA-YJZ</td>
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<td>Syria</td>
<td>YKA-YKZ</td>
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<td>Latvia</td>
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<td>Nicaragua</td>
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<td>Rumania</td>
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<td>Republic of El Salvador</td>
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<td>Yugoslavia</td>
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<td>Venezuela</td>
<td>YVA-YVZ</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>YZA-YZZ</td>
</tr>
</tbody>
</table>

### Proposals

**1409** Belgian Congo

419. Table of Allocation of Call Signs

1) Belgian Congo DNA-DQZ Read: Belgian Congo and Territory of Ruanda-Urundi DNA-DQZ

**1410**

2) Belgium and Colonies ONA-OTZ Read: Belgium, Belgian Congo, and Territory of Ruanda-Urundi ONA-OTZ

**France, French O. P. T. A.**

411 419. Amend the table of allocation of call signs as follows:

a) in column 1, before the series:

- FAA - FZZ
- HWA - HYZ
- THA - THZ
- TJA - TRZ
- TSN - TZZ
- XTA - XTZ

for: France and Colonies and Protectorates, read: France and Overseas France.

**1412**

b) In column 1, replace: France and Colonies and Protectorates by:

- Tunisia before the series TSA-TSM
- Cambodia before the series XUA-XUZ
- Viet-Nam before the series XVA-XVZ
- Laos before the series XWA-XWZ
- Tunisia before the series 3VA-3VZ

**Reasons**

To confirm assignment changes already carried out and reported to the Union Secretariat.
### Present Provisions

<table>
<thead>
<tr>
<th>Country</th>
<th>Call Signs</th>
</tr>
</thead>
<tbody>
<tr>
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<td>ZAA-ZAZ</td>
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<tr>
<td>British Colonies and Protectorates</td>
<td>ZBA-ZJZ</td>
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<tr>
<td>New Zealand</td>
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<td>British Colonies and Protectorates</td>
<td>ZNA-ZOZ</td>
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<td>Paraguay</td>
<td>ZPA-ZPZ</td>
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<tr>
<td>British Colonies and Protectorates</td>
<td>ZQA-ZQZ</td>
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<tr>
<td>Union of South Africa</td>
<td>ZRA-ZUZ</td>
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<tr>
<td>Brazil</td>
<td>ZVA-ZZZ</td>
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<tr>
<td>Great Britain</td>
<td>2AA-2ZZ</td>
</tr>
<tr>
<td>Principality of Monaco</td>
<td>3AA-3AZ</td>
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<tr>
<td>Canada</td>
<td>3BA-3FZ</td>
</tr>
<tr>
<td>Chile</td>
<td>3GA-3GZ</td>
</tr>
<tr>
<td>China</td>
<td>3HA-3UZ</td>
</tr>
<tr>
<td>France and Colonies and Protectorates</td>
<td>3VA-3VZ</td>
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<tr>
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<td>3YA-3YZ</td>
</tr>
<tr>
<td>Norway</td>
<td>3ZA-3ZZ</td>
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<td>France and Colonies and Protectorates</td>
<td>4AA-4CZ</td>
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<tr>
<td>Republic of the Philippines</td>
<td>4DA-4IZ</td>
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<tr>
<td>Union of Soviet Socialist Republics</td>
<td>4JA-4LZ</td>
</tr>
<tr>
<td>Venezuela</td>
<td>4MA-4MZ</td>
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<tr>
<td>Yugoslavia</td>
<td>4NA-4OZ</td>
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<tr>
<td>British Colonies and Protectorates</td>
<td>4PA-4SZ</td>
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<td>Peru</td>
<td>4TA-4TZ</td>
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<tr>
<td>United Nations</td>
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<td>(Not allocated)</td>
<td>8AA-8ZZ</td>
</tr>
<tr>
<td>(Not allocated)</td>
<td>9AA-9ZZ</td>
</tr>
</tbody>
</table>

### Proposals

**France, French O.P.T.A. (cont'd)**

1413  
**c) Add the series:** 4YA to 4YZ, **assigned to:** the International Civil Aviation Organization.  

**Reasons**

To confirm a temporary assignment.

1414  
**d) Assign eight new series to:** France and Overseas France, *e.g.*: SSA to SZZ.  

**Reasons**

To be able to assign call signs, as necessary, to new stations brought into operation as the telecommunication infrastructure develops.

1415  **Italy**

419. _Under Italy replace the words:* and colonies by: and territories under United Nations mandate.

1416  **Japan**

419. **Add as follows:**

- Japan 7JA-7ZZ
- Japan 8JA-8ZZ

**Reasons**

Since the international series JAA-JSZ allocated to our country in accordance with the RR cannot satisfy the requirements for call signs due to the recent increase in number of radio stations, the Japanese Administration is obliged to assign call signs formed of many letters and digits other than those set forth in Article 19, Section III (Formation of Call Signs). The above amendment is to meet the present requirements and to cope with the increasing number of radio stations in the near future.
Present Provisions

Proposals

Morocco

1417 419. 1. Definitively allocate the series: 5CA-5CZ to the Kingdom of Morocco.

Reasons
Confirms a provisional allocation.

1418

2. Allocate the series: 5DA-5GZ to the Kingdom of Morocco.

Reasons
To cope with fresh requirements.

Section III. Formation of Call Signs

420 § 5. Call signs in the international series are formed as stated below. It is understood, however, that in accordance with the table in 419, the first letter in certain series is replaced by a digit:

421

a) Three letters, or three letters followed by not more than three digits (other than the digits 0 and 1 in cases where they immediately follow a letter), in the case of land and fixed stations.

422

b) However, it is recommended that, as far as possible:
— the call signs of coast and aeronautical stations shall consist of three letters or three letters followed by a single digit other than 0 or 1;
— the call signs of fixed stations shall consist of three letters followed by two digits (other than the digits 0 and 1 when immediately following a letter).

423

c) Four letters in the case of ship stations (for ship stations using radiotelephony see 429).

Italy

422. Replace the present text by the following:
— However, the call signs of coast and aeronautical stations shall consist of three letters, or three letters followed by a single digit other than 0 or 1;
— the call signs of fixed stations shall consist of three letters followed by two digits (other than the digits 0 and 1 when immediately following a letter).

Reasons
The provisions concerning the formation of call signs should be made compulsory in order that the Regulation should be generally carried out.

Netherlands

422. Replace the present text by the following:

b) However, it is recommended that, as far as possible, the call signs of coast and aeronautical stations shall consist of three letters or three letters followed by one or two digits (the digit following immediately a letter other than 0 and 1).

Reasons
Some coast stations operate more than 8 transmitters.
Present Provisions

424  
\(d\) Five letters in the case of aircraft stations (for aircraft stations using radiotelephony see 431).

425  
\(e\) The call sign of the parent ship or aircraft followed by two digits (other than 0 or 1), in the case of lifeboats, liferafts and other survival craft.

Proposals

1421 France, French O. P. T. A.

425 Delete: or aircraft.

1422 United Kingdom

425 Delete: or aircraft.

Reasons

To restrict to maritime craft.

1423 France, French O. P. T. A., Morocco

425 After this No. add the following new sub-paragraph:

\(e\) bis) The call sign of the parent aircraft consisting of five letters followed by a digit (other than 0 or 1) for lifeboat, liferaft and other survival craft stations. This provision, however, shall not apply to stations automatically transmitting the distress signal.

Reasons

France, French O. P. T. A.:

It is unreasonable to prolong communication by using a seven-character call sign. No confusion can arise with the other forms of call signs. Moreover, stations in survival craft aboard aircraft (rubber dinghies) may be operated after ditching or forced landing by persons who are not communication experts. Hence the equipment consists of a simple automatic transmitter, transmitting the signal SOS followed by a long dash. As this transmitter should be interchangeable on board aircraft, it is not advisable to provide for manual adjustment thereof in order to announce a particular call sign.

Morocco:

In order not to unduly lengthen the call signs.
Present Provisions

Proposals

1424 United Kingdom

425. After this No. add the following new sub-paragraph:

e bis) The call sign of the parent aircraft consisting of five letters followed by one digit (other than 0 or 1), in the case of lifeboats, liferafts and other survival craft. This provision is not applicable in respect of stations which transmit automatically the distress signal.

Reasons

To reduce the number of characters in the call sign for aeronautical craft, thus avoiding unnecessary signalling.

427 g) One or two letters and a single digit (other than 0 or 1) followed by a group of not more than three letters in the case of amateur and experimental stations. The prohibition of the use of the digits 0 and 1, however, does not apply to amateur stations.

1428 Netherlands

428. Delete in fine: or by any other appropriate indication.

Reasons

The addition RADIO without further details is sufficient.

1426 United Kingdom

428. In the last sub-paragraph, after: List of Coast, delete: and Ship.

Reasons

Consequential on proposals for Article 20.
(2) Ship stations using radiotelephony may use as a call sign:

- a call sign established in conformity with 423;
- a call sign consisting of two or three letters followed by four digits (other than the digit 0 or 1 where they immediately follow a letter);
- the name of the ship as it appears in the international documents, preceded, if necessary, by the name of the owner.

1427 Netherlands

429. After this No. add the following new paragraph:

(2bis) It is recommended that the names of ships shall be chosen such as not to cause confusion with distress, urgency or safety signals.

Reasons

Lately the Dutch ship "MEDEA" originated unconsciously distress-traffic only by transmitting its name.

(3) Aeronautical stations using radiotelephony may use as a call sign:

- a call sign established in conformity with 421 and 422;
- the name of the airport or geographical name of the place as it appears in the List of Aeronautical and Aircraft Stations, followed by the word TOWER or any other appropriate word.

1428 France, French O.P.T.A., Morocco

430. Replace the present text by the following:

(3) Aeronautical radiotelephone stations may use as a call sign:

- the name of the airport or place name, or a conventional word appearing in the List of Aeronautical Stations, followed by an appropriate word indicating the type of service.
431. (4) Aircraft stations using radiotelephony may use as a call sign:
   — a call sign established in conformity with 424;
   — a combination of characters corresponding to the official registration mark assigned to the aircraft.

1429

431. Replace the present text by the following:

(4) Aircraft radiotelephone stations may use as a call sign:
   — a call sign made up in conformity with 424, preceded, if necessary, by a word indicating the owner or the type of aircraft;
   — a combination of characters representing the official registration marks assigned to the aircraft;
   — a word denoting the airline company, followed by the identification number of the flight.

Reasons

See proposal 1428.

1430

Japan

431. Add in fine:

   — the abbreviation of the name of the owner of the aircraft (company or individual) or the type of the aircraft, followed by a call sign established in conformity with 424 or the registration mark assigned to the aircraft;
   — the abbreviation of the name of the air transportation company, followed by the flight identification number.

Reasons

It is necessary to specify every case occurring in common practice with respect to the aircraft stations using radiotelephony.
<table>
<thead>
<tr>
<th>Present Provisions</th>
<th>Proposals</th>
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<tbody>
<tr>
<td><strong>1431 United Kingdom</strong></td>
<td></td>
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<tr>
<td>431. 1. <em>In the second sub-paragraph, after</em>: 424, <em>add</em>: which may be preceded by a word designating the owner or the type of aircraft.</td>
<td></td>
</tr>
<tr>
<td>1432 2. <em>In the last sub-paragraph, replace</em>: mark <em>by</em>: marks.</td>
<td></td>
</tr>
<tr>
<td><strong>Reasons</strong></td>
<td><strong>To conform with existing practice.</strong></td>
</tr>
<tr>
<td><strong>1433 Sweden</strong></td>
<td></td>
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</tbody>
</table>
| 431. *Replace the present text by the following:* (4) Aircraft stations using radiotelephony may use as a call sign:  
   — a call sign established in conformity with 424. This call sign may be preceded by a word designating the owner or the type of the aircraft.  
   — a combination of characters corresponding to the official registration marks assigned to the aircraft.  
   — a word designating the airline, followed by the flight identification number. | |
| **Reasons** | To make the wording more precise and take into account the rules in force in the aeronautical mobile service. |
| **1434 United Kingdom** | | |
| 431. *After this No. add the following new sub-paragraph:* (4 bis) In the exclusive frequency bands of the aeronautical mobile service, aircraft stations using radiotelephony may use as a call sign a word designating the airline, followed by the flight identification number. | |
| **Reasons** | To conform with existing practice. |
Present Provisions

432 (5) Land stations other than coast and aeronautical stations, which use radiotelephony may use as a call sign:

- a call sign established in conformity with 421;
- the geographical name of the place followed, if necessary, by any other appropriate indication.

433 (6) Mobile stations other than ship and aircraft stations, which use radiotelephony, may use as a call sign:

- a call sign established in conformity with 426;
- a call sign consisting of two or three letters followed by four digits (other than the digits 0 or 1 in cases where they immediately follow a letter);
- the identity of the vehicle or any other appropriate indication.

Proposals

France, French O.P.T.A., Morocco

1435 432. Replace the present text by the following:

(5) Parent radiotelephone stations may use as a call sign:

- a call sign made up in conformity with 421;
- two or three letters followed by 4 digits (the digit immediately following the letters may not be 0 or 1);
- the place name followed by any other necessary particulars.

Reasons

France, French O.P.T.A.:

To ensure uniformity of call signs for a parent station and land mobile stations forming networks. The latter can have a call sign consisting of two or three letters followed by four figures (see proposal 1436).

Morocco:

In order to make uniform the call signs of stations forming networks.

1436 433. Replace the present text by the following:

(6) Land mobile stations using radiotelephony may use as a call sign:

- a call sign made up in conformity with 426;
- a call sign consisting of two or three letters followed by four digits (the digit immediately following the letters may not be 0 or 1);
- an indication of the identity of the vehicle or any other appropriate indication.

Reasons

France, French O.P.T.A.:

To conform with the definition given in proposal 129, in Connection with 47.
§ 7. (1) In the aeronautical mobile service, after communication has been established by means of the complete call sign (see 424 or 431), the aircraft station may use, if no risk of confusion is likely to arise, an abbreviated call sign consisting of:

a) in radiotelegraphy, the first character and last two letters of the complete 5-letter call sign;

b) in radiotelephony, the abbreviation of the name of the owner of the aircraft (company or individual) followed by either the last two letters of the call sign, the last two characters of the registration mark, or the flight identification number.

France, French O.P.T.A., Morocco

Replace the present text by the following:

b) in radiotelephony:
— the first character of the complete five-letter call sign;
— the abbreviation of the name of the owner of the aircraft (company or individual);
— the type of aircraft,
followed by the last two letters of the complete call sign or by the last two characters of the registration mark.

Reasons:
France, French O.P.T.A.:
The abbreviation of a call sign must be a shortening of one of the forms laid down in 431 and not a new form of call sign. It is inadvisable for an aircraft station to change its type of call sign during flight.

India

Delete in fine: or the flight identification number.

Reasons:
This practice of identification of the aircraft is likely to be confused with the call signs, particularly at the time of emission of distress call or message from such an aircraft.

Japan

Replace the present text by the following:

b) in radiotelephony, the abbreviation of the name of the owner of the aircraft (company or individual) or the type of the aircraft, followed by
Present Provisions

either the last two letters of the call sign formed in conformity with 424 or the last two characters of the registration mark.

Reasons

This amendment is made in consonance with proposal 1430 and in agreement with the present usage.

1440 United Kingdom

436. Replace the present text by the following:

b) in radiotelephony:
— the first character of the complete 5-letter call sign, or
— the abbreviation of the name of the owner of the aircraft (company or individual), or
— the type of aircraft, followed by the last two letters of the complete call sign, or the last two characters of the registration mark.

Reasons

To conform with existing practice.

1441 Sweden

436. Replace the present text by the following:

b) in radiotelephony:
— the first character of the complete 5-letter call sign, or
— a word designating the owner of the aircraft (company or individual), or
— the type of the aircraft followed by the last two letters of the complete 5-letter call sign.

Reasons

1. The abbreviated call sign must consist of an abbreviation of that one of the alternative forms, defined in 431, which can be used unchanged during a flight. The most suitable call sign for this purpose is the first alternative given in 431.
2. The provision permits the use of such alternative methods as are suitable for e.g. small private aircraft.
Present Provisions

437  (2) The provisions 434, 435 and 436 may be amplified or modified by agreements between countries concerned.

438 § 8. (1) The 26 letters of the alphabet and figures in the cases indicated in §§ 5 and 6 may be used to form call signs. Accented letters are excluded.

439  (2) However, the following combinations may not be used as call signs:

440  a) combinations which might be confused with distress signals or with other signals of the same nature;

441  b) combinations reserved for the abbreviations to be used in the radio-communication services (appendix 9);

442  c) for amateur stations, combinations commencing with a digit when the second character is one of the letters O or I.

443  (3) In the case of four-letter combinations commencing with the letter A, which are used for the geographical portion of the International Code of Signals, their use as call signs must be restricted to cases in which no risk of confusion is likely to arise.

444  (4) The distinguishing signals allotted to ships for visual and aural signalling must, in general, agree with the call signs of ship stations.

445 § 9. Each country reserves the right to establish its own measures for identifying its stations used for national defence. However, it shall use, as far as possible, call signs recognizable as such, and containing the distinctive letters of its nationality.

Proposals

China

1442 445. After this No. add the following new Section:

Section IV. Identification of Emissions

Reasons

It is desirable to stipulate the method of identification of emissions under one section. The Recommendation No. 220 of the C.C.I.R. (Warsaw, 1956) has been adopted for this purpose,
Present Provisions

Proposals

1443

§ 9 bis) The transmission of signals without identification is forbidden to all stations.

Reasons

Taken from 383.

1444

§ 9 ter) In order that the identification of stations may be as rapid as possible, stations provided with a call sign in accordance with Sections I, II and III above must, unless the Regulations provide otherwise, transmit this call sign during the course of their transmission as frequently as is practicable and reasonable.

Reasons

Taken from 384.

1445

§ 9 quater) Any station carrying out emissions for tests, adjustments or experiments, must, wherever possible, transmit at slow speed its call sign or, if necessary, its name, at frequent intervals during the course of these emissions.

Reasons

Taken from 385.

1446

§ 9 quinquies) The identifying signal shall be in International Morse Code, Five-Unit Code (International Telegraph Alphabet No. 2) or in speech modulation.

Reasons

Taken from C.C.I.R. Recommendation No. 220, 1.2.
§ 9 sexies) When a number of stations work simultaneously in a common circuit, either as relay stations, or in parallel on different frequencies, each station shall as far as is practicable and reasonable, transmit its own call sign; alternatively, each station shall transmit the call signs of all stations working as a group on a common circuit.

**Reasons**

Taken from C.C.I.R. Recommendation No. 220, 1.3.

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§ 9 septies) For the purpose of identification one of the following special call signal emissions shall be used:

- a call signal emission employing International Morse Code using class A1, A2 or F1 emission, and transmitted preferably at hand speed;
- a call signal emission employing Five-Unit Code (International Telegraph Alphabet No. 2) using class A1, A2 or F1 emission, at a speed appropriate to single-channel working and preferably at the standardised speed of 50 bauds;
- a call signal emission employing speech in clear.

**Reasons**

Taken from C.C.I.R. Recommendation No. 220, 2.

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§ 9 octies) The identification signal shall be transmitted by one of the following methods:

i) For class F1 emissions, particularly for high-speed or multi-channel working, the superposition of the call sign in Morse Code by amplitude keying;
Present Provisions

Proposals

China (cont'd)

ii) For single-sideband emissions, by amplitude keying of the reduced carrier or of some other pilot frequency:

— keying of the reduced carrier with a difference in level of more than 10 db provides satisfactory identification even in the presence of interference; as the difference in level is increased above about 6 db distortion starts to be noticeable in speech transmitted in the sidebands. In the absence of interference, identification is satisfactory for a difference of level greater than about 5 db, particularly if the identification signal is repeated;

iii) For facsimile transmission employing class A4 emissions, by Morse Code during the intervals of traffic, or alternatively, simultaneously with traffic, by amplitude modulation at a frequency below the lowest used for the facsimile modulation. Where single-sideband transmission is used, amplitude keying, as in ii) above, may be used.

iv) For the transmission of a special call-signal emission simultaneously with traffic, as covered in i), ii) and iii) above or in other ways, the signal sent to indicate that the call signal which follows is superimposed on another transmission, shall be sent in the same manner as the call signal, and the letters QTT shall be used for the purpose.

Reasons

Taken from C.C.I.R. Recommendation No. 220, 3.

1450

§ 9 nonies) If the call signal cannot be transmitted frequently or continuously, it would facilitate the work of monitoring stations if the call signal were transmitted in the period from 10 minutes before, to 10 minutes after, the hour (G.M.T.).

Reasons

Taken from C.C.I.R. Recommendation No. 220, 5.
CHAPTER VIII

ARTICLE 20

Service Documents

§1. The following documents shall be published by the Secretary General of the Union:

(I) List I. The International Frequency List.

a) This shall contain details of frequency assignments recorded in the Master International Frequency Register under the provisions of article 11 (see 309 and 318). These details shall include the data enumerated in appendix 6.

b) The List shall show also those specific frequencies (for example 500 kc/s) prescribed by these Regulations for common use in certain services, together with the information with respect to the frequencies or bands of frequencies assigned by the members of the Union to stations of other classes which are not individually subject to notification to the International Frequency Registration Board; all such stations having a common frequency assignment may be shown collectively for each country.

France, French O.P.T.A.

Replace: (see 309 and 318) by: (see Nos. 11-01, 11-10, 11-41 and 11-50). (proposals 1127, 1137, 1172 and 1182).

Reasons
Because of the revision proposed in Article 11.

Morocco

After this No. add the following new sub-paragraph:

The list of frequencies above 27.5 Mc/s is compiled on a regional geographical basis.

Reasons

United Kingdom

After this No. add the following new sub-paragraph:

(I bis) List I A. List of frequency assignments shown in List I, with details restricted to those enumerated in Appendix 6, List I, Columns 1, 3-6, 8 and 10.

Reasons
To provide an abridged version of List I for the use of operators and manufacturing companies who do not require information in columns 2, 7, 9, 11, 12 and 13 of List I.
Present Provisions

(II) List II. List of Fixed Stations (alphabetical index of fixed stations, the frequencies of which are shown in List I).

Proposals

1454 United Kingdom

449. Replace the present text by the following:

(II) List II. List of Fixed Stations (alphabetical index of fixed stations, the frequencies of which are shown in List I, arranged in order of countries).

Reasons

To cease issue of Part a) (Stations arranged in alphabetical order) of existing List II.

1455 India

450. Delete: c) facsimile.

Reasons

List of broadcasting stations published by the I.T.U. does not contain facsimile broadcasting stations.

1456 Belgium


Reasons

The existing List of Coast and Ship Stations is a document of enormous bulk. We propose that it be divided into two, and that the second volume should be relieved of data about ship stations not open for public correspondence and of data about ship stations which never — or hardly ever — make contact with a foreign coast station.

1457 France, French O.P.T.A., Morocco

451. Add in fine: This List shall be published in two volumes.

Reasons

France, French O.P.T.A.:

List IV is becoming unwieldy and should be issued in two volumes. Stations on board ships which are obliged to carry radiotelegraph equipment would not have to carry the second volume.

Morocco:

List IV is becoming unwieldy.
Present Provisions

Proposals

1458    Italy

451. At the beginning, after: Ship Stations, add: drawn up according to the provisions relative to List IV — Appendix 6 — to the present Regulations and… (remainder unchanged).

Reasons
Clarity.

1459    Netherlands

451. Replace the present text by the following:

(IV) List IV. List of Coast Stations.

Reasons
It is proposed to divide the present List into a volume, containing the coast stations and a volume, containing the ship stations, because

a) the present combined List of Coast and Ship stations is becoming too voluminous by the increasing number of coast stations and ship stations equipped with radio;

b) the changes in the coast stations are much less than the mutations in the ship stations. Hence, a separate List of Coast Stations could be published less frequently than a separate List of Ship Stations.

1460    United Kingdom

451. Replace the present text by the following:

(IV) List IV. List of Coast Stations (radiotelegraphy and radiotelephony information).

Reasons
Information concerning coast and ship stations to be split between three volumes (see proposals 1464 and 1465).

1461    Belgium

451. After this No. add the following new subparagraph:

List IV bis) List of Ship Stations, showing all ship stations open for public correspondence, but not fish-
Present Provisions

Proposals

ing smacks communicating only with coast stations of the country to which they belong.

Reasons

See proposal 1456.

1462 France, French O. P. T. A., Morocco

451. After this No. add the two following new sub-paragraphs:

The first volume shall cover:
coast stations, ship stations, excluding stations equipped for radiotelephony only and working in the bands between 1605 and 3800 kc/s or 156 and 162 Mc/s.
The second volume shall cover:
ship stations equipped for radiotelephony only and working in the bands between 1605 and 3800 kc/s or 156 and 162 Mc/s.

Reasons

See proposal 1457.

1463 Netherlands

451. After this No. add the following new sub-paragraph:

(IV bis) List IV bis. List of Ship Stations, including all seagoing vessels, equipped with radio with the exception, however, of fishing-boats.

Reasons

To be consistent with proposal 1459.

United Kingdom

451. After this No. add the following new sub-paragraphs:

1464 (IV bis) List IV A. List of Ship Stations fitted with radiotelegraphy only and Ship Stations fitted with both radiotelegraphy and radiotelephony. The list excludes
warship stations. Annexed to the List is a Table and a Chart showing the zones and hours of service of Ship Stations of the second, third and fifth categories (see Appendix 13).

**Reasons**

See proposal for 451 (proposal 1460). Also to omit all warship stations ("cross sword" ships) from the proposed list.

Mention of the second, third and fifth categories is consequent on the introduction of fourth, fifth and sixth categories in Article 35, Section IV.

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1465

(IV ter) List IV B. List of Ship Stations fitted with radiotelephony only. The List excludes warship stations. Annexed to the List is a Table and a Chart showing the zones and hours of service of ship stations of the fifth category (see Appendix 13).

**Reasons**

See proposal 1464.

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452 (V) List V. List of Aeronautical and Aircraft Stations. Only stations on board aircraft making international flights are included.

1466 Australia (Commonwealth of)

452. Omit particulars of all stations except:

a) Aeronautical stations open to public correspondence; and

b) Aircraft stations engaged on international flights and open to public correspondence.

**Reasons**

Particulars of aeronautical stations engaged in the air navigation and safety service are contained in documents published by the various Administrations in accordance with I.C.A.O. requirements.

No purpose appears to be served by listing aircraft stations not open to public correspondence.

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1467 France, French O.P.T.A., Morocco

452. Replace the present text by the following:

(V) List V. List of Aeronautical Stations.
Present Provisions

Proposals

Reasons

France, French O.P.T.A.:
At the Atlantic City Conference, 1947, it was proposed to delete Part C of the List. As a compromise, it was decided that only aircraft stations on international flights should be mentioned in Part C. The information in question is of little interest and furthermore is incomplete, as many countries do not consider it necessary to supply data regarding their aircraft.

Morocco:
Deletion of Part C, which is of little interest.

1468 United Kingdom

452. Delete.

Reasons
No useful purpose is served by the document; civil aviation interests obtain adequate information from other sources.

453 (VI) List VI. List of Radiolocation Stations. This shall not include radionavigation mobile stations, or aeronautical navigational land stations on frequencies above 70 Mc/s, whenever their identifications are published elsewhere in official international documents.

1469 Australia (Commonwealth of)

453. Omit particulars of aeronautical navigational stations.

Reasons
These are contained in documents published by the various Administrations in accordance with I.C.A.O. requirement.

1470 France, French O.P.T.A., Morocco

453. Replace the present text by the following:

(VI) List VI. — List of Radiolocation Stations. This List shall not include stations identified in other official international documents.

Reasons
It seems useless to include stations which appear in other official international documents available to Administrations.
Replacing the present text by the following:

(VI) List VI. List of Radiolocation Stations. This shall include all radionavigation mobile stations, or aeronautical navigation land stations.

Reasons

In view of the recent advancements in the aeronautical navigational systems, the exclusion of navigational aids operating on frequencies above 70 Mc/s from the list of radiolocation stations is not justified. This limitation should be removed from the provisions.

United Kingdom

(VI) List VI. List of Maritime Radiolocation Stations and Stations transmitting Regular Meteorological Bulletins (Weather Reports), Notices to Navigators, Medical Advice and Epidemiological Bulletins.

Reasons

To exclude particulars of aeronautical stations, as the information is not required by civil aviation or maritime interests, and to divide the contents of the List of Special Service Stations so that their general usefulness for maritime purposes is enhanced by the incorporation in the List of Radiolocation Stations of items drawn from the List of Special Service Stations.

(VII) List VII. List of Special Service Stations transmitting Time Signals, Standard Frequencies and URSIgrams.

Reasons

Consequential on proposal 1472.
Present Provisions

455  a) Stations transmitting Time Signals.
456  b) Stations transmitting Regular Meteorological Bulletins (Weather Reports).
457  c) Stations transmitting Notices to Navigators.
458  d) Stations transmitting Medical Advice.
459  e) Stations transmitting Standard Frequencies.

Proposals

474  United Kingdom

455 to 459. Delete.

Reasons

Consequential on proposal 1472.

France, French O. P. T. A., Morocco

1475  456. Replace the present text by the following:

b) Stations transmitting weather reports.

Reasons

The weather bulletins transmitted by stations include special reports transmitted from time to time, besides the regular bulletins.

1476

459. After this No. add the following two new sub-paragraphs:

f) stations transmitting epidemiological bulletins.
g) stations transmitting URSIgrams.

Reasons

Both types of station are already included in the List.

460  (VIII) List VIII. Alphabetical List of Call Signs of all stations included in Lists I to VII having call signs from the international series, with the exception, however, of amateur and experimental stations. This List is preceded by the table of allocation of call signs given in article 19 and by a table indicating the form of call signs assigned by each administration to its amateur and experimental stations.

1477  Belgium

460. Replace the present text by the following:

(VIII) List VIII. Alphabetical List of Call Signs of maritime mobile radio stations, giving the Call Signs of all Maritime Mobile Stations appearing in Lists IV, IVbis, VI and VII with Call Signs from the International Series. The List is preceded by a Call Sign Apportionment Table, as shown in Article 19.

Reasons

To divide the old List into two.
1478 France, French O.P.T.A., Morocco

460. Replace the present text by the following:

(VIII) List VIII. — Alphabetical List of Call Signs of all stations included in Lists I to VII having call signs from the international series, with the exception of amateur, experimental and parent stations and of ship stations appearing in the second volume of the List of Coast and Ship Stations.

Reasons
France, French O.P.T.A.:
There is no point in including the call sign of certain stations. The List is becoming unwieldy, moreover, and should be published in two volumes, one being reserved for maritime stations.

Morocco:
There is no point in including the call signs of certain stations.

1479 United Kingdom

460. Replace the present text by the following:

(VIII) List VIII. Alphabetical List of Call Signs from the international series of all stations included in Lists I–VII, excluding stations published in List VIII A. List VIII is preceded by the table of allocation of call signs given in Article 19 and by a table indicating the form of call signs assigned by each administration to its amateur and experimental stations.

Reasons
To provide for the publication in a separate volume of certain information, included in the existing List of Call Signs, of interest to maritime users only.

1480 Belgium

460. After this No. add the following new sub-paragraph:

(VIII bis) List VIII bis. Alphabetical List of Call Signs of Radio Stations other than Maritime Mobile
Present Provisions

Stations, giving call signs of all stations appearing in Lists I, II, III, V, VI and VII with Call Signs from the International Series. The List is preceded by a Table of Allocation of Call Signs, as shown in Article 19.

Reasons

See proposal 1477.

1481 France, French O.P.T.A., Morocco

460. After this No. add the following new subparagraphs:

This List shall be preceded:
— by a table showing the assignment of call signs appearing in Article 19;
— by a table showing the form of the call signs assigned by each Administration to its amateur and experimental stations;
— by the alphabetical list of signals characterising the transmissions of radiobeacons, the particulars of which appear in the List of Radiolocation Stations.

1482

This List shall be published in two volumes.

The first volume shall cover:
the call signs of coast, ship, maritime radiolocation stations and maritime special service stations.

The second volume shall cover:
the call signs of other stations.

Reasons

See proposal 1478.
Present Provisions

Proposals

1483 United Kingdom

460. After this No. add the following new paragraph:

(VIII bis) List VIII A. Alphabetical List of International Call Signs of coast stations, ship radiotelegraph stations, ship radiotelegraph/radiotelephone stations (excluding warships) and maritime radio beacons.

Reasons

See proposal 1479.

1484

461 to 464. Delete.

Reasons

To cease publication of maps.

1485 U.S.S.R.

464. Under: (IX) Maps of: add:

d) Ionospheric stations.

1486 United Kingdom

467. In the middle, replace:

IV, V, VI and VII, by: IV, IV A, IV B, VI and VII;

further replace: I, II and III, by: I, I A, II and III,

and in the last sentence replace: VIII, by: VIII and VIII A.

Reasons

References amended to conform to other U.K. proposals for this Article.
Present Provisions

obtained by him from the information he receives in regard to Lists I to VII inclusive.

468  b) For permanent changes affecting the operation of radiolocation stations (List VI) see 1018.

469 § 3. In Lists III, IV, V, VI and VII each class of station shall occupy a special section.

1487 United Kingdom

469. Replace: V by: IV A, IV B.

Reasons

See proposal 1486.

470 § 4. The International Frequency List and the List of Fixed Stations shall be published separately each year. They shall be kept up to date by the issue of monthly supplements, likewise published separately, every third supplement being recapitulative.

1488 France, French O. P. T. A. Morocco

470. Replace the present text by the following:

§ 4. The International Frequency List and the List of Fixed Stations shall be published separately each year. They shall be kept up-to-date by the issue of quarterly supplements which shall also be published separately.

1489 United Kingdom

470. Replace the present text by the following:

§ 4. The International Frequency List (List I), and the abridged version (List I A) of the frequency assignments shown in List I, shall be published at intervals to be determined by the Secretary General, but the intervals shall not exceed two years. The Lists shall be kept up-to-date by the issue of recapitulative supplements every three months.

Reasons

To provide for publication of the new Lists I and IA to be at the discretion of the Secretary General within certain limits; for the issue of supplements every three months; and for all supplements to be recapitulative.
§ 4 bis. The List of Fixed Stations shall be re-published at intervals to be determined by the Secretary General. It shall be kept up-to-date by the publication of recapitulative Supplements at intervals not exceeding three months.

Reasons
To provide for publication at the discretion of the Secretary General; for the issue of supplements normally every three months; and for all supplements to be recapitulative.

§ 5. The List of Broadcasting Stations, the List of Radiolocation Stations and the List of Special Service Stations shall be re-published at intervals to be determined by the Secretary General. Recapitulative supplements shall be published every six months for the List of Broadcasting Stations and every three months for the List of Radiolocation Stations and the List of Special Service Stations.

Reasons
To provide for issue of recapitulative supplements at intervals of six months for the three Lists concerned.

§ 6. The List of Coast and Ship Stations shall be re-published every nine months without supplements between editions.

Reasons
Economy.
§ 6. The List of Coast and Ship Stations shall be re-published every eighteen months and shall be kept up-to-date by the issue of recapitulative supplements every six months.

**Reasons**

France, French O.P.T.A.:  
The interval between editions might well be increased.

1494 Italy

§ 6. The List of Coast and Ship Stations shall be re-published every nine months. It shall be kept up-to-date by means of quarterly supplements.

**Reasons**

Experience has shown that coast and ship station staff have to be informed, as soon as possible, of any change or amendment in the List.

1495 Netherlands

§ 6. The List of Coast Stations shall be re-published every two years. It shall be kept up-to-date by the publication of 3-monthly recapitulative supplements.

**Reasons**

Editorial in relation with proposal 1459.

1496 United Kingdom

§ 6. The List of Coast Stations shall be re-published every three years and kept up-to-date by the publication of recapitulative supplements every year.
Present Provisions

Proposals

Reasons
To provide for less frequent issue of coast-station information and for the issue of supplements consequent upon separate publication of information concerning Coast and Ship Stations.

1497 Belgium

472. After this No. add the following new paragraph:

§ 6bis. The List of Ship Stations shall be kept up to date by quarterly recapitulative supplements. A new edition shall be issued every eighteen months.

Reasons
Economy.

1498 Netherlands

472. After this No. add the following new paragraph:

§ 6bis. The List of Ship Stations shall be re-published every nine months without supplements between editions.

Reasons
Editorial in relation with proposal 1463.

1499 United Kingdom

472. After this No. add the following new paragraph:

§ 6bis. The List of ships fitted with radiotelegraphy only and ships fitted with both radiotelegraphy and radiotelephony (List IV A) and the List of ships fitted with radiotelephony only (List IV B) shall be re-published every eighteen months without supplements between editions.

Reasons
To provide for less frequent issue of information concerning ship stations.
Present Provisions

§ 7. The List of Aeronautical and Aircraft Stations shall be re-published every six months without supplements between editions.

§ 8. The List of Call Signs shall be re-published at intervals to be determined by the Secretary General. It shall be kept up-to-date by the publication of monthly recapitulative supplements.

Proposals

1500 France, French O.P.T.A., Morocco

473. Replace the present text by the following:

§ 7. The List of Aeronautical Stations shall be re-published every eighteen months, and shall be kept up-to-date by the issue of recapitulative supplements every six months.

Reasons
The interval between editions might well be increased.

1501 United Kingdom

473. Delete.

Reasons
Consequential on proposal 1468.

1502 Belgium

474. Replace the present text by the following:

§ 8. The Alphabetical List of Call Signs of Maritime Mobile Radio Stations shall be re-issued every two years with quarterly recapitulative supplements in between.

Reasons
Economy.

1503 United Kingdom

474. Replace the present text by the following:

§ 8. The Lists of International Call Signs (Lists VIII and VIII A) shall be re-published at intervals to be determined by the Secretary General, but in the case of List VIII A the interval shall be not less than eighteen months. Recapitulative supplements to the Lists shall be published at intervals to be determined by the Secretary General.

Reasons
Consequential on insertion of new sub-paragraph (VIII bis), and to provide a) for the interval in respect of re-publication of List VIII A to be not less than eighteen months, and b) for less frequent issue of recapitulative supplements.
§ 8 bis. The alphabetical List of Call Signs of Radio Stations other than maritime mobile ones shall be re-issued whenever the Secretary General sees fit. It shall be kept up-to-date by quarterly recapitulative supplements.

Reasons
Economy.

§ 9. The General Radiocommunication Statistics shall be re-published at intervals to be determined by the Secretary General.

§ 10. (1) The forms in which the lists mentioned in § 1 (Lists I to VII and General Radiocommunication Statistics) are to be prepared are given in appendix 6 of the present Regulations. Information concerning the use of these documents shall be given in the prefaces thereto. Each entry shall be accompanied by the appropriate symbol, as indicated in appendix 7, to designate the class of station concerned. Additional symbols, where necessary, may be selected by the Secretary General, any such new symbols being notified by the Secretary General to the various administrations.

(2) In the service documents, the names of coast, aeronautical, radio direction-finding and radiobeacon stations are followed by the words:

— RADIO for coast stations;
— GONIO for maritime radio direction-finding stations;
— PHARE for maritime radiobeacon stations;
— AERADIO for aeronautical stations;
— AEROGONIO for aeronautical radio direction-finding stations;
— AEROPHARE for aeronautical radiobeacon stations.
484 § 11. For the purpose of the service documents, a country shall be understood to mean the territory within the limits of which the station is located; a colony, an overseas territory, a territory under suzerainty or mandate, or a protectorate shall also be considered as a country for this purpose.

CHAPTER IX

ARTICLE 21

Secrecy

485 The administrations bind themselves to take the necessary measures to prohibit and prevent:

486 a) the unauthorized interception of radiocommunications not intended for the general use of the public;

487 b) the divulgence of the contents, simple disclosure of the existence, publication or any use whatever, without authorization, of information of any nature whatever obtained by the interception of the radiocommunications mentioned in 486.

1506 487. After this No. add the following new paragraph:

c) When in radio stations participating in the general telecommunications network, technical devices are employed intended to render difficult or to prevent the unauthorized interception of radio transmissions, the competent authorities bind themselves to apply the pertinent recommendations of the C.C.I.R.

Reasons

Obligation evolving from Article 32 of the International Telecommunication Convention. The C.C.I.R. Recommendation No. 74 contains details on such technical devices.

CHAPTER X

ARTICLE 22

Licences

1507 Poland (People’s Republic of)

We suggest that the licence form for mobile stations temporarily on the territory of a foreign country should be standardized and published in the RR.
§ 1. (1) No transmitting station may be established or operated by a private person or by any enterprise without a licence issued by the government of the country to which the station in question is subject.

(2) Mobile stations which have their place of registry in a colony, a territory under suzerainty or mandate, an overseas territory or a protectorate, may be considered, as regards the grant of licences, as subject to the authority of that colony, those territories or that protectorate.

§ 2. The holder of a licence is required to preserve the secrecy of telecommunication, as provided in article 32 of the Convention. Moreover, the licence must provide that if the station includes a receiver the interception of radiocommunication correspondence, other than that which the station is authorized to receive, is forbidden, and that in the case where such correspondence is involuntarily received, it must not be reproduced, nor communicated to third parties, nor used for any purpose, and even its existence must not be disclosed.

§ 3. In order to facilitate the verification of licences issued to mobile stations, there shall be added, when necessary, to the text written in the national language, a translation of the text in a language widely used in international relations.

Federal German Republic

Add in fine:

... unless it is specifically stipulated by special arrangements communicated to the Union by the parties concerned that the licence is issued by another government.

E. A. R. C. Recommendation No. 10.

France, French O. P. T. A.

Read:

(2) Mobile stations which are registered in a colony...

(remainder unchanged).

A better, more general wording.

Morocco

Replace the present text by the following:

(2) Mobile stations which are registered in a territory or group of territories which does not have full responsibility for its international relations may be considered as regards the grant of licences, as subject to the authority of that territory or group of territories.

A more general wording.

United States of America

In the first sentence, replace: article by: Article.

In the second sentence, after: must provide add: specifically or by reference.

To make possible abbreviated licence forms.
§ 4. The government which issues a licence to a mobile station mentions therein in clear form, the particulars of the station, including its name, call sign and public correspondence category, as well as the general characteristics of the main and, if appropriate, the emergency (reserve) installations.

1512 France, French O. P. T. A., Morocco

492. Delete in fine:

... main and, if appropriate, the emergency (reserve)...

Reasons

More general wording.

1513 United Kingdom

492. Add in fine:

In the case of aircraft stations the essential particulars are the name, call sign and public correspondence category, if any.

Reasons

To simplify the provisions regarding aircraft stations so as to avoid frequent withdrawal of the licences of such stations for entry of particulars of changes of apparatus. The particulars specified in the proposal are sufficient to identify an individual aircraft station in cases where interference is caused.

1514 Switzerland

492. Add in fine:

For land mobile stations a clause shall be included in the licence under which use of the station shall be forbidden in countries other than the country which has delivered the licence, except as may be provided by special agreement between the countries concerned.

Reasons

To make allowance for the ever-increasing use of radiotelephony by motor cars, and because of the greater ease with which vehicles can now cross frontiers.

1515 Australia (Commonwealth of)

492. After this No. insert the following new paragraph:

§ 4 bis. In the case of change of place of registry of a ship or aircraft from one country to another in circumstances which preclude the prior grant of a licence for a station in such ship or aircraft by the administra-
CHAPTER XI

Inspection of Mobile Stations. Operators' Certificates for Ship and Aircraft Stations

ARTICLE 23

Inspection of Mobile Stations

§ 1. (1) The governments or appropriate administrations of countries where a mobile station calls may require the production of the licence. The operator of the mobile station, or the person responsible for the station, must facilitate this examination. The licence must be kept in such a way that it can be produced without delay. As far as possible, the licence, or a copy certified by the authority which has issued it, should be permanently exhibited in the station.

493

1516 Italy

493. In the last sentence, delete: As far as possible.

Reasons

The provision must be made compulsory.

1517 United Kingdom

493. At the end of the first sentence, read: ... may require the production of the licence for examination.

Reasons

Clarification.
494 (2) The inspectors must have in their possession an identity card or badge, issued by the competent authority, which they must show on request of the master or his deputy.

1518 France, French O.P.T.A., Morocco

494. Read in fine

... of the master or person in charge of the ship, aircraft or other vehicle carrying the mobile station.

Reasons

More general wording, in accordance with 565.

1519 United Kingdom

494. Replace: of the master or his deputy by: of the person responsible for the station (see 565).

Reasons

To provide for application to mobile services generally.

495 (3) When the licence cannot be produced or when manifest irregularities are observed, governments or administrations may inspect the radio installations in order to satisfy themselves that these conform to the conditions imposed by these Regulations.

1520 Italy

495. At the beginning, delete: When the licence cannot be produced or when manifest irregularities are observed.

Reasons

495, in its present wording, is absurd. Installations have to be inspected if manifest irregularities are to be observed, whereas, according to the existing regulation, they can only be inspected when the licence cannot be produced or when manifest irregularities are observed. Our proposal aims at adapting the regulation to the practice already general in several countries.

496 (4) In addition, inspectors have the right to require the production of the operator's certificates, but proof of professional knowledge may not be demanded.

1521 United Kingdom

496. Replace: the production of operators' certificate by: the production of operators' certificates and authorities to operate.

Reasons

Consequential on proposal 1535.
§ 2. (1) When a government or an administration has found it necessary to adopt the course indicated in 495, or when the operators' certificates cannot be produced, the government or administration to which the mobile station in article 15 is subject must be so informed without delay. In addition, the procedure specified in article 15 is followed when necessary.

(2) The government or administration official who has inspected the station must, before leaving it, communicate the result of his inspection to the master or to the person responsible (see 565).

§ 3. The countries, members of the Union, undertake not to impose upon foreign mobile stations which are temporarily within their territorial waters or make a temporary stay in their territory, technical and operating conditions more severe than those contemplated in these Regulations. This in no way affects arrangements which are made under international agreements relating to maritime or air navigation, and which are therefore not covered by these Regulations.
499. Replace the present text by the following:

§ 3. Members of the Union shall undertake not to impose upon foreign mobile stations which are temporarily within their territory technical and operating conditions more severe than those contemplated in these Regulations.

499. Replace: contemplated, by: provided for.

Reasons
To conform more closely to the French text.

France, French O. P. T. A., Morocco

499. After this No. add the following new paragraphs:

1530 § 3 bis) Mobile stations which have just been built and whose nationality has not yet been decided, shall be considered as foreign stations and shall be subject to the above-mentioned regulation.

1531

§ 3 ter. Should a foreign mobile station make a lengthy stay in a country's territorial waters or on its territory, more severe technical and operating conditions than those contemplated in these Regulations may only be imposed after agreement with the Administration of the country to which the station belongs.

1532 § 3 quater. This in no way affects arrangements which are made under international agreements relating to maritime or air navigation, and which are therefore not covered by these Regulations.

Reasons
France, French O. P. T. A.:
(§§ 3 and 3 quater) of the proposal reproduce the present provisions of 499.
Present Provisions

Proposals

§ 3(b) has been added to make it clear that 499 should be applied in an important specific case which in the past has been subject to differences of opinion.

§ 3(ter) has been added for the following reason:
In most countries, mobile radio installations are subject to national regulations more detailed than the international regulations; any change made in an installation without the agreement of the Administration of the country to which the station belongs might put that Administration in the position of infringing the national regulations.

Morocco:
To take account of national regulations.

ARTICLE 24

Operators' Certificates for Ship and Aircraft Stations

United Kingdom

1533 Replace the heading by the following:

Operators, Certificates and Authorities to Operate for Ship and Aircraft Stations.

Reasons

To include in the RR authorities to operate.
The possession of a certificate of proficiency does not ensure that the holder is fully competent to carry out the service on board a ship or aircraft.

A person may have been issued with such a certificate and, after the passage of time, might, through one or more of a variety of causes, be unable to perform efficiently the duties required of him; yet there is no regulation to preclude him from undertaking such duties.

518 of the RR permits administrations to require fulfilment of other conditions — the need for further technical or professional knowledge or flying experience or physical fitness — before authorising an operator to carry out the service on board a ship or an aircraft. This suggests that some form of authority to operate in addition to the certificate is necessary to show that the holder is fully competent.

Present practices are not uniform; administrations appear to use varying methods to deal with persons holding certificates who, for one reason or another, are considered to have become unsuitable to carry out the duties. Some administrations regard the certificate as being of two parts; one as a proof of technical qualifications and the other as an authority to operate. In such cases the whole certificate is not withdrawn when the holder becomes unsuitable to operate a station. The authority to operate may be suspended or revoked, dependent upon his general ability to operate. Other administrations regard the certificate as one whole and will withdraw or cancel the certificate when the holder is considered unsuitable to carry out the service.

This variation of practice makes it possible for an operator, who has had his "authority to operate" withdrawn by his administration, whilst retaining his certificate of technical proficiency, to secure employment on a station under the control of an administration which does not issue an "authority to operate". It is thought that some safeguard is required against this possibility.

The certificate of proficiency is awarded to a person who shows by examination that he has the required technical and manipulative standard on that date. An "authority to operate" is an authority to carry out certain duties, the issue of which can be made dependent upon a person's physical and mental capa-
Section I. General Provisions

§ 1. (1) The service of every ship or aircraft radiotelegraph or radiotelephone station must be performed by an operator holding a certificate issued or recognized by the government to which the station is subject.

A uniform practice should be adopted by all administrations, and the position could best be met by the issue of authorities to operate, which could be withdrawn in cases where efficiency fell below requirements.

Proposals

United Kingdom (cont’d)

(bilities and upon his general ability to perform the duties efficiently at any time.

France, French O.P.T.A.

1536 501. Replace the present text by the following:

(2) Nevertheless, in the service of radiotelephone stations operating solely on frequencies above 30 Mc/s each government decides for itself whether a certificate is necessary and, if so, defines the conditions for obtaining it.
Present Provisions

Proposals

France, French O. P. T. A. (cont’d)

1537

b) with radiotelephone stations operating solely on frequencies above 30 Mc/s, each government shall decide for itself whether a certificate is necessary and, if so, shall define how it may be obtained.

Reasons

Survival craft apparatus must normally be designed for use by unqualified persons. Test on an actual antenna, however, should be made by a competent person to avoid interference or false distress messages.

1538

Netherlands

501. Replace the present text by the following:

(2) Nevertheless, for mobile radiotelephone stations operating solely on frequencies above 30 Mc/s and not making international voyages or international flights, each government… (remainder unchanged).

Reasons

Mobile stations, making international voyages or international flights, may cause serious international interference.

1539

Morocco

501. After this No, add the following new sub-paragraph:

(2 bis) The survival craft stations mentioned in Article 28, Section IV, of these Regulations may be put into operation by persons who do not possess a certificate, except when tests are carried out otherwise than by means of the fictitious antenna with which the transmitter is equipped.

Reasons

Tests on an actual antenna should be made by a competent person to avoid interference or false distress messages.
Present Provisions

502 (3) The provision of 501 does not, however, apply to aircraft stations working on frequencies allocated exclusively to aircraft making international flights.

Proposals

1540 France, French O. P. T. A.


1541 Netherlands

502. Delete.

Reasons

Editorial in relation with proposal 1538.

United Kingdom

1542 502. Replace the present text by the following:

(3) The provision of 501 does not, however, apply to:

a) aircraft stations working on frequencies allocated to aircraft making international flights, and

b) ship stations operating in the maritime mobile public correspondence and port operations services.

Reasons

The word "exclusively" is unnecessary in a). The amendment makes provision for maritime mobile VHF services.

503 § 2. (1) In the case of complete unavailability of the operator in the course of a sea passage, a flight or a journey, the master or the person responsible for the station may authorize, solely as a temporary measure, an operator holding a certificate issued by the government of another country member of the Union to perform the radiocommunication service.

1543 503. Read: ... a certificate and a valid authority to operate issued... (remainder unchanged).

Reasons

Consequential on proposal 1534.
§ 3. (1) Each administration takes the necessary steps to prevent, to the maximum extent possible, the fraudulent use of certificates. For this purpose, such certificates shall bear the signature of the holder and shall be authenticated by the stamp of the issuing administration. Administrations may employ, if they wish, other means of authentication such as the photograph of the holder, etc.

Reasons

France, French O.P.T.A.:
A photograph is a simple means of authentication and more effective than the signature only.

Morocco:
A photograph is a simple and effective means of authentication.

United Kingdom

§ 3. (1) Each Administration shall make every effort to prevent the fraudulent use of certificates. For this purpose, such certificates shall bear the holder's signature and photograph and shall be authenticated by the stamp of the issuing Administration. Administrations may employ other means of authentication if they wish.

Reasons

Consequential on proposal 1534.
(3) In order to facilitate the verification of certificates these carry, if necessary, in addition to the text in the national language a translation of this text in a language widely used in international relations.

**France, French O.P.T.A., Morocco**

507. *Add in fine:*

Indications of the class or category of the certificates, moreover, must always be translated into the five official languages of the Union.

**Reasons**

*France, French O.P.T.A.:
To facilitate a check on the class or category of these certificates.*

*Morocco:
To facilitate a check on certificates.*

**Italy**

507. *Add in fine:*

... chosen among the I.T.U. working languages.

**Reasons**

To limit the choice of language.

**United Kingdom**

507. *Read:*

... certificates and authorities to operate these carry ... *(remainder unchanged).*

**Reasons**

Consequential on proposal 1534.

**Netherlands**

509. *Delete:* as well as a special certificate.

**Reasons**

It is proposed to abolish the special certificate; a holder of a special certificate may cause international interference to the same extent as a second class radiotelegraph operator because he is allowed to operate the same apparatus.
Present Provisions

510 (2) There are two categories of certificates (general and restricted) for radiotelephone operators.¹)

509.1 and 510.1 ²) As regards the employment of operators holders of the different certificates, see article 25.

511 § 6. (1) The holder of a first or second class radiotelegraph operator's certificate, may perform the service of any ship or aircraft radiotelephone station.

Proposals

1552 United Kingdom

510. Replace the present text by the following:

(2) There are two categories of certificates for radiotelephone operators, general and restricted.¹

Reasons

Clarification.

1553 India

511. Replace the present text by the following:

§ 6. (1) The holder of a first class radiotelegraph operator’s certificate, may perform the service of any aircraft radiotelephone station.

Reasons

In accordance with I.C.A.O. recommendation (Annex I).

1554 Federal German Republic

511. Replace the present text by the following:

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

Reasons

The special certificate for radiotelegraph operators is of higher value than the general certificate for radiotelephone operators and includes the proof of the qualification for the radiotelephone service.
Present Provisions

Proposals

1555 United Kingdom

511. Read: ... of any ship or aircraft radiotelegraph or radiotelephone station (see 515).

Reasons
Clarification.

1556 India

511. After this No. add the following new subparagraph:

(1 bis) The holder of a first or second class radiotelegraphy operator’s certificate may perform the service of any ship radiotelephone station.

Reasons
Consequential to proposal 1553.

512 (2) The holder of a general radiotelephone operator’s certificate may carry out the service of any ship or aircraft station when the installation is used solely for telephony, provided that:

— the power in the antenna of the unmodulated carrier wave does not exceed 100 watts;
— or, the power in the antenna of the unmodulated carrier wave does not exceed 500 watts in cases where the operation of the transmitter requires only the use of simple external switching devices excluding all manual adjustment of frequency determining elements. Moreover, the stability of these frequencies must be maintained by the transmitter itself within the limits of tolerance specified by appendix 3.

France, French O.P.T.A., Morocco

1557 512. Replace the present text by the following:

(2) The holder of a general radiotelephone operator’s certificate may carry out the service of any ship or aircraft station when the installation is used solely for telephony, provided that:

— the power in the antenna (power of the unmodulated carrier wave in class A3, or peak power in class AR3) does not exceed 100 watts;

1558 — the power in the antenna (power of the unmodulated carrier wave in class A3, or peak power in class AR3) does not exceed 500 watts in cases

1559 — the power in the antenna (power of the unmodulated carrier wave in class A3, or peak power in class AR3) does not exceed 500 watts in cases
Present Provisions

where the operation of the transmitter requires only the use of simple external switching devices excluding all manual adjustment of frequency determining elements. Moreover, the stability of these frequencies must be maintained by the transmitter itself within the limits of tolerance specified by Appendix 3.

Reasons

France, French O.P.T.A.:  
Provision must be made for the use of single sideband and reduced carrier wave transmission (class AR3). We have kept the 100 and 500 watts laid down for class A3. This provides a simple solution which particularly favours single sideband transmission.

Morocco:  
Provision must be made for the use of single sideband and reduced carrier wave transmission (class AR3).

1560 Netherlands

512. Delete all after: for telephony at the end of sub-paragraph (2).

Reasons

The operation of all present radiotelephony sets requires only the use of simple external switching devices excluding all manual adjustment of frequency determining elements. For the operation of the MF and HF radiotelephony sets aboard ships one radiotelephony certificate, whose conditions are the same as the present restricted certificate, is therefore sufficient.

1561 United Kingdom

512. Replace the present text by the following:

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

Reasons

To remove the power restrictions and to widen its application.
(3) The holder of a radiotelephone operator's restricted certificate may carry out the service of any ship or aircraft station when the installation is used solely for telephony provided that:

- the power in the antenna of the unmodulated carrier wave does not exceed 50 watts;
- or, the power in the antenna of the unmodulated carrier wave does not exceed 250 watts in cases where the operation of the transmitter requires only the use of simple external switching devices excluding all manual adjustment of frequency determining elements. Moreover, the stability of these frequencies must be maintained by the transmitter itself within the limits of tolerance specified by appendix 3.

---

1562 France, French O.P.T.A., Morocco

513. Replace the present text by the following:

(3) The holder of a radiotelephone operator's restricted certificate may carry out the service of any ship or aircraft when the station is used solely for telephony, provided that:

- the power in the antenna (power of the unmodulated carrier wave in class A3, or peak power in class AR3) does not exceed 50 watts;

1563

- or the power in the antenna (power of the unmodulated carrier wave in class A3, or peak power in class AR3) does not exceed 100 watts in cases where the operation of the transmitter requires only the use of simple external switching devices excluding all manual adjustment of frequency determining elements. Moreover, the stability of these frequencies must be maintained by the transmitter itself within the limits of tolerance specified by Appendix 3.

1564

- or the power in the antenna (power of the unmodulated carrier wave in class A3, or peak power in class AR3) does not exceed 100 watts in cases where the operation of the transmitter requires only the use of simple external switching devices excluding all manual adjustment of frequency determining elements. Moreover, the stability of these frequencies must be maintained by the transmitter itself within the limits of tolerance specified by Appendix 3.

Reasons

France, French O.P.T.A.:
A) Introduction of class AR3 transmitters: same reason as for proposal 1559.
B) Replacement of "250 watts" by "100 watts":
   a) Both radiotelephone operator's certificates should relate to quite different classes of transmitter; there is little difference, however, between a transmitter of 250 watts and one of 500 watts.
   b) The powers used by mobile stations below 4 000 kc/s are usually less than 100 watts (325 makes this compulsory in Region I for the 1605–2 850 kc/s band). Hence the restricted certificate will always suffice for radiotelephony below 4 000 kc/s.
   c) Powers higher than 100 watts are often found in high frequencies; in such cases, however, the length of the voyage and special operational requirements justify the presence on board of a holder of a general radiotelephone operator's certificate.

Morocco:
Same as for proposal 1559.
Present Provisions

Proposals

1565 Netherlands

513. Replace the present text by the following:

(3) The holder of a radiotelephone operator's restricted certificate may carry out the service of any ship station when the installation operates solely on frequencies above 30 Mc/s.

Reasons
To be consistent with proposed new wording of 501 (proposal 1538).

1566 United Kingdom

513. At the beginning read:

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

.......

(remainder unchanged).

Reasons
Consequential on proposals for Article 35, Section IV and to widen its application.

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

1567 Netherlands

514. Delete.

Reasons
To be consistent with proposal 1551.

1568 Federal German Republic

514. Delete.

Reasons
1. The performance of the service in ship stations in which a radiotelegraph installation is provided but not prescribed by international agreements by an operator holding a radiotelegraph operator's special certificate has been regulated in RR 561.
2. Following from proposal to 511 in which it is established that also holders of a radiotelegraph operator's special certificate may perform the service in any radiotelephone station.
Present Provisions

Proposals

1569 United Kingdom

514. Replace the present text by the following:

(4) The holder of a radiotelegraph operator's special certificate may carry out the radiotelegraph service of ships for which a radiotelegraph installation is not made compulsory by international agreement, as well as the radiotelephone service of ship stations and aircraft stations for which only a restricted radiotelephone operator's certificate is required.

Reasons

For consistency of form with the preceding sub-paragraphs.

515 § 7. Exceptionally, the second class radiotelegraph operator's certificate as well as the radiotelegraph operator's special certificate may be limited exclusively to the radiotelegraph service. In such case the certificate must be suitably endorsed.

1570 Netherlands

515. Delete: as well as the radiotelegraph operator's special certificate.

Reasons

Editorial in relation with proposal 1551.

1571 Federal German Republic

515. Delete.

Reasons

With a view to the fact that in the maritime service the number of radiotelephony stations is nearly three times that of radiotelegraphy stations, and also in the aeronautical service radiotelephony has become predominant, there is good reason to require of the holder of any radio operator's certificate the proficiency to perform radiotelephony service. The exceptions contained in 515 should, therefore, be abolished.

Section III. Conditions for the Issue of Operators' Certificates

516 § 8. (1) The conditions to be imposed for obtaining the various certificates are contained in the following paragraphs and represent the minimum requirements.

517 (2) Each administration is free to fix the number of examinations necessary to obtain each certificate.
§ 9. The administration which issues a certificate may, before authorizing an operator to carry out the service on board a ship or aircraft, require the fulfillment of other conditions (for example: further technical and professional knowledge relating particularly to navigation; physical fitness; for an operator of the aeronautical mobile service, the completion as an operator of a certain number of flying hours; etc.).

United Kingdom

Replace: before authorizing an operator to carry out the service on board a ship or aircraft by: before issuing an authority to operate.

Reasons
Consequential on proposal 1534.

A. First Class Radiotelegraph Operator's Certificate

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

a) Knowledge both of the general principles of electricity and of the theory of radio, knowledge of the adjustment and practical working of various types of radiotelegraph and radiotelephone apparatus used in the mobile service, including apparatus used for radio direction-finding and the taking of direction-finding bearings, as well as radar equipment between the words: bearings and:

Finland

Add the words: radar equipment between the words: bearings and: as well as.

Reasons
The ship's radio operator is the only person aboard to assume responsibility for the technical maintenance of the radar equipment. In the education of ship operators adequate attention should be paid to this point.
<table>
<thead>
<tr>
<th>Present Provisions</th>
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<tr>
<td>as a general knowledge of the principles of operation of other apparatus generally used for radionavigation.</td>
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<th>521</th>
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<tr>
<td><strong>b)</strong> Theoretical and practical knowledge of the operation and maintenance of apparatus, such as motor-generators, storage batteries, etc., used in the operation and adjustment of the radiotelegraph, radiotelephone and radio direction-finding apparatus mentioned in 520.</td>
<td><strong>Finland</strong></td>
</tr>
<tr>
<td><strong>1575</strong> 521. <em>Add the word: radar between the words:</em> radiotelephone <em>and:</em> and radio direction-finding apparatus.</td>
<td></td>
</tr>
<tr>
<td><strong>Reasons</strong></td>
<td>See proposal 1574.</td>
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<tr>
<td><strong>c)</strong> Practical knowledge necessary to repair with the means available on board, damage which may occur to the radiotelegraph, radiotelephone and radio direction-finding apparatus during a voyage.</td>
<td><strong>United Kingdom</strong></td>
</tr>
<tr>
<td><strong>1576</strong> 522. <em>Add the word: radar between the words:</em> radiotelephone <em>and:</em> and radio direction-finding apparatus.</td>
<td></td>
</tr>
<tr>
<td><strong>Reasons</strong></td>
<td>See proposal 1574.</td>
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<tr>
<td><strong>d)</strong> Ability to send correctly and to receive correctly by ear, code groups (mixed letters, figures and punctuation marks), at a speed of 20 (twenty) groups a minute, and a plain language text at a speed of 25 (twenty-five) words a minute. Each code group must comprise five characters, each figure or punctuation mark counting as two characters. The average word of the text in plain language must contain five characters. The dur-</td>
<td><strong>Finland</strong></td>
</tr>
<tr>
<td><strong>1577</strong> 523. <em>Add in fine the following new sentence:</em> In the plain language test, the applicant must be able to receive the text on a typewriter.</td>
<td></td>
</tr>
<tr>
<td><strong>Reasons</strong></td>
<td>Because the typewriter facilitates the operator’s work, it would be advisable to add to its use as much as possible. At most stations, this ability is already required. The significance of typewriter reception will be stressed if an express mention of it is made in the RR.</td>
</tr>
</tbody>
</table>
Present Provisions

tion of each test of sending and of receiving shall be, as a rule, five minutes.

Proposals

1578

India

523. Replace in fine: five minutes by: three minutes.

Reasons

A three minute test is quite adequate.

United Kingdom

1579

523. At the beginning read:

d) Ability to send correctly by hand and to receive correctly by ear, in the Morse code, code groups...

(remainder unchanged).

Reasons

Clarification.

524

e) Ability to send correctly and to receive correctly by telephone.

525

f) Detailed knowledge of the Regulations applying to radiocommunications, knowledge of the documents relating to charges for radiocommunications, knowledge of the provisions of the Convention for the Safety of Life at Sea which relate to radio, and, in the case of air navigation, knowledge of the special provisions governing the aeronautical fixed, mobile, and radionavigation services. In the latter case, the certificate states that the holder has successfully passed the tests relating to these special provisions.

1580

525. Replace the present text by the following:

f) Detailed knowledge of the Regulations applying to radiocommunications, knowledge of the documents relating to charges for radiocommunications, and knowledge of the provisions of the Convention for the Safety of Life at Sea which relate to radio, or of the special provisions governing the aeronautical mobile and radionavigation services, as appropriate.

Reasons

To restrict the need for knowledge of certain provisions of the Safety of Life at Sea Convention to the operator in the maritime mobile service.
526 Knowledge of the general geography of the world, especially the principal maritime and air navigation routes and the most important telecommunication routes.

526 Delete.

Reasons
In view of the information available in documents carried on a ship (see Appendix 8), need is not seen for operators to have the knowledge prescribed in 526.

1582 France, French O.P.T.A., Morocco

526 Replace the present text by the following:

g) An elementary knowledge of world geography, especially the principal shipping and air routes and the most important telecommunication routes.

Reasons
France, French O.P.T.A.:
In French, the expression “general geography” signifies the study of the general methods and laws of geography, which are not what is meant here.
Morocco:
The expression “general geography” is inappropriate.

1583 United Kingdom

526 Replace the present text by the following:

g) Knowledge of the general geography of the world, especially the principal navigation routes (maritime or air, according to the type of certificate) and the most important telecommunication routes.

Reasons
To segregate the requirements for the air and maritime certificates.

527 Sufficient knowledge of a language widely used in the international correspondence of the mobile service. Candidates must be able to express themselves in that language in a satisfactory manner.

1584 Finland

527 Replace the present text by the following:

h) Candidates must be able to express themselves in English with adequate clarity both orally and in writing.
Present Provisions

both orally and in writing. Each government decides for itself the language or languages required.

Proposals

Reasons

The inaccurate wording of the present text is apt to discourage the study of English, the dominating language in the international sea traffic. The proposed accurate wording would facilitate considerably the operator's work.

1585 France, French O.P.T.A., Morocco

527. Replace the present text by the following:

h) Adequate knowledge of a language widely used in international relations, apart from their own tongue. Candidates must be able to speak and write this language satisfactorily. Every government shall decide for itself what this second language shall be.

Reasons

France, French O.P.T.A.:
To facilitate relations between mobile stations of different nationality, since all holders of the 1st class certificate will know at least two languages. (It will doubtless be advisable to amplify this regulation in accordance with the effect given to Recommendation No. 5 of the Göteborg Conference.)

Morocco:
To facilitate relations between mobile stations of different nationality.

1586 Italy

527. At the end of the first sentence, after: mobile service add: and chosen among the I.T.U. working languages.

Reasons

See proposal 1549.

B. Second Class Radiotelegraph Operator's Certificate

528 § 11. The second class certificate is issued to operators who have given proof of the technical and professional knowledge and qualifications enumerated below:
Present Provisions

529

(a) Elementary theoretical and practical knowledge of electricity and of radio, knowledge of the adjustment and practical working of the various types of radiotelegraph and radiotelephone apparatus used in the mobile service, including apparatus used for radio direction-finding and the taking of direction-finding bearings, as well as elementary knowledge of the principles of operation of other apparatus in general use for radio-navigation.

530

(b) Elementary theoretical and practical knowledge of the operation and maintenance of apparatus, such as motor-generators, storage batteries, etc., used in the operation and adjustment of the radiotelegraph, radiotelephone and radio direction-finding apparatus mentioned in 529.

531

(c) Practical knowledge sufficient for effecting repairs in the case of minor damage which may occur to the radiotelegraph, radiotelephone and radio direction-finding apparatus during a voyage.

532

(d) Ability to send correctly and to receive correctly by ear, code groups (mixed letters, figures and punctuation marks) at a speed of 16 (sixteen) groups a minute. Each code group must comprise five characters, each figure or punctuation mark counting as two
characters. The duration of each test of sending and of receiving is, as a rule, five minutes.

1592 2. Add in fine the following sentence: In the plain language text, the applicant must be able to receive the text on a typewriter.

Reasons
1. The proficiency of radio operators immediately after the course is not sufficient. During the early phase of the work the operating speed of the newcomers decreases too much. This is particularly so in the case when the new operator must wait for quite a long time for his first ship. A higher operating speed acquired during the course would improve the situation.
2. See proposal 1577.

India

1593 532. Add at the end of the first sentence: and a plain language text at a speed of 20 (twenty) words a minute,

1594 and insert between the second and third sentences the following sentence:
The average word of the text in plain language must contain five characters.

1595 Replace in fine: five minutes by: three minutes.

Reasons
Plain language is very commonly used in communication and as such it is desirable to test the proficiency of the candidate in receiving and sending plain language messages.

1596 United Kingdom

532. Replace the present text by the following:
d) Ability to send correctly by hand and to receive correctly by ear in the Morse code, code groups (mixed letters, figures and punctuation marks) at a speed of 16 (sixteen) groups a minute, and a plain language text at a speed of 20 (twenty) words a minute. Each code group must comprise five characters, each figure or punctuation mark counting as two characters. The average word of the text in plain language must contain five characters. The duration of each test of sending and of receiving is, as a rule, five minutes.

Reasons
To include a plain language test on the lines of the first-class certificate.
Present Provisions

1597

U. S. S. R.

532. Under d), after: ... at a speed of 16 (sixteen) groups a minute, add the following: and a plain language text in letters at the rate of 20 (twenty) words a minute. Each code group is, as a rule, 5 minutes ... (remainder unchanged).

Reasons

For clarification of this point.

533 e) Ability to send correctly and to receive correctly by telephone except in the case provided for in 515.

1598

Federal German Republic

533. Delete the following words:

... except in the case provided for in 515.

Reasons

Following from our proposal for 515 in which it is established that the exceptional restriction of the second class radiotelegraph operator's certificate to the radiotelegraph service should be abolished.

534 f) Knowledge of the Regulations applying: to radiocommunications, knowledge of the documents relating to charges for radiocommunications, knowledge of the provisions of the Convention for the Safety of Life at Sea which relate to radio, and, in the case of air navigation, knowledge of the special provisions governing the aeronautical fixed, mobile, and radionavigation services. In this latter case the certificate states that the holder has successfully passed the tests relating to these special provisions.

1599

India

534. Delete everything after the words: which relate to radio.

Reasons

A second class certificate holder is not to operate on board an aircraft.

1600

United Kingdom

534. Replace the present text by the following:

f) Knowledge of the Regulations applying to radiocommunications, knowledge of the documents relating to charges for radiocommunications, and knowledge
Present Provisions

Proposals

of the provisions of the Convention for the Safety of Life at Sea which relate to radio, or of the special provisions governing the aeronautical mobile and radio-navigation services, as appropriate.

Reasons

See proposal 1580.

1601  Australia (Commonwealth of)

535. Delete.

Reasons

In view of the information available in documents carried on a ship (see Appendix 8) need is not seen for operators to have the knowledge prescribed in 535.

1602  France, French O. P. T. A., Morocco

535. Replace the present text by the following:

\[ g) \text{An elementary knowledge of world geography, especially the principal shipping and air routes and the most important telecommunication routes.} \]

Reasons

See proposal 1582.

1603  United Kingdom

535. Replace the present text by the following:

\[ g) \text{Knowledge of the general geography of the world, especially the principal navigation routes (maritime or air according to the type of certificate) and the most important telecommunication routes.} \]

Reasons

See proposal 1583.
h) If necessary, elementary knowledge of a language widely used in the international correspondence of the mobile service. Candidates must be able to express themselves in that language in a satisfactory manner both orally and in writing. Each government decides for itself the language or languages required.

1604 Finland

536. Replace the present text by the following:

h) Candidates must be able to express themselves in English in a satisfactory manner both orally and in writing.

Reasons
See proposal 1584.

1605 France, French O.P.T.A., Morocco

536. Replace the present text by the following:

h) An elementary knowledge of a language, besides their own, widely used in international relations. Candidates must be able to speak and write this language satisfactorily. Every government shall decide for itself what this second language shall be.

Reasons
France, French O.P.T.A.:
To facilitate relations between mobiles of different nationality, as all holders of the 2nd class certificate will know at least two languages. (It will doubtless be advisable to amplify this regulation in accordance with the effect given to Recommendation No. 5 of the Göteborg Conference.)

Morocco:
To facilitate relations between mobiles of different nationalities.

1606 Italy

536. At the end of the first sentence, after the words: of the mobile service add: and chosen among the working languages of the I.T.U.

Reasons
See proposal 1549.
C. Radiotelegraph Operator’s Special Certificate

§ 12. (1) The radiotelegraph operator’s special certificate is issued to candidates capable of correct transmission and correct reception by ear of code groups (mixed letters, figures and punctuation marks) at a speed of 16 (sixteen) groups a minute. Each code group must comprise five characters, each figure or punctuation mark counting as two characters. These candidates must in addition be capable of correct transmission and correct reception by telephone, except in the case provided for in 515.

Proposals

1607 France, French O. P. T. A.

537. Leave unchanged for the time being; should Recommendation No. 5 of the Göteborg Conference be carried out, it will be necessary to require a knowledge of standardized conventional words also.

1608 Federal German Republic

537. Delete the following words:

... except in the case provided for in 515.

Reasons

1. Following from our proposal for 511 in which it is provided for the holder of a radiotelegraph operator’s special certificate to be entitled to perform the service in any radiotelephone station.

2. Following from our proposal for 515 in which it is established that the exceptional restriction of the second class radiotelegraph operator’s certificate as well as the radiotelegraph operator’s special certificate to the radiotelegraph service should be abolished.

1609 United Kingdom

537. Replace the present text by the following:

§ 12. (1) The radiotelegraph operator’s special certificate is issued to candidates who are capable of sending correctly by hand and receiving correctly by ear in the Morse code, code groups (mixed letters, figures and punctuation marks) at a speed of 16 (sixteen) groups a minute, and a plain language text at a speed of 20 (twenty) words a minute. Each code group must comprise five characters, each figure or punctuation mark counting as two characters. The average word of the text in plain language must contain five characters. These candidates must, in addition, be capable of correct transmission and correct reception by telephone, except in the case provided for in 515.

Reasons

See proposal 1596,
(2) It rests with each government concerned to fix the other conditions for obtaining this certificate. However, except in the case provided for in 515, the conditions specified by 544, 545, 547 or 548, as the case may be, must be satisfied.

1611 Netherlands

537 and 538. Delete.

Reasons
Editorial in relation with proposal 1551.

1612 France, French O.P.T.A.

538. Delete the reference to 548.

Reasons
The deletion of 548 is proposed below.

1613 Federal German Republic

538. Replace the second sentence by the following:

However, the conditions specified by 544, 545, 547, as the case may be, must be satisfied.

Reasons
1. Following from our proposal for 511 by which it is provided that also holders of a radiotelegraph operator's special certificate may perform the service in any maritime radiotelephone station.
2. A radiotelegraph operator holding a special certificate should have knowledge exceeding that required for a restricted radiotelephone operator's certificate.

1614 United Kingdom

538. Read in fine: 544, 545 or 547.

Reasons
Consequential on proposal 1624.
D. Radiotelephone Operator’s Certificate

§ 13. The general radiotelephone operator’s certificate is issued to candidates who have given proof of the knowledge and professional qualifications enumerated below (see also 511):

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

1615 Netherlands

539 to 543. Delete.

Reasons

Editorial in relation to proposal 1560.

1616 France, French O.P.T.A., Morocco

540. Replace the present text by the following:

a) A knowledge of the elementary principles of radiotelephony and of the general laws of radio propagation.

Reasons

Use of decametric waves.

1617 France, French O.P.T.A.

542. Leave unchanged for the time being: should Recommendation No. 5 of the Göteborg Conference be carried out, it will be necessary to require a knowledge of standardized conventional words also.

1618 United Kingdom

543. Replace the present text by the following:

d) Detailed knowledge of the Regulations applying to radiotelephone communications and knowledge of the provisions of the Convention of the Safety of Life
Present Provisions

Proposals

at Sea which relate to radiotelephone communications or of the special provisions governing the aeronautical mobile and radionavigation services as appropriate.

Reasons

The provisions of the Safety Convention have, since Atlantic City, been extended to include Radiotelephony.

§ 14. (1) The restricted radiotelephone operator's certificate is issued to candidates who have given proof of the knowledge and professional qualifications enumerated below:

a) Practical knowledge of radiotelephone operation and procedure;

b) Ability to send correctly and to receive correctly by telephone;

c) General knowledge of the Regulations applying to radiotelephone communications and specifically of that part of those Regulations relating to the safety of life.

1619 Netherlands


Reasons

Editorial in relation to proposal 1560.

1620 France, French O.P.T.A.

546. Leave unchanged for the time being; should Recommendation No. 5 of the Göteborg Conference be carried out, it will be necessary to require a knowledge of standardized conventional words also — or at least of the most important of them.

1621 United Kingdom

547. Replace the present text by the following:

c) General knowledge of the Regulations applying to radiotelephone communications and knowledge of the provisions of the Convention of the Safety of Life at Sea which relate to radiotelephone communications or of the special provisions governing the aeronautical mobile and radionavigation services as appropriate.

Reasons

See proposal 1618.
Present Provisions

§ 548 (2) For ship and aircraft radiotelephone stations where the power in the antenna of the unmodulated carrier wave does not exceed 50 watts, each administration may itself fix the conditions for obtaining a restricted radiotelephone operator's certificate.

Proposals

1622 France, French O.P.T.A., Morocco

548. Delete.

Reasons

France, French O.P.T.A.:
The programme laid down for the radiotelephone operator's restricted certificate represents the minimum knowledge required to use frequencies below 30 Mc/s, given the relatively complex operational rules for these frequencies and the risk of interference at long distances.

Morocco:
The programme laid down for the radiotelephone operator's restricted certificate represents the minimum knowledge required.

1623 Netherlands

548. Delete.

Reasons

Transmitters operating abroad which do not exceed 50 watt antennae-power may also cause serious international interference.

1624 United Kingdom

548 and 549. Delete.

Reasons

Considered superfluous.

1625 Netherlands

548. After this No. add the following new sub-paragraphs:

1626

(2 bis) The restricted radiotelephone operator's certificate is issued to candidates who have given proof of the knowledge and qualifications enumerated below:

1627

(2 ter) a) Practical knowledge of radiotelephone operation and procedure;
§ 16. In order to meet special needs and on condition that international services are not interfered with, special agreements may fix the conditions to be fulfilled in order to obtain a radiotelephone operator’s certificate, intended to be used in radiotelephone stations complying with certain technical conditions and certain operating conditions. These conditions and agreements are mentioned in the certificates issued to such operators.

Section IV. Qualifying Service

§ 17. (1) A first class radiotelegraph operator is authorized to embark as chief operator of a ship station of the third category (see 845).

(2) Before becoming chief operator of a ship station of the second category (see 844), a first class radiotelegraph operator must have had at least six months’ experience as operator on board ship or in a coast station.

1628

(2 quater b) Ability to send correctly and to receive correctly by telephone.

Reasons

To be consistent with proposal 1538.

1629 France, French O. P. T. A., Morocco

549. Delete in fine: ... and in the latter case if it has been issued in conformity with the provisions of 548.

Reasons

The deletion of 548 is proposed above.

1630 Netherlands

549. Delete everything after: restricted certificate.

Reasons

Editorial in relation with proposal 1623.

1631 United Kingdom

550. Read: ... special agreements between administrations may fix the conditions...

Reasons

Clarification.

1632

551 to 553. Replace these three Nos. by the following text:

(1) The holder of a first class radiotelegraph operator’s certificate is authorized to embark as chief operator of a ship station of the fourth, fifth or sixth category (see Nos. ... 1st, 3rd and 4th new numbers after 845).
553 (3) Before becoming chief operator of a ship station of the first category (see 843), a first class radiotelegraph operator must have had at least one year’s experience as operator on board ship or in a coast station.

1632bis (2) Before becoming chief operator of a ship station of the second or third category (see 844 and 845) the holder of a first class radiotelegraph operator’s certificate must have had at least six months’ experience as operator on board ship or in a coast station.

1632ter (3) Before becoming chief operator of a ship station of the first category (see 843), the holder of a first-class radiotelegraph operator’s certificate must have had at least one year’s experience as operator on board ship or in a coast station.

Reasons
Consequential on proposals for Article 35, Section IV.

Australia (Commonwealth of)

1633 552. Delete the words: or in a coast station.

Reasons
As operators at coast stations do not handle typical marine transmitters, direction-finding apparatus, auto-alarm apparatus and lifeboat transmitting and receiving apparatus, it is considered that this provision should be deleted.

1634

553. Delete the words: or in a coast station.

Reasons
Same as for proposal 1633.

554 § 18. (1) A second class radiotelegraph operator is authorized to embark as chief operator of a ship station of the third category (see 845).

555 (2) Before becoming chief operator of a ship station of the second category (see 844), a second class radiotelegraph operator must have had at least six months’ experience as an operator on board ship.

United Kingdom

554 and 555. Replace these two Nos. by the following text:

1635 (1) The holder of a second class radiotelegraph operator’s certificate is authorized to embark as chief operator of a ship station of the fourth, fifth, or sixth category (see the 1st, 3rd and 4th new Nos. after 845).
Present Provisions

(2) Before becoming chief operator of a ship station of the second or third category (see 844 and 845) the holder of a second class radiotelegraph operator’s certificate must have had at least six months' experience as an operator on board ship.

Reasons

Consequential on proposals for Article 35, Section IV.

Proposals

United Kingdom (cont’d)

1635bis

(2) Before becoming chief operator of a ship station of the second or third category (see 844 and 845) the holder of a second class radiotelegraph operator’s certificate must have had at least six months' experience as an operator on board ship.

Reasons

Consequential on proposals for Article 35, Section IV.

1636 Australia (Commonwealth of)

555. After this No. insert the following new paragraph.

§ 18 bis. In the international radiotelegraph service of public correspondence, each government takes the necessary steps to ensure that its coast stations have personnel adequate to perform efficient service during the working hours of the stations and that each operator employed thereat is the holder of a first class radiotelegraph operator’s certificate.

Reasons

In view of the necessity for operators employed at coast stations in the international service of public correspondence to have ability in Morse operating at least equal to that of the operators employed in ship stations with which they communicate and that they be fully conversant with operating conditions and working procedures in the mobile service, including distress, urgency and safety procedures, it is considered that this new provision should be included in the Regulations.

United Kingdom

555. After this No. add the following new sub-paragraph and paragraph:

1637 (2bis) The holder of a radiotelegraph operator’s special certificate is authorized to embark as chief operator of a ship station of the fourth category in which a radiotelegraph installation is not prescribed by international agreement, or, of the fifth or sixth category if the installation complies with the conditions of 513. (See the 1st, 3rd and 4th new Nos. after 845.)

Reasons

To define what an operator holding a special certificate may do. (See proposals 2356, 2358 and 2359)
Present Provisions

Proposals

United Kingdom (cont'd)

§ 18 bis. (1) The holder of a radiotelephone operator's general certificate is authorized to embark as chief operator of a ship station of the fifth or sixth category. (See the 3rd and 4th new Nos. after 845.)

1638

(2) The holder of a radiotelephone operator's restricted certificate is authorized to embark as chief operator of a ship station of the fifth or sixth category. (See the 3rd and 4th new Nos. after 845) if the installation complies with the conditions of 513.

Reasons

To define what holders of general and restricted certificates may do.

(See proposals 2358 and 2359)

CHAPTER XII

Personnel of Mobile Stations

ARTICLE 25

Class and Minimum Number of Operators for Ship and Aircraft Stations

§ 1. In the international service of public correspondence, each government takes the necessary steps to ensure that ship and aircraft stations of its own nationality have personnel adequate to perform efficient service during the working hours which correspond to the category in which these stations are placed.

556

557

§ 2. The personnel of these stations must, having regard to the provisions of article 24 (see 551 to 555), include at least:

1640 France, French O. P. T. A.

556. Add in fine:

(see 842, 843, 844, 845, 851 and 859).

Reasons

To facilitate reference to the Regulations.

1641 United Kingdom

557. Parenthesis to read: (see 511, 514, 515 and 555).

Reasons

Editorial.
Present Provisions

558  
a) ship stations of the first category: one operator holding a first class radiotelegraph operator's certificate;

559  
b) ship stations of the second category: one operator holding a first or second class radiotelegraph operator's certificate;

560  
c) ship stations of the third category, except in the cases provided for in 561 and 562: one operator holding a first or a second class radiotelegraph operator's certificate;

964  

United Kingdom

559. Replace the present text by the following:

b) ship stations of the second and third categories: one operator holding at least a second class radiotelegraph operator's certificate.

Reasons
Consequential on proposals for Article 35, Section IV.

France, French O.P.T.A., Morocco

560. Replace the present text by the following:

c) ship stations of the third category, except as provided for in 561: one operator holding a first or a second class radiotelegraph operator's certificate.

Reasons
France, French O.P.T.A.:
The division into three categories concerns radiotelegraph stations only (see 842). Radiotelephone stations constitute a single category (see 851).

Morocco:
The division into three categories concerns radiotelegraph stations only (see 842).

Netherlands


Reasons
To be consistent with proposals 1551 and 1647.
Present Provisions

Proposals

1645 United Kingdom

560. Replace the present text by the following:

c) ship stations of the fourth category for which a radiotelegraph installation is prescribed by international agreement: one operator holding at least a second class radiotelegraph operator’s certificate;

Reasons

Consequential on proposals for Article 35, Section IV.

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

1646 Finland

561. Delete: radiotelegraph operator’s special certificate or ...

Reasons

See 537 and 538. Furthermore, if a vessel is provided with radiotelegraph equipment a person with the proficiency of an international radiotelegraph operator must be in charge of it.

1647 Netherlands

561. Delete.

Reasons

To be consistent with proposal 1551.

1648 United Kingdom

561. Replace the present text by the following:

d) other ship stations of the fourth category: one operator holding at least a radiotelegraph operator’s special certificate;

Reasons

Consequential on proposals for Article 35, Section IV.
Present Provisions

562  e) ship stations equipped with a radiotelephone installation: one operator holding either a radiotelephone operator's certificate (see 501, 512 and 513) or a radiotelegraph operator's certificate (see 511 and 514);

Proposals

1649  **Federal German Republic**

562. **Delete in fine the words:**

... and 514.

**Reasons**

Following from our proposal to delete 514.

1650  **United Kingdom**

562. **Replace the present text by the following:**

e) ship stations of the fifth and sixth categories: one operator holding at least a radiotelephone operator's general certificate, or if the installation complies with the conditions of 513, at least a radiotelegraph operator's special or a radiotelephone operator's restricted certificate;

**Reasons**

Consequential on proposals for Article 35, Section IV.

563  f) aircraft stations except in the cases provided for in 564: one operator holding a first or second class radiotelegraph operator's certificate, according to the internal regulations of the governments to which the stations are subject;

1651  **India**

563. **Delete:** or second.

**Reasons**

See proposal 1553.

564  g) aircraft stations equipped with a radiotelephone installation: one operator holding, as the case may be, a radiotelephone operator's certificate (see 501, 512 and 513) or a radiotelegraph operator's certificate (see 511) according to the internal regulations of the governments to which the stations are subject.

1652  **Poland (People's Republic of)**

564. **Read at the beginning:**

g) aircraft stations equipped with a radiotelephone, but not with a radiotelegraph installation: one operator ... (**remainder unchanged**).
Present Provisions

ARTICLE 26

Authority of the Master

§ 1. The service of a mobile station is placed under the supreme authority of the master or of the person responsible for the ship, aircraft, or other vehicle carrying the mobile station.

§ 2. The person holding this authority must require the operators to comply with these Regulations.

Proposals

Finland


1654 § 565 and § 566. Replace the present provisions by the following:

The radio service rendered by a mobile station in accordance with these regulations, as well as the technical maintenance of the radio equipment of that station are in the first place under responsibility of the highest radio operator of that station.

This radio operator is under supervision of the master or other person responsible for the ship, aircraft or other vehicle carrying the mobile station.

The person holding the authority to supervise must require that the radio operators operate and maintain the radio equipment efficiently and that the watch periods assigned to the station concerned are closely observed.

If the radio operator considers that an order given to him by the master is not in conformity with these Regulations or with the supplementary provisions given by the administration concerned, he shall obey his superior; however, he is entitled to get the order in writing so as to keep it for himself as a piece of evidence.

Reasons

This article has often been the cause of dispute. The present wording gives all responsibility for the station to incompetent hands. If the radio operator cannot be made responsible for anything, the compliance with the provisions of the Regulations, etc., will remain doubtful.

1655 Denmark, Iceland, Norway, Sweden

§ 566. Replace the present text by the following:

The person holding this authority must require the operators to comply with these Regulations and the additional Regulations that may be issued by the administration or company responsible for the operation of the station.

Reasons

Addition justified by the current practice.
§ 3. The master or the person responsible, as well as all persons who may have knowledge of the text or even of the existence of the radiotelegrams, or of any information whatever obtained by means of the radiocommunication service, are placed under the obligation of observing and ensuring the secrecy of correspondence.

CHAPTER XIII

Working Conditions in the Mobile Services

ARTICLE 27

Aircraft and Aeronautical Stations

§ 1. Except as otherwise provided in these Regulations, the aeronautical mobile service may be regulated by special arrangements between the governments concerned (see article 40 of the Convention).

§ 2. In the absence of special arrangements, the provisions of these Regulations concerning the exchanging of and accounting for public correspondence shall be applicable, in a general way, to the exchanging of and accounting for public correspondence by stations in the aeronautical mobile service.

§ 3. (1) Aircraft stations may communicate with stations of the maritime mobile service.

1656 Denmark, Finland, Iceland, Norway, Sweden

§ 1. See the general proposal concerning an editorial revision of Chapters XIII–XV of the RR, Part I A of the Book of Proposals.

1657 United States of America

§ 2. In fine replace: article by: Article.

Reasons
Editorial.

1658 France, French O. P. T. A.

§ 2. For: Article 40, read: Article 41.

1659 United Kingdom

§ 3. in a general way.

Reasons
To ensure compliance with the RR.

1660 France, French O. P. T. A.

§ 3. (1) Aircraft stations may communicate with maritime mobile stations. They must then conform to those provisions of the Regulations which relate to the maritime mobile service.

Reasons
See proposal 1662.
Present Provisions

(2) For this purpose only, they may utilize frequencies allocated to the maritime mobile service and must then conform to the provisions of these Regulations relating to the maritime mobile service.

Proposals

1661 United States of America

571. Add in fine:

Aircraft using frequencies of the maritime mobile service shall exercise every precaution to avoid disruption of maritime mobile communications. In this regard, attention is called to the greatly increased propagation distance obtained by radio transmissions above 30 Mc/s from aircraft flying at high altitudes.

Reasons

Because of high altitude transmission by aircraft, the use of marine VHF frequencies by such aircraft may cause interference to ship and coast stations over a wide area.

1662 France, French O. P. T. A.

571. Replace the present text by the following:

(2) For this purpose, aircraft stations must use the frequencies allocated to the maritime mobile service.

Reasons

This is not the only purpose for which aircraft stations use maritime mobile frequencies. The use of certain frequencies, such as 500 kc/s and 8364 kc/s, is subject to special provisions, and it is possible that communications concerning safety inquiries and operations may be made on these frequencies with stations other than maritime mobile ones.

1663 Netherlands

571. Replace the present text by the following:

(2) Aircraft stations must for this purpose use the frequencies allocated to the maritime mobile service. Administrations shall take whatever steps may be necessary to prevent aircraft, flying at high altitudes and transmitting on frequencies above 30 Mc/s, from disrupting maritime mobile communications.

Reasons

In the frequency band above 30 Mc/s, a limited number of frequencies have been allocated for use by the maritime mobile service. In some regions of the world, these frequencies have been assigned and are used on a fully planned basis for surface communications.
**Present Provisions**

**Proposals**

1664  France, French O.P.T.A.

571. After this No. add the following new sub-paragraph:

(2 bis) However, Administrations shall ensure that, in using frequencies allocated to the maritime mobile service in bands above 30 Mc/s, aircraft flying at great altitudes do not cause long-distance interference to communications between maritime mobile stations.

**Reasons**

At great altitudes the range of aircraft transmissions may be several hundred miles; hence maritime mobile communications need protection.

572  (3) Aircraft stations when handling public correspondence with stations of the maritime mobile service must comply with all the provisions applicable to the handling of public correspondence in the maritime mobile service (see particularly articles 38, 39, 40 and 41).

1665  United States of America

572. In fine replace: articles by: Articles.

**Reasons**

Editorial.

ARTICLE 28

Conditions To Be Observed by Mobile Stations

1666  France, French O.P.T.A.

**GENERAL REMARKS**

1. Changes in the "Conditions to be observed by mobile stations" require a complete recasting of Article 28.

2. The references used in the first column of the proposal are as follows:

   * Radio Regulations (RR)*
   Reference: paragraph No.

   * Supplementary Radio Regulations, Göteborg (SRR)*
   Reference: G ...

   * Supplementary Radio Regulations, (SRR) The Hague*
   Reference: H ...

3. Provisional numbering of the paragraphs is indicated in the second column.

4. We wish to submit the revised Article 28 as a whole and request that our proposal should not be divided and numbered.
Present Provisions

Section I. General Provisions

§ 1. (1) Mobile stations must be established in such a way as to conform as regards frequencies and class of emission to the provisions of chapter III.

§ 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.

§ 3. The energy radiated by receiving apparatus must be reduced to the lowest possible value and must not cause harmful interference to other stations.

§ 4. (1) Changes of frequency in the sending and receiving apparatus of any mobile station must be capable of being made as rapidly as possible.

§ 5. Broadcasting by mobile stations at sea and over the sea is prohibited.

§ 6. Mobile stations must be provided with the service documents enumerated in appendix 8.

Proposals

France, French O.P.T.A. (cont'd)

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<td>1672</td>
<td>576 28-05</td>
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<td>1668</td>
<td>1673</td>
<td>577 28-06</td>
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<td>579 28-08</td>
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<td>1671</td>
<td>1676</td>
<td>580 28-09</td>
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</tbody>
</table>

Section I. General Provisions

Unchanged.

For: see 711, read: see 711 and 712.

Unchanged.

Replace by:

When the ship transmitter itself cannot be controlled in such a way that its frequency satisfies the tolerance laid down, mobile stations must be provided with a device, having a precision at least equal to one-half of this tolerance, for measuring the frequency of emission.

Reasons

This paragraph should appear in Section I. It is preferable, moreover, that it should apply to all mobile stations.

Unchanged.

Unchanged.

Unchanged.

Section II. Ship Stations using Radiotelegraphy

(See No. 28-04).
Present Provisions

584  (2) All ship stations working in the authorized bands between 405 and 535 kc/s must be able to use the frequency 500 kc/s and at least one working frequency.

585  § 10. (1) Every station installed on board a ship compulsorily equipped with radiotelegraph apparatus in accordance with an international agreement must be able to send and receive class A2 emissions:

586  a) on the frequency 500 kc/s, and

587  b) in addition on at least two working frequencies in the authorized bands between 405 and 535 kc/s.

588  (2) The provisions of 587 do not apply to transmitters on lifeboats, liferafts and survival craft or to emergency (reserve) transmitters of ship stations.

589  § 11. Any radiotelephone station installed on board a ship which uses the frequency 2182 kc/s for call and reply must be provided with at least one other frequency in the bands between 1605 and 2850 kc/s in which radiotelephone services are admitted.

590  § 12. In ship stations, all apparatus installed for the use of class A1 emission on frequencies in the authorized bands between 4000 and 23000 kc/s must satisfy the following conditions:

591  a) in each of the bands necessary to carry on their service, they must be equipped with at least two working frequencies in addition to one frequency in the calling band;

592  b) changes of frequency in transmitting apparatus must be effected within 5 (five) seconds if the frequencies are in the same band and within 15 (fifteen) seconds if the frequencies are in different bands;

593  c) receiving apparatus must be capable of a performance equal to that of the transmitting apparatus in the matter of frequency changing and must be designed in such

France, French O.P.T.A. (cont’d)

<table>
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<tr>
<td>595</td>
<td>28-10</td>
<td>Ship stations equipped with radiotelegraph apparatus must be able to receive, in addition to 500 kc/s, all the frequencies necessary for their service in classes A1 and A2.</td>
</tr>
<tr>
<td>596</td>
<td></td>
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<td>597</td>
<td>28-11</td>
<td>Ship stations equipped with radiotelegraph apparatus must also be equipped with devices permitting change-over from transmission to reception and vice-versa without manual switching.</td>
</tr>
<tr>
<td>598</td>
<td></td>
<td>Authorized bands between 110 and 160 kc/s</td>
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<td>599</td>
<td></td>
<td>Unchanged.</td>
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<tr>
<td>600</td>
<td>28-12</td>
<td>Authorized bands between 405 and 535 kc/s</td>
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<td>601</td>
<td>28-13</td>
<td>Unchanged.</td>
</tr>
<tr>
<td>602</td>
<td>28-14</td>
<td>Ship stations equipped with radiotelegraph apparatus and working in the authorized bands between 405 and 535 kc/s must have at least one transmitter capable of operating:</td>
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<tr>
<td>603</td>
<td></td>
<td>a) in class A2 on 500 kc/s</td>
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<tr>
<td>604</td>
<td>28-15</td>
<td></td>
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<tr>
<td>605</td>
<td>28-16</td>
<td>b) in classes A1 and A2 on at least two working frequencies in the authorized bands between 405 and 535 kc/s.</td>
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<tr>
<td>606</td>
<td>28-17</td>
<td>The provisions of 28-14, 28-15 and 28-16 do not apply to transmitters on lifeboats,</td>
</tr>
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<td>607</td>
<td></td>
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</table>
Present Provisions

a manner so as to ensure a satisfactory performance;

594  

   d) the provisions of 592 and 593 above shall become effective on the same dates as the tolerance requirements of column 3 of appendix 3 as applied to ship and aircraft stations.

595  § 13. (1) Stations in ships compulsorily equipped with radiotelegraph apparatus must be able to receive, in addition to 500 kc/s, all the frequencies necessary for their service.

596  (2) Such stations must be able to receive easily and efficiently on the same frequencies class A1 and A2 emissions.

597  (3) Ship radiotelegraph stations shall be equipped as soon as possible with devices permitting change-over from transmission to reception and vice-versa without manual switching.

Section III. Aircraft Stations

598  § 14. (1) Any aircraft station following a maritime course and required by national or international regulations to communicate, for safety purposes, with stations of the maritime mobile service, must be capable of transmitting and receiving on the frequency 500 kc/s, preferably class A2 emission.

599  (2) Aircraft stations when communicating with stations of the maritime mobile service on frequencies allocated to the maritime mobile service shall comply as far as possible with the provisions of this article.

Section IV. Lifeboat, Liferaft and Survival Craft Stations

600  § 15. (1) Any installation used on board a lifeboat, a liferaft, or a survival craft, compulsorily provided with radio apparatus as a result of an international agreement, must be capable of transmitting by radiotelegraphy on the frequency 500 kc/s, preferably class A2 emission. In cases where the equipment provides for the use of frequencies between 4000 and 23000 kc/s, it must be able to transmit on the frequency 8364 kc/s, preferably class A2 emission.

Proposals

France, French O.P.T.A. (cont'd)

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<tr>
<td>1687</td>
<td>liferafts and survival craft (see Section V) or to emergency ship transmitters.</td>
</tr>
<tr>
<td>1688</td>
<td>Authorized bands between 4000 and 23000 kc/s</td>
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<tr>
<td>1689</td>
<td>Unchanged.</td>
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<tr>
<td>1690</td>
<td>Retain, adding at the end: (see 789 and 795).</td>
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<td>1691</td>
<td>Unchanged.</td>
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<td>1692</td>
<td>Delete.</td>
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Reasons

It seems necessary to rearrange the present provisions under different headings and to amend some of them to take account of developments in ship installations.

The foregoing texts depend upon the introduction into Article 1 of the following three additional definitions:

Principal transmitter: Ship radio transmitter normally used for the routing of traffic.

Reserve transmitter: Ship radio transmitter which may be used instead of the principal transmitter for the routing of traffic. Usually the power of the reserve transmitter is less than that of the principal transmitter.

Emergency transmitter: Ship radio transmitter which may be used only for distress purposes on distress frequencies.

(See 28-10)
Present Provisions

(2) If the equipment includes a receiver, it shall be able to receive on 500 kc/s, preferably class A2 emission, and, in the case where the transmitter employs frequencies between 4000 and 23000 kc/s, and a receiver is provided, it must be able to receive classes A1 and A2 emissions throughout the band 8266 to 8745 kc/s.

Proposals

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<tr>
<td>1695 589 G 2</td>
<td>28–22</td>
<td></td>
</tr>
<tr>
<td>1696 589 G 1</td>
<td>28–23</td>
<td></td>
</tr>
<tr>
<td>1697 825</td>
<td>28–24</td>
<td></td>
</tr>
</tbody>
</table>

France, French O.P.T.A. (cont'd)

Section III. Ship Stations using Radiotelephony

Authorized bands between 1 605 and 3 800 kc/s

Ship stations equipped with radiotelephone apparatus and working in the authorized bands between 1 605 and 3 800 kc/s must be able to receive all the frequencies necessary for their service in class A3, in addition to 2 182 kc/s.

Ship stations equipped with radiotelephone apparatus and working in the authorized bands between 1 605 and 3 800 kc/s must be able to make class A3 transmissions:

a) on 2181 kc/s

b) on at least one “ship-to-coast” frequency and one “ship-to-ship” frequency.

The power of the unmodulated carrier-wave supplied to the antenna by such transmitters shall not exceed 100 watts.

Reasons

Rearrangement of various provisions of the RR and of the Göteborg (1955) Supplementary Regulations. The greater power transmitted, moreover, increases interference considerably without any appreciable effect on the range.
<table>
<thead>
<tr>
<th>No. in the RR or SRR</th>
<th>No.</th>
<th>Proposed amendments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1698</td>
<td>28-25</td>
<td><strong>Authorized bands between 4,000 and 23,000 kc/s</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ship stations equipped with radiotelephone apparatus and working in the authorized bands between 4,000 and 23,000 kc/s must be able to make class A3 and/or class AR3 transmissions in each of these bands:</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Reasons</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>The RR recommend the use of paired channels; for ships wishing to communicate with a coast station of another nationality, contact would be facilitated if one channel per band were reserved for calling in the ship-to-coast direction.</td>
</tr>
<tr>
<td>1699</td>
<td>28-26</td>
<td>In the tropical zone, the provisions of 28-25 shall not be applicable to coastal shipping; the power supplied to the antenna by the transmitters of such ships must not exceed 25 watts.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Reasons</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>In the tropical zone, some ships use frequencies in the 4 to 8 Mc/s bands; while it is unnecessary to subject them to the foregoing provisions, it would seem reasonable to limit the power transmitted given the short distances of the circuits and the need to reduce interference with other long-distance circuits.</td>
</tr>
</tbody>
</table>
Present Provisions

<table>
<thead>
<tr>
<th>No. in the RR or SRR</th>
<th>No.</th>
<th>Proposed amendments</th>
</tr>
</thead>
</table>
| 1700 H 1 and 2       | 28–27 | Ship stations working in the international maritime mobile VHF radiotelephone service in authorized bands between 156 and 162 Mc/s must be able to make and to receive class F3 transmissions:  
a) on the frequency 156.80 Mc/s  
b) on at least:  
   — one “intership” channel  
   — one “harbour control” channel  
   — two “public correspondence” semi-duplex channels. |
| 1701 H 3             | 28–28 | These ship stations must be able to transmit and to receive on the other frequencies necessary for their service. |
| 1702 H Ann. 2        | 28–29 | The technical characteristics for frequency-modulated VHF radiotelephone equipment in the international maritime mobile service shall be as follows: |

Reasons

It is advisable to have a universal definition of the main characteristics of the international maritime mobile VHF radiotelephone service. The definitions of “simplex”, “semi-duplex” and “duplex” indicated in the Hague Agreement should, moreover, appear in Article-1.
Present Provisions

Proposals

France, French O.P.T.A. (cont'd)

<table>
<thead>
<tr>
<th>No. in the RR or SRR</th>
<th>No.</th>
<th>Proposed amendments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1703</td>
<td>28-30</td>
<td>At present the frequency deviation shall not be greater than ±15 kc/s; the maximum deviation will be reviewed later if it is found in practice that unacceptable adjacent channel interference occurs, particularly as the loading of the channels increases.</td>
</tr>
<tr>
<td>1704</td>
<td>28-31</td>
<td>All receivers shall be capable of satisfactorily receiving emissions having a maximum deviation of ±15 kc/s.</td>
</tr>
<tr>
<td>1705</td>
<td>28-32</td>
<td>Vertical polarization shall be used.</td>
</tr>
<tr>
<td>1706</td>
<td>28-33</td>
<td>The equipment shall be designed for a frequency separation between adjacent channels of 50 kc/s.</td>
</tr>
<tr>
<td>1707</td>
<td>28-34</td>
<td>Frequency modulation with a pre-emphasis of 6 db/octave shall be used (phase modulation) with subsequent de-emphasis in the receiver.</td>
</tr>
<tr>
<td>1708</td>
<td>28-35</td>
<td>The output power of a ship's transmitter shall not exceed 20 watts, except in special circumstances to be determined by individual Administrations.</td>
</tr>
<tr>
<td>1709</td>
<td>28-36</td>
<td>On any spurious, radiated frequency, the power measured at the output of the transmitter, when loaded with a resistance equal to the nominal antenna impedance, shall not exceed 50 microwatts.</td>
</tr>
</tbody>
</table>
### Present Provisions

<table>
<thead>
<tr>
<th>No. in the RR or SRR</th>
<th>No.</th>
<th>Proposed amendments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1710</td>
<td>28–37</td>
<td>The audio-frequency bandwidth shall be limited to 3000 c/s.</td>
</tr>
<tr>
<td>1711</td>
<td>28–38</td>
<td>The frequency tolerance of the transmitter shall not exceed 0.002 %.</td>
</tr>
<tr>
<td>1712</td>
<td>28–39</td>
<td>Equipment shall be designed so that frequency changes between assigned channels can be speedily carried out, e.g. within a few seconds.</td>
</tr>
</tbody>
</table>

### Proposals

**France, French O.P.T.A. (cont'd)**

<table>
<thead>
<tr>
<th>No. in the RR or SRR</th>
<th>No.</th>
<th>Proposed amendments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1713</td>
<td>598</td>
<td>28–40 All stations aboard aircraft flying over the sea and required by national or international regulations to communicate, for safety purposes, with maritime mobile stations, must be capable of transmitting and receiving (preferably) class A2 emissions on 500 kc/s or, if this is impossible, class A3 emissions on 2182 kc/s.</td>
</tr>
<tr>
<td>1714</td>
<td>599</td>
<td>28–41 Unchanged.</td>
</tr>
</tbody>
</table>
Present Provisions

France, French O.P.T.A. (cont'd)

<table>
<thead>
<tr>
<th>No. in the RR or SRR</th>
<th>No.</th>
<th>Proposed amendments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1715</td>
<td>600</td>
<td>28-42</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Section V. Lifeboat, Liferaft and Survival Craft Stations</td>
</tr>
<tr>
<td>1716</td>
<td>600</td>
<td>28-42</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The transmitting frequencies of apparatus to be used on board lifeboats, liferafts and survival craft (in groups or singly) shall be chosen, in accordance with the desired aim, from the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wave range</td>
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<tr>
<td></td>
<td></td>
<td>Hectometric waves</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hectometric waves</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Decametric waves</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Metric waves</td>
</tr>
<tr>
<td>1717</td>
<td></td>
<td>1) For example, 121.5 Mc/s or 243 Mc/s.</td>
</tr>
<tr>
<td>1718</td>
<td>601</td>
<td>28-43</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The receiving frequency bands of apparatus to be used on board lifeboats, liferafts and survival craft (in groups or singly) shall be chosen, in accordance with the desired aim, from the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wave range</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hectometric waves</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hectometric waves</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Decametric waves</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Metric waves</td>
</tr>
<tr>
<td>1719</td>
<td></td>
<td>1) For example, 121.5 Mc/s or 243 Mc/s.</td>
</tr>
</tbody>
</table>

Reasons

The technical development of apparatus used in search and safety operations would indicate that the frequencies to be used for the various wave ranges should be specified.

It will be the task of the next conference on the safety of life at sea to draw up appropriate provisions governing transmission and reception.
1720 United Kingdom

574. Delete.

Reasons
Covered by 711.

1721 U.S.S.R.

574. Delete.

Reasons
The use of an excessive bandwidth is inadmissible.

United Kingdom

1722 578. Delete: once communication is established.

Reasons
The limitation is unnecessary.

1723

578. After this No. add the following new subparagraph:

(2 bis) Radiotelephone stations of the maritime mobile service should be equipped with devices for instantaneous switching from transmission to reception and vice versa. This provision is necessary for all stations establishing communication between ships or aircraft and subscribers of the land telephone system.

Reasons
Contains the substance of 809, which appears more appropriately here.

1724 Japan

580. Replace the present text by the following:

§ 6. Ship and aircraft stations must be provided with the service documents enumerated in Appendix 8. However, they may be exempted from being provided
Present Provisions

with some of such documents which the administration deems unnecessary, with the exception of licences, certificates of the operator or operators, and the log (diary of the radio service).

Reasons

Among documents such as lists of stations enumerated in Appendix 8, there are some with which the stations are not obliged to be provided, depending on the range of action of ships or aircraft. So, it is intended to specify that at the discretion of the administration, the stations may be exempted from having such documents.

United Kingdom

1725  580. Replace the present text by the following:

§ 6. Ship and aircraft stations must be provided with the service documents enumerated in the appropriate section of Appendix 8.

Reasons

To exclude land mobile stations.

1726

583. Delete: on emissions of class A2.

Reasons

To cover A1 emissions also.

1727

584. Delete.

Reasons

Covered by proposals for 585 to 587.
(See proposal 1728.)

1728

585 to 587. Replace the present text of these three Nos. by the following:

§ 10. (1) All ship stations equipped to work in the authorized bands between 405 and 535 kc/s must be able to:
Present Provisions

Proposals

United Kingdom (cont'd)

a) send and receive on the frequency 500 kc/s;
b) send, in addition, on at least two working frequencies in the authorized bands between 405 and 535 kc/s;
c) send and receive on the same frequencies class A1 and A2 emissions;
d) receive on all the frequencies necessary for their service.

Reasons
585 to 587 and 595-596 combined to make the same provisions applicable to all ship stations using the band 405-535 kc/s.

1729

588. Replace the present text by the following:

(2) The provisions of Nos. ... to ... [included in proposal 1728 a), b), c) and d)] do not apply to transmitters on lifeboats, liferafts and survival craft, nor do they apply to emergency (reserve) transmitters of ship stations where these are provided for distress and urgency use only.

Reasons
To confine 588 to emergency (reserve) installations provided for distress and urgency use only.

1730 Japan

588. After this No. add the following new subparagraph:

(2 bis) Any radiotelegraph station installed on board a ship which uses the frequency 2 091 kc/s for call and reply must be provided with at least one other frequency in the bands between 1 605 and 2 850 kc/s in which radiotelegraph services are admitted.

Reasons
This is deemed necessary for operation on 2091 kc/s.
United Kingdom

1731. After this No. add the following new paragraph:

§ 10 bis. Ship radiotelegraph stations shall be equipped with devices permitting change-over from transmission to reception and vice versa without manual switching and facilities shall be provided for listening on the receive frequency during the period of transmission.

Reasons

587 transferred to a more appropriate place and amplified to accommodate a modern practice.

1732

589. Replace the present text by the following:

§ 11. All ship stations using radiotelephony in the authorized bands between 1 605 and 2 850 kc/s must be able to:

a) send and receive on the frequency 2 182 kc/s;

b) send and receive on at least two working frequencies;

c) receive on all the frequencies necessary for their service.

Reasons

A minimum of the calling frequency and two working frequencies is considered necessary for a satisfactory public service.

1733 U. S. S. R.

589. Delete.

Reasons

Provision has been made for this point in Article 34.

1734 Federal German Republic

589. After this No. add the following new paragraph:

§ 11 bis. Ship stations that are frequently in contact with a coast station of another nationality may employ
Present Provisions

the same operating procedure as the ship stations of the same nationality as the coast station, if so agreed between the administrations concerned.

Reasons
Gothenburg Conference (1955), Resolution No. 3, para. 5.

1735 United Kingdom

593. Replace the present text by the following:
c) In the matter of frequency changing, receiving apparatus must be capable of a performance equal to that of the transmitting apparatus.

Reasons
The part deleted is redundant.

1736 Japan, Netherlands, United Kingdom, U.S.S.R.

594. Delete.

Reasons
Japan:
A transitional provision which is no longer required.
Netherlands, United Kingdom:
No longer required.
U.S.S.R.:
Contemporary equipment makes it possible to abide by the provisions of 592 and 593, so that it becomes pointless to keep this limitation.

United Kingdom

1737 594. After this No. add the following new paragraph:

§ 12 bis. All ship radiotelephone stations using the authorized bands between 156 and 174 Mc/s must be able to send and receive on:

a) the calling and safety frequency 156.80 Mc/s;
b) the primary intership frequency 156.30 Mc/s; and
Present Provisions

Present Provisions

Proposals

United Kingdom (cont'd)

c) all the frequencies necessary for their service.

Reasons

To incorporate 1-3 of the The Hague Supplementary Regulations.

1738

595 and 596. Delete.

Reasons

Provided for in the new paragraph intended to replace Nos. 585 to 587 (proposal 1728).

1739 Japan

597. At the beginning read:

(3) Such stations shall be equipped with devices...

(remainder unchanged).

Reasons

It is deemed unnecessary to include the words “as soon as possible” for stations in ships compulsorily equipped with radiotelegraph apparatus.

1740 United Kingdom

597. Delete.

Reasons

Included in proposal 1731.

1741 Japan

598. Read in fine:

... and receiving on the frequency 500 kc/s class A2 emission or 2182 kc/s class A3 emission.

Reasons

The frequency to be used by an aircraft station following a maritime course in communicating, for safety purposes, with a station in the maritime mobile service is prescribed to be 500 kc/s. The frequency 2182 kc/s class A3 emission will be added, as its use is more suitable in view of the present status of aircraft stations and their operation.
1742 Poland (People’s Republic of)

598. Add in fine: or, if this is not possible, on 2 182 kc/s, class A3 emission.

1743 United Kingdom

598. Delete.
Reasons
No longer required.

1744 India

600. At the end of the first sentence delete: preferably and at the end of the paragraph add: modulated at 1 000 cycles per second.

Reasons
To ensure good tone quality of the A2 emission from the life boat, survival craft etc.

United Kingdom

1745 601. Delete everything after: preferably class A2 emission.

1746

601. After this No. add the following new sub-paragraph:

(2 bis) In the case where the transmitter includes frequencies between 4 000 and 23 000 kc/s and facilities are provided for reception in these bands, then the receiver must be able to receive classes A1 and A2 emissions throughout the band 8 266 to 8 745 kc/s.

Reasons
Clarification.
ARTICLE 29

General Radiotelegraph Procedure in the Maritime Mobile and Aeronautical Mobile Services

Section I. General Provisions

602 § 1. (1) In the maritime mobile and aeronautical mobile services the procedure detailed in this article is obligatory, except in the case of distress calls or of distress traffic, to which the provisions of article 37 are applicable.

(2) However, in the aeronautical mobile service the procedure contemplated in sections III, IV and V is applicable only in the absence of special arrangements to the contrary made by agreements between the governments concerned.

603 § 2. Aircraft stations when communicating with stations of the maritime mobile service must use the procedure laid down in this article.

604 § 3. In order to facilitate radiocommunications, stations of the mobile service use the service abbreviations given in appendix 9.

605 § 3. (1) The use of the Morse code signals specified in the Telegraph Regulations shall be obligatory in the maritime and aeronautical mobile services. However, for radiocommunications of a special character, the use of other signals is not precluded.

606 § 3. (2) In the maritime mobile service, only the service abbreviations given in appendix 9 are to be used.

1747 United Kingdom
In the heading, delete: radiotelegraph.

1748 France, French O. P. T. A., Morocco

602. Replace: except in the case of distress calls or of distress traffic, to which... by: except in case of distress, urgency or safety traffic, to which...

1749 United Kingdom


Reasons

Article 29 relates only to radiotelegraphy.

1750 Finland

607. Replace the present text by the following:
(2) In the maritime mobile radio service, the service abbreviations given in Appendix 9 are to be used in the first place.

Reasons

An alleviation is necessary because the expression "only" is not applicable in practice.
Present Provisions | Proposals
--- | ---

**1751 Sweden**

607. Replace the present text by the following:

(2) In the maritime mobile service only the service abbreviations given in Appendix 9 are authorized for international use.

*Note:* Heading of Appendix 9 to be amended accordingly.

**Reasons**

In order to make the provision less restrictive.

**1752 Italy**

607. After this No. add the following new sub-paragraph:

(2 bis) However, the abbreviations contained in the "Code and Abbreviations used for International Telecommunication Services" published by the I.T.U., may be used if necessary.

**Reasons**

To spread the use of this code recently published by the I.T.U.

**1753 United Kingdom**

607. After this No. add the following new sub-paragraph:

(2 bis). Automatic calling devices may be used in the mobile radiotelephone service.

**Reasons**

808 transferred to a more appropriate place.

**1754 Belgium, France, French O.P.T.A., Morocco, United Kingdom**

608. Delete.

**Reasons**

Belgium:

These provisions are embodied in a separate section dealing with radiotelephony.

France, French O.P.T.A., Morocco:

Another article of the Regulations deals with radiotelephone procedure.

United Kingdom:

Consequential on the inclusion of radiotelephony in detail in this Article.

---

608 § 4. The provisions of §§ 6, 23, 24 and 25 of this article are applicable to radiotelephone communications in the mobile service.
Section II. Preliminary Operations

609 § 5. In areas where traffic is congested, ship stations must take into account the provisions of 721.

610 § 6. (1) Before emitting, every station must listen for a period long enough to satisfy itself that it will not cause harmful interference to transmissions in progress within its range; if such interference is likely, the station awaits the first break in the transmission with which it might interfere.

611 (2) If, these precautions having been taken, the emissions of the station happen to interfere with a radio transmission already in progress the following rules are to be applied:

612 a) Within the zone of communication of a coast station open to public correspondence or of any aeronautical station, the station whose emission causes the interference must cease sending at the first request of the said coast station or aeronautical station.

1755 United Kingdom

609 Before: traffic, add: radiotelegraph.

Reasons

This provision relates only to radiotelegraphy.

1756 Replace the present text by the following:

§ 6. (1) Before emitting, every station should take all precautions to ensure that its emissions will not interfere with working already in progress; if such interference is likely, the station awaits an appropriate break in the working.

Reasons

To make this provision applicable to all types of service.

1757 Denmark, Finland, Iceland, Norway, Sweden

612 Replace the present text by the following:

a) The mobile station whose emission causes interference to the correspondence of a mobile station with a coast station or aeronautical station must cease sending at the first request of the said coast station or aeronautical station.

Reasons

To make the text applicable not only to short distance telegraphy and to avoid using the expression "zone of communication", which is not defined in the R.R. (See proposal 1853.)
613 

b) In the case where radiocommunication already in progress between mobile stations is interfered with by the emissions of another mobile station, this station must cease sending at the first request of one of the other stations.

614 
c) The station which requests this cessation must indicate the approximate waiting time imposed on the station whose emission it suspends.

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

616 § 7. Method of Calling.

(1) The call is made as follows:
   — call sign of the station called, not more than three times;
   — the word DE;
   — call sign of the calling station, not more than three times.

1758 France, French O.P.T.A.

615. Delete this No. which refers to a sub-heading.

1759 Netherlands

616. Read:

§ 7. Method of Telegraphic Calling.

Reasons
To make clear that the paragraph specifically applies to radiotelegraph transmission.

1760 United Kingdom

616. After this No. add a new sub-heading:

Radiotelegraphy.

Reasons
To segregate radiotelegraphy from radiotelephony in this paragraph.

1761 617. Replace the present text by the following:

(1) The call is made as follows:
   — call sign of the station called, up to three times;
   — the word DE;
   — call sign of the calling station, up to three times.
(2) However, in the bands of frequencies between 4 000 and 23 000 kc/s, when the conditions of establishing contact are difficult, the call signs may be transmitted more than three times, but not more than eight times.

618. Replace the present text by the following:

(2) Exceptionally, however, in the bands between 4 000 kc/s and 23 000 kc/s, when communications are peculiarly difficult, call signs may be transmitted more than three times. They must never be transmitted more than eight times.

Reasons

To put an end to a practice which is becoming ever more widespread; ship stations have become accustomed to transmitting their call signs eight times over, and even more. This causes a grave increase of traffic in the special calling bands, and hence leads to harmful interference therein.

618. Replace the present text by the following:

(2) However, in the bands of frequencies between 4 000 and 23 000 kc/s, when the conditions of establishing contact are difficult, the call sign of the station called may be transmitted more than three times, but not more than twelve times.

Reasons

As the experience obtained in the daily wireless operations shows, whenever the conditions of establishing contact with a desired station are difficult, there is always an indispensable need for more than eight (8) repetitions of the call sign of the station to be contacted. The existing limit of eight repetitions is, therefore, often exceeded in practice. Such being the case, violation of the RR often becomes inevitable. We hereby recommend that the number of repetitions of call of the station called be adjusted to twelve (12) in lieu of eight (8).

618. Replace the present text by the following:

(2) However, in the frequency bands between 4 000 and 23 000 kc/s, when the conditions for making con-
tact are difficult, the call sign of the called station may be transmitted more than three times, but not more than ten times.

**Reasons**

In case of difficulty, it is the call sign of the called station which should be repeated.

**1766 Netherlands**

618. Replace the present text by the following:

(2) However, in the bands of frequencies between 4 000 and 23 000 kc/s, when conditions of establishing contact are difficult, this call may be repeated no more than three times without interruption. If no reply has been received, the whole may be repeated twice with an interval of two minutes. Hereafter, the procedure of 694 must be followed.

**Reasons**

To meet the practical need for a method of calling, whereby the called station can answer sooner than under the present system.

**1767 Federal German Republic**

618. Replace the present text by the following:

(2) However, in the bands of frequencies between 4 000 and 23 000 kc/s, when the conditions of establishing contact are difficult, a total of 16 call signs altogether of the calling and called stations may be transmitted in alternating sequence (e.g.: ABC ABC de DEFG DEFG ABC ABC de DEFG DEFG ABC...).

**Reasons**

In the case of interference, the calling station can be more easily recognized and by employing the BK procedure the load on the calling frequency could to some extent be lessened.

**United Kingdom**

1768 618. Replace the present text by the following:

(2) However, in the bands of frequencies between 4 000 and 23 000 kc/s the call signs may be transmitted
Present Provisions

Proposals

United Kingdom (cont'd)

up to five times if conditions for establishing contact are difficult.

Reasons

To discourage unnecessary signalling.

1769

618. After this No. add a new sub-heading:
Radiotelephony.

Reasons

See proposal 1760.

1770

618. and add the following new paragraph:

§ 7 bis. (1) The call is made as follows:
— "Hullo... (call sign of the station called)", up to three times;
— the words THIS IS;
— call sign of the calling station, up to three times.
When contact is established the call signs thereafter may be transmitted once only.

Reasons

To incorporate 3 of the Göteborg Supplementary Regulations.

1771

(2) In the maritime mobile service if the coast station is fitted with equipment for selective calling and the ship is fitted with equipment for receiving selective calls, the coast station shall call the ship by transmitting the appropriate code signal, and the ship station shall call the coast station, by speech, in the manner given in paragraph 7 bis (1).
(Proposal 1770).

Reasons

To incorporate and generalize 5 of the Hague Supplementary Regulations.
Present Provisions

§ 8. Frequency to be Used for Calling and for Preparatory Signals.

United Kingdom

619. After this No. add a new sub-heading: Radiotelegraphy.

Reasons
See proposal 1760.

France, French O. P. T. A.

620. Replace the present text by the following:

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

Reasons
The called station may keep watch on several frequencies at once.

United Kingdom

621. Replace: specially reserved for this purpose, by: (see 655).

Reasons
Clarification.

Radiotelephony.

Reasons
See proposal 1760.

§ 8 bis. (1) A ship station calling a coast station should, as a general rule, use the frequency 2 182 kc/s.
Present Provisions

Proposals

United Kingdom (cont'd)

1777

(2) However, a ship station calling a coast station of its own nationality may use a working frequency upon which the coast station is known to be keeping watch.

Reasons

To incorporate 4 of the Göteborg Supplementary Regulations.

1778

(3) A ship station calling a coast station of another country may use a working frequency upon which watch is kept by that coast station, provided this has been agreed between the administrations concerned.

Reasons

To incorporate 5 of the Göteborg Supplementary Regulations.

1779

(4) A ship station calling another ship station should, as a general rule, use the frequency 2 182 kc/s.

1780

(5) However, in areas of heavy traffic a ship station calling another ship station should use an intership working frequency.

Reasons

To incorporate 6 of the Göteborg Supplementary Regulations.

1781

(6) A coast station should, as a general rule, call ship stations on the frequency 2 182 kc/s.
Present Provisions

Proposals

United Kingdom (cont'd)

1782

(7) However, a coast station may call ship stations of its own nationality on a working frequency.

Reasons

To incorporate 7 and 8 of the Göteborg Supplementary Regulations.

1783

(8) (i) In the bands between 156 and 174 Mc/s used for the public correspondence and port operations services, coast and ship stations should call on the frequency 156.80 Mc/s. However, when using a two-frequency channel, for calling in the public correspondence service, they shall transmit on 162.00 and 157.40 Mc/s respectively, but this does not prohibit initial calling and answering on the working channel when previously arranged.

(8) (ii) When the frequency 156.80 Mc/s is being used for distress, urgency or safety communications, a ship station requiring entry into the Port Operations service may establish contact on the first choice port operations frequency 156.60 Mc/s.

Reasons

To incorporate 6 and 7 of the The Hague Supplementary Regulations, and to give effect to the Brussels recommendation in regard to the two-frequency VHF calling channel.

622 § 9. Indication of the Frequency to be Used for Traffic.

1785 622. After this No. add a new sub-heading: Radiotelegraphy.

Reasons

See proposal 1760.
Present Provisions

623. (1) The call, as described in 616, must be followed by the service abbreviation indicating the frequency and, if useful, the class of emission which the calling station proposes to use for the transmission of its traffic.

624. (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:

625. a) if the calling station is a land station: it indicates that this station proposes to use for traffic its normal working frequency indicated in the list of stations.

626. b) if the calling station is a mobile station: it indicates that the frequency to be used for traffic is to be chosen by the station called from amongst the frequencies on which the calling station can transmit.

Proposals


Reasons

Clarification.

1787. Delete.

Reasons

To make it obligatory for the calling station to indicate the working frequency to be used and thus reduce preliminary signalling.

1788. After this No. add a new sub-heading: Radiotelephony.

Reasons

See proposal 1760.

1789. and add the following new provisions:

b bis) If contact is established on the frequency 2 182 kc/s, coast and ship stations must transfer to one of their normal working frequencies for the exchange of traffic.

Reasons

To incorporate 9 of the Göteborg Supplementary Regulations.
§ 9 bis) (1) In the bands between 156 and 174 Mc/s used for the public correspondence service, whenever contact has been established between a coast station and a ship station on the frequency 156.80 Mc/s, or when necessary, on the two-frequency channel 157.40/162.00 Mc/s, the stations shall transfer to one of their normal working channels for the exchange of traffic. The calling station should indicate the channel to which it is proposed to transfer by reference to its channel designator (see appendix 12 bis).

Reasons
To incorporate 8 of the The Hague Supplementary Regulations.

1791
(2) A ship station, when it has established contact with a coast station in the Port Operations service on the frequency 156.80 Mc/s should indicate the particular service required (such as navigational information, docking instructions, etc.) and the coast station should then indicate the channel to be used for the exchange of traffic by reference to its channel designator (see Appendix 12 bis).

Reasons
To incorporate 9 of the The Hague Supplementary Regulations.

1792
(3) A coast station in the Port Operations service when it has established contact with a ship station on the frequency 156.80 Mc/s should indicate the channel to be used for the exchange of traffic, by reference to its channel designator (see Appendix 12 bis).

Reasons
To incorporate 10 of the The Hague Supplementary Regulations.

1793
(4) A ship station, when it has established contact with another ship station on the frequency 156.80 Mc/s should indicate the intership channel to
Present Provisions

Proposals

United Kingdom (cont'd)

which it is proposed to transfer for the exchange of traffic by reference to its channel designator (see Appendix 12 bis).

Reasons

To incorporate 11 of the The Hague Supplementary Regulations.

627 § 10. Indication of the Number of Radiotelegrams or of Transmission in Series.

628 (1) When the calling station has more than one radiotelegram to transmit to the station called, the above mentioned preparatory signals are followed by the service abbreviation and the figure giving the number of such radiotelegrams.

629 (2) Moreover, when the calling station wishes to send its radiotelegrams in series, it indicates this by adding the service abbreviation for requesting the consent of the station called.

630 § 11. Form of Reply to Calls.

The reply to calls is made as follows:
— call sign of the calling station, not more than three times;
— the word DE;
— call sign of the station called.

627 § 10. Read:

§ 10. Indication in Radiotelegraphy of the Number of Radiotelegrams or of Transmission in Series.

Reasons

To segregate radiotelegraphy.

629. After this No. add the following new sub-heading and paragraph:

§ 10 bis. Indication of the Number of Radiotelegrams by Radiotelephony and Radiotelephone Calls.

Reasons

To cater for radiotelephony.

630. After Form of Reply to Calls add a new sub-heading: Radiotelegraphy.

Reasons

See proposal No. 1760.

and replace: three times by: twice.
Present Provisions

§ 12. Frequency for Reply.

United Kingdom (cont'd)

1799

630. **After this No. add a new sub-heading: Radiotelephony.**

**Reasons**

See proposal 1760.

1800

**and add the following new sub-paragraph:**

The reply to calls is made as follows:

- "Hullo... (call sign of the calling station)", not more than twice;
- the words THIS IS;
- call sign of the station called.

**Reasons**

To incorporate 12 of the Göteborg Supplementary Regulations and 13 of the The Hague Supplementary Regulations, modified to discourage unnecessary calling.

1801

631. **After this No. add a new sub-heading:** Radiotelegraphy.

**Reasons**

See proposal 1760.

1802 France, French O. P. T. A., Morocco

634. **Replace:** as indicated in the List of Coast and Ship Stations, by: as indicated in heavy type in the List of Coast and Ship Stations.

**Reasons**

See proposal 1804.
Present Provisions

Proposals

1803 United Kingdom

634. Delete: and Ship.

Reasons
Consequential on proposals for Article 20.

1804 France, French O. P. T. A., Morocco

635. Replace: .... being indicated in the List of Coast and Ship Stations, by: .... being indicated in heavy type in the List of Coast and Ship Stations.

Reasons
This proposal is in conformity with the manner in which the normal working frequency is now indicated.

1805 United Kingdom

635. Delete: and Ship.

Reasons
Consequential on proposals for Article 20.

1806 Belgium

635. After this No. add the following new sub-paragraph:

b bis) When a mobile station calls a coast station on 500 kc/s, the coast station shall reply on 512 kc/s, the world-wide coast station reply frequency.

Reasons
So that coast stations may use 500 kc/s only for calling purposes and for distress and emergency. This would cut traffic on 500 kc/s by about half, reduce interference, ensure effective protection for distress signals and calls, and make things easier for coast and mobile stations. To this end, a world-wide reply frequency will have to be allocated to coast stations. Since 512 kc/s is already allocated to the maritime mobile service in Regions 1 and 3 and to the mobile service in Region 2, it would doubtless be possible to get world-wide agreement for its use by coast stations as world-wide reply frequency between 405 kc/s and 535 kc/s.

United Kingdom

1807 635. After this No. add a new sub-heading:
Radiotelephony.

Reasons
See proposal 1760.
Present Provisions

Proposals

United Kingdom (cont'd)

1808 and add the following new provisions:

(1) When a ship station is called on 2182 kc/s it should reply on the same frequency unless another frequency is indicated by the calling station.

Reasons
To incorporate 13 of the Göteborg Supplementary Regulations.

1809 (2) When a ship station is called on a working frequency by a coast station of the same nationality, it must reply on the working frequency normally associated with the frequency used by the coast station for the call.

Reasons
To incorporate 14 of the Göteborg Supplementary Regulations.

1810 (3) Ship stations must, after calling a coast station or another ship station, 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.

Reasons
To incorporate 10 of the Göteborg Supplementary Regulations.

1811 (4) A ship which frequently exchanges traffic with a coast station of another country may use the same procedure for reply as a ship of the nationality of the coast station, where this has been agreed by the administrations concerned.

Reasons
To incorporate 16 of the Göteborg Supplementary Regulations.

1812 (5) A coast station should reply to calls made by ships of its own nationality either on a working frequency or on 2182 kc/s, according to the requirements of the country concerned.

Reasons
To incorporate 15 of the Göteborg Supplementary Regulations.
§ 12bis (1) In the bands between 156 and 174 Mc/s calls received on 156.80 Mc/s should be replied to on the same frequency.

Reasons
To incorporate 14 of the The Hague Supplementary Regulations.

(2) When a coast station open to public correspondence calls a ship either by speech or by selective calling using a two-frequency channel, the ship shall reply by speech on the frequency complementary to that of the coast station; conversely, a coast station shall reply to a call from a ship on the frequency complementary to that of the ship station.

Reasons
To incorporate 15 of the The Hague Supplementary Regulations.

§ 13. Agreement on the Frequency to be Used for Traffic.

(1) If the station called is in agreement with the calling station, it transmits:

a) the reply to the call;

b) the service abbreviation indicating that from that moment onwards it will listen on the frequency announced by the calling station;

c) if necessary, the indications referred to in 648;

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 readability of the signals received (see appendix 9).

After this No. add a new sub-heading: Radio-telegraphy.

See proposal 1760.

Before: frequency, add: working.

Clarification.
(2) If the station called is not in agreement with the calling station on the frequency to be employed as the result of the arrangements under 623 and 624, it transmits:

a) the reply to the call;

b) the service abbreviation indicating the frequency and, if useful, the class of emission proposed;

c) if necessary, the indications specified in 648.

(3) When agreement is reached regarding the frequency which the calling station shall use for its traffic, the station called transmits the letter K after the indications contained in its reply.

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1817 643. Replace the present text by the following:

(2) If the station called is not in agreement with the calling station on the working frequency to be employed it transmits:

Reasons

Clarification.


Reasons

Clarification.

1819 647. Before: frequency add: working.

Reasons

Clarification.

1820

647. After this No. add a new sub-heading: Radio-telephony.

Reasons

See proposal 1760.

and add the following new sub-paragraphs:

1821 (1) If the station called is in agreement with the calling station it transmits:

1822 a) the reply to the call:

1823 b) an indication that from that moment onwards it will listen on the working frequency announced by the calling station;

1824 c) an indication that it is ready to receive the traffic of the calling station.
Present Provisions

1825  (2) If the station called is not in agreement with the calling station on the working frequency to be employed it transmits:

1826   a) the reply to the call;
1827   b) an indication of the working frequencies proposed.

1828  (3) When agreement is reached regarding the working frequency which the calling station shall use for its traffic, the station called indicates that it is ready to receive the traffic.

Reasons

To provide Regulations for handling radiotelephone traffic.

1829  In the bands between 156 and 174 Mc/s if a ship is not equipped to operate on the channel that is requested by a coast station, it should indicate such other channels on which it can operate, and the choice of channel shall be made by the coast station.

Reasons

To incorporate 16 of the The Hague Supplementary Regulations.


The station called, in replying to a calling station which has proposed to transmit its radiotelegrams by series (629), indicates, by means of the service abbreviation, its acceptance or refusal. In the former case it specifies, if necessary, the number of radiotelegrams which it is ready to receive in one series.

649 § 15.  Difficulties in Reception.

1830  Netherlands

649.  Read: Difficulty in Telegraphic Reception.

Reasons

To make clear that the paragraph specifically applies to radiotelegraphy.

1831  United Kingdom

649.  After this No. add a new sub-heading: Radiotelegraphy.

Reasons

See proposal 1760.
Present Provisions

650 (1) If the station called is prevented from receiving, it replies to the call as indicated in 636, but it replaces 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 10 minutes (5 minutes in the case of aircraft stations communicating with stations of the maritime mobile service), the reason for the delay must be given.

651 (2) When a station receives a call without being certain that such a call is intended for it, it must 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 must reply immediately, using the service abbreviation in place of the call sign of this latter station.

Proposals

United Kingdom (cont’d)

1832 650. Replace: prevented from receiving by: unable to accept traffic immediately.

Reasons

Clarification.

1833 651. After this No. add a new sub-heading: Radiotelephony.

Reasons

See proposal 1760.

and add the following new sub-paragraphs:

1834 (1) If the station called is unable to accept traffic immediately it replies to the call as outlined in . . . (new sub-paragraph — see proposal 1800) followed by “Wait . . . minutes” (indicate probable duration of waiting time in minutes). If the probable duration exceeds 10 minutes (5 minutes in the case of aircraft stations communicating with stations of the maritime mobile service), the reason for the delay must be given. Alternatively, the station called may indicate by any appropriate means that it is not ready to receive traffic immediately.

Reasons

To incorporate 17 of the Göteborg Supplementary Regulations.

1835 (2) When a station receives a call without being certain that such a call is intended for it, it must 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 must reply immediately asking for a repetition of the call sign of the calling station.

Reasons

To incorporate 18 of the Göteborg Supplementary Regulations.
Section IV. Forwarding (Routing) of Traffic

§ 16. Traffic Frequency.

(1) Every station of the mobile service uses, in principle, for the transmission of its traffic, one of its working frequencies as indicated in the list of stations, for the band in which the call has been made.

(2) In addition to its normal working frequency, printed in heavy type in the list of stations, every station may use one or more supplementary frequencies in the same band, in conformity with the provisions of article 33.

(3) The use of frequencies in the bands reserved for calling is forbidden for traffic with the exception of distress traffic (see article 33).

(4) If the transmission of a radiogram takes place on a frequency and/or class of emission other than that on which the call has been made the transmission of the radiogram is preceded by:

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

Present Provisions

Proposal

1836. France, French O. P. T. A.

Heading. Read:

Section IV. Routing of Traffic.

Reasons

The word "routing" is more appropriate than the word "forwarding".

1837. United Kingdom

Delete: as indicated in the list of stations.

Reasons

The working frequencies of individual ship stations are not included in the list.

1838. United Kingdom

After: list of, add: coast, and after: every, add: coast.

Reasons

It is considered that this Regulation should apply only to coast stations.

1839. Belgium

After this No. add the following new sub-paragraph:

(3bis) Unauthorized traffic means transmissions in connection with — TR — and — QSL —.

Reasons

To avoid superfluous transmissions on frequencies in the calling bands (see Article 33, 714 and 775).

1840. United Kingdom

Replace the present text by the following:

(4) If the transmission of a radiogram takes place on a frequency and/or class of emission other than that on which the call has been made the transmission of the radiogram is preceded by:

a) Radiotelegraphy:

- call sign of the station called not more than twice;
- the word DE;
- call sign of the calling station, not more than twice.
Present Provisions

Proposals

United Kingdom (cont’d)

1842  b) Radiotelephony:

— “Hullo .... (call sign of the station called)” not more than twice;
— the words THIS IS;
— call sign of the calling station, not more than twice.

Reasons
To cater for radiotelephony and to shorten calls.

657  (5) If the transmission is made on the same frequency and class of emission as the call, the transmission of the radiotelegram is preceded, if need be by:

— the call sign of the station called;
— the word DE;
— call sign of the calling station.

1843  657. Replace the present text by the following:

(5) If the transmission is made on the same frequency and class of emission as the call, the transmission of the radiotelegram is preceded, if need be by:

1844  a) Radiotelegraphy:

— call sign of the station called;
— the word DE;
— call sign of the calling station.

1845  b) Radiotelephony:

— “Hullo .... (call sign of the station called)”;
— the words THIS IS;
— the call sign of the calling station.

Reasons
To cater for radiotelephony.

1846

657. After this No. add a new sub-heading: Transmission of Radiotelegrams.

1847  and add the text of 661 unchanged.

Reasons
To bring 661 to a more appropriate place.
Present Provisions

§ 17. **Numbering in Daily Series.**

As a general rule radiotelegrams of all kinds transmitted by ship stations and radiotelegrams in the service of public correspondence transmitted by aircraft stations are to be numbered in a daily series, number 1 being given to the first radiotelegram sent each day to each separate land station.

§ 18. **Long Radiotelegrams.**

(1) In principle, any radiotelegram containing more than 100 words is regarded as forming a series, or terminates a series already in course of transmission.

(2) In cases where both stations are able to change from sending to receiving without manual switching, the sending station may continue to send until all its traffic has been sent or until the receiving station breaks in on the transmission with the service

Proposals

1848 **Denmark, Finland, Iceland, Norway, Sweden**

§ 17. **Numbering in Daily Series.** Radiotelegrams of all kinds transmitted by ship stations and radiotelegrams in the service of public correspondence transmitted by aircraft stations are to be numbered in one continuous daily series. If required, the radiotelegrams sent by a mobile station to different land stations may be numbered in separate daily series.

1849 **United Kingdom**

658. **Delete in fine: land.**

**Reasons**

Clarification of the intention as regards relayed messages.

1850 659. **Add: (radiotelegraphy).**

**Reasons**

To restrict application to radiotelegraphy.

1851 661. **Delete.**

**Reasons**

Transferred (see proposal 1847).
abbreviation BK. Before commencing, both stations normally agree on such a method of working by means of the abbreviation QSK.

662 (3) If this method cannot be employed, long radiotelegrams, whether in plain language or in code or cypher, are, as a general rule, to be transmitted in sections, each section containing 50 words in the case of plain language and 20 words or groups if code or cypher is used.

663 (4) At the end of each section the signal •••••• (?) meaning “Have you received the radiogram correctly up to this point?” is transmitted. If the section has been correctly received, the receiving station replies by sending the letter K and the transmission of the radiogram is continued.

664 § 19. Suspension of Traffic.

When a station of the mobile service transmits on a working frequency of a land station and so causes interference with the transmission of such land station, it must suspend working at the first request of the latter.
Present Provisions

(1) The transmission of a radiotelegram is terminated by the signal — — — (end of transmission), followed by the call sign of the sending station and the letter K.

Proposals

1856 Denmark, Finland, Iceland, Norway, United Kingdom, Sweden

666. *Delete:* the call sign of the sending station and.

Reasons

Denmark, Finland, Iceland, Norway, Sweden:
In accordance with current practice.

United Kingdom:
Sending the call sign at the end of traffic is considered unnecessary.

1857 Japan

666. *Add in fine:*

However, in the case of transmission of a short radiotelegram, the call sign of the sending station may be omitted.

Reasons

In the case of communication of short duration, the transmission of the call sign at the beginning of work is enough for identification of emissions. For simplification of radiocommunications, unnecessary transmissions should be avoided.

1858 Denmark, Finland, Iceland, Norway, Sweden

667. *After:* by the signal — — — add: (end of transmission) and *delete:* the call sign of the sending station and.

Reasons

In accordance with current practice.

1859 United Kingdom

667. *Delete:* the call sign of the sending station and.

Reasons

Sending the call sign at the end of traffic is considered unnecessary.
Present Provisions

Proposals

United Kingdom

1860 667. After this No. add a new sub-heading:
Radiotelephony.

Reasons

See proposal 1760.

1861 and add the following new sub-paragraph:

The transmission of a radiotelegram is terminated
by the word "radiotelegram ends" followed by the
word "over".

Reasons

To include procedure for handling radiotelegrams by radio-
telephony.


1862 668. After this No. add a new sub-heading:
Radiotelegraphy.

Reasons

See proposal 1760.

669 (1) The acknowledgment of receipt of a
radiotelegram is given by transmitting the letter R,
followed by the number of the radiotelegram. Such
acknowledgment of receipt is preceded by the following
formula:

— call sign of the station which has
been sending;
— the word DE;
— call sign of the station which has
been receiving.

670 (2) The acknowledgment of receipt of a
series of radiotelegrams is given by transmitting the
letter R, followed by the number of the last radiotele-
gram received. Such acknowledgment of receipt is
preceded by the above formula given in 669.

1863 Japan

670. Replace: the number of the last radiotele-
gram received by: the number of radiotelegrams re-
ceived or by the number of the last radiotelegram re-
ceived.

Reasons

In actual work, it is more convenient to indicate the number of
telegrams received in a series.
(3) The acknowledgment of receipt shall be transmitted by the receiving station on the traffic frequency (see 652).

United Kingdom

671. Add in fine: and the radiogram, or series of radiograms, must not be considered as cleared until this acknowledgement has been duly received.

Reasons

To emphasize that responsibility for obtaining acknowledgement lies with the sending station.

671. After this No. add a new sub-heading: Radiotelephony.

Reasons

See proposal 1760.

and add the following new sub-paragraphs:

(1) The acknowledgement of receipt of a radiogram is given in the following manner:

— "Hullo .... (call sign of the station which has been sending)";
— the words THIS IS;
— call sign of the station which has been receiving;
— "Your radiogram No. .... correctly received, over".

(2) When the receiving station is doubtful of the accuracy of the radiogram received it repeats the radiogram to the sending station for check.

(3) The acknowledgement of receipt is transmitted by the receiving station on the frequency used for the reply to the call [see Nos. .... (proposals 1807 etc.)] and the radiogram, or series of radio-
Present Provisions

Proposals

United Kingdom (cont'd)

telegrams, must not be considered as cleared until this acknowledgement has been duly received.

Reasons

To cater for radiotelephone traffic.

672 § 22. End of Work.

1870 672. After this No. add a new sub-heading: Radiotelegraphy.

Reasons

See proposal 1760.

673 (l) The end of work between two stations is indicated by each of them by means of the signal · · · · · (end of work), followed by its own call sign.

1871 Denmark, Finland, Iceland, Norway, Sweden

672. Delete: followed by its own call sign.

Reasons

Consequence of proposals 1856 and 1858.

1872 Japan

673. Add in fine:

However, in the case of work of short duration, the transmission of the call sign may be omitted.

Reasons

In the case of communication of short duration, the transmission of the call sign at the beginning of work is enough for identification of emissions. For simplification of radiocommunications, unnecessary transmissions should be avoided.

1873 Netherlands

673. Replace the present text by the following:

(1) If the acknowledgement of receipt is found to be correct, the station which has transmitted the telegram indicates the end of work by means of the following formula:

— call sign of the station which has been receiving;
— the word DE;
Present Provisions

Present Provisions

Proposals

— call sign of the station which has been sending;
— the signal ••••• (end of work).

Reasons

To meet practical requirements.

1874 United Kingdom

673. Delete in fine: followed by its own call sign.

Reasons

Considered unnecessary.

674 (2) For these signals the sending station continues to use the working frequency and the receiving station the frequency used for the reply to the call.

1875 Finland

674. Replace the present text by the following:

(2) These signals are sent on the frequency on which the work has taken place.

Reasons

Change of frequency for the sole purpose of sending the signal “end of work” is unnecessary; this procedure is no longer used in actual practice. Further, the use of the distress frequency for traffic purposes can thus be reduced.

1876 France, French O.P.T.A., Morocco

674. Replace the present text by the following:

(2) For these signals, both stations shall continue to use their respective traffic frequencies.

1877 United Kingdom

674. Delete.

Reasons

Considered unnecessary.
(3) The signal \( \ldots \ldots \) (end of work) is also 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 acknowledgment of receipt or without acknowledgment of receipt.

United Kingdom

1878 675. After this No. add a new sub-heading: Radiotelephony.

Reasons
See proposal 1760.

1879 and add the following new sub-paragraph:

The end of work between two stations is indicated by each of them by means of the word "out".

Reasons
To cater for radiotelephone traffic.

Section VI. Duration and Control of Work

1880 France, French O.P.T.A.

Heading: Read:

Section VI. Control of Work

1881 and add the following new sub-paragraph:

The provisions of this section are not applicable in case of distress, urgency or safety traffic (see 602).

1882 France, French O.P.T.A., Morocco

676. Delete.

Reasons
See proposal 1964.

1883 United Kingdom

676. Replace the present text by the following:

§ 23. In the maritime mobile service calling and signals preparatory to traffic must not exceed 3 minutes when made on 500 kc/s or 2 182 kc/s (see 602).

Reasons
To extend the Regulation to cover 2182 kc/s and to exclude distress working from the prohibition.
Present Provisions

677 § 24. 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 of the class of emission, and to the duration and suspension of work. This provision does not apply to cases of distress.

1884 Finland

677. Replace the present text by the following:

§ 24. The mobile station shall comply with instructions given by the land station, in all questions relating to the order and time of transmission, to the choice of frequency and of the class of emission, and to the duration and suspension of work. This provision does not apply to cases of distress.

Reasons

The responsibility of the land station must be increased.

1885 France, French O.P.T.A., Morocco

677. Delete the last sentence: This provision does not apply to cases of distress.

Reasons

See proposal 1887.

1886 United Kingdom

677. Delete last sentence, and add in fine: (see 602).

Reasons

None of the provisions of article 29 apply to cases of distress.

678 § 25. In communication between mobile stations, except in cases of distress, the station called controls the working in the manner indicated in 677.

1887 France, French O.P.T.A., Morocco

678. Delete: except in cases of distress.

Reasons

France, French O.P.T.A.: The instructions for normal traffic cannot be applied in case of distress, urgency or safety traffic for which the procedure is laid down in another article of the Regulations.
Present Provisions

Section VII. Tests

679 § 26. Where it is necessary for a mobile station to send signals for testing or adjustment which are liable to interfere with the working of a neighbouring coast or aeronautical station, the consent of the station must be obtained before such signals are sent.

680 § 27. 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, they must not continue for more than 10 seconds and must be composed of a series of VVV followed by the call sign of the station emitting the test signals.

Proposals

1888 United Kingdom

678. Delete: except in cases of distress, and add in fine: (see 602).

Reasons

None of the provisions of Article 29 apply to cases of distress.

1889

680. Replace the present text by the following:

§ 27. 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, they must not continue for more than 10 seconds. In the mobile radiotelegraph service the signals must be composed of a series of VVV followed by the call sign of the station emitting them, and in the mobile radiotelephone service they must contain the indication "... (call sign of the station) testing" spoken slowly and distinctly.

1890

680. After this No. add the following new paragraph:

§ 27 bis. Any signals sent for testing must be kept to a minimum.

Reasons

To incorporate 19 and 20 of the Göteborg Supplementary Regulations and 18 and 19 of the Hague Supplementary Regulations.
ARTICLE 30

Calls

§ 1. (1) In the aeronautical mobile service the procedure contemplated in this article is applicable, except in the case of special arrangements by agreements between the governments concerned.

§ 2. (1) As a general rule, it rests with the mobile station to establish communication with the land station. The mobile station may call the land station, for this purpose, only after coming within the range of action of the land station.

§ 2. (1) As a general rule, it rests with the mobile station to establish communication with the land station for the purpose of transmitting its traffic or making inquiries about traffic on hand or for other purposes. The mobile station may, however, only call the land station after coming within the range of action of the land station.

Reasons

To make clear that the article specifically applies to radiotelegraphy.

Reasons

To stress the importance of inquiries about traffic on hand being made by ships that, for some reason, have not been able to listen to the traffic lists emitted by a coast station.

Reasons

It is most difficult to define the range of action of a land station.
Present Provisions

United Kingdom

1894 683. Replace in fine: after coming within the range of action of the land station, by: when within the service area of the land station and using an appropriate frequency.

Reasons
More appropriate for modern techniques.

684  (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 within range and is keeping watch.

1895 684. Replace in fine: within range and is keeping watch, by: keeping watch and is within the service area of the land station.

Reasons
See proposal 1894.

685  § 3. (1) In addition, every coast station must, so far as practicable, transmit its calls in the form of "traffic lists" consisting of the call signs in alphabetical order of all mobile stations for which they have 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.

686  (2) Coast stations transmit their traffic lists on their normal working frequency.

1896  Denmark, Finland, Iceland, Norway, Sweden

686. Read in fine:
... on their normal working frequencies.

Reasons
Many coast stations transmit their traffic lists on more than one working frequency.
Present Provisions

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

— CQ DE... (call sign of the calling station)
— QSW followed by the indication of the working frequency on which the traffic list is about to be sent.

In no case may this preamble be repeated.

Proposals

1897 Denmark, Finland, Iceland, Norway, Sweden

687. From the word QSW read:

— QSW followed by the indication of the working frequency or frequencies on which...

*Reasons

Consequence of proposal 1896.

United Kingdom

1898 687. Replace the present text by the following:

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

1899

a) Radiotelegraphy:

— CQ DE... (call sign of the calling station);
— QSW followed by the indication of the working frequency on which the traffic list is about to be sent;

1900

b) Radiotelephony:

— "Hullo; all stations" (not more than twice);
— "THIS IS... (call sign of the calling station)";
— "listen for my traffic list on... (indication of working frequency on which the traffic list is about to be sent)".

1901

In no case may this preamble be repeated.

*Reasons

To incorporate 22 of Göteborg and 21 of the Hague Supplementary Regulations.
Present Provisions

688 (4) The provisions of 687 are obligatory where the frequency 500 kc/s is involved.

689 (5) They do not apply to the bands of frequencies between 4000 and 23000 kc/s.

690 (6) The hours at which coast stations transmit their traffic lists and the frequencies and classes of emission which they use for this purpose must be stated in the List of Coast and Ship Stations.

691 (7) Mobile stations which hear their call sign during this transmission must reply as soon as they can do so, following as far as possible the order in which they are called.

Proposals

United Kingdom

1902 688. Replace: frequency 500 kc/s is by: frequencies 500 kc/s., 2 182 kc/s and 156.8 Mc/s are.

Reasons
To include the radiotelephone calling frequencies.

Denmark, Finland, Iceland, Norway, Sweden

1903 690. In fine delete: and Ship.

Reasons
See proposal for Article 20.

1904 691. Read:

(7) Mobile stations should as far as possible listen to the transmissions of traffic lists, made by coast stations. On hearing their call sign during such a transmission they must reply ... (remainder unchanged).

Reasons
To stress the importance of ship stations listening to the transmissions of traffic lists, made by coast stations.

1905 693. Read in fine:

... greatest number of radiotelephone calls and radiograms.

Reasons
To make the paragraph applicable also to radiotelephony.
<table>
<thead>
<tr>
<th>Year</th>
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<th>Proposal</th>
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<tr>
<td>1906</td>
<td>United Kingdom</td>
<td>693. Add in fine: or radiotelephone calls.</td>
<td>To make the Regulation applicable to radiotelephone calls.</td>
</tr>
<tr>
<td>1907</td>
<td>U. S. S. R.</td>
<td>693. Replace the second sentence by the following:</td>
<td>Its decision shall be based on the urgency of the radiotelegrams ships have on hand and on the need for allowing each calling station to clear as many radiotelegrams as possible.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reasons</td>
<td>Supplements and clarifies the wording.</td>
</tr>
<tr>
<td>1908</td>
<td>Denmark, Finland, Iceland, Norway, Sweden</td>
<td>694. § 5. (1) When a station called does not reply to a call sent three times at intervals of two minutes, the calling must cease and must not be renewed until after an interval of fifteen minutes.</td>
<td>694. Replace in fine: 15 minutes by: five minutes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reasons</td>
<td>The stipulated period of fifteen minutes is considered to be longer than necessary.</td>
</tr>
<tr>
<td>1910</td>
<td>United Kingdom</td>
<td>695. After this No. add the following new sub-paragraph:</td>
<td>(2 bis). However, if there is reason to believe that harmful interference will not be caused to other com-</td>
</tr>
</tbody>
</table>
(3) Before renewing the call, the calling station must ascertain that the station called is not in communication with another station.

(4) The call may be repeated at shorter intervals if there is no reason to believe that it will interfere with communication in progress.

697 amended to clarify the intention when harmful interference will not be caused.

1911 Federal German Republic

697. Replace the present text by the following:

(4) The call sent three times at intervals of two minutes may be renewed at an interval shorter than 15 minutes if there is no reason to believe that it will interfere with communication in progress.

Reasons

The wording of No. 697 in conjunction with No. 694 does not establish beyond doubt whether calls may be renewed after intervals of 2 or 15 minutes.

1912 United Kingdom

697. Delete.

Reasons

Replaced by § 5. (2bis). (See proposal 1910.)

1913 France, French O. P. T. A.

697. After this No. add the following new sub-paragraph:

(4 bis). The provisions of 694 shall not apply to distress, urgency or safety traffic.

Reasons

This reminder seems necessary.

1914 Federal German Republic

697. After this No. add the following new sub-paragraph:

(4 bis). In the bands of frequencies between 4 000 and 23 000 kc/s the call must not be renewed until after an interval of fifteen minutes.

Reasons

The restrictions imposed by sub-paragraph (4bis) are necessary with a view to special propagation conditions on these frequencies.
698 § 6. (1) When communication is first established with a land station, any mobile station may, if it deems it advisable in order to avoid confusion, transmit its name in full.

699 (2) When the name and address of the administration or private operating agency controlling a mobile station are not given in the 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, using for this purpose the appropriate service abbreviations.

700 § 7. (1) The land station may, by means of the abbreviation PTR, ask the mobile station to furnish it with the following information:

701 a) approximate distance in nautical miles and bearing in relation to the land station, position in latitude and longitude (Greenwich), course and speed;

702 b) next place of call.

703 (2) The information referred to in 700 is furnished on the authority of the master or the person responsible for the vehicle carrying the mobile station.

1914 bis United Kingdom

697. After this No. add the following new sub-paragraph:

(4 bis) Mobile stations shall not radiate a carrier wave in the interval between calls.

Reasons

To incorporate 23 of the B. N. R. C. and 22 of the Hague Supplementary Regulation.

1915 France, French O. P. T. A., Morocco

698. Delete.

Reasons

France, French O. P. T. A.:

Many ships have the same name; the call sign is the only valid distinguishing sign. Should additional information prove necessary, it can be supplied in accordance with 699.

Morocco:

The call sign is the only valid distinguishing sign.

1916 United Kingdom

699. Delete in fine: using for this purpose the appropriate service abbreviations.

Reasons

To cover radiotelephony.

1917 Finland

700 to 703. Replace the present text by the following:

§ 7. The land station may, by means of the abbreviation QRD or TR, ask the mobile station to furnish it with the information necessary for its service and relating to the voyage of the mobile station.

In its reply, the mobile station gives the last and next place of call by using the abbreviation QRD or the abbreviation bnd... fm... and the appropriate place names.

In general, a mobile station is obliged to give a coast station, upon arriving in the operating area of the last-mentioned, the information referred to in the preceding paragraph, even though the coast station would not specifically ask for this information. This provision is not applicable on waters of dense traffic. In the advice
Present Provisions

Proposals

concerning the geographical location of the mobile station one of the abbreviations ETA, psn or QTH is used.

Reasons

The present provisions are too much in contradiction with actual practice. The simplified information given in accordance with the proposed amendment is necessary to the coast station; further, the proposed text underlines the responsibility of the ships to contact coast stations on their own initiative. During peace, the service should not be handicapped by any formal secrecy reasons.

1918 Italy

700. Replace: by means of the abbreviation PTR by: by means of the authorized abbreviations (PTR, QRB, QRD, QTH, etc.).

Reasons

These abbreviations are in general use. No reason to exclude them.

1919 United Kingdom

700. Replace: PTR by: TR.

Reasons

The P before TR is rarely used.

1920 France, French O.P.T.A., Morocco

701. Replace the present text by the following:

a) position, course and speed.

Reasons

France, French O.P.T.A.:
The position may be determined from various data.

1921 United Kingdom

701. Replace the present text by the following:

a) approximate distance in nautical miles and bearing in relation to the land station or a known geographical point, or its position in latitude and longitude (Greenwich);
Present Provisions

Reasons
The distance and bearing from the land station are not necessary if the co-ordinates of the ship are given. It is often more convenient to relate the ship's position to a known geographical point than to the land station. Course and speed are seldom available to the radio operator and are therefore rarely given, so these should not be mandatory.

Proposals

1922 Sweden

702. After this No. add the following new sub-paragraph:

(1 bis). The information referred to in 700-702, preceded by the abbreviation TR, should be furnished spontaneously by ship stations whenever such a measure seems appropriate.

Reasons
To facilitate the forwarding of traffic intended for ship stations.

1923 France, French O.P.T.A., Morocco

703. Read in fine:

... the person responsible for the ship, aircraft or other vehicle carrying the mobile station.

Reasons
To make the text accord with that of 565.

1924 Sweden

703. Replace: 700 by: § 7 (1) a), b) and (1 bis)

Reasons
Consequence of proposal 1922.
ARTICLE 31

General Call “To All Stations”

704 § 1. Two types of calling signal “To all stations” are recognized:

705  a) Call CQ followed by the letter K (see 707 and 708);

706  b) Call CQ not followed by the letter K (see 709).

707 § 2. Stations desiring to enter into communication with stations of the mobile service, without, however, knowing the names of any such stations within their range of action, may use the enquiry signal CQ, in place of the call sign of the station called in the calling formula, the call being followed by the letter K (general call to all stations in the mobile service with request for reply).

708 § 3. In the maritime mobile service, in regions where traffic is congested, the use of the call CQ followed by the letter K is forbidden. As an exception it may be used with signals denoting urgency.

709 § 4. The call CQ not followed by the letter K (general call to all stations without request for reply) is used before the transmission of information of any kind intended to be read or used by anyone who can intercept it.

1925 Netherlands

Heading. Read:

General Radiotelegraphic Call “To All Stations”.

Reasons

To make clear that the article specifically applies to radiotelegraphy.

1926 France, French O.P.T.A., Morocco

704 to 706. Delete.

Reasons

France, French O.P.T.A.: The instructions in 705 and 706 are not very clear; 707, 708 and 709 alone are sufficient.

Morocco: 707, 708 and 709 are sufficient.

1927 Federal German Republic

704 to 709. Replace the present text by the following:

1928 § 1. Three types of calling signal “To all stations” are recognized:

1929  a) Call CQ not followed by the letter K (see § 1bis) (see proposal 1931);

1930  b bis) Call CY not followed by the letter K (see § 4) (see proposal 1935)

1931 § 1bis) The call CQ (general call to all stations without request for reply) is used before the transmission of information of any kind intended to be read or used by anyone who can intercept it.

1932 § 1ter) The call CY is used in all other cases where the prerequisites of 708 are not given.

1933 § 2. Stations desiring to enter into communication with stations of the mobile service, without, however, knowing the names of any such stations within their range of action, may use the enquiry signal
Present Provisions

Proposals

Federal German Republic (cont'd)

CY, in place of the call sign of the station called in the calling formula, the call being followed by the letter K (general call to all stations in the mobile service with request for reply).

1934 § 3. In the maritime mobile service in regions where traffic is congested, the use of the call CY followed by the letter K is forbidden. As an exception it may be used with signals denoting urgency.

1935 § 4. In the transmission of traffic lists (see 685 to 687) only the call CY not followed by the letter K is to be used.

1936 Note. In place of the proposed signal CY another two-digit signal beginning with the letter “C” may be chosen.

Reasons

It seems practical to differentiate between information “To all stations”,

a) that are intended to be read or used by anyone who can intercept them, and those,

b) that are not intended to be read or used by anyone who can intercept them, because they are intended to specific stations though initially unknown.

United Kingdom

704 to 706. Replace the present text by the following:

1937 § 1. Two types of call “To all stations” are recognized:

1938 a) A call to CQ followed by the letter K (see 707 and 708);

1939 b) A call to CQ not followed by the letter K (see 709).

Reasons

Clarification.

1940 Japan

708. In fine replace: urgency by: urgency and warning.

Reasons

To be consistent with proposals 2562 to 2565.
ARTICLE 32
Call to Several Stations Without Request for Reply

710 The call CP followed by two or more call signs or by a code word (call to certain receiving stations without request for reply) is used only for the transmission of information of any nature intended to be read or used by the persons authorized.

ARTICLE 33
Use of Frequencies for Radiotelegraphy in the Maritime Mobile and Aeronautical Mobile Services

Section I. Restrictions

711 § 1. (1) The use of class B emissions is forbidden in all stations.¹)

711.1 ¹) Exceptionally, the ship stations of Australia may, when operating within proximity of the coast of that country, continue to use temporarily their existing damped wave equipment on the frequencies 425 and 500 kc/s.

Belgium

1941 708. After this No. add the following new paragraph:

§ 3bis. When a CQ call followed by the letter K (705) is broadcast on 500 kc/s, subject to 708, any coast stations wishing to reply must do so on 500 kc/s.

Reasons

In these circumstances, it is no more than logical that a coast station wishing to reply should do so on 500 kc/s. It would be no easy matter for a station transmitting CQ followed by K to listen in simultaneously on 500 and 512 kc/s.

1942 709. After this No. add the following new paragraph:

§ 4bis. In areas where traffic is intense a ship station wishing to transmit a TR to several coast stations must do so in the form of a CQ call not followed by the letter K.

Reasons

It not infrequently happens that a ship station calls several coast stations one after the other to transmit its TR. This procedure gives rise to perfectly useless repetition of calls and transmissions.

1943 Netherlands

Heading. Read: Radiotelegraphic Call to Several Stations Without Request for Reply.

Reasons

To make clear that the article specifically applies to radiotelegraphy.

1944 United Kingdom

710. Delete.

Reasons

There is no evidence that CP is ever used, and the collective-call-sign system appears to meet any need.

1945 Netherlands

711. Replace the present text by the following:

§ 1. (1) The use of class B emissions is forbidden in all stations, with the exception, however, of emergency (reserve) installations of ship stations and for lifeboat, liferaft and survival craft equipments and solely for
Present provisions

the transmission of distress, urgency and safety traffic, urgent messages relating to the movement of the ship and essential messages relating to the navigation.

Reasons

a) Spark-transmitters are more robust than valve-transmitters; this can be very important for a ship which has struck a mine;
b) It is desirable that a ship, when its main-transmitter is out of order, may transmit important navigational messages.

Australia (Commonwealth of),

1946 711. Delete in fine the reference: 1).

1947

711.1. Delete.

Reasons

This provision is no longer required.

United Kingdom

1948 711. Delete reference 1) and add in fine: (see 232).

1949

711.1. Delete.

712 (2) However, it is permitted for emergency (reserve) installations of ship stations and for lifeboat, liferaft and survival craft equipments.

1950 China

712. Delete.

Reasons

Unnecessary.

1951 France, French O. P. T. A.

712. Delete: (reserve).
1952 Netherlands, United Kingdom, U.S.S.R.

712. Delete.

Reasons
Netherlands:
To be consistent with 711.

United Kingdom:
To make complete the ban on class B emissions (see proposal 1008).

U.S.S.R.:
To avoid harmful interference to numerous stations because of the excessive bandwidth used.

1953 Cancelled.

1954 Netherlands

712. After this No. add the following new sub-paragraph:

(2 bis) Only classes A1 or F1 emissions are authorized for stations of the maritime mobile services working on frequencies in the band 110–160 kc/s. As an exception to this rule, class A2 emissions may be employed within the band 110–125 kc/s exclusively for the transmission of time signals.

Reasons
To be consistent with 233.

1955 France, French O. P. T. A.

Heading. Read:
Section III. Bands included between 405 and 535 kc/s.

Reasons
§ 2. The provisions of this section are applicable to aircraft stations when communicating with stations of the maritime mobile service.

A. Distress

§ 3. (1) The frequency 500 kc/s is the international distress frequency; it is used for this purpose by ship or aircraft stations using frequencies in the band 405 to 535 kc/s when requesting assistance from the maritime services. It is used for the distress call and distress traffic, and for urgency and safety signals and messages.

1956 Japan

714. Replace in fine: for urgency and safety signals and messages by: for urgency, safety and warning signals and messages.

Reasons
To be consistent with proposals 2562 to 2565.

1957 United Kingdom

714. Replace the last sentence by the following:

It is used for the distress call and distress traffic, for the urgency signal and urgency messages, and for the safety signal. (Safety messages are transmitted on the working frequency after a preliminary announcement on 500 kc/s.)

Reasons
To reduce congestion on 500 kc/s.

715. (2) In addition it may be used only:

a) for call and reply (see 720 and 722);

1958 Belgium

715. Replace the present text by the following:

(2) Apart from this, it may only be used by:

a) mobile stations, for calling and reply (see 720 and 722).

(Proposal 1967.)

1959 France, French O.P.T.A.

715. Insert a No. opposite the sub-paragraph beginning:

a) for call...
Present Provisions

716  

b) by coast stations to announce the transmission of their traffic lists under the conditions provided for in 688.

717  

(3) As an exception, however, the frequency 500 kc/s may be used for traffic, outside regions of heavy traffic, under the conditions provided for in 727, 728 and 729.

Proposals

1960  

Belgium

716. Replace the present text by the following:

b) by coast stations for:
— calling;
— announcing the transmission of their call lists as described in 688;
— announcing the transmission of the messages described in No. . . . (proposal 2779) as therein set forth.

Reasons

Coast stations use the world-wide reply frequency 512 kc/s to answer calls transmitted on 500 kc/s.

1961  

France, French O. P. T. A.

717. Delete.

Reasons

It is most important to eliminate any derogation that might adversely affect the role of the frequency 500 kc/s in the safety of life.

1962  

United Kingdom

717. Replace the present text by the following:

(3) As an exception, however, the frequency 500 kc/s may be used with discretion for direction-finding outside regions of heavy traffic.

Reasons

To confine the exceptional use of 500 kc/s to direction-finding only.

1963  

U. S. S. R.

717. Delete.

Reasons

At present, there has been a considerable increase in the number of radio-equipped vessels, and hence the use of 500 kc/s for the exchange of ordinary traffic will cause inadmissible harmful interference to the reception of distress, safety and emergency communications, and of calls.
478

**Present Provisions**

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</thead>
</table>

718 (4) Apart from the transmissions authorized on 500 kc/s, and taking account of 721, all transmissions on the frequencies included between 490 and 510 kc/s are forbidden.

719 (5) In order to facilitate the reception of distress calls, all stations working on the frequency 500 kc/s must reduce to the minimum their transmissions on this frequency.

---

1964 France, French O.P.T.A.

719. *Read in fine:* . . on this frequency, which should never be occupied for more than three minutes.

**Reasons**

Incorporation of 676, the deletion of which is proposed elsewhere, and reduction of the duration of authorized transmissions.

---

1965 United Kingdom

719. *Replace the present text by the following:*

(5) In order to facilitate the reception of distress calls, transmissions on the frequency 500 kc/s must be reduced to a minimum.

**Reasons**

To avoid the use of the word “working”, which usually refers to traffic as distinct from calling.

---

B. Call and Reply

720 § 4. (1) The general calling frequency, which must be used by any ship station or coast station engaged in radiotelegraphy in the authorized bands between 405 and 535 kc/s, and by aircraft desiring to enter into communication with a station of the maritime mobile service using frequencies in this band, is the frequency 500 kc/s.

721 (2) However, in order to reduce interference in regions of heavy traffic, administrations reserve the right to consider the requirements of 720 as satisfied when the calling frequencies assigned to coast stations open to public correspondence are not separated by more than 5 kilocycles from the general calling frequency 500 kc/s.

---

1966 France, French O.P.T.A.

721. *Replace the present text by the following:*

(2) However, in order to reduce interference in regions of heavy traffic, administrations may assign call-
Present Provisions

§ 5. (1) The frequency for replying to a call sent on the general calling frequency (see 720) is the frequency 500 kc/s, the same as that of the call.

Proposals

ing frequencies in the band 495–505 kc/s, to their coast stations open to public correspondence.

Reasons

Clearer wording.

1966bis United Kingdom

721. Replace in fine: 5 kc/s by: 2 kc/s.

Reasons

Necessary on account of improved receiver performance.

1967 Belgium

722. Replace the present text by the following:

§ 5. (1) The reply frequency for a call transmitted on the general calling frequency 500 kc/s (see 720) shall be:

a) for a mobile station, 500 kc/s, the same as the calling frequency;

b) for a coast station, the coast-station world-wide reply frequency 512 kc/s (see 636).

1968 United Kingdom

722. In fine replace: the same as that of the call by: except where the calling station specifies the frequency on which it will listen for the reply (see 632).

Reasons

To accommodate existing practice and to reduce congestion on 500 kc/s.

1969 Belgium

723. Delete.

Reasons

This paragraph represented an attempt to cut down the volume of traffic on 500 kc/s, an aim which has never been attained, because the working frequencies of coast stations between 405 and 535 kc/s were, more often than not, not available. Very few ship stations are still abiding by 723.

722  § 5. (1) The frequency for replying to a call sent on the general calling frequency (see 720) is the frequency 500 kc/s, the same as that of the call.

723  (2) However, in regions of heavy traffic, ship stations should, as far as possible, ask coast stations to answer by means of their normal working frequency (see 632).
Present Provisions

Proposals

1970 Federal German Republic

723. Add in fine:

A coast station should answer the calls of ship stations, of its own nationality, by means of its (the coast station’s) working frequency.

Reasons

It is desirable to restrict the traffic on 500 kc/s as far as possible. The coast stations of some countries have already adopted this procedure.

United Kingdom

1971 723. Replace the present text by the following:

(2) In regions of heavy traffic, ship stations should request coast stations to answer on their normal working frequency (see 632).

Reasons

To strengthen the existing Regulation.

C. Traffic

724 § 6. (1) Coast stations working in the authorized bands between 405 and 535 kc/s must 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 and Ship Stations is the normal working frequency of the station.

1972 724. Replace the second sentence by the following:

The normal working frequency is printed in heavy type in the List of Coast Stations.

Reasons

Clarification and consequential on proposals for Service Documents, Article 20.

725 (2) In addition to their normal working frequency coast stations may use, in the authorized bands, additional frequencies which are shown in ordinary type in the List of Coast and Ship Stations. The band of frequencies 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 III.


Reasons

See proposals for Article 20.
Present Provisions

726 (3) The working frequencies of coast stations must be chosen so as to avoid interference with neighbouring stations.

Proposals

1974 Federal German Republic

726. After this No. add the following new paragraph:

(3 bis) In regions of heavy traffic the coast stations should use class A1 emissions on their working frequencies.

Reasons

RR 375.

1975 France, French O. P. T. A.

727, 728, 728.1 and 729. Delete.

Reasons

See proposal 1961.

1976 United Kingdom

727, 728 and 728.1. Delete.

Reasons

To limit the use of 500 kc/s in all Regions to calling and distress.

1977 Australia (Commonwealth of)

728.1. Replace the present text by the following:

1) Certain coast stations in Australia, India and Pakistan are also permitted to transmit a single short radiotelegram on 500 kc/s.

Reasons

To permit the simplification of operations at certain coast stations where traffic is extremely light and the more complicated method of working is not justified.

1978 United Kingdom

729. Delete.

Reasons

See proposal 1962.
Present Provisions

§ 8. (1) Ship stations employing class A1 or A2 emissions in the authorized bands between 405 and 535 kc/s must use, wherever practicable, working frequencies chosen from amongst the following: 425, 454, 468 and 480 kc/s.

In addition, the frequency 512 kc/s may be used in regions 1 and 3 and the frequency 448 kc/s in region 2.

(2) No coast station is authorized to transmit on these working frequencies allocated for the use of ship stations on a world wide basis or on the working frequency allocated for the use of ship stations in the region in which the coast station is situated.

(3) In regions 1 and 3 the frequency 512 kc/s may also be used by ship and coast stations as a supplementary calling frequency when 500 kc/s is being used for distress purposes.

Proposals

1979 Belgium

730. Read the second sub-paragraph as follows:
Furthermore, ship stations may use 448 kc/s in Region 2.

1980 France, French O.P.T.A., United Kingdom

730. Delete the words: wherever practicable.

Reasons
France, French O.P.T.A.:
The use of such working frequencies should be compulsory.

United Kingdom:
To confine working to authorized frequencies.

1981 Federal German Republic

730. Replace the text of the second sub-paragraph by the following:

In addition the frequency 512 kc/s may be used by ship stations in Regions 1 and 3 observing the provisions of 732 and the frequency 448 kc/s in Region 2.

Reasons
In region 1 the frequency 512 kc/s is often used by ship stations as a working frequency. When the frequency 500 kc/s is being used for distress traffic, calls on 512 kc/s are often interfered with by the traffic handled on this frequency.

1982 Belgium

732. Replace the present provisions by the following:

(3) When the frequency 500 kc/s is used for distress purposes:

a) ship stations may use one of the working frequencies mentioned in 730, to be designated as additional calling frequency.
Present Provisions

b) coast stations may use 512 kc/s, the world-wide reply frequency, as additional calling frequency.

c) Coast stations may, too, use 512 kc/s to acknowledge receipt (QSL) of messages from ship stations.

Federal German Republic

1983 732. Replace the present text by the following:

(3) When the frequency 500 kc/s is occupied by distress traffic, ship stations in Regions 1 and 3 must not use the frequency 512 kc/s as a working frequency, though they may use it for calling such coastal stations as do not participate in the distress traffic; as an exception, also coastal stations may use this frequency.

Reasons

1. In Region 1 the frequency 512 kc/s is often used by ship stations as a working frequency. When, however, the frequency 500 kc/s is occupied by distress traffic, often mutual interference occurs between calling and the handling of traffic on 512 kc/s.

2. An additional watch on 512 kc/s by the coastal stations, a prerequisite for successful calls on this frequency, will not always be guaranteed in the case of those coastal stations, that are actually participating in the distress traffic, because they are engaged in additional work in connection with the distress traffic (e.g. as stated in 910).

3. No regulation exists for ship stations to maintain a watch, or a supplementary watch, on 512 kc/s in cases of distress. Therefore, it is rather pointless for coastal stations to call ship stations by means of this frequency. Nevertheless coastal stations should be in a position, in cases of distress, to call other coastal stations on 512 kc/s without interfering with the distress traffic.

4. The extent of the deviation from the rule in 731, that is given by 732, will be minimized if the coastal stations will use the frequency 512 kc/s only as outlined above.

1984 732. After this No. add the following new sub-paragraph:

(3bis). Coast stations will transmit their reply to a call on the frequency 512 kc/s by means of their normal working frequency (see 723).
Present Provisions

Reasons
1. Evolves from RR 723 in which it is provided that coast stations, in regions of heavy traffic, when requested by a ship station to do so, should answer to a call by means of their normal working frequency.
2. Evolves from our proposal to 723 that provides for coast stations to invariably send their replies to calls by ship stations of their own nationality by means of the coast stations' normal working frequency.
3. Calls by ship stations both on 500 kc/s and 512 kc/s can be answered by employing a uniform procedure.

D. Watch

733 § 9. (1) In order to increase the safety of life at sea and over the sea, all stations of the maritime mobile service normally keeping watch on frequencies in the authorized bands between 405 and 535 kc/s must, 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.).

1985  France, French O.P.T.A.


1986  United Kingdom

733. Add in fine: by an operator using headphones or loudspeaker.

Reasons
To define how the watch must be kept.

734 (2) During the periods mentioned above, except for the emissions provided for in article 37 (see 934 to 949):

735 a) transmissions must cease within the bands 485 to 515 kc/s;

736 b) outside this band, transmissions of stations of the mobile service may continue; stations of the maritime mobile service may listen to these transmissions on the express conditions that they first ensure watch on the distress frequency as provided by 733.

1987  Australia (Commonwealth of)

737. Replace the second sentence by the following:

This watch is obligatory for class A1 emissions, except when watch is being maintained by auto-alarm when watch shall be obligatory for class A2 emissions.
(2) These stations, while observing the provisions of 733, are authorized to relinquish this watch only when they are engaged in communication on other frequencies.

(3) When they are engaged in such communications:

— Ship stations may maintain this watch on the frequency 500 kc/s by means of an operator, a loudspeaker, or by some other appropriate means such as an automatic alarm receiver.

— Coast stations may maintain this watch on the frequency 500 kc/s either by means of an operator or by loudspeaker; in the latter case an indication may be inserted in the List of Coast and Ship Stations.

1988 United Kingdom

737. Replace the present text by the following:

§ 10. (1) Stations of the maritime mobile service open to public correspondence on frequencies in the authorized bands between 405 and 535 kc/s must, during their hours of service, remain on watch on the calling frequency 500 kc/s. This watch should normally be maintained by an operator using headphones; it is obligatory only for class A2 emissions.

Reasons
To define the means by which the watch should be kept.

France, French O. P. T. A.


Reasons
See the new draft of 739.

1990 739. Read:

(3) When they are communicating on frequencies other than 500 kc/s:

— ship stations shall maintain this watch ... (remainder unchanged).

— coast stations shall maintain this watch ... (remainder unchanged).

Reasons
The watch kept on 500 kc/s must be effective.

1991 United Kingdom

739. Replace the present text by the following:

(3) When they are engaged in such communications:

— Ship stations may maintain this watch on the frequency 500 kc/s by means of an operator using headphones, split headphones or a loudspeaker,
Present Provisions

Proposals

or by some appropriate means such as an automatic alarm receiver.

— Coast stations may maintain this watch on the frequency 500 kc/s by means of an operator using headphones, split headphones or a loudspeaker; in the latter case an indication may be inserted in the List of Coast Stations.

Reasons

To permit the use of split headphones.

Section III. Bands included between 90 and 160 kc/s

1992  France, French O. P. T. A.

Heading. For: Section III, read:

Section II. Bands between 90 and 160 kc/s.

Reasons

The inversion of Sections II and III enables the frequencies to be kept in ascending order.

A. Call and Reply

740  § 11. (1) The frequency 143 kc/s (class A1 only) is the international calling frequency used in the maritime mobile service in the bands 90 to 160 kc/s.

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

742  § 12: The frequency for replying to a call sent on the frequency 143 kc/s is:

— for a ship station, the frequency 143 kc/s;
— for a coast station, its normal working frequency.

B. Traffic

743  § 13. (1) The following rules must be observed by stations of the maritime mobile service using class A1 emissions in the bands 90 to 160 kc/s:

744  (2) a) Every coast station must keep watch on the frequency 143 kc/s, unless the List of Coast and Ship Stations provides otherwise.
Present Provisions

745  b) The coast station transmits its traffic on the working frequency or frequencies specially assigned to it.

746  (3) a) When a ship station desires to establish communication with another station of the maritime mobile service, it must use the frequency 143 kc/s, unless the List of Coast and Ship Stations provides otherwise.

747  b) This frequency must be used exclusively:
     — for individual calls and replies to such calls;
     — for the transmission of signals preparatory to traffic.

748  (4) A ship station after establishing communication with another station of the maritime mobile service on the general calling frequency 143 kc/s must, so far as practicable, transmit its traffic on some other frequency in the authorized bands, provided that it does not disturb the work in progress at another station.

749  § 14. (1) As a general rule, any ship station working in the bands 110 to 160 kc/s when it is not engaged in communication with other stations of the maritime mobile service must, during its hours of service, keep watch every hour on the frequency 143 kc/s for five minutes beginning at x h 35, Greenwich mean time (G.M.T.).

750  (2) The frequency 143 kc/s may be used for individual calls and will preferably be used for this purpose during the period indicated in 749.

Section IV. Bands included between 1605 and 2850 kc/s

751  § 15. Except where regional agreements specify otherwise, the frequencies assigned to ship stations for radiotelegraph communication in the bands between 1605 and 2850 kc/s must, as far as possible, be harmonically related (subharmonics) to the frequencies assigned to ship stations in the 4000 kc/s radiotelegraph band (see section V).

1993  France, French O.P.T.A.

749. Replace: Greenwich mean time (G.M.T.),
by: universal time (U.T.).

1994  France, French O.P.T.A.,
United Kingdom

751. Delete.

Reasons

France, French O.P.T.A.:
The use of radiotelegraphy in these bands causes considerable interference. Moreover, the regional plans based on these bands do not take account of 751.

United Kingdom:
No longer required. Not observed in regional planning.
Section V. Bands included between 4000 and 23000 kc/s

A. General Provisions

§ 16. (1) Mobile radiotelegraph stations equipped to operate in the frequency bands of the maritime mobile service between 4000 and 23000 kc/s must employ only class A1 emission. However, for radiocommunication of a special character, and for survival craft stations (see 600), the use of other classes of emission is not precluded.

2001 Denmark, Finland, Iceland, Norway, Sweden

§ 16. (1) Mobile and coast radiotelegraph stations equipped . . . (remainder unchanged).
Present Provisions

Proposals

2002 France, French O.P.T.A.

752. Replace the present text by the following:

§ 16. (1) Radiotelegraph stations of the maritime mobile service equipped to operate in the frequency bands of the maritime mobile service between 4 000 and 23 000 kc/s must employ only class A1 emission. However, for radiocommunication of a special character, and for lifeboat, liferaft or survival craft stations (see 600), the use of other classes of emission is not precluded.

Reasons

In accordance with 75 of the E.A.R.C. Agreement.

2003 Poland (People's Republic of)

752. Replace: ... must employ only class A1 emission... by: ... must employ class A1 and F1 emissions...

2004 United Kingdom

752. Replace the present text by the following:

§ 16 (1) Mobile radiotelegraph stations equipped to operate in the calling bands, and in the passenger-ship and cargo-ship working bands, of the maritime mobile service between 4 000 and 23 000 kc/s must employ only class A1 emission. However, survival craft stations (see 600) may use class A2 emissions in these bands.

2005 France, French O.P.T.A.

752. After this No. add the following new sub-paragraph:

(1bis) Coast telegraph stations operating in the bands between 4 000 and 27 500 kc/s assigned exclusively for maritime mobile radiotelegraphy shall never use antenna input powers in excess of the following:

<table>
<thead>
<tr>
<th>bands</th>
<th>maximum power</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Mc/s</td>
<td>5 kW</td>
</tr>
<tr>
<td>6 Mc/s</td>
<td>5 kW</td>
</tr>
<tr>
<td>8 Mc/s</td>
<td>10 kW</td>
</tr>
<tr>
<td>12 Mc/s</td>
<td>15 kW</td>
</tr>
<tr>
<td>16 Mc/s</td>
<td>15 kW</td>
</tr>
<tr>
<td>22 Mc/s</td>
<td>15 kW</td>
</tr>
</tbody>
</table>

Reasons

Paragraph 70 of the E.A.R.C. Agreement.
Present Provisions

Proposals

United Kingdom

752. After this No. add the following new sub-paragraphs:

2006 (1bis) For radiocommunications employing other types of emission the wide band frequency channels indicated in 787 bis must be used.

Reasons
Clarification and consequential on proposal for a band allocated for wideband emissions.

2007 (1ter) Coast radiotelegraph stations operating in the maritime mobile exclusive bands between 4000 and 23000 kc/s shall not use class A2 emission.

Reasons
To incorporate 75 of the E.A.R.C. Agreement.

2008 (1quarter) Coast radiotelegraph stations operating in the maritime mobile bands between 4000 and 23000 kc/s, shall at no time use an antenna input power in excess of the figures given below:

<table>
<thead>
<tr>
<th>Band</th>
<th>Power Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Mc/s</td>
<td>5 kW</td>
</tr>
<tr>
<td>6 Mc/s</td>
<td>5 kW</td>
</tr>
<tr>
<td>8 Mc/s</td>
<td>10 kW</td>
</tr>
<tr>
<td>12 Mc/s</td>
<td>15 kW</td>
</tr>
<tr>
<td>16 Mc/s</td>
<td>15 kW</td>
</tr>
<tr>
<td>22 Mc/s</td>
<td>15 kW</td>
</tr>
</tbody>
</table>

Reasons
To incorporate 70 of the E.A.R.C. Agreement.

753 (2) The rules of procedure fixed in article 29 are applicable to stations of the maritime mobile service using frequencies in the bands between 4000 and 23000 kc/s.

754 (3) Stations of the maritime mobile service open to public correspondence and using frequencies in the bands 405 to 535 kc/s in addition to frequencies in the band 4000 to 23000 kc/s are required to observe the provisions of 737.

2009 France, French O.P.T.A.

753 and 754. Delete.

Reasons
These Nos. seem superfluous.
§ 17. (1) Beginning at the low frequency end, each of the radiotelegraph bands reserved for the use of ship stations is divided into three bands as follows:


2011 755. After this No. add the following new sub-paragraph:

(.) A band of working frequencies for ship stations using wide band emissions.

Reasons
To increase the existing provision for harmonically related wideband channels in the maritime mobile bands.

756  a) A band of working frequencies for the use of passenger ships. 1)


Reasons
Clarification.

756.1 1) Exceptionally, whaling factory vessels handling a large volume of traffic may use frequencies in this band from October to March of each year.

2013 756.1. Delete in fine: from October to March of each year.

Reasons
To allow whaling ships to use the frequencies when on passage to and from the whaling grounds, which could occur at any time of the year.

757  b) A band of calling frequencies for the use of all ship and aircraft stations entering into communication with stations of the maritime mobile service.

758  c) A band of working frequencies for the use of cargo ships.


Reasons
Clarification.

759  (2) For the purposes of this section:
— a passenger ship is a vessel defined as such by the Convention for the Safety of Life at Sea.
— a cargo ship is any ship that is not a passenger ship as defined above.

760  (3) The arrangement of the frequencies in the ship radiotelegraph bands is illustrated graphically in appendix 10.
For the exchange of radiotelegraph communications with stations of the maritime mobile service, aircraft stations may utilize the frequencies allocated to that service for radiotelegraphy between 4000 and 23000 kc/s. When using these frequencies, aircraft stations must comply with the provisions of this Section.

B. Call and Reply

In order to establish communication with a station in the maritime mobile service, every ship and aircraft station must use a calling frequency in the bands listed in §775.

Frequencies in the calling bands are assigned to each mobile station in accordance with the provisions of §776 to §780 inclusive.

In order to reduce interference, mobile stations must, 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 must, before making a call, listen for the signals of the station with which it desires to communicate. The strength and readability of such signals is a useful guide to propagational conditions and should indicate which is the preferable band for calling.

The calling frequency to be used by a coast station, in each of the bands for which it is equipped, is its normal working frequency as shown in heavy type in the List of Coast and Ship Stations (see §774).

In fine delete: and Ship.

Consequential on proposals for Article 20.

As a general rule, transmits its calls at specified times in the form of traffic lists on the frequency or frequencies indicated in the List of Coast and Ship Stations (see §685 and §686).

At the beginning replace: as a general rule, by: so far as is practicable.

To conform with §685 and consequential on proposals for Article 20.
Present Provisions

§ 22. Unless the calling station specifies otherwise, the frequency for reply to a call made in any maritime mobile band is as follows:

a) for a mobile station, its assigned calling frequency in the same band as that used by the calling station;

b) for a coast station, its normal working frequency in the same band as that used by the calling station.

§ 23. When notifying the transmitting frequencies of a coast station, administrations also 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 and Ship Stations.

C. Traffic

§ 24. (1) A mobile station, after establishing communication on a calling frequency (see 762), changes to a working frequency for the transmission of traffic. No traffic shall be transmitted on any frequency in the calling bands.

Proposals

2018 France, French O.P.T.A.


2019 United Kingdom

770. In fine delete: and Ship.

Reasons

Consequential on proposals for Article 20.

2020 Federal German Republic

771. Add in fine:

... except a brief indication of position by means of the abbreviations QTH, QTO or QTP.

Reasons

The transmission time for a brief indication of position is substantially the same as for the transmission of signals requesting a change of frequency.

2021 United Kingdom

771. In the last sentence replace: traffic shall be transmitted by: working shall be conducted.

Reasons

To guard against the interpretation that “traffic” applies only to radiotelegrams.
Present Provisions

772 (2) Working frequencies shall be assigned to mobile stations in accordance with the provisions of 781 to 797 inclusive.

773 § 25. (1) A coast station shall transmit its traffic on its normal working frequency or on other working frequencies assigned to it.

774 (2) Working frequencies of coast stations using the bands between 4000 and 23000 kc/s are included within the following limits:

<table>
<thead>
<tr>
<th>Frequency Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>4238 to 4368 kc/s</td>
</tr>
<tr>
<td>6357 to 6525 kc/s</td>
</tr>
<tr>
<td>8476 to 8745 kc/s</td>
</tr>
<tr>
<td>12714 to 13130 kc/s</td>
</tr>
<tr>
<td>16952 to 17290 kc/s</td>
</tr>
<tr>
<td>22400 to 22650 kc/s</td>
</tr>
</tbody>
</table>

D. Assignment of frequencies to mobile stations

774.1 1) Although this section requires the assignment of specific frequencies to all ship stations operating in the bands between 4000 and 23000 kc/s, it is recommended that in the case of certain older types of transmitters now in use, the reference point for measuring frequency deviations shall be that frequency on which the emission begins. This recommendation applies only until such transmitters have been replaced or modified so as to meet the tolerance requirements specified in column 3 of appendix 3.

2022 France, French O.P.T.A.,
United Kingdom

774.1. Delete.

Reasons

France, French O.P.T.A.:
This particular provision was only temporary.

United Kingdom:
No longer required.

1. Calling Frequencies of Ship Stations

775 § 26. (1) The calling frequencies assigned to ship stations are included within the following bands:

<table>
<thead>
<tr>
<th>Frequency Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>4177 to 4187 kc/s</td>
</tr>
<tr>
<td>6265.5 to 6280.5 kc/s</td>
</tr>
<tr>
<td>8354 to 8374 kc/s</td>
</tr>
<tr>
<td>12531 to 12561 kc/s</td>
</tr>
<tr>
<td>16708 to 16748 kc/s</td>
</tr>
<tr>
<td>22220 to 22270 kc/s</td>
</tr>
</tbody>
</table>

776 (2) In the 4000 kc/s maritime mobile service band, the calling frequencies must be uniformly distributed within the calling band. They are preferably spaced 1 kc/s apart. The extreme frequencies assignable are 4178 and 4186 kc/s as indicated in appendix 10.

777 (3) In each of the other maritime mobile service bands between 4000 and 18000 kc/s, the calling frequencies must be in harmonic relationship with those in the 4000 kc/s calling band. In the 22000 kc/s

2023 United Kingdom

775. In the first column replace:

<table>
<thead>
<tr>
<th>Original Frequency</th>
<th>New Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>6265.5</td>
<td>6266</td>
</tr>
<tr>
<td>16708</td>
<td>16709</td>
</tr>
<tr>
<td>22220</td>
<td>22222.5</td>
</tr>
</tbody>
</table>

Reasons

Consequential upon proposals for wide-band channels.
calling band, the preferable spacing of calling frequencies is 5 kc/s.

§ 27. 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 must 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 776. The same system of uniform distribution shall be applied in the assignment of calling frequencies in the 22000 kc/s calling band.

§ 28. (1) The centre calling frequency in each of the calling bands indicated in 775 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.

(2) The frequency 8364 kc/s must be used by lifeboats, liferafts and other survival craft, if they are equipped to transmit on frequencies between 4000 and 23000 kc/s, and if they desire to establish with stations of the maritime mobile service communications relating to search and rescue operations see (600).

France, French O.P.T.A.

Delete.

Reasons

It is not advisable to assign the frequency 8364 kc/s to aircraft stations.

Read in fine: .... and if they desire to provide information relating to search and rescue operations (see 600).

Reasons

The new wording takes account of the fact that lifeboats, liferafts and other survival craft are not always able to receive.

United Kingdom

(English text only.) In fine replace: see (600), by: (see 600).

Reasons

To align with French text.

Belgium

After this No. add the following new sub-paragraph:

(2 bis) The frequency 8364 kc/s may be used for this purpose by aircraft too.
2. Working Frequencies of Mobile Stations

a) General

§ 29. (1) The working frequencies for passenger ships are so spaced as to provide clear channels. In the 4000 kc/s band, the two channels adjacent to the calling band are 5 kc/s wide and the remainder are 2.5 kc/s wide, the extreme frequencies assignable being 4135 and 4175 kc/s as indicated in Appendix 10.

Reasons
To include proposed additional wide band channels.

United Kingdom

2027 781. Before this number add the following new sub-paragraph:

( . ) In the 4000 kc/s band the wide band working frequency channels are spaced 3.5 kc/s apart, the extreme frequencies assignable being 4134.75 and 4152.25 kc/s, as indicated in Appendix 10.

Reasons
Consequent upon proposals for wideband channels.

U.S.S.R.

2028 781. Replace the present text by the following:

§ 29. (1) The working frequencies for passenger ship stations are so spaced as to provide clear channels. In the 4000 kc/s band the channels are 1.75 kc/s wide, the extreme frequencies assignable being 4155 and 4176 kc/s as indicated in Appendix 10.

Reasons
Consequent upon proposals for wideband channels.
497

Present Provisions

782. (2) In the 4 000 kc/s band, the working frequencies of cargo ships are spaced 0.5 kc/s apart, the extreme frequencies assignable being 4 163 and 4 236.5 kc/s as indicated in appendix 10.

783. (3) The working frequencies assigned to each ship station in the 6000, 8000, 12000 and 16000 kc/s bands must be harmonically related to those assigned in the 4000 kc/s band.

784. (4) In the case of the 22 000 kc/s band, which is not in harmonic relationship with the other bands, the frequencies are spaced as follows and indicated in appendix 10:

Proposals

2030. U. S. S. R.

782. Replace the present text by the following:

(2) In the 4 000 kc/s band, the cargo ship working frequencies shall be spaced 0.5 kc/s apart, the extreme frequencies assignable to these ship stations being, as shown in Appendix 10, 4 163 kc/s and 4 176 kc/s, 4 188 kc/s and 4 236.5 kc/s.

Reasons

The bandwidth for passenger ship stations having been reduced to 15 kc/s, the bandwidth available for cargo vessels is correspondingly increased. In fact, the increase is 13 kc/s, since 2 kc/s have to constitute guard channels.

2031. United Kingdom

784. After this number add the following new sub-paragraph:

(4 bis) In the band allocated for wide band emissions the frequency channels are 15 kc/s wide, the extreme frequencies assignable being 22 078 and 22 138 kc/s.

Reasons

To include proposed additional wide band channels at 22 Mc/s.

2032. 785. Replace the present text by the following:

a) In the passenger ship station band the working frequencies are spaced 7 kc/s apart, the extreme frequencies assignable being 22 149 and 22 219 kc/s.

Reasons

Consequent upon proposals for wide band channels.
Present Provisions

Proposals

U.S.S.R.

2033 785. Replace the present text by the following:

a) In the band allocated to passenger ship stations, the channels are 10 kc/s wide; the extreme frequencies assignable are 22 075 and 22 155 kc/s.

Reasons

These changes are bound up with the reduction in the band of frequencies allotted to passenger ships.

2034 786. Replace the present text by the following:

b) In the cargo ship band the working frequencies shall be 2.5 kc/s apart, the extreme frequencies assignable being 22 165 and 22 215 kc/s and 22 272.5 and 22 395 kc/s.

Reasons

These changes are bound up with the extension of the bandwidth allotted to cargo vessels.

786  

b) in the cargo ship band the working frequencies are spaced 2.5 kc/s apart, the extreme frequencies assignable being 22 272.5 and 22 395 kc/s.

787  § 30. All mobile stations licensed to operate in the maritime mobile bands between 4000 and 23000 kc/s must be assigned, as soon as possible, working frequencies in the bands for which they are equipped in accordance with 788 to 797 inclusive.

2035 France, French O.P.T.A, United Kingdom

787. Delete: as soon as possible.

Reasons

France, French O.P.T.A.: These assignments are made in accordance with the procedure laid down in 788 to 797.

United Kingdom:

No longer necessary.

2036 Netherlands

787. Delete.

Reasons

No longer required.
Present Provisions

Proposals

United Kingdom

2037 787. After this No. add the following new subheading:

*Working Frequencies for Ship Stations Employing Wide Band Emissions.*

and add the following new paragraphs:

2038 § 30 bis. The working frequencies assigned to ship stations using wide band emissions are included within the following bands:

<table>
<thead>
<tr>
<th>Frequency Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 133 to 4 154 kc/s</td>
</tr>
<tr>
<td>6 200 to 6 231 kc/s</td>
</tr>
<tr>
<td>8 265 to 8 308 kc/s</td>
</tr>
<tr>
<td>12 400 to 12 462 kc/s</td>
</tr>
<tr>
<td>16 530 to 16 616 kc/s</td>
</tr>
<tr>
<td>22 070 to 22 145.5 kc/s</td>
</tr>
</tbody>
</table>

2039 § 30 ter. (1) Each administration shall assign to each of its ship stations under its jurisdiction and employing wide band emissions, one or more series of working frequencies designated in Appendix 10. The total number of series assigned to each ship should be determined by the anticipated traffic requirements.

2040 (2) When ship stations employing wide band emissions are assigned less than the total number of wide band frequency channels in a band, the administration concerned shall assign wide band frequency channels to such ships in accordance with an orderly system of rotation that will ensure approximately the same number of assignments on any one frequency channel.

**Reasons**

To provide for orderly distribution of the wideband channels.

2041

788. Replace the present text by the following:

§ 31. The working frequencies assigned to passenger ships are included within the following bands:

<table>
<thead>
<tr>
<th>Frequency Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 133 to 4 177 kc/s</td>
</tr>
<tr>
<td>6 200 to 6 265.5 kc/s</td>
</tr>
<tr>
<td>8 265 to 8 354 kc/s</td>
</tr>
<tr>
<td>12 400 to 12 531 kc/s</td>
</tr>
<tr>
<td>16 530 to 16 708 kc/s</td>
</tr>
<tr>
<td>22 070 to 22 220 kc/s</td>
</tr>
<tr>
<td>4 154 to 4 177 kc/s</td>
</tr>
<tr>
<td>6 231 to 6 266 kc/s</td>
</tr>
<tr>
<td>8 308 to 8 354 kc/s</td>
</tr>
<tr>
<td>12 462 to 12 531 kc/s</td>
</tr>
<tr>
<td>16 616 to 16 709 kc/s</td>
</tr>
<tr>
<td>22 145.5 to 22 222.5 kc/s</td>
</tr>
</tbody>
</table>

**Reasons**

Consequential upon proposals for wide band channels.
§ 31. The working frequencies assigned to passenger ships shall be included in the following bands:

- 4 133-4 162 kc/s
- 6 200-6 243 kc/s
- 8 265-8 324 kc/s
- 12 400-12 486 kc/s
- 16 530-16 648 kc/s
- 22 070-22 160 kc/s

Reasons

Frequencies have been given to cargo vessels, so frequency bands assigned to passenger ships shrink.

§ 32. (1) Each administration shall assign to each of the passenger ships under its jurisdiction two or more series of working frequencies designated in appendix 10 for vessels of this class. The total number of series assigned to each ship should be determined by the anticipated traffic volume.

(2) When passenger ships 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 which will ensure approximately the same number of assignments on any one frequency.

(3) In each band, the two frequencies nearest to the calling frequencies, indicated by solid lines in appendix 10 are assigned to passenger ship stations the emissions of which do not already comply with the frequency tolerance of 0.02% specified in the 3rd column of appendix 3.¹ These frequencies must also be used by mobile stations employing special types of wide band transmission which cannot be contained within the channels indicated by dashed lines in appendix 10.

(3) In each band, the two frequencies nearest to the calling frequencies, indicated by continuous lines in Appendix 10, shall be used by mobile stations employing classes of wide band transmission which cannot be contained within the channels indicated by dashed lines in Appendix 10.

(3) In each band, the two frequencies nearest to the calling frequencies, indicated by solid lines in Appendix
Present Provisions

Proposals

10, are assigned to ship stations employing special types of wide band transmission which cannot be contained within the channels indicated by dashed lines in Appendix 10.

Reasons

Passenger ship stations which cannot satisfy the tolerance of 0.02 % exist no longer, and it is deemed sufficient if the requirements for cargo ship stations employing special types of wide band transmission are satisfied.

2045 Netherlands

791. Delete.

2046 United Kingdom

791. Delete.

Reasons

See proposals 2039 and 2040.

791.1 It is anticipated that the number of these transmitters on passenger ships will decrease progressively before the effective date of the application of the tolerances specified in column 3 of appendix 3. These channels will be thus gradually cleared for the use of special types of wide-band transmission.

2047 France, French O. P. T. A., Japan, United Kingdom

791. Delete.

Reasons

Japan: To be consistent with proposal 2044.

United Kingdom: No longer required.

2048 Netherlands

791. After this No. add the following new sub-paragraph:

(3 bis) The following frequency bands are reserved for special types of wide band transmissions:
<table>
<thead>
<tr>
<th>Present Provisions</th>
<th>Proposals</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 133 to 4 143 kc/s</td>
<td>4 133 to 4 143 kc/s</td>
</tr>
<tr>
<td>6 200 to 6 215 kc/s</td>
<td>6 200 to 6 215 kc/s</td>
</tr>
<tr>
<td>8 265 to 8 285 kc/s</td>
<td>8 265 to 8 285 kc/s</td>
</tr>
<tr>
<td>12 400 to 12 430 kc/s</td>
<td>12 400 to 12 430 kc/s</td>
</tr>
<tr>
<td>16 530 to 16 570 kc/s</td>
<td>16 530 to 16 570 kc/s</td>
</tr>
<tr>
<td>22 070 to 22 110 kc/s</td>
<td>22 070 to 22 110 kc/s</td>
</tr>
</tbody>
</table>

**Reasons**

These bands are established in order to expand the space provided by the present paragraph 791 because there are not satisfactory means of accommodating advances in the state of radio communications such as teleprinting, specialized facsimile, multiplex. The proposed place of the band for wide band transmissions — viz. between the ship telephony band and the working frequencies band for passenger ships — is preferred to the present place — viz. between the calling frequency band and the working frequencies band for passenger ships — in view of among other things the identification of the wide bands transmissions, which has to be transmitted either by radiotelephony or by radiotelegraphy.

---

**§ 33.** For the exclusive purpose of communicating with stations of the maritime mobile service an aircraft station may be assigned one or more series of working frequencies in the passenger ship bands. These frequencies shall be assigned in accordance with the same system of uniform distribution provided for passenger ships.

**§ 34.** Working frequencies assigned to cargo ships shall be included within the following bands:

| 4 187 to 4 238 kc/s |
| 6 280.5 to 6 357 kc/s |
| 8 374 to 8 476 kc/s |
| 12 561 to 12 714 kc/s |
| 16 748 to 16 952 kc/s |
| 22 270 to 22 400 kc/s |

**§ 34.** Working frequencies assigned to cargo ships shall be included within the following bands:

| 4 162–4 177 kc/s and 4 187–4 238 kc/s |
| 6 243–6 265.5 kc/s and 6 280.5–6 357 kc/s |
| 8 324–8 354 kc/s and 8 374–8 476 kc/s |
| 12 486–12 531 kc/s and 12 561–12 714 kc/s |
| 16 648–16 708 kc/s and 16 748–16 952 kc/s |
| 22 160–22 220 kc/s and 22 270–22 400 kc/s |

**Reasons**

The cargo ship bands increase at the expense of the passenger ship ones.
§ 35. (1) In each of the cargo ship bands the assignable frequencies are divided into two equal groups A and B, group A comprising the frequencies in the lower half of the band and group B the frequencies in the upper half (see appendix 10).

(2) Each administration shall assign to each of its cargo ships two series of working frequencies; one in group A and the other in group B. In each band these two working frequencies are separated from each other by half the width of the assignable band.

(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.

(4) Each administration shall assign successively one 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.

U.S.S.R.

2051. Replace the present text by the following:

§ 35. (1) In each cargo ship band above the calling bands, the assigned frequencies shall be divided into two equal groups, A and B, group A comprising frequencies in the lower half of the band, group B the frequencies in the upper half (see Appendix 10).

Reasons
More accurate wording, since frequency bands lower than the calling bands are allocated to cargo vessels.

2052

797. After this No. add the following new paragraph:

§ 35 bis. In the cargo ship bands below the calling bands, each administration shall be free to assign whatever frequencies it sees fit to the cargo vessels subject to its jurisdiction.

Reasons
To lay down a procedure for the use of the additional bands allocated to cargo vessels at the expense of passenger ships.

d) Abbreviations for the designation of working frequencies

§ 36. The following system of abbreviations may be used to designate working frequencies:
799 Present Provisions

a) In the case of a working frequency included between 4000 and 23000 kc/s, transmit the last three figures of the frequency excluding fractions of a kilocycle;

800 Proposals

b) When the calling station does not know the working frequencies of a cargo 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.

2053 Denmark, Finland, Iceland, Norway, Sweden

Replace the present text by the following:

b) When the calling station does not know the working frequencies of a cargo ship station, it may request the ship station to reply on its working frequency by transmitting QSS. The cargo ship station then replies by transmitting QSS, followed by three figures according to 799.

2054

800. After this No. add the following new sub-paragraph:

b bis) In case of poor receiving conditions on the working frequency stated by the cargo ship according to 800, the coast station may request the ship to change to transmission on its supplementary working frequency in the same frequency band. This request is made by the transmission of QSY B or QSY A as the case may be.

Reasons

In order to make the existing provision of 800 more clear.

Section VI. Aeronautical Mobile Service

801 § 37. Agreements between the interested governments may fix frequencies for call and reply in the aeronautical mobile service. These frequencies, as well as the conditions governing their use, are listed in the service documents published by the Secretary General of the Union.

2055 United Kingdom

801. Replace: Agreements between the interested governments may fix frequencies for by: Governments may, by agreement, decide the frequencies to be used for . . . .
Present Provisions

802 § 38. For the use of the frequency 500 kc/s for calling and distress purposes, see 711 to 723.

Proposals

2056 Denmark, Finland, Iceland, Norway, Sweden

802. After this No. add the following new paragraph:

§ 38 bis. For the use of 2 182 kc/s for distress and calling purposes see . . .

Reasons

1. In order to make the provisions regarding the frequency 2 182 kc/s applicable to the aeronautical mobile service.
2. In accordance with the special proposal concerning the use of 2 182 kc/s for distress purposes.

803. Delete.

Reasons

Australia (Commonwealth of):
The frequency 333 kc/s is not now used by aircraft stations in Australia.

France, French O.P.T.A.:
The use of 333 kc/s is no longer as provided in 803.

United Kingdom:
No longer required by the aeronautical service.

2058 Japan

803. At the beginning replace: In Regions 1 and 3 by: In Region 1.

Reasons

See proposal 1037.
ARTICLE 34
Maritime Mobile Radiotelephone Service

GENERAL COMMENTS

1. The development of maritime mobile radiotelephony calls for the introduction of two articles (34 and 34 bis) into the RR analogous to Articles 29, 30 and 33, relative to radiotelegraphy.

2. The titles proposed for these two articles are as follows:
   - Article 34: General Maritime Mobile Radiotelephone Procedure.
   - Article 34 bis: Use of Frequencies in Maritime Mobile Radiotelephony.

3. The references used for this proposal are as follows:

   Radio Regulations (RR)
   Articles 29, 30, 33 and 34.

   Supplementary Radio Regulations (SR), Göteborg
   Reference G . . .

   Supplementary Radio Regulations (SR), The Hague
   Reference H . . .

   Agreement of the Extraordinary Administrative Radio Conference, Geneva
   Reference E. A. R. C. . . .

Note:

The Belgian and French Administrations wish to submit the new Articles 34 and 34 bis in complete form and request that their proposal should not be split up by numbers.

* Apart from proposals submitted jointly by the above mentioned countries, Italy has submitted two proposals (concerning 816 and 826). They will be found opposite these numbers.

** In general, the Moroccan proposals, and the reasons adduced to support them, are the same as those of the countries mentioned in this heading. There are some slight differences in connection with certain numbers, in which case the Moroccan proposals and reasons are separately shown, after the proposals or reasons from which they differ. These divergences are shown in the margin by a thick line, and by the name of the country, Morocco.
1. The MF, HF and VHF mobile radiotelephone services differ from each other in many points (especially the VHF harbour traffic which has its own typical requirements).

Notwithstanding these differences it is preferred to make one combined international set of regulations. This prevents the necessity of drafting three separate sets of regulations in which would appear many repetitions and/or references. If the various paragraphs in the international combined regulations are arranged systematically, the administrations themselves could compile quite easily the regulations concerning a definite frequency band for national use.

2. In the International Mobile Radiotelephone Regulations should be included the results of the E.A.R.C. (Geneva, 1951), of the Baltic and North Sea Radiotelephone Conference (Göteborg, 1955), and of the Agreement of the Mobile VHF Service (The Hague, 1957).

3. As the French revision of Article 34 and the new French Article 34 bis meet the above-mentioned requirements, the Netherlands adopt the French proposals.
Present Provisions

Proposals

Belgium, France, French O. P. T. A., Italy, Morocco, Netherlands

GENERAL RADIOTELEPHONE PROCEDURE IN THE MARITIME MOBILE SERVICE

<table>
<thead>
<tr>
<th>No. in RR</th>
<th>No.</th>
<th>Proposed Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>2061</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Section I. General Provisions**

804 § 1. (1) The provisions of the present article are applicable in all cases to radiotelephone stations of the maritime mobile service.

805 (2) Aircraft stations may enter into telephone communication with stations of the maritime mobile service on frequencies allocated to that service for radiotelephony. They must then comply with the provisions of this article.

806 § 2. (1) The service of ship radiotelephone stations must be performed by an operator satisfying the conditions fixed by article 24.

807 (2) For the call signs for coast and ship radiotelephone stations see 428 and 429.

808 § 3. Automatic calling devices may be used in this service.

809 § 4. In order to obtain rapid and satisfactory communication, radiotelephone stations of the maritime mobile service should, as far as possible, be equipped with devices for instantaneous switching from transmission to reception and vice-versa. This provision is necessary for all stations establishing communication between ships or aircraft and subscribers of the land telephone system.

810 § 5. The frequencies of transmission and reception (also the pairs of frequencies in the case of duplex telephony) allocated to each coast station shall be indicated in the List of Coast and Ship Stations. This List shall also indicate any other useful information concerning the service performed by each coast station.

**Belgium, France, French O. P. T. A., Italy, Morocco, Netherlands**

<table>
<thead>
<tr>
<th>No. in RR</th>
<th>No.</th>
<th>Proposed Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>2062</td>
<td>804</td>
<td>34-01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Replace by:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>§ 1. (1) In the maritime mobile service the procedure hereinafter set forth shall be obligatory, except in the case of distress calls, urgent calls and safety calls which shall be subject to Article 37.</td>
</tr>
</tbody>
</table>

**Reasons**

Text comparable with that of 602 amended.
Present Provisions

Belgium, France, French O.P.T.A., Italy, Morocco, Netherlands (cont'd)

§ 6. As far as is reasonable and practicable, the provisions concerning the radiotelegraph service relating to:

- procedure (article 29),
- calling (article 30),
- distress, urgency and safety signals (article 37) and
- conditions of closure of the service (article 35)

are applicable to the maritime mobile radiotelephone service.

§ 7. Mobile stations equipped solely for radiotelephony may transmit and receive radiograms by means of telephony. The procedure indicated in appendix 11 may be applied for this purpose.

Section II. Frequency Bands between 1605 and 2850 kc/s

A. Call, Reply and Distress

§ 8. (1) The frequency 2182 kc/s is both a calling and the distress frequency for the maritime mobile service of radiotelephony in the portions of the band 1605 to 2850 kc/s in which radiotelephony is authorized (see chapter III).

(2) The administrations concerned will ensure, by special arrangements if necessary, that an adequate guard-band is provided for this frequency.

§ 9. (1) The frequency 2182 kc/s may be used for calls and replies, and it is the frequency to be used for the distress call and traffic, as well as for urgency and safety signals and messages.

(2) Its use for call and reply purposes between ship and coast stations is permitted only within the service areas of coast stations duly authorized by their administrations to this effect after a special arrangement if necessary. This information shall be indicated in the List of Coast and Ship Stations.

(3) However, an administration may assign to a station other frequencies for call and reply.

(4) The distress signal in radiotelephony is defined in 873.

Proposals

<table>
<thead>
<tr>
<th>No. in RR</th>
<th>No.</th>
<th>Proposed Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>2069</td>
<td>811</td>
<td>Delete.</td>
</tr>
<tr>
<td>2069 bis</td>
<td>812</td>
<td>Delete the second sentence.</td>
</tr>
<tr>
<td>2070</td>
<td>G Rec. 5</td>
<td>34-09 If language difficulties should arise, maritime mobile stations shall use the statutory abbreviations and conventional expressions defined in Appendix ..., spelt according to the alphabet defined in Appendix ...</td>
</tr>
<tr>
<td>2071</td>
<td>812</td>
<td>Morocco If there are language difficulties, stations of the maritime mobile service shall use the service abbreviations and conventional expressions defined in Appendix 9 spelt in accordance with the alphabet defined in Appendix 11.</td>
</tr>
</tbody>
</table>
Present Provisions

B. Watch

§ 10. (1) Every coast station using the calling frequency 2182 kc/s must, as far as possible, maintain watch on this frequency during its working hours.

(2) If this watch is not maintained by an operator, the method used shall be specifically indicated in the List of Coast and Ship Stations.

C. Traffic

§ 11. (1) Coast stations which use the frequency 2182 kc/s for calling must be able to use at least one other frequency in the portions of the band 1605—2850 kc/s in which the maritime mobile radiotelephone service is admitted.

(2) One of these frequencies is printed in heavy type in the List of Coast and Ship Stations to indicate that it is the normal working frequency of the station. Supplementary frequencies, if assigned, are shown in ordinary type.

(3) Working frequencies of coast stations must be chosen in such a manner as to avoid interference with other stations.

D. Additional Provisions applying to Region 1

§ 12. (1) In Region 1, the provisions of this sub-section apply only to the service of mobile radiotelephone stations using the frequency 2182 kc/s as a calling and distress frequency.

(2) The power of the unmodulated carrier-wave in the antenna of such mobile stations shall not exceed 100 watts except in the case of special agreements as provided in § 50.

(3) With a view to greater safety of life at sea all radiotelephone stations of the maritime mobile service which normally keep watch on frequencies in this band take steps, as far as possible, to keep watch on the distress frequency 2182 kc/s twice each hour for three minutes commencing at x h 00 and x h 30, Greenwich mean time (G.M.T.).

Proposals

Belgium, France, French O.P.T.A., Italy, Morocco, Netherlands (cont'd)

<table>
<thead>
<tr>
<th>No. in RR</th>
<th>No.</th>
<th>Proposed Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>2072</td>
<td></td>
<td>Section II (813-827)</td>
</tr>
<tr>
<td>2073</td>
<td></td>
<td>Section III (828 and 829)</td>
</tr>
<tr>
<td>2074</td>
<td>(610)</td>
<td>34-10</td>
</tr>
<tr>
<td>2075</td>
<td>(611)</td>
<td>34-11</td>
</tr>
<tr>
<td>2076</td>
<td>(612)</td>
<td>34-12</td>
</tr>
</tbody>
</table>

These 3 sections need to be rearranged.

Reasons

New presentation of rules applying to radiotelephony.

Section II.

Preliminary Operations

§ 6. (1) Before emitting, every station must listen long enough to satisfy itself that it will not cause harmful interference to transmissions in progress within its range; if such interference is likely, the station shall await the first break in the transmission with which it might interfere.

(2) If, these precautions having been taken, the emissions of the station happen to interfere with a radio transmission already in progress, the following rules are to be applied:

Replace by:

a) Within range of a coast station open to public correspondence, the station whose emission causes the interference must stop sending at the first
Present Provisions

Belgium, France, French O.P.T.A., Italy, Morocco, Netherlands (cont'd)

<table>
<thead>
<tr>
<th>No. in RR</th>
<th>No.</th>
<th>Proposed Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>(613)</td>
<td>34-13</td>
<td>b) If radiocommunication already in progress between mobile stations is interfered with by the emissions of another mobile station, this station must stop sending at the first request of one of the other stations.</td>
</tr>
<tr>
<td>(614)</td>
<td>34-14</td>
<td>c) The station which requests this cessation must indicate the approximate waiting time imposed on the station the emission of which it suspends.</td>
</tr>
</tbody>
</table>

Proposals

Section III. Frequency Bands between 4000 kc/s and 23000 kc/s

§ 13. (1) The provisions of this section are applicable to the radiotelephone service between coast stations and ship stations in the frequency bands allocated for this purpose to the maritime mobile service between 4000 and 23000 kc/s.

§ 14. (1) The frequency 156.80 Mc/s is the frequency designated for world-wide use on a simplex basis in the maritime mobile service for calling, safety, intership and harbour control purposes.

§ 15. The use of frequency modulation is compulsory in Region 2 and its use is strongly recommended in other regions.

§ 16. The interested administrations may designate, by special arrangements if necessary, other frequencies in this band for the handling of public correspondence, communications relating to ship operation, etc., in the maritime mobile service.

Section IV. Frequency Band 152-162 Mc/s

§ 14. (1) The frequency 156.80 Mc/s is the frequency designated for world-wide use on a simplex basis in the maritime mobile service for calling, safety, intership and harbour control purposes.

(2) The administrations concerned will take the necessary steps, by special arrangements if necessary, to reserve a suitable guard-band for this frequency.

§ 15. The use of frequency modulation is compulsory in Region 2 and its use is strongly recommended in other regions.

§ 16. The interested administrations may designate, by special arrangements if necessary, other frequencies in this band for the handling of public correspondence, communications relating to ship operation, etc., in the maritime mobile service.
Present Provisions

Proposals

Belgium, France, French O.P.T.A., Italy, Morocco, Netherlands (cont'd)

<table>
<thead>
<tr>
<th>No. in RR</th>
<th>No.</th>
<th>Proposed Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>2082 H5</td>
<td>34-16</td>
<td>When the coast station is fitted with equipment for selective calling and the ship is fitted with equipment for receiving selective calls, the coast station shall call the ship by transmitting the appropriate code signal, and the ship station shall call the coast station, by speech, in the manner given in 34-15 above.</td>
</tr>
</tbody>
</table>

B. Frequency to be used for Calling and for Preparatory Signals

a) Frequency bands between 1 605 kc/s and 3 800 kc/s.
<table>
<thead>
<tr>
<th>No. in RR</th>
<th>No.</th>
<th>Proposed Modifications</th>
</tr>
</thead>
</table>
| 2083     | G 4 | 34–17 A ship station calling a coast station of its own nationality shall use:  
  — either the working frequency assigned for this purpose by the Administration;  
  — or the frequency 2 182 kc/s, only whenever and wherever traffic density is low. |
| 2084     |     | Morocco  
  — either a working frequency assigned for this purpose by its national administration;  
  — or the frequency 2 182 kc/s, only whenever and wherever traffic density is low. |
| 2085     |     | Morocco  
  — or the frequency 2 182 kc/s, only whenever and wherever traffic density is low. |
| 2086     | G 5 | 34–18 A ship station calling a coast station of another country shall use the frequency 2 182 kc/s, as a general rule. However, where mutually agreed by administrations, the ship station may use a working frequency on which a watch is kept by that coast station. |
| 2087     |     | Morocco  
  A ship station calling a coast station of another country shall use frequency |
### Present Provisions

**Belgium, France, French O.P.T.A., Italy, Morocco, Netherlands (cont'd)**

<table>
<thead>
<tr>
<th>No. in RR</th>
<th>No.</th>
<th>Proposed Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2 182 kc/s as a general rule. However, by mutual agreement between the national administrations, the ship station may use a working frequency on which a watch is kept by the coast station.</td>
</tr>
<tr>
<td>2088</td>
<td>G 6</td>
<td>34–19 \n A ship station calling another ship station shall, as a general rule, use an intership working frequency, but whenever and wherever traffic density is low, it may use the frequency 2 182 kc/s.</td>
</tr>
<tr>
<td>2089</td>
<td></td>
<td>34–20 \n An aircraft station calling a coast station or a ship station shall use the frequency 2 182 kc/s.</td>
</tr>
<tr>
<td>2090</td>
<td>G 7</td>
<td>34–21 \n Coast stations shall, in accordance with the regulations of their own country, call ship stations of their own nationality: \n  — either on a working frequency; \n  — or on the frequency 2 182 kc/s in case of individual calls.</td>
</tr>
<tr>
<td>2091</td>
<td>G 8</td>
<td>34–22 \n As a general rule, coast stations shall call ship stations of another country on 2 182 kc/s.</td>
</tr>
</tbody>
</table>
### Present Provisions

Belgium, France, French O.P.T.A., Italy, Morocco, Netherlands (cont'd)

<table>
<thead>
<tr>
<th>No. in RR</th>
<th>No.</th>
<th>Proposed Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>2092</td>
<td>34-23</td>
<td>A ship station calling a coast station by radiotelephony shall use the frequency reserved for this purpose in the frequency band chosen.</td>
</tr>
<tr>
<td>2093</td>
<td>34-24</td>
<td>A coast station calling a ship station by radiotelephony shall use one of its working frequencies specified in the List.</td>
</tr>
<tr>
<td>2094</td>
<td>34-25</td>
<td>However, the preliminary operations for the establishment of radiotelephone communications may be carried out by radiotelegraphy in accordance with the procedure proper to that service. c) Frequency bands between 156 Mc/s and 162 Mc/s.</td>
</tr>
<tr>
<td>2095</td>
<td>H 6 34-26</td>
<td>As a general rule, coast stations and ship stations shall use 156.80 Mc/s.</td>
</tr>
<tr>
<td>2096</td>
<td>H 6 34-27</td>
<td>However, when using the two-frequency channel for calling in the public correspondence service, coast stations shall transmit on 161.80 Mc/s and ship stations on 157.20 Mc/s.</td>
</tr>
</tbody>
</table>
Present Provisions

Proposals

Belgium, France, French O.P.T.A., Italy, Morocco, Netherlands (cont'd)

<table>
<thead>
<tr>
<th>No. in RR</th>
<th>No.</th>
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<tbody>
<tr>
<td>2097</td>
<td>H 6</td>
<td>34–28</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The provisions of 34–26 and 34–27 above shall not prohibit initial calling and answering on the working channel mentioned in the List of Coast and Ship Stations.</td>
</tr>
<tr>
<td>2098</td>
<td>H 7</td>
<td>34–29</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If the frequency 156.80 Mc/s is being used for distress, urgency or safety calls, a ship station requesting entry into the port operations service may establish contact on the first-choice port operations frequency, i.e. 156.60 Mc/s.</td>
</tr>
<tr>
<td>2099</td>
<td>G 9</td>
<td>34–30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If contact is established on the frequency 2 182 kc/s, the coast and ship stations should transfer by mutual agreement to one of their working frequencies for the exchange of traffic.</td>
</tr>
<tr>
<td>2100</td>
<td>G 10</td>
<td>34–31</td>
</tr>
</tbody>
</table>
|          |      | Ship stations should, after calling a coast station or another ship station, indicate the frequency on which a
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<tr>
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<tbody>
<tr>
<td></td>
<td>34-32</td>
<td>If a ship station has established contact with a coast station or possibly with another ship station, using the calling frequency of the band chosen, the two stations shall transfer by mutual agreement to one of their working frequencies in that band.</td>
</tr>
<tr>
<td>2101</td>
<td></td>
<td>b) Frequency bands between 4000 kc/s and 23000 kc/s.</td>
</tr>
<tr>
<td></td>
<td>H 8</td>
<td>34-33 When contact has been established between a coast station in the public correspondence service and a ship station on 156.80 Mc/s, or on the two-frequency channel 157.20/161.80 Mc/s, the stations shall transfer to one of their normal pairs of working frequencies for the exchange of traffic. The calling station shall indicate the channel to which it is proposed to transfer by reference to the frequency in Mc/s or, preferably, to the channel designator given in the Allocation Table (see 34b-30).</td>
</tr>
</tbody>
</table>
### Present Provisions

<table>
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<tr>
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<th>Proposed Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>2103</td>
<td>H 9</td>
<td>34-34 A ship station, when it has established contact with a coast station in the port operations service on the frequency 156.80 Mc/s, shall 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 the channel designator given in the Allocation Table (see 34b-30).</td>
</tr>
<tr>
<td>2104</td>
<td>H 10</td>
<td>34-35 A coast station in the port operations service shall, when it has established contact with a ship station on 156.80 Mc/s, indicate the channel to be used for the exchange of traffic by reference to the frequency in Mc/s, or, preferably, to the channel designator given in the Allocation Table (see 34b-30).</td>
</tr>
<tr>
<td>2105</td>
<td>H 11</td>
<td>34-36 A ship station shall, when it has made contact with another ship station on 156.80 Mc/s, indicate the inter-ship channel which it proposes</td>
</tr>
</tbody>
</table>
Present Provisions

### Proposals

**Belgium, France, French O.P.T.A., Italy, Morocco, Netherlands (cont'd)**

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<tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td>to use for the exchange of traffic, by reference to the frequency in Mc/s or, preferably, to the channel designator given in the Allocation Table (see 34b-30).</td>
</tr>
</tbody>
</table>

**D. Indication of Traffic**

1. **2106**  
   - **G 11**  
   - **H 12**  
   - 34-37 When the calling station has several radiotelephone calls to send, or several radiotelegrams to transmit, it shall indicate this when contact is made with the called station.

**E. Form of Reply to Calls**

1. **2107**  
   - **G 12**  
   - **H 13**  
   - 34-38 Replies to calls shall be made up as follows:  
     - the call sign of the calling station, not more than three times;  
     - the words THIS IS;  
     - the call sign of the called station, not more than three times.

**F. Frequency for Reply**

1. **2108**  
   - **G 13**  
   - 34-39 When a ship station is called on 2 182 kc/s, it shall reply on the same frequency unless another frequency available to it is indicated by the calling station.
### Present Provisions

Belgium, France, French O.P.T.A., Italy, Morocco, Netherlands (cont'd)

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<tbody>
<tr>
<td>2109</td>
<td>G 14</td>
<td>34–40</td>
</tr>
<tr>
<td>2110</td>
<td></td>
<td>34–41</td>
</tr>
<tr>
<td>2111</td>
<td></td>
<td>34–42</td>
</tr>
<tr>
<td>2112</td>
<td>H 14</td>
<td>34–43</td>
</tr>
</tbody>
</table>
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Belgium, France, French O.P.T.A., Italy, Morocco, Netherlands *(cont’d)*

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</thead>
<tbody>
<tr>
<td>2113</td>
<td>H 15</td>
<td>34-44 When a ship station is called by a coast station open to public correspondence on a two-frequency channel, either by speech or by selective calling, it shall reply on the other frequency associated with that of the coast station.</td>
</tr>
<tr>
<td>2114</td>
<td>H 15</td>
<td>34-45 A coast station shall reply to a call from a ship station on the frequency associated with the other frequency used by the ship station for the call.</td>
</tr>
<tr>
<td>2115</td>
<td></td>
<td>34-46 If the called station is in agreement with the calling station, it shall transmit:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>— the reply to the call (see 34-38);</td>
</tr>
<tr>
<td></td>
<td></td>
<td>— the statutory conventional expression (or abbreviation) indicating that it is listening from that moment on the frequency announced by the calling station;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>— the statutory conventional expression (or abbreviation) indicating that the called station is ready to receive traffic from the calling station;</td>
</tr>
</tbody>
</table>
**Present Provisions**

Belgium, France, French O.P.T.A., Italy, Morocco, Netherlands *(cont'd)*

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>2116</td>
<td>H 16 34-47</td>
<td>— if desirable, the statutory conventional expressions (or abbreviations) relative to the emission quality of the calling station.</td>
</tr>
<tr>
<td>2117</td>
<td>H 16 34-48</td>
<td>If the called station does not agree with the calling station on the frequency to be used for the traffic, it shall transmit:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>— the reply to the call (see 34-38);</td>
</tr>
<tr>
<td></td>
<td></td>
<td>— the statutory conventional expression (or abbreviation) indicating the frequencies which it can use.</td>
</tr>
<tr>
<td>2118</td>
<td>G 17 H 17 34-49</td>
<td>For communications between a coast station and a ship station, it is the coast station which shall finally decide the frequencies to be used.</td>
</tr>
</tbody>
</table>

**H. Difficulties in Reception**

If the called station is prevented from receiving traffic, it shall reply to the call as outlined in 34-38 above, followed by the expression “Wait ... minutes” (how long, in minutes, the wait is likely to last); if there are language difficulties, the called station shall show this by means of the appropriate conventional expression.
Present Provisions

Proposals

Belgium, France, French O.P.T.A., Italy, Morocco, Netherlands (cont'd)

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</thead>
<tbody>
<tr>
<td>2119</td>
<td>G 18</td>
<td>34-50 When a station receives a call without being certain that the call is intended for it, it shall not reply until the call has been repeated and understood.</td>
</tr>
<tr>
<td>2120</td>
<td>G 18</td>
<td>34-51 When a station receives a call which is intended for it, but is uncertain of the call sign of the calling station, it must immediately ask for the calling station to repeat its call sign.</td>
</tr>
</tbody>
</table>

2120bis
Section IV. Transmission of Traffic

2121 34-52 A. Traffic Frequency

2122 (653) 34-53 Every maritime mobile station shall use, to transmit its traffic (radiotelephone calls or radiotelegrams), one of its working frequencies specified in the List for the band in which the call has been made.

2123 (654) 34-54 In addition to its normal working frequency, printed in heavy type in the List, every station may use one or more supplementary frequencies in the same band, in accordance with Article 33.

2124 (655) 34-55 The use of frequencies in the bands reserved for calling is forbidden for traffic,
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<tr>
<td>2124 bis</td>
<td>34-56</td>
</tr>
<tr>
<td>a) General</td>
<td></td>
</tr>
<tr>
<td>2125</td>
<td>34-57</td>
</tr>
<tr>
<td>2126</td>
<td>34-58</td>
</tr>
<tr>
<td>b) Establishment of radiophone calls.</td>
<td></td>
</tr>
<tr>
<td>2127</td>
<td>34-59</td>
</tr>
<tr>
<td>2128</td>
<td>34-60</td>
</tr>
</tbody>
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Proposals

Belgium, France, French O.P.T.A., Italy, Morocco, Netherlands (cont’d)

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<tr>
<td></td>
<td></td>
<td>specify its call sign followed by the word “over” (in the language used for the call) or by a new request for communication; the corresponding station shall reply “over” or follow up the new request, or itself request a communication; in case of language difficulties, the operators of the two stations shall use the conventional expressions appearing in Appendix… (See proposal 3003).</td>
</tr>
<tr>
<td>2129 (658)</td>
<td>34-61</td>
<td>As a general rule, radiotelegrams shall be numbered in a daily series, number 1 being given to the first radiotelegram sent each day to each separate station. A series which has been started in radiotelegraphy may be continued in radiotelephony and vice versa.</td>
</tr>
<tr>
<td>2130</td>
<td>34-62</td>
<td>Each radiotelegram shall be transmitted once only by the sending station. However, it may be repeated in full or in part by the receiving station or, at the request of the latter, by the sending station.</td>
</tr>
<tr>
<td>2131</td>
<td>34-63</td>
<td>The acknowledgement of receipt of a radiotelegram shall be given by the receiving station in the form “received number... (number of the radiotelegram)”.</td>
</tr>
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<td>No.</td>
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</tr>
<tr>
<td>2132</td>
<td>34-64</td>
<td>The acknowledgement of receipt of a series of radiotelegrams shall be given in the form “received x radiotelegrams, from number... to number... (numbers of the first and last radiotelegrams in the series)”</td>
</tr>
<tr>
<td>2133</td>
<td>34-65</td>
<td>Transmission of an acknowledgement of receipt shall be preceded by the call sign of the receiving station.</td>
</tr>
<tr>
<td>2134</td>
<td>34-66</td>
<td>If, during the transmission of a radiotelegram or a request for a radiotelephone call, it is necessary to spell certain expressions (call sign, abbreviations, difficult words, etc.) the spelling code appearing in Appendix ... shall be used. (See proposal 3003).</td>
</tr>
<tr>
<td>2135</td>
<td>34-67</td>
<td>Any number written in figures shall be transmitted each figure being enounced separately. Transmission of a number in figures may be preceded by the words “in figures”. If there is any doubt at the receiving end, the numbers may be repeated immediately by the operator of the sending station or, after transmission of the message, by the operator of the receiving station.</td>
</tr>
<tr>
<td>2136</td>
<td>34-68</td>
<td>Numbers written in letters shall be transmitted as they are written, their transmis-</td>
</tr>
<tr>
<td>Present Provisions</td>
<td>Proposals</td>
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<tr>
<td>Belgium, France, French O.P.T.A., Italy, Morocco, Netherlands (cont'd)</td>
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<tbody>
<tr>
<td>2137</td>
<td></td>
<td>section being preceded by the words &quot;in letters&quot;.</td>
</tr>
<tr>
<td>2138</td>
<td>(679)</td>
<td><strong>Section V. Tests</strong></td>
</tr>
<tr>
<td></td>
<td>34–69</td>
<td>Where it is necessary for a mobile station to send signals for testing or adjustment which are liable to interfere with the working of a neighbouring station, the consent of the station must be obtained before such signals are sent.</td>
</tr>
<tr>
<td>2139</td>
<td>(680)</td>
<td><strong>Section VI. Calls</strong></td>
</tr>
<tr>
<td></td>
<td>G 19</td>
<td>The duration of signals sent for testing must be reduced to the minimum, particularly on 2182 kc/s.</td>
</tr>
<tr>
<td></td>
<td>H 18</td>
<td></td>
</tr>
<tr>
<td>2140</td>
<td>G 20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>H 19</td>
<td>In the aeronautical mobile service the procedure contemplated in this article shall apply, except where special arrangements have been made between the Governments concerned.</td>
</tr>
<tr>
<td>2141</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2142</td>
<td>(681)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>34–72</td>
<td></td>
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</thead>
<tbody>
<tr>
<td>2143</td>
<td>(682)</td>
<td>34–73 Aircraft stations when communicating with maritime mobile stations shall use the procedure laid down in this article.</td>
</tr>
<tr>
<td>2144</td>
<td>(683)</td>
<td>34–74 Replace the present text by the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>As a general rule, it shall be for the mobile station to make contact with the land station. The mobile station may call the land station for this purpose only if it considers that it can be heard by the latter.</td>
</tr>
<tr>
<td>2145</td>
<td>(684)</td>
<td>34–75 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 within range and is keeping watch.</td>
</tr>
<tr>
<td>2146</td>
<td>(685)</td>
<td>34–76 In addition, every coast station shall, as far as possible, 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 at intervals of at least two hours and</td>
</tr>
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<td>No.</td>
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</tr>
<tr>
<td>2147 G 21</td>
<td>34-77</td>
<td>not more than four hours during the working hours of the coast station.</td>
</tr>
<tr>
<td>H 20 (686)</td>
<td></td>
<td>Coast stations shall transmit these traffic lists on their normal working frequency.</td>
</tr>
<tr>
<td>2148 G 22</td>
<td>34-78</td>
<td>They may, however, announce this transmission by the following brief preamble sent on the calling frequency when such a frequency exists in the band under consideration (2182 kc/s or 156.80 Mc/s):</td>
</tr>
<tr>
<td>H 21</td>
<td></td>
<td>— “CQ” (spelt out), not more than three times;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>— the word THIS IS;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>— “...Radio”, not more than three times;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>— Q SW (spelt out) on ... kc/s (Mc/s).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>This preamble shall never be repeated.</td>
</tr>
<tr>
<td>2149</td>
<td></td>
<td>Morocco</td>
</tr>
<tr>
<td></td>
<td></td>
<td>— “call to all ships”, not more than three times;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>— the words THIS IS;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>— “Radio”, not more than three times;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>— “listen to my call list”.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In no case may this preamble be repeated.</td>
</tr>
<tr>
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<td>No.</td>
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</tr>
<tr>
<td>2150</td>
<td>(690)</td>
<td>34–79 The times at which coast stations transmit their traffic lists and the frequencies and classes of emission which they use for this purpose must be mentioned in the List.</td>
</tr>
<tr>
<td>2151</td>
<td>(691)</td>
<td>34–80 Mobile stations which hear their call sign during this transmission shall reply as soon as they can do so, following as far as possible the order in which they are called.</td>
</tr>
<tr>
<td>2152</td>
<td>(692)</td>
<td>34–81 When the traffic cannot be sent immediately, the coast station shall inform each mobile station concerned of the probable time at which working can begin, and also, if necessary, of the frequency and class of emission which will be used.</td>
</tr>
<tr>
<td>2153</td>
<td>(693)</td>
<td>34–82 § 4. When a land station receives calls from several mobile stations at practically the same time, it shall decide the order in which these stations may transmit their traffic. This decision is based solely on the necessity of allowing each of the calling stations to clear the greatest number of radiotelegrams.</td>
</tr>
<tr>
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<td>No.</td>
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</tr>
<tr>
<td>2154</td>
<td>G 23 H 22 (694)</td>
<td>34-83 When a called station does not reply to a call three times at intervals of two minutes, calling shall cease and shall not be renewed for fifteen minutes, except in the case of distress, urgent or safety calls. Ship stations shall not emit their carriers between calls.</td>
</tr>
<tr>
<td>2155</td>
<td>(695)</td>
<td>34-84 However, when the call is between a maritime mobile station and an aircraft station, calling may be renewed after five minutes.</td>
</tr>
<tr>
<td>2156</td>
<td>(696)</td>
<td>34-85 Before renewing the call, the calling station shall ascertain that the station called is not in communication with another station.</td>
</tr>
<tr>
<td>2157</td>
<td>(697)</td>
<td>34-86 The call may be repeated at shorter intervals if there is no reason to believe that it will interfere with the call in progress.</td>
</tr>
<tr>
<td>2158</td>
<td>(698)</td>
<td>34-87 Belgium, France, French O.P.T.A., Italy, Netherlands When contact with a land station is first made, any mobile station may transmit its name in full if it deems this advisable to avoid confusion.</td>
</tr>
</tbody>
</table>
Belgium, France, French O.P.T.A., Italy, Morocco, Netherlands (cont’d)

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<tbody>
<tr>
<td>2159</td>
<td>(699)34-88</td>
<td>When the name and address of the administration or private operating agency controlling a mobile station are not given in the List of stations or are no longer in agreement with the particulars given therein, it shall be the duty of the mobile station regularly to supply the land station to which it transmits traffic with all necessary information in this respect, using for this purpose the appropriate service abbreviations.</td>
</tr>
<tr>
<td>2160</td>
<td>(700)34-89</td>
<td>The land station may ask the mobile station to supply the following information:</td>
</tr>
<tr>
<td>2161</td>
<td>(701)34-90</td>
<td>a) position, course and speed;</td>
</tr>
<tr>
<td>2162</td>
<td>(702)34-91</td>
<td>b) next place of call.</td>
</tr>
<tr>
<td>2163</td>
<td>(703)34-92</td>
<td>The information referred to in 34–89 shall be supplied on the authority of the master, captain or other person responsible for the ship, the aircraft or other vehicle carrying the mobile station.</td>
</tr>
</tbody>
</table>
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Proposals

United Kingdom

2164 Article 34. Heading. Read:

Use of Frequencies for Radiotelephony in the Maritime Mobile Service.

Reasons

The general provisions for radiotelephony are now incorporated in other articles, and it is proposed that the article should cover only the frequencies used for radiotelephony.

2165 804. Delete.

Reasons

Not necessary.

2166 806. Delete.

Reasons

Covered by proposals for Articles 24 and 25.

2167 807. Delete.

Reasons

Covered by 428 and 429.

2168 808. Delete.

Reasons

Covered by proposal 1753.

2169 809. Delete.

Reasons

Covered by proposal 1723.
United Kingdom

2170 810. Replace the first sentence by the following:

The frequencies of transmission and, where necessary, of reception (also the pairs of frequencies in the case of duplex telephony) allocated to each coast station shall be indicated in the List of Coast Stations.

Reasons

Clarification, and see proposals for Service Documents, Article 20.

2171 811. Delete.

Reasons

No longer required (see proposals for the articles-concerned).

2172 812. Delete: solely.

Reasons

To remove an unnecessary restriction.

U.S.S.R.

812. After this No. add the following new provisions:

2173 §7bis (1) All ships equipped for radiotelephony must, if they do not normally keep a watch on the distress frequency 500 kc/s, be equipped with the automatic radiotelephone alarm device with all possible speed.

2174 (2) All ships compulsorily equipped with radio but having radiotelephony only, and engaged in international voyages, must carry the following documents:
Present Provisions

1. The licence mentioned in Article 22 of the Radio Regulations;
2. The certificate or certificates of the operator or operators;
3. A radio log-book, in which shall be recorded (with the times when they occur):
   a) Summarized particulars of all distress, emergency or safety calls;
   b) Summarized particulars of the calls exchanged between the ship station and land or mobile stations;
   c) Particulars of major service events;
   d) The ship’s position at least once a day, if permissible under the ship’s rules.

They must also carry:

1. A list of the coast stations with which it is probable that calls will be exchanged, with data of the working frequencies used and the volume of traffic.
2. The Radio Regulations and Additional Radio Regulations in so far as the latter are applicable to radio telephony.

2175 (3) When a radiotelephone mobile station has to transmit test signals for adjustment of the transmitter before transmission of a call or for adjustment of the receiver, these signals must not be transmitted for more than 10 seconds and must be accompanied by the designation... (call sign of the station) and the words “...” (I am testing), pronounced slowly and distinctly.

2176 (4) Any signal transmitted for test purposes on the frequency 2 182 kc/s must take up as little time as possible.

2177 Australia (Commonwealth of)

Insert in Section II of Article 34, a self-contained comprehensive set of rules for the maritime mobile radiotelephone service in the frequency bands between 1 605 and 3 800 kc/s such as those contained in Chapter IV of the Final Acts of the Göteborg Conference (1955), the rules to include the international phonetic alphabet and numbers.

Reasons

In view of developments which have occurred in the maritime mobile radiotelephone service in the bands between 1 605 and 3 800 kc/s, it is considered that provision of such a set of rules is necessary.
Section II. Change the heading to read:
Section II. Frequency bands between 1 605 and 3 800 kc/s.

United Kingdom
2179 Section II. Sub-Section A. Heading. Read:
A. Distress

Reasons
To segregate distress.

2180 § 813. Replace the present text by the following:
§ 8. (1) The frequency 2 182 kc/s is the international distress frequency for radiotelephony; it is used for this purpose by ship or aircraft stations using frequencies in the authorized bands between 1 605 and 2 850 kc/s when requesting assistance from the maritime services. It is used for the distress call and distress traffic, for the emergency signal and emergency messages, and for the safety signal. (Safety messages are transmitted on a working frequency after a preliminary announcement on 2 182 kc/s.)

Reasons
Aligned with 714 for the frequency 500 kc/s, and to specify that 2 182 kc/s is a general mobile distress frequency.

2181 U. S. S. R.

813. Replace the present text by the following:
§ 8. (1) The frequency 2 182 kc/s is, for the maritime mobile radiotelephone service, both a calling and a distress frequency in the bands between 1 605 and 3 800 kc/s, in which radiotelephony is authorized.

2182 United Kingdom

813. After this No. add the following new sub-
paragraph:
(1bis) In addition it may be used only:
Present Provisions

Proposals

a) for call and reply (see sub-Section Abis);

b) by coast stations to announce the transmission of their traffic lists under the conditions provided for in 685-688.

Reasons

To provide a more comprehensive definition of the use of 2 182 kc/s and in alignment with Article 33, 714-716.

2183 U. S. S. R.

813. After this No. add the following new sub-paragraph:

(1 bis) The call is made as follows:
— the call sign of the called station not more than three times;
— the words THIS IS;
— the call sign of the calling station not more than three times.

When the call is set up, the call signals can be transmitted once only.

2184 China

814. Delete.

Reasons

See proposal 1039.

2185 United Kingdom

814. Replace the present text by the following:

(2) Apart from the transmissions authorized on 2 182 kc/s, all transmissions on the frequencies included between 2 176 and 2 188 kc/s are forbidden.

Reasons

To standardize the guard-band for all regions and to take advantage of the advances in transmitter and receiver design.
§ 9. (1) The frequency 2 182 kc/s may be used for calls and replies and it is the frequency to be used for the distress call and traffic, for urgency and safety signals or messages, as well as for warning signals and messages preceded by the warning signal.

Reasons
To be consistent with proposals 2562 to 2565.

2187 Singapore-British Borneo Group

815. The frequency 2 182 kc/s is unsuitable as an international calling and distress frequency for tropical zones.

(See proposal 2221).

United Kingdom

2188 815. Delete.

Reasons
Included in 813 and new sub-paragraph (1 bis) of § 8 (proposal 2182).

2189 815. After this No. add the following new sub-paragraph:

(1 bis) In order to facilitate the reception of distress calls transmissions on the frequency 2 182 kc/s must be reduced to a minimum.

Reasons
To conform with 719.

2190 add the new sub-section:

A bis. Call and Reply.

Reasons
To segregate calling and reply.
and add the following two new paragraphs:

2191 § 9 bis. The general calling frequency for use by any ship station or coast station using radiotelephony in the authorized bands between 1 605 and 2 850 kc/s and by aircraft desiring to enter into communication with a station of the maritime mobile service using frequencies in this band, is 2 182 kc/s.

2192 § 9 ter. The frequency for replying to a call sent on the general calling frequency is the frequency 2 182 kc/s, the same as that of the call.

Reasons
To conform with 720 and 722 and consequential on amendments proposed to sub-section A.

2193 Italy

816. Replace the present text by the following:

(2) Its use for call purposes between ship and coast stations shall be permitted to ship stations only. The coast station shall always reply, except in exceptional cases, on its own working frequency.

Reasons
It is essential to ease the traffic burden on 2 182 kc/s.

2194 United Kingdom, U. S. S. R.

816. Delete.

Reasons
United Kingdom:
No longer required (see proposals for Article 29).

U. S. S. R.

816. After this No. add the following new provisions:

2195 a) A ship radiotelephone station calling a coast station belonging to the same country, must use
the ship-shore working frequency, but when the load on the channel is low, it may use 2 182 kc/s too.

2196  b) A radiotelephone ship station calling a coast station belonging to another country must, as a general rule, use the frequency 2 182 kc/s, but, when this has been mutually agreed upon between the two administrations concerned, the ship may use the working frequency on which the coast station is keeping watch.

2197  c) A radiotelephone ship station calling another ship station must, as a general rule, use the intership working frequency for calling purposes, but when the load on the channel is low it may use 2 182 kc/s too.

2198  d) In accordance with their countries' regulations, coast stations should call radiotelephone ship stations of the same nationality on a working frequency or, in the case of individual calls, on the frequency 2 182 kc/s.

2199  e) As a general rule, coast stations must call radiotelephone ship stations belonging to another country on 2 182 kc/s.

2200  f) If the call is set up on 2 182 kc/s, the coast and ship stations must transfer to one of their ordinary working frequencies for the exchange of their traffic.

Radiotelephone ship stations must, after calling a coast station or other ship stations, indicate the frequency on which they await a reply, if this frequency is not the one on which replies are normally given to calls from the ship stations concerned.

2201  g) Answers to calls shall be given as follows:

- the call sign of the calling station not more than three times;
- the words THIS IS;
- the call sign of the called station not more than three times.
Present Provisions

2202  h) When the radiotelephone ship station is called on 2 182 kc/s, it shall reply on the same frequency except when the calling station indicates another frequency.

2203  i) When the radiotelephone ship station is called by a coast station belonging to the same country on a working frequency, it shall answer on the ship-shore working frequency normally used by the coast station for calling purposes.

Coast stations shall answer the calls of ships belonging to the same country and equipped for radiotelephony either on the working frequency or on 2 182 kc/s, as the country in question may require.

2204  j) Ships equipped for radiotelephony and frequently exchanging correspondence with coast stations of another country, may use the same procedure for replying as laid down for ships belonging to the same country as the coast station, when this has been agreed upon between the two administrations.

2205  k) Coast stations shall transmit particulars about the division of their work between their normal working frequencies.

2206  l) But they may provide information on this subject by means of the following short broadcast on 2 182 kc/s:

- “calling all stations” not more than three times;
- the words THIS IS;
- “... Radio” not more than 3 times;
- “call list follows on frequency ... kc/s.”

In no circumstances will such a call be repeated.

2207  m) When the called radiotelephone station does not answer a call sent three times at two-minute intervals, the call shall be discontinued for at least fifteen minutes. Ship radio stations shall not broadcast their carriers in the intervals between calls.
When a radiotelephone station accepts a call while still uncertain whether the call is intended for it, it shall not answer until the call has been repeated and understood. When a station accepts a call intended for it, but is not certain of the calling station’s call sign, it shall reply immediately by asking for that call sign to be repeated.

United Kingdom

§ 9 quater. However, administrations may authorize the use of working frequencies for call and reply (see Nos. ... et seq.).

(Proposals 1775 et seq.)

Reasons
To accord with Göteborg Supplementary Regulations.

Delete.

Covered by 873.

Replace the present text by the following:
§ 10 (1) All coast stations which are open to public correspondence in the bands 1 605–2 850 kc/s and which form an essential part of the coverage of the area for distress purposes shall, during the hours of radiotelephone service within these bands, remain on watch on the frequency 2 182 kc/s.

Reasons
To include 24 of the Göteborg Supplementary Regulations.
Present Provisions

Proposals

2212 U. S. S. R.

819. After this No. add the following new sub
paragraph:

(1 bis) All coast radiotelephone stations open for
general correspondence in the bands 1 605 and 2 850
kc/s, and representing a considerable proportion of the
radio facilities available in that particular part of the
world for safety purposes, must keep a watch on 2 182
kc/s during their working hours.

2213 United Kingdom

820. Replace the present text by the following:

(2) Coast Stations shall maintain this watch by means
of an operator using headphones, split headphones, or
a loudspeaker.

Reasons

To include 25 of the Göteborg Supplementary Regulations.

2214 U. S. S. R.

820. Replace the present text by the following:

(2) Coast radiotelephone stations shall keep a watch
on 2 182 kc/s, either by designating a special operator,' or
by means of a loudspeaker, in which case this watch
shall be kept in addition to any watch maintained by
means of an automatic alarm signal receiver.

United Kingdom

820. After this No. add the following new sub
paragraphs and paragraph:

2215 (2 bis) Ship stations of the maritime mobile ser
vice open to public correspondence, in the authorized
bands between 1 605 and 2 850 kc/s, should, as far as
possible during their hours of service, remain on watch
on the calling frequency 2 182 kc/s.

Reasons

To accord with Article 33 (737).
Present Provisions

Proposals

United Kingdom (cont'd)

2216 (2 ter) This watch shall be maintained by means of an operator using headphones, split headphones, or a loudspeaker.

Reasons
To accord with Article 33 (738-739).

2217 § 10 bis. (1) In order to increase the safety of life at sea all radiotelephone stations of the maritime mobile service which normally keep watch on frequencies in this band take steps, as far as possible, to keep watch on the distress frequency 2 182 kc/s twice each hour for three minutes commencing at x h 00 and x h 30, Greenwich mean time (G.M.T.) during their hours of radiotelephone service.

Reasons
To make 826 applicable in all regions and to clarify that watch is required only during the hours of radiotelephone service.

2218 (2) During the periods mentioned above, except for the emissions provided for in Article 37 (see 935 to 949) transmissions must cease within the band 2 173 to 2 191 kc/s.

Reasons
827 transferred and amended to bring into line with modern techniques.

U. S. S. R.

820. After this No. add the following new subparagraphs:

2219 (Former 826) (2 bis) For the safety of life at sea, all maritime mobile radiotelephone stations, which normally keep a watch on frequencies of this band, shall do all they can to keep a watch on the distress frequency 2 182 kc/s for two 3-minute periods in every hour, beginning at x h 00 minutes and x h 30 minutes (G. M. T.).

2220 (Former 827) (2 ter) During these periods, all transmissions in the range from 2 167 to 2 197 kc/s shall be stopped, except for distress, emergency and safety calls.
Present Provisions

Present Provisions

Present Provisions

Present Provisions

Present Provisions

Proposals

Reasons

826 and 827 of the RR are entirely devoted to the sub-section headed "B. Watch", and hence are included in this sub-section as sub-paragraphs (2bis) and (2ter).

2221 Singapore-British Borneo Group

821. Consideration should be given to a second international calling and distress frequency, for the maritime mobile radio telephone service in the tropical zone, preferably in the 8 Mc/s band.

It is suggested that a frequency might be found between 8 340 and 8 350 kc/s. It is understood that those ships which in the past did not comply in 1947 with the Safety of Life at Sea Convention were allocated frequencies in this band, but should have by now vacated these frequencies.

Reasons

The Malaya-British Borneo area, being in the tropical zone, is in a region of very high noise grading. The practical working range of the 2 Mc/s Band in such an area has been found to be only of the order of 50–100 miles; in this area there is a high concentration of small tonnage local shipping, a considerable proportion of which is only equipped with radiotelephone equipment, much of which uses only low power transmitters. Therefore stations in this area cannot fully comply with Chapter IV, Regulation 15 (c) of the International Convention on Safety of Life at Sea. The most useful bands for the maritime mobile radio telephone service in this area are 4 and 8 Mc/s.

2222 U. S. S. R.

821. Replace: of the band 1 605–2 850 kc/s by:
of the band 1 605–3800 kc/s.

United Kingdom

2223 822. Delete: and Ship.

Reasons

See proposals for Service Documents, Article 20.

823. After this No. add the following new sub-paragraphs:

2224 (3bis) The frequency 2 172 kc/s may be used as a working frequency by a ship station of one country desir-
Present Provisions

Proposals

United Kingdom (cont'd)

ing to communicate with a coast station of another country.

Reasons

Göteborg Recommendation No. 3.

2225 (3ter) The frequency 2 192 kc/s may be used as a working frequency by a ship station of one country desiring to communicate with a ship station of another country.

Reasons

Göteborg Recommendation No. 2.

U. S. S. R.

823. After this No. add the following new provisions:

2226 a) All radiotelephone ship stations working in the authorized bands between 1 605 and 3 800 kc/s must be able to use the international frequencies 2 320, 2 430 and 2 510 kc/s, besides the frequency 2 182 kc/s.

2227 b) Stations on ships equipped for radiotelephony must be able to receive all frequencies necessary for this service, besides 2 182 kc/s.

2228 c) If the call is made on 2 182 kc/s, coast and ship stations must change over to one of their normal working frequencies to exchange traffic.

2229 d) Radiotelephone ship stations, after calling a coast station or other ship station, must indicate the frequency on which they expect a reply, if this is not the normal frequency on which answers are normally given to calls by those particular stations.

2230 e) When the calling station intends to exchange more than one radiotelephone call or to transmit one or more radiotelegrams, it must indicate this fact as soon as the call has been set up with the called station.

2231 f) If the called radiotelephone station cannot accept the traffic, it shall answer in accordance with the procedure laid down in No. . . . (proposal 2201)
indicating how many minutes are likely to elapse before it will be able to do so. If this period is likely to exceed ten minutes (5 minutes for calls from aircraft stations with maritime mobile stations) then the cause of the delay shall be indicated. Otherwise, the called station shall indicate by any appropriate means that it is not ready to receive the traffic at once.

2232  g) In Regions 1, 2 and 3, for inter-ship radiotelephony, ship stations may use 2 320 kc/s.

The administrations of countries in these regions shall take appropriate action to ensure that in the bands 2 317.5–2 322.5 kc/s stations of all services shall not cause harmful interference to inter-ship radiotelephony on 2 320 kc/s.

2233  h) In Regions 1, 2 and 3, for ship-shore radiotelephone traffic, ship stations may use 2 510 kc/s.

The administrations of all countries shall do all they can to ensure that in the band 2 506.7–2 513.5 kc/s no stations of any services shall cause harmful interference to ship station-coast station radiotelephone traffic on 2 510 kc/s.

2234  i) In Regions 1, 2 and 3, for urgent ship station-coast station and inter-ship radiotelephone calls, ship stations may use 2 430 kc/s when the frequency 2 182 kc/s is occupied by a distress call.

The administrations of countries in these regions shall do all they can to ensure that no stations of any services in the band 2 426.5–2 433.5 kc/s cause harmful interference to urgent inter-ship and ship-to-shore radiotelephone traffic on 2 430 kc/s.

2235  United Kingdom

824. Replace: to the service of mobile radiotelephone stations by: to the stations of the maritime mobile radiotelephone service.

Reasons
To permit extension of the provisions to coast stations.
**Present Provisions**

**Proposals**

2236 **United Kingdom**

825. *Replace: such mobile by: ship.*

**Reasons**

Clarification.

2237 **U. S. S. R.**

825. *Replace the present text by the following:*

(2) The power of the unmodulated carrier wave in the antennae of radiotelephone ship stations shall not exceed 100 watts, unless special agreements exist between the governments concerned.

**Reasons**

Clearer wording.

**United Kingdom**

825. *After this No. add the following new sub-paragraphs:*

2238 *(2bis)* In the authorized bands between 1 605 and 2 850 kc/s the mean power of coast radiotelephone stations shall be limited to:

— 2 kilowatts for coast stations located North of Latitude 32° North;

— 3 kilowatts for coast stations located South of Latitude 32° North.

**Reasons**

To incorporate Recommendation No. 4 of the E.A.R.C.

2239 *(2ter)* Stations which use frequencies in the band 1 625–1 670 kc/s, allocated for low-power telephony services, shall, in principle, employ a power as low as possible. Such power shall not exceed 20 watts.

**Reasons**

To incorporate 31 of the E.A.R.C.

2240 *(2quater)* When a ship station of one country wishes to communicate with a coast station in another country, it may, by agreement with that coast
Present Provisions

Proposals

station, use one of its own assigned frequencies (ship-
to-coast), even if the use of such frequencies in the
area where the ship is located is not envisaged.

Reasons
To incorporate 46 of the E.A.R.C.

2241 Australia (Commonwealth of)

826. Apply this provision to Region 3 in addition
to Region 1.

Reasons
In view of the increasing use being made of the maritime mobile
radiotelephone service in the bands between 1 605 and 3 800 kc/s,
it is considered that this provision should apply to Region 3.

2242 Denmark, Finland, Iceland,
Norway, Sweden

826. Add in fine:
... and, in addition, continuous watch by any ap-
propriate means for receiving, in the place wherefrom
the ship is usually navigated, the radiotelephone alarm
signal prescribed in...

Reasons
In accordance with Göteborg Resolution No. 4 (1955).

2243 Italy

826. Delete in the middle: as far as possible.

Reasons
For greater safety at sea it is essential to keep watch on the
distress frequency 2 182 kc/s.

2244 United Kingdom

826 and 827. Delete.

Reasons
Transferred to Section B, thus making the RR of general
application.
Present Provisions

2245 United Kingdom

829. Delete: as far as possible.

Reasons
To ensure compliance with Appendix 12.

2246 Australia (Commonwealth of)

830. Replace the present text by the following:
§ 14. (1) The frequency 156.8 Mc/s is the frequency designated for world-wide use on a simplex basis in the maritime mobile service for calling and safety purposes. It may also be used for messages preceded by the urgency signal and, if necessary, for distress messages.

Reasons
In view of the developments which have occurred in the VHF maritime mobile service, it is considered that 156.8 Mc/s should be used for calling and safety purposes only.

2247 United Kingdom

830. Replace the present text by the following:
§ 14. (1) The frequency 156.80 Mc/s is the frequency for world-wide use in the maritime mobile service for safety purposes.

2247bis Section IV. Heading. Read:
Section IV. Frequency Bands between 156 Mc/s and 174 Mc/s.

Reasons
To bring into line with the Frequency Table.

U. S. S. R.

2247ter Section IV. Heading and sub-heading. Read:
Section IV. Frequency Band 156-162 Mc/s.
A. General

2248 830. Replace the present text by the following:
§ 14. (1) The frequency 156.80 Mc/s shall be designated for world-wide simplex use in the maritime mobile service for calling and safety purposes. It can also be used for the transmission of calls preceded by the emergency signal and for distress calls if necessary.
United Kingdom

2249 830. After this No. add the following new sub-paragraph:

(1 bis) In addition, it may be used only:

a) for call and reply;

b) by coast stations to announce the transmission of their traffic lists under the conditions provided for in 688.

Reasons

To limit the use of the frequency 156.8 Mc/s in accordance with Recommendation No. 2 of The Hague and to align with sub-paragraph (1 bis) of § 8 (see proposal 2182).

2250 831. Replace the present text by the following:

(2) In the maritime mobile service, apart from the transmissions authorized on 156.80 Mc/s all transmissions on the frequencies included between 156.725 and 156.875 Mc/s are forbidden.

Reasons

To establish a guard-band for the safety frequency as provided for in the frequency plan agreed at The Hague.

2251 832. Replace: 830 by: § 14. (1) and (1 bis).

Reasons

Consequential on the introduction of the new sub-paragraph. See proposal 2249.

832. After this No. add the following new sub-paragraphs:

2252 (3 bis) As far as possible, every coast station providing a maritime radiotelephone service in the bands between 156 and 174 Mc/s should maintain watch on 156.80 Mc/s during its hours of radiotelephone service within these bands. Ship stations during their hours of service should, as far as possible, maintain a
Present Provisions

Proposals

United Kingdom (cont'd)

watch on this frequency when within range of a coast station.

Reasons

To incorporate 23 and 24 of the The Hague Supplementary Regulations.

2253 (3 ter) If the frequency 156.80 Mc/s is in use for safety purposes, watch for calls should be maintained additionally on the frequency 156.60 Mc/s by coast stations in the port operations service in the area concerned.

Reasons

To incorporate 26 of the The Hague Supplementary Regulations.

2254 (3 quater) Coast stations open to public correspondence and using the two-frequency calling channel (157.40 and 162.00 Mc/s), should, as far as possible, maintain watch on the frequency 157.40 Mc/s during their working hours.

Reasons

To incorporate 25 of the The Hague Supplementary Regulations.

2255 India

833. Replace the present text by the following:

§ 15. The use of frequency modulation is compulsory.

Reasons

1. Universal adoption of frequency modulation system as recommended by maritime conferences.
2. C.C.I.R. Recommendation No. 223.

2256 United Kingdom

833. Replace the present text by the following:

§ 15. The use of frequency modulation is compulsory in the maritime mobile radiotelephone service.

Reasons

To make FM mandatory in all Regions.
§ 15. The use of frequency modulation shall be compulsory throughout the world.

§ 16. Working frequencies for public correspondence, port operations and intership services must be assigned to coast and ship stations in accordance with the frequency allocation table contained in Appendix 12 bis.

Reasons
To ensure assignment in accordance with the Hague Frequency Table.

§ 16 bis. The method of working, that is single-frequency or two-frequency, should be adhered to as indicated in Appendix 12 bis.

Reasons
To cover Note 1 of the Hague Frequency Table.

§ 16 ter. Working frequencies of coast stations must be chosen in such a manner as to avoid interference with other stations.

Reasons
To cover Note 4 of the Hague Frequency Table.
§ 16 quarter. Communications on port operation channels must be restricted to those related to the movement and safety of ships, and, in emergency, to the safety of persons.

Reasons
To cover Note 11 of the The Hague Frequency Table

U. S. S. R.

834. After this No. add the following new provisions:

2262 § 16 quarter. Communications on port operation channels must be restricted to those related to the movement and safety of ships, and, in emergency, to the safety of persons.

2263 a) The frequency channels to be used for transmission by ship stations in the international mobile radiotelephone service shall be designated by digits, beginning at 1 for 156.05 Mc/s, then 2 for 156.10 Mc/s, and so on in steps of 50 kc/s up to 28 for 157.40 Mc/s, as shown in Annex 12A.

2264 b) A coast station operating a public correspondence service shall provide for the possibility of duplex or semi-duplex operation (switching from transmission to reception).

2265 c) The public correspondence service for passengers shall normally be operated in duplex.

2266 d) When a station has to transmit test signals, they shall be transmitted uninterruptedly for not more than 10 seconds and shall include the indication "...... (call sign of the station) testing" pronounced slowly and distinctly.

2267 e) Any test signals shall be transmitted for as short a time as possible.

2268 B. Calls, Answers to Calls and Signals closing Calls.

2269 a) If either the coast or the ship station does not have selective-call equipment, the call shall be made up as follows:
Present Provisions

— the call sign of the called station, not more than three times;
— the words THIS IS;
— the call sign of the calling station, not more than three times.

When the call is set up, the call sign may be transmitted once only.

2270 b) When the coast station is equipped for selective calls and the ship station is equipped for the reception of selective calls, the coast station shall call the ship by transmitting the appropriate code signal while the ship station shall call the coast station by using speech as described in sub-paragraph B a).

2271 c) Coast and ship stations must call on the frequency 156.80 Mc/s but when they use a duplex channel intended for the public correspondence service, they shall call on 161.80 and 157.20 Mc/s*) as the case may be, but this shall not prevent an initial call and answer in the working channel if this has been agreed to previously.

2272 *) The date on which the use of these two frequencies for calling purposes in the public correspondence service shall begin shall be laid down by administrations in the light of their individual requirements.

2273 d) If the frequency 156.80 Mc/s is used for distress, safety, and emergency calls, a ship station desirous of getting into touch with harbour authorities shall put its call through on the first harbour frequency, 156.60 Mc/s.

2274 e) Answers to calls shall follow the following procedure:

— the call sign of the calling station, not more than three times;
— the words THIS IS;
— the call sign of the called station, not more than three times.

2275 f) If a coast station open for public correspondence calls a ship on a duplex channel, either in plain language or by selective call, the ship shall answer on another frequency, corresponding to the frequency of
Present Provisions

U.S.S.R. (cont’d)

the coast station, and the coast station shall reply to the call on another frequency, corresponding to the frequency of the ship station.

2276 C. Traffic

2277 a) Ship stations working in the officially recognized bands between 156.025 and 157.425 Mc/s shall be able to transmit and receive on 156.8 Mc/s.

2278 b) Ship stations must be able to transmit and receive on the first inter-ship frequency.

2279 c) Ship stations must be able to transmit and receive on the other frequencies essential for their service.

2280 d) If the ship is not equipped for work in the channel requested by the coast station, it shall indicate the other channels in which it can work, but the choice of channel shall be left to the coast station.

2281 e) After a call has been set up between a coast and a ship station in the general safety service, either on 156.8 Mc/s or in duplex on 157.20 and 161.80 Mc/s, these stations shall, to exchange their traffic, transfer to one of their ordinary pairs of working frequencies. The calling stations must indicate the channel to which transfer is proposed, indicating the particular frequency in Mc/s and preferably the number of the channel shown in the Frequency Allocation Table (see Appendix 12bis).

2282 f) After the call with the coast station has been set up in the public correspondence service on 156.80 Mc/s, the ship station shall indicate the service desired (such as navigational information, harbour information, etc.), while the coast station shall indicate the channel to be used in the exchange of traffic, accurately specifying the channel or the frequency in Mc/s, or preferably giving the channel number shown in Appendix 12bis.
Present Provisions

2283 g) A coast station, after setting up a call with a ship station on 156.80 Mc/s in the public correspondence service, shall indicate the channel to be used for exchange of traffic, giving the particular frequency in Mc/s, or, preferably, indicating the channel number as shown in Appendix 12 bis.

2284 h) A ship station, after setting up the call with the other ship station on 156.80 Mc/s, must indicate the inter-ship channel to which transfer is proposed for exchange of traffic, accurately giving the frequency in Mc/s, or, preferably, the number of the channel shown in Appendix 12 bis.

2285 i) If the calling station wishes to exchange more than one radiotelephone call or to transmit one or more radiotelegrams, it must indicate this after the call has been set up with the called station.

2286 j) If the called station cannot conduct an exchange, it must answer the call as shown in sub-paragraph B, e), adding "wait for...... minutes." (probable duration of the delay).
  If the delay exceeds ten minutes, then the reason shall be stated.

2287 k) Coast stations open for public correspondence shall transmit their lists on the first working frequency.

2288 l) But they may issue the following brief announcement about this transmission on the calling frequency 156.80 Mc/s:
  — "Attention all stations" (not more than three times);
  — the words THIS IS;
  — "..... Radio" (not more than three times);
  — "Listen to our traffic list on..... Mc/s; channel No. ......"

2289 m) If a station does not answer a call broadcast three times at two-minute intervals, the call shall be broken off and started again only after an interval of fifteen minutes, except in case of distress or emergency. Ship stations shall not transmit their carriers between calls.
Present Provisions

Proposals

U.S.S.R. (cont'd)

2290  D. Watch

2291  a) Every coast station operating an international maritime radiotelephone service shall, as far as possible, keep watch on 156.80 Mc/s throughout its working period.

2292  b) Administrations shall ensure that ship stations equipped for operations in the international VHF maritime radiotelephone bands shall try to keep watch on 156.80 Mc/s when they are within the range of coast stations operating an international maritime radiotelephone service in these bands.

2293  c) Coast stations open to public correspondence and using the duplex calling channel (157.20/167.80 Mc/s), must as far as possible keep a watch on 157.20 Mc/s in the course of their working periods.

2294  d) If the frequency 156.80 Mc/s is used for distress, emergency or safety calls, the coast stations used for harbour operations in that particular area shall keep an additional watch for calls on the first harbour channel 156.60 Mc/s.

Reasons

Our proposals in connection with Article 34 make provision for the decisions taken at regional conferences (Göteborg in 1955 and The Hague in 1957) with regard to telephony in the maritime mobile service.
Belgium, France, French O.P.T.A., Italy, Morocco, Netherlands

ARTICLE 34 bis
USE OF FREQUENCIES IN THE MARITIME MOBILE RADIOTELEPHONE SERVICE

<table>
<thead>
<tr>
<th>No. in RR or SR</th>
<th>No.</th>
<th>Proposed Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>2295</td>
<td></td>
<td>Section 1. Frequency bands between 1 605 and 3 800 kc/s:</td>
</tr>
<tr>
<td>2296</td>
<td>813</td>
<td>34b–01 A. Call, Reply and Distress</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The frequency 2 182 kc/s shall be both a calling and a distress frequency for the maritime mobile radiotelephone service in the portions of the band 1 605 to 3 800 kc/s in which radiotelephony is authorized (see Chapter III).</td>
</tr>
<tr>
<td>2297</td>
<td>(732)</td>
<td>34b–02 The coast and ship stations may use ... kc/s as a supplementary calling frequency when 2 182 kc/s is being used for distress purposes.</td>
</tr>
</tbody>
</table>

**Reasons**

It is desirable to make a supplementary calling frequency available in these bands, analogous to 512 kc/s mentioned in 732; what exactly this frequency should be cannot at present be prophesied.

**Morocco:**

To make a supplementary calling frequency available.
### Present Provisions

Belgium, France, French O.P.T.A., Italy, Morocco, Netherlands (cont’d)

<table>
<thead>
<tr>
<th>No. in RR or SR</th>
<th>No.</th>
<th>Proposed Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>2298</td>
<td>814</td>
<td>Delete.</td>
</tr>
</tbody>
</table>

**Reasons**
The guard-band of 2 182 kc/s must appear in the Table.

<table>
<thead>
<tr>
<th>No. in RR or SR</th>
<th>No.</th>
<th>Proposed Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>2299</td>
<td>815</td>
<td>34b-03 The frequency 2 182 kc/s shall be used for distress calls and traffic, as well as for urgency and safety signals and messages. Apart from this it shall be used for calling and replying only.</td>
</tr>
<tr>
<td>2300</td>
<td>34b-04</td>
<td>Apart from the transmissions authorized on 2 182 kc/s, all transmissions on frequencies between 2 174 and 2 190 kc/s shall be forbidden.</td>
</tr>
<tr>
<td>2301</td>
<td>34b-05</td>
<td>To facilitate the reception of distress calls, all stations working on 2 182 kc/s must reduce to the minimum their transmissions on this frequency, which should in no case be occupied for more than two minutes.</td>
</tr>
<tr>
<td>2302</td>
<td>34b-06</td>
<td>Use of 2 182 kc/s for call and reply purposes between ship and coast stations shall be permitted only within the service areas of coast stations duly authorized by their administrations to this effect after a special arrangement, if necessary.</td>
</tr>
<tr>
<td>No. in RR or SR</td>
<td>No.</td>
<td>Proposed Modifications</td>
</tr>
<tr>
<td>----------------</td>
<td>-----</td>
<td>------------------------</td>
</tr>
<tr>
<td></td>
<td>2303 817</td>
<td>34b-07 However, an administration may assign other frequencies for call and reply to its stations.</td>
</tr>
<tr>
<td></td>
<td>2304 818</td>
<td>34b-08 The distress signal in radiotelephony shall be as defined in 873.</td>
</tr>
<tr>
<td></td>
<td>2305</td>
<td>B. Watch</td>
</tr>
<tr>
<td></td>
<td>2306 819 G 24</td>
<td>34b-09 All coast stations open to public correspondence which form an essential part of the coverage of the area for distress purposes shall during their hours of service listen out on 2182 kc/s.</td>
</tr>
<tr>
<td></td>
<td>2307 820 G 25</td>
<td>34b-10 Coast stations may listen out on 2182 kc/s either by means of an operator, or by means of a loudspeaker, in addition to any watch which may be kept by means of an auto-alarm receiver.</td>
</tr>
<tr>
<td></td>
<td>2308 826</td>
<td>34b-11 With a view to greater safety of life all maritime mobile radiotelephone stations which normally keep watch on frequencies in this band shall take appropriate steps to listen out on the</td>
</tr>
</tbody>
</table>
Present Provisions | Proposals
---|---
Belgium, France, French O.P.T.A., Italy, Morocco, Netherlands (cont'd)

<table>
<thead>
<tr>
<th>No. in RR or SR</th>
<th>No.</th>
<th>Proposed Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>2309</td>
<td>827</td>
<td>34b-12 Distress frequency 2182 kc/s twice each hour for three minutes beginning at x h 00 and x h 30, universal time (U. T.) during the above-mentioned intervals, all transmissions in the bands between 2170 and 2194 kc/s, except distress, urgency and safety transmissions, shall cease.</td>
</tr>
<tr>
<td>2310</td>
<td>822</td>
<td>34b-14 One of these frequencies shall be printed in heavy type in the List to indicate that it is the normal working frequency of the station. Any supplementary frequencies shall be shown in ordinary type.</td>
</tr>
<tr>
<td>2311</td>
<td>821</td>
<td>34b-13 Coast stations which use 2182 kc/s for calling shall be able to use one or more other frequencies in the portions of the band between 1605-3800 kc/s in which the maritime mobile radiotelephone service is admitted.</td>
</tr>
<tr>
<td>2312</td>
<td>823</td>
<td>34b-15 Working frequencies of coast stations must be chosen in such a manner as to avoid interference with other stations.</td>
</tr>
</tbody>
</table>
### Present Provisions

Belgium, France, French O.P.T.A., Italy, Morocco, Netherlands (cont'd)

<table>
<thead>
<tr>
<th>Proposed Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delete.</td>
</tr>
</tbody>
</table>

#### Reasons

Use of 2 182 kc/s as the calling and distress frequency should be extended to all ship radiotelephone stations working in the bands between 1 605 kc/s and 3 800 kc/s, irrespective of what part of the world they are in.

<table>
<thead>
<tr>
<th>Proposed Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>The power of the unmodulated carrier-wave in the antenna of mobile stations working with radiotelephony in the bands between 1 605 and 3 800 kc/s shall not exceed 100 watts.</td>
</tr>
</tbody>
</table>

#### Reasons

When mobile stations move they may cause interference to neighbouring stations using frequencies in the same bands; hence it is necessary to limit the output power of these stations.

Morocco:

When mobile stations move, they may cause interference to neighbouring stations using frequencies in the same bands.

<table>
<thead>
<tr>
<th>Proposed Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Region 1 the power in the antenna of coast radiotelephone stations working in the bands between 1 605 kc/s and 3 800 kc/s shall not exceed:</td>
</tr>
</tbody>
</table>

| 2 kW on the unmodulated carrier-wave for coast stations located north of latitude 32° N; |
Present Provisions

Proposals

Belgium, France, French O.P.T.A., Italy, Morocco, Netherlands (cont'd)

<table>
<thead>
<tr>
<th>No. in RR or SR</th>
<th>No.</th>
<th>Proposed Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2317</td>
<td>— 3.5 kW on the unmodulated carrier-wave for coast stations located south of latitude 32° N.</td>
</tr>
</tbody>
</table>

Reasons

It is preferable to refer, as in the case of mobile stations, to the power supplied to the antenna on the unmodulated carrier-wave.

Section II. Bands between 4 000 and 23 000 kc/s

2318 828 34b–18

In the bands authorized for radiotelephony between 4 000 and 23 000 kc/s, ship stations shall use, for calling, one of the frequencies indicated in the table below:

<table>
<thead>
<tr>
<th>Band</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 000 kc/s</td>
<td>..........</td>
</tr>
<tr>
<td>8 000 kc/s</td>
<td>..........</td>
</tr>
<tr>
<td>12 000 kc/s</td>
<td>..........</td>
</tr>
<tr>
<td>16 000 kc/s</td>
<td>..........</td>
</tr>
<tr>
<td>22 000 kc/s</td>
<td>..........</td>
</tr>
</tbody>
</table>

2319 829 34b–19

The transmission frequencies of coast stations and ship stations of the same nationality shall be associated in pairs, as far as possible, as indicated in Appendix 12.

Reasons

Operation of this service shows that the association of frequencies by pairs often leads to difficulties.
<table>
<thead>
<tr>
<th>Present Provisions</th>
<th>Proposals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium, France, French O.P.T.A., Italy, Morocco, Netherlands (cont’d)</td>
<td>No. in RR or SR</td>
</tr>
<tr>
<td></td>
<td>2320</td>
</tr>
<tr>
<td></td>
<td>2321</td>
</tr>
<tr>
<td></td>
<td>2322</td>
</tr>
<tr>
<td></td>
<td>2323</td>
</tr>
<tr>
<td></td>
<td>2324</td>
</tr>
</tbody>
</table>
### Present Provisions

Belgium, France, French O.P.T.A., Italy, Morocco, Netherlands (cont'd)

<table>
<thead>
<tr>
<th>No. in RR or SR</th>
<th>No.</th>
<th>Proposed Modifications</th>
</tr>
</thead>
</table>

#### Morocco:

For A. General, Morocco proposes the following order: 830, 831 and 832, 833, 834.

2326  

B. Watch

2327  

H 23 346-23  

It shall be for administrations to supply the List of Coast and Ship Stations with information about such of their coast stations as listen out on 156.80 Mc/s.

2328  

H 24 346-24  

When ship stations are within range of coast stations they shall listen out on 156.80 Mc/s unless busy on other channels; this watch can be ensured by a loudspeaker.

2329  

H 25 346-25  

Administrations shall indicate, for the List of Coast and Ship Stations, which of their coast stations open to public correspondence listen out on 157.20 Mc/s.

2330  

H 26 346-26  

If 156.80 Mc/s is used for distress, urgency or safety
### Present Provisions

Present Provisions

Belgium, France, French O.P.T.A., Italy, Morocco, Netherlands *(cont'd)*

<table>
<thead>
<tr>
<th>No. in RR or SR</th>
<th>No.</th>
<th>Proposed Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>2331</td>
<td></td>
<td>calls, watch for calls shall be maintained on the first-choice port operations frequency, i.e. 156.60 Mc/s, by coast stations in the port operations service.</td>
</tr>
<tr>
<td>2332</td>
<td>34b-27</td>
<td>Traffic shall be sent in accordance with the three operational methods — simplex, duplex or semi-duplex — defined under Article 1 (see ... and ...) <em>(proposals 284, 285 and 286).</em></td>
</tr>
<tr>
<td>2333</td>
<td>34b-28</td>
<td>The frequency allocation table and the notes included therein (see 34b-30 and 34b-41) show how each of the channels assigned for international maritime mobile radiotelephony shall be used (see 34b-30).</td>
</tr>
<tr>
<td>2334 H Rec. 3</td>
<td>34b-29</td>
<td>Channels shall be designated by numbers, beginning with 1 for the channel 156.05 Mc/s, 2 for the channel 156.10 Mc/s, and so on in steps of 50 kc/s, in accordance with the Frequency Allocation Table for international maritime mobile radiotelephony (see 34b-30).</td>
</tr>
<tr>
<td>Channel Designators</td>
<td>Ship Frequencies</td>
<td>Intership</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------</td>
<td>-----------</td>
</tr>
<tr>
<td></td>
<td>Transmit Mc/s</td>
<td>Receive Mc/s</td>
</tr>
<tr>
<td>No.</td>
<td>No.</td>
<td>Proposed Modifications</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>-----------------------</td>
</tr>
<tr>
<td>2335</td>
<td>34b-30</td>
<td>FREQUENCY ALLOCATION TABLE FOR THE INTERNATIONAL MARITIME MOBILE RADIOTELEPHONE SERVICE</td>
</tr>
<tr>
<td>1</td>
<td>156.05*)</td>
<td>160.65</td>
</tr>
<tr>
<td>2</td>
<td>156.10</td>
<td>160.70</td>
</tr>
<tr>
<td>3</td>
<td>156.15**)</td>
<td>160.75</td>
</tr>
<tr>
<td>4</td>
<td>156.20</td>
<td>160.80</td>
</tr>
<tr>
<td>5</td>
<td>156.25</td>
<td>160.85</td>
</tr>
<tr>
<td>6</td>
<td>156.30</td>
<td>156.30</td>
</tr>
<tr>
<td>7</td>
<td>156.35</td>
<td>160.95</td>
</tr>
<tr>
<td>8</td>
<td>156.40</td>
<td>156.40</td>
</tr>
<tr>
<td>9</td>
<td>156.45</td>
<td>156.45</td>
</tr>
<tr>
<td>10</td>
<td>156.50</td>
<td>156.50</td>
</tr>
<tr>
<td>11</td>
<td>156.55</td>
<td>156.55</td>
</tr>
<tr>
<td>12</td>
<td>156.60</td>
<td>156.60</td>
</tr>
<tr>
<td>13</td>
<td>156.65</td>
<td>156.65</td>
</tr>
<tr>
<td>14</td>
<td>156.70</td>
<td>156.70</td>
</tr>
<tr>
<td>15</td>
<td>156.75</td>
<td>Guard-band (156.725–156.775 Mc/s)</td>
</tr>
<tr>
<td>16</td>
<td>156.80</td>
<td>156.80</td>
</tr>
<tr>
<td>17</td>
<td>156.85</td>
<td>Guard-band (156.825–156.875 Mc/s)</td>
</tr>
<tr>
<td>18</td>
<td>156.90</td>
<td>161.50</td>
</tr>
<tr>
<td>19</td>
<td>156.95</td>
<td>161.55</td>
</tr>
<tr>
<td>20</td>
<td>157.00</td>
<td>161.60</td>
</tr>
<tr>
<td>21</td>
<td>157.05 (or 156.05**)</td>
<td>161.65</td>
</tr>
<tr>
<td>22</td>
<td>157.10</td>
<td>161.70</td>
</tr>
<tr>
<td>23</td>
<td>157.15 (or 156.15***)</td>
<td>161.75</td>
</tr>
<tr>
<td>24</td>
<td>157.20***)</td>
<td>161.80</td>
</tr>
<tr>
<td>25</td>
<td>157.25</td>
<td>161.85</td>
</tr>
<tr>
<td>26</td>
<td>157.30</td>
<td>161.90</td>
</tr>
<tr>
<td>27</td>
<td>157.35</td>
<td>161.95</td>
</tr>
<tr>
<td>28</td>
<td>157.40</td>
<td>162.00</td>
</tr>
</tbody>
</table>

### Present Provisions

Belgium, France, French O.P.T.A., Italy, Morocco, Netherlands (cont'd)

<table>
<thead>
<tr>
<th>No. in RR or SR</th>
<th>No.</th>
<th>Proposed Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>2336</td>
<td>34b–31</td>
<td>Note 1: The method of working, that is, single-frequency or two-frequency, indicated for each channel should be adhered to for international services.</td>
</tr>
<tr>
<td>2337</td>
<td>34b–32</td>
<td>Note 2: The figures in the column headed “Inter-ship” indicate the normal sequence in which channels should be taken into use by a mobile station.</td>
</tr>
<tr>
<td>2338</td>
<td>34b–33</td>
<td>Note 3: 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.</td>
</tr>
<tr>
<td>2339</td>
<td>34b–34</td>
<td>Note 4: In assigning frequencies to their coast stations, Administrations should collaborate in cases where harmful interference could occur.</td>
</tr>
<tr>
<td>2340</td>
<td>34b–35</td>
<td>Note 5: The use of channels for maritime mobile purposes other than those indicated shall not cause</td>
</tr>
<tr>
<td>Present Provisions</td>
<td>Proposals</td>
<td></td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------</td>
<td></td>
</tr>
<tr>
<td>Belgium, France, French O.P.T.A., Italy, Morocco, Netherlands (cont'd)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No. in RR or SR</th>
<th>No.</th>
<th>Proposed Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2341</td>
<td>34b–36 Note 6: During ice seasons, ship stations shall avoid harmful interference to communications between icebreakers and assisted ships on the frequency 156.30 Mc/s.</td>
</tr>
<tr>
<td></td>
<td>2342</td>
<td>34b–37 Note 7: Administrations should, as far as possible, arrange that ship stations, fitted only with the channels corresponding to the figures underlined in the Allocation Table, can obtain a reasonably adequate use of available services.</td>
</tr>
<tr>
<td></td>
<td>2343</td>
<td>34b–38 Note 8: When an Administration finds it necessary to introduce a two-frequency calling channel for public correspondence the channel marked*** shall be used for this purpose. This channel shall also be used for selective calling if this</td>
</tr>
</tbody>
</table>
Present Provisions

Proposals

Belgium, France, French O.P.T.A., Italy, Morocco, Netherlands (cont'd)

<table>
<thead>
<tr>
<th>No. in RR or SR</th>
<th>No.</th>
<th>Proposed Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>method of calling is introduced for public correspondence.</td>
</tr>
</tbody>
</table>

2344 34b-39 Note 9: The ship receive frequencies 156.05 Mc/s and 156.15 Mc/s marked**) apply to the case of special semi-duplex public correspondence systems using 1 Mc/s spacing between transmit and receive frequencies, used by Belgium and France and which other countries might use in the future.

2345 34b-40 Note 10: The frequencies marked*) are those used as ship receive frequencies in the special semi-duplex correspondence systems, referred to in note 9 above.

2346 34b-41 Note 11: Messages on port operation channels must be restricted to those related to the movement and the safety of ships, and, in emergency, to the safety of persons.
Present Provisions

ARTICLE 35

Working Hours of Stations in the Maritime and Aeronautical Mobile Services

Section I. Preamble

§ 1. In order to permit the application of the following rules on the subject of hours of watch, every station of the maritime and aeronautical mobile services must have an accurate clock and the necessary steps must be taken to keep it correctly regulated to Greenwich mean time (G.M.T.).

§ 2. Greenwich mean time (G.M.T.) (reckoned from 0000 to 2400 hours beginning at midnight) must be used for all entries in the radiocommunication service log and in all similar documents of ships compulsorily equipped with radiocommunication apparatus in compliance with an international agreement; the same will apply, as far as possible, to other ships.

Section II. Coast Stations

§ 3. The service of coast stations is, as far as possible, continuous (day and night). Certain coast stations, however, may have a service of limited duration. Each administration or recognized private operating agency duly authorized to that effect, fixes the hours of service for coast stations under its jurisdiction.

§ 4. Coast Stations whose service is not continuous may not cease before:

a) finishing all operations resulting from a distress call, urgency or safety signals;

b) exchanging all traffic originating in or destined for mobile stations which are situated within their range and have indicated their presence before the actual cessation of work.

France, French O. P. T. A.,
Morocco


Italy

2349

837. Add in fine: and shall notify them to the I.T.U. General Secretariat, which shall publish them in the List of Coast and Ship Stations.

United Kingdom

2350

838. Replace: cease by: close.

Reasons

To align with text of 852.
Present Provisions

Section III. Aeronautical Stations

§ 5. The service of an aeronautical station shall be continuous throughout the period during which it bears primary responsibility for the radio-communication service to aircraft in flight.

Section IV. Ship Stations

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

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

— Stations of the second category: these stations maintain a service of limited duration as indicated in 847 and 848.

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

Proposals

United Kingdom

2351 841. Delete: primary.

Reasons

Clarification.

2352 842. Replace: three by: four.

Reasons

To introduce a fourth category.

2353 United States of America

844. In fine after: indicated in add: Nos.

Reasons

Editorial.

United Kingdom

2354 844. Replace the present text by the following:

— Stations of the second category; these stations maintain a service at least during the hours fixed by Appendix 13 (section I, column 4).

Reasons

To fix the watchkeeping of second-category ships at 16 hours (see proposals for Appendix 13).

2355 845. Replace the present text by the following:

— Stations of the third category; these stations maintain a service at least during the hours fixed by Appendix 13, (section I, column 4).

Reasons

To fix the watchkeeping of third-category ships at 8 hours (see proposals for Appendix 13).
Present Provisions

Proposals

United Kingdom

845. After this No. add the following new sub-paragraph and paragraphs:

2356 — Stations of the fourth category; these stations maintain a service the duration of which is not fixed by these Regulations but is agreed with the administration to which they are subject.

Reasons

Introduction of a fourth category to cover indefinite hours of watchkeeping.

2357 § 6 bis. For the international service of public correspondence, ship stations equipped exclusively for the use of radiotelephony are divided into two categories:

Reasons

To provide for two categories of ships equipped exclusively with radiotelephony (see 851).

2358 — Stations of the fifth category; these stations maintain a service at least during the hours of service fixed by Appendix 13 (section I, column 5).

Reasons

Introduction of a fifth category providing for ships keeping 8 hours watch. (See proposals for Appendix 13.)

2359 — Stations of the sixth category; these stations maintain a service the duration of which is not fixed by these Regulations but is agreed with the administration to which they are subject.

Reasons

Introduction of a sixth category providing for ships keeping indefinite watch.

2360 § 6 ter. Ship stations equipped for both radiotelegraphy and radiotelephony are placed in a category appropriate to the radiotelegraph station.

Reasons

To clarify the position of ships fitted for both radiotelegraphy and radiotelephony.
Present Provisions

Proposals

United Kingdom (cont'd)

2361 § 6 quater. Ships which normally make voyages of less than 16 hours duration and for which a radiotelegraph installation is prescribed by international agreement are placed in the third category, but they provide service during the hours fixed by the administration to which they are subject.

Reasons

Consequential upon revision of categories and to provide for short-voyage ships (see 848).

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


Reasons

Consequential upon preceding proposals.

2363 846. After this number add the following new sub-paragraph:

(2 bis) However, a ship station for which the radio installation is prescribed by international agreement should not be placed in a category the duration of service for which is less than the hours of aural watch required by that agreement.

Reasons

To ensure that the watch is not less than that required by a safety agreement.

847 § 7. (1) Ship stations of the second category must provide service at least during the hours fixed by appendix 13. These hours are mentioned in the licence.

2364 United States of America

847. Replace: appendix by: Appendix.

Reasons

Editorial.
§ 7. (1) When the hours of service of ship stations are fixed by these Regulations, these hours shall be mentioned in the licence.

Reasons
To apply to all categories.

2365 847. Replace the present text by the following:

§ 7. (1) When the hours of service of ship stations are fixed by these Regulations, these hours shall be mentioned in the licence.

Reasons
To apply to all categories.

(2) In case of short voyages, they provide service during the hours fixed by the administration to which they are subject.

2366 848. Delete.

Reasons
Covered by § 6 quater (see proposal 2361).

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

2367 849. Replace the present text by the following:

§ 8. When practicable, the hours of service of ship stations of the fourth and sixth categories should occur within the periods fixed by Appendix 13 (Section I, Column 5). The hours of service should, as far as possible, be mentioned in the List of Ship Stations.

Reasons
Consequential upon the introduction of fourth and sixth categories and to relate periods of service to watch for safety purposes.

§ 9. As a general rule, when a coast station has traffic on hand for a ship station of the third category not having fixed hours of service and assumed to be within range of the coast station, the latter calls the ship station during the first half-hour of the first and third periods of service for ships of the second category performing an eight-hour service, in accordance with the provisions of appendix 13.

2368 United States of America

850. In fine replace: appendix by: Appendix.

Reasons
Editorial.

United Kingdom

2369 850. Replace: of the third category by: of the fourth and sixth categories.

2370 and delete: of the second category.

Reasons
To extend the scope of the regulation consequentially upon the increased number of categories.
§ 10. For the international service of public correspondence, ship stations equipped exclusively for the use of radiotelephony constitute a single category. These stations carry on a service the duration of which is not determined by these Regulations.

United Kingdom

2371. Delete.

Reasons
Accommodated in proposals 2357 to 2359.

U.S.S.R.

2372. Replace the second sentence by the following:
These stations shall carry on a service, the duration of which is determined by the administration to which the stations are subject.

Reasons
More accurate drafting.

§ 11. (1) Ship stations whose service is not continuous may not close before:

a) finishing all operations resulting from a distress call, urgency or safety signal;

United States of America

2373. Add in fine: or any request for emergency assistance at sea.

Reasons
Ships responding to requests for emergency assistance at sea have experienced considerable difficulty and delay in making radio contact and subsequent rendezvous. This difficulty has been the result of the requesting ships not maintaining a continuous radio guard so that position information could be exchanged and radio bearing obtained.

The present wording of Nos. 852 and 853 is limited to distress calls, urgency or safety signals. Expansion of the present text is necessary to include situations not covered previously and to direct attention to the requirement for continuous guard in any situation where assistance has been requested.
b) exchanging so far as practicable all traffic originating in or destined for coast stations situated within their range and mobile stations which, being within their range, have indicated their presence before the actual cessation of work.

(2) Any ship station not having fixed working hours must inform the coast stations, with which it is in communication, of the time of closing and the time of reopening its service.

§ 12. (1) a) Any mobile station arriving in port, and whose service is therefore about to close, must so notify the nearest coast station and, if necessary, the other coast stations with which it generally communicates.

b) It must not close until after the disposal of traffic on hand, unless the regulations in force in the country where it is calling do not permit this.

United Kingdom

Replace: mobile by: ship, and delete: therefore.

Reasons
Clarification.

U. S. S. R.

§ 12. (1) a) A mobile ship station arriving in port must stop work and bring this to the notice of the nearest coast station, and to any other coast stations with which it normally corresponds, where necessary:

b) A ship station may continue to work in port if authorized to do so by the port or other authorities of the state concerned.

Reasons
A more accurate and expanded wording.
Present Provisions

Proposals

U. S. S. R.

857. After this No. add the following new sub-paragraphs:

2377  \(b\) bis) But a ship station arriving in port may go on working until it has finished the exchange of distress traffic or the transmission of distress or safety calls, or correspondence in connection with the sailing of ships through ice.

Reasons

It might well be that a ship station would not have finished the exchange of distress messages on entering port.

2378  \(b\) ter) A ship station arriving in harbour can continue to work, or may work:

1. At the request of the coast or harbour station of the corresponding government;
2. When calls are being exchanged in connection with port operations, in communications with pilots, or when there is public VHF telephone traffic.

United States of America

858. Add in fine:

A ship station of the third category not having hours of service fixed by these Regulations may defer such notification until the station first reopens its service after departure from port.

Reasons

When a vessel does not have its hours of service fixed by the Regulations it should have the option of relating this required notification to its reopening of service, and not necessarily to its departure from port.

United Kingdom

858. Replace: mobile by: ship.

Reasons

Clarification.

Section V. Aircraft Stations

859 § 13. For the international service of public correspondence, aircraft stations constitute a single category. The duration of the service of such stations is not fixed by these Regulations.
CHAPTER XIV
Distress, Alarm, Urgency
and Safety Signals

Heating. Read:
Alarm, Distress, Urgency and Safety.

CHAPTER XIV

Heating. Read:
Distress, Alarm, Urgency, Safety, and
Warning Signals.

Reasons
To be consistent with the proposed inclusion of a new Section
Xibi (Warning Signals) in the RR.

ARTICLE 36
Emergency (Reserve)
Lifeboat, Liferaft and Survival Craft
Installations

860 § 1. The Convention for the Safety of Life
at Sea prescribes which ships must be fitted with an
emergency (reserve) installation and which lifeboats,
liferafts and other survival craft on ships must be fitted
with radio equipment. It prescribes also the require­
ments which must be complied with by such installa­
tions.

861 § 2. The present Regulations do not define
which aircraft must be fitted with emergency (reserve)
installations, which liferafts and other survival craft
on aircraft must be fitted with radio equipment, or the
requirements which must be complied with by these
installations.

2383 France, French O. P. T. A.,
Morocco

Heating. Delete: (Reserve).

Reasons
See proposal 2388.

864 United Kingdom

Heating. After: (Reserve) add a comma.

Reasons
Comma inserted for clarification.

2385 France, French O. P. T. A.,
Morocco

860. Delete: (reserve).

Reasons
See proposal 2388.

2386 Australia (Commonwealth of)

861. Replace the present text by the following:

§ 2. I.C.A.O. Annex 6 to the Convention on Civil
Aviation prescribes that all aeroplanes on long-range
Present Provisions

over-water flights shall carry a portable self-buoyant and water-resistant radio transmitter capable of being operated away from the aeroplane by unskilled personnel after the aeroplane has alighted on the water.

Reasons

To bring the Regulations into line with I.C.A.O. recommendations on carriage of emergency equipment.

France, French O.P.T.A.,
Morocco

2387 § 61. Delete: (reserve).

Reasons

See proposal 2388.

862 § 3. The provisions of the present Regulations must, however, be observed in the use of emergency (reserve) installations and of installations in lifeboats, liferafts and other survival craft of both ships and aircraft.

Reasons

The word "(reserve)" is deleted in the heading and in 860, 861 and 862 in view of the new definitions proposed under Article 1.

2389 China

863. Delete.

Reasons

See proposal 1950.

863 § 4. Ships fitted with a transmitting installation of class A1 or A2 emission in working order must not use the emergency (reserve) installations of class B except for the transmission of distress signals and distress traffic.

2390 France, French O.P.T.A.,
Morocco

863. Replace the present text by the following:

§ 4. Ships fitted with an emergency transmitter operating in class B may use it for the transmission of distress signals and distress traffic only.

Reasons

France, French O.P.T.A.:

It is impossible to allow the use of a class B transmitter for reasons other than distress, when the other transmitters (principal or emergency) of the ship are no longer in working condition.
Present Provisions

Proposals

2391 Netherlands

863. Add in fine:

For the use of the emergency (reserve) transmitter of class B in the case that the main transmitter of class A1 or A2 is not in working order see 711 (modified).

Reasons

To avoid the misunderstanding, that class B may be used for the transmission of all messages when the main transmitter is not in working order.

2392 United Kingdom

863. Delete.

Reasons

Consequential on deletion of 712. (See proposal 1952.)

2393 U. S. S. R.

863. Delete.

Reasons

See proposal 1953.

2394 Denmark, Finland, Iceland, Norway, Sweden

ARTICLE 37

Distress Signal and Traffic. Alarm, Urgency and Safety Signals

Section 1. General


2395 1. In accordance with the International Convention for the Safety of Life at Sea (London, 1948), Chapter IV, Regulations 3 and 7, passenger ships and
Present Provisions

ships of 1600 gross tons and upwards shall be fitted with a radiotelegraph installation. Furthermore each such ship shall, while at sea, carry at least one qualified operator, and, if not fitted with an auto-alarm, shall listen continuously on the radiotelegraph distress frequency 500 kc/s.

In consequence, most of the ships to which these regulations apply have been fitted with alarm apparatus performing for the greater part of the day the operator's task of keeping watch on the distress frequency, so that it has usually been possible to reduce the operator's hours of duty to 8 hours or less a day.

The distress signal SOS does not affect any alarm apparatus designed for the alarm signal. Thus the signal SOS, if not preceded by the alarm signal, has become insufficient for alarming in case of distress.

For the elimination of this serious deficiency of the existing prescriptions for radiotelegraphy with regard to safety of life at sea, the alarm signal must be made compulsory, so that every distress call can actuate the auto-alarm apparatus of coast stations and ships within range.

Proposals

Denmark, Finland, Iceland, Norway, Sweden (cont'd)

2396 2. When circumstances permit a distress call and message are to be transmitted, by the provisions in force in the form shown in Appendix 1 to this proposal. From what has been said above it follows, that a revision of these provisions is necessary.

2397 a) For the future it is considered best to prescribe that the distress call and message should follow the alarm signal immediately instead of after two minutes, as is now stipulated. This change would mean a gain of two minutes for the rescue work, and those two additional minutes might be of vital importance. In the first instance, it would enable coast stations — which for many reasons hold a key position in the rescue work and therefore instantly react to the alarm signal — to make themselves immediately acquainted with the distress case instead of compelling them to wait for two minutes for the message.

2398 b) If time permits, the transmission of the distress call and message should be repeated after a short
Present Provisions

Proposals

Denmark, Finland, Iceland, Norway, Sweden (cont'd)

interval. Meanwhile, it is expected that operators of other ships will have had time to start attending to their radio apparatus. It would then be of great value, if coast stations had already been given sufficient information in the first transmission and could have started the rescue procedure.

In consideration of these facts and with a view to improving the radiotelegraph security system it is proposed:

1. that the distress call when sent by radiotelegraphy on 500 kc/s shall be preceded by the alarm signal as defined in 920;

2. that the procedure for transmitting the distress call and message be that indicated in Appendix 2 to this proposal; and

3. that paragraphs 876-877, 886-889 and 931 of the RR be amended as follows:

876. The distress call, when sent by radiotelegraphy on 500 kc/s, shall be preceded by the alarm signal as defined in 920.

877. The alarm signal is immediately followed by the distress call and the distress message.

886. After the transmission of its distress message, the mobile station transmits the signal —— (end of transmission).

887. If time permits, the whole procedure, starting with the transmission of the alarm signal, shall be repeated after a short interval.

888. If necessary this repetition must be made several times, especially during the period of silence prescribed in 733 until an answer is received.

889. The intervals between these subsequent repetitions must, however, ..... (remainder unchanged).

931. Delete.
Appendix 1: DIAGRAM SHOWING THE PROCEDURE PRESCRIBED BY THE RADIO REGULATIONS (ATLANTIC CITY, 1947) FOR THE TRANSMISSION OF A DISTRESS MESSAGE BY RADIOTELEGRAPHY

1. The *alarm signal* (not compulsory). To actuate alarm apparatus of other ships and of coast stations:

   ![Diagram showing the alarm signal](image)

   1 minute

2. The *distress signal* (3 times) (877):

   ![Diagram showing the distress signal](image)

   877

3. *Interval* (877):

   ![Diagram showing the interval](image)

   Interval about 110 sec.

4. The *distress call* (878):

   ![Diagram showing the distress call](image)

   DE ST IV ST IV ST IV

5. The *distress message* (882) comprising:

   a) the *distress call* (878):

   ![Diagram showing the distress call](image)

   DE ST IV ST IV ST IV

   b) the *name of the ship*:

   ![Diagram showing the name of the ship](image)

   VERA

   c) *particulars* of its position etc.:

   ![Diagram showing particulars](image)

6. Two *dashes* and the *call sign* of the ship (886):

   ![Diagram showing two dashes and call sign](image)

   10 sec. 10 sec. ST IV

(cont'd)
Appendix 2  DIAGRAM SHOWING PROPOSED NEW PROCEDURE FOR THE TRANSMISSION OF A DISTRESS MESSAGE BY RADIOTELEGRAPHY

1. The \textit{alarm signal} (compulsory). To actuate alarm apparatus of other ships and of coast stations: <——— 1 minute ———>

2. The \textit{distress call} (878):

3. The \textit{distress message} (882), comprising:
   a) the \textit{distress signal}:
   b) the \textit{name of the ship}:
   c) \textit{particulars} of its position etc.:

4. \textit{End of transmission signal}:

*) See proposal 2460.
2411 Transmission of the Radiotelephone Alarm Signal on 2182 kc/s

1. It is expected that coast stations will, as a general rule, use devices for receiving the radiotelephone alarm signal as an additional means of improving the watchkeeping on 2182 kc/s.

2. In sea areas of heavy radio traffic there is a danger of a weak distress call not being identified in the presence of other signals.

3. In using the radiotelephone alarm signal on 2182 kc/s, a ship station will reach beyond the range at which the transmission of speech is satisfactory.

4. It is for these reasons believed that the radiotelephone security system would be greatly improved if the radiotelephone alarm signal were used by all ships equipped for radiotelephony in the 2 Mc/s band.

2412 In consideration of the facts above it is proposed to adopt 26 and 32 of the Supplementary Regulations contained in the Agreement of the Baltic and North Sea Radiotelephone Conference (Göteborg, 1955) amended as follows:

2413 26. The distress call sent by radiotelephony on 2182 kc/s shall be preceded by the alarm signal as described in 34, when transmitted by stations equipped with the appropriate alarming device.

2414 32. In radiotelephony, the repetition of the distress call and distress message shall whenever possible be preceded by the transmission of the alarm signal as described in 34.
Present Provisions

Proposals

2415 France, French O. P. T. A., Morocco

Heading. Read:
Alarm, Distress, Urgency and Safety Signals, Distress Traffic.

Reasons
France, French O. P. T. A.:
The proposed new title is more appropriate.

2416 Japan

Heading. Read:

Reasons
To be consistent with the proposed inclusion of a new Section XI bis (Warning Signals) in the Regulations.

864 § 1. In the maritime mobile and aeronautical mobile services, the procedure laid down in this article is obligatory.

865 § 2. No provision of these Regulations shall prevent the use by a mobile station in distress of any means at its disposal to attract attention, make known its position, and obtain help.

866 § 3. (1) The speed of telegraph transmission in cases of distress, urgency or safety must not in general exceed 16 words a minute.

France, French O. P. T. A., Morocco

2417 866. Read at the beginning:
In radiotelegraphy the speed of transmission.....

867 (2) The speed of transmission for the alarm signal is indicated in 920.

2418 866. After this No. add the following new sub-paragraph:
(1 bis) In radiotelephony, talking speed must be reduced in distress, urgency or safety traffic, to facilitate transcription of the information received.

2419 867. Replace the present text by the following:

(2) The characteristics of the radiotelegraph alarm signal are given in 920.
After this No. add the following new subparagraph:

(2 bis) The characteristics of the radiotelephone alarm signal are given in ... (see proposal 2538).

Section II. Frequencies to Be Used in Case of Distress


(1) In case of distress, the frequency to be used shall be the international distress frequency, that is, 500 kc/s (see 714); it must preferably be used on class A2 or B emissions.

869 (2) In case of distress for radiotelephone stations working in the authorized bands between 1605 and 2850 kc/s, the frequency to be used is the distress frequency 2182 kc/s (see article 34 and particularly 815).

2420 France, French O.P.T.A., Morocco (cont'd)

867. After this No. add the following new subparagraph:

(2 bis) The characteristics of the radiotelephone alarm signal are given in ... (see proposal 2538).

2421 China

868. Read in fine:

.....; it must preferably be used on class A2 emission.

Reasons

See proposal 1005.

2422 France, French O.P.T.A.,

868-869. Replace the present text by the following:

§ 4. Ships.

In distress, the frequency to be used shall be:

— either the international radiotelegraphy distress frequency (500 kc/s); it should for preference be used with class A2 or B emissions;

— or the international radiotelephony distress frequency (2 182 kc/s); this should for preference be used with class A3 emissions.

2423 Morocco

868-869. Replace the present text by the following:

§ 4. Ships.

In case of distress, the frequency used shall be:

— either the international radiotelegraphy distress frequency (500 kc/s); it must preferably be used with class A2 emissions;

— or the international radiotelephony distress frequency (2 182 kc/s); it must preferably be used with class A3 emissions.
(3) Ship stations which cannot transmit on the above distress frequencies shall use their normal calling frequency.

§ 5. Aircraft.

Any aircraft in distress must transmit the distress call on the frequency on which the land or mobile stations capable of helping it, keep watch. When the call is addressed to stations of the maritime mobile service, the frequencies to be used shall be the international distress frequency 500 kc/s or other watch-keeping frequencies of these stations.

2425 869. Replace the present text by the following:

(2) In distress, radiotelephone stations working in the authorized bands between 1 605 and 3 800 kc/s shall use the distress frequency 2 182 kc/s (see Article 34 and especially 815).

and add the following new sub-paragraph:

2426 (2 bis) In distress, stations equipped for VHF telephony in the bands 156—162 Mc/s shall exchange calls and distress traffic on 156.80 Mc/s.

Reasons


2427 France, French O.P.T.A.

§ 5. Replace the present text by the following:

§ 5. Aircraft.

Any aircraft in distress shall transmit the distress call on the frequency on which the land or mobile stations capable of helping it keep watch. When the call is to maritime mobile stations, the frequency to be used shall be one of the international distress frequencies (500 kc/s or 2 182 kc/s) or any other frequency on which these stations keep watch.

2428 Japan

871. Read in fine:

...... shall be the international distress frequency 500 kc/s class A2 emission or 2 182 kc/s class A3 emis-
Present Provisions

Proposals

sion or other watchkeeping frequencies of these stations.

Reasons

See proposal 1741.

Morocco

2429 871. Replace the present text by the following:

§ 5. Aircraft.

Any aircraft in distress must first transmit the distress call and message on the air/ground route frequency designated by the control authorities.

2430 871. After this No. add the following new paragraphs:

§ 5 bis. If the aircraft cannot establish communications on the air/ground frequency designated, it shall use:

— either the aeronautical urgency frequency 121.5 Mc/s,
— or any other available frequency to establish contact with any land, mobile, or radio direction-finding station.

2431 § 5 ter. When the call is addressed to stations of the maritime mobile service, the frequency to be used shall be one of the international distress frequencies (500 kc/s or 2 182 kc/s) or any other frequency on which a watch is kept by these stations.

2432 Federal German Republic

871. In the second sentence after: 500 kc/s add: or 2 182 kc/s.

Reasons

The Convention of the Safety of Life at Sea (London, 1948) provides for ships compulsorily equipped with radiotelephone equipments to keep watch on the distress frequency 2 182 kc/s.
Present Provisions

Section III. Distress Signal

§ 6. (1) In radiotelegraphy, the distress signal consists of the group . . . — . — . transmitted as a single signal in which the dashes must be emphasized so as to be distinguished clearly from the dots.

(2) In radiotelephony, the distress signal consists of the word MAYDAY pronounced as the French expression "m'aider".

Proposals

2433 France, French O. P. T. A., Morocco

§ 6. (1) The radiotelegraph distress signal shall consist of the group . . . — . — . transmitted as a single signal in such a way that the dashes may be distinguished from the dots.

2434 Belgium

(2) In radiotelephony, the distress signal shall consist of the three letters S.O.S.

Reasons

In accordance with C.C.I.R. Recommendation No. 23 (Warsaw, 1956). The C.C.I.R. unanimously recommended that the international radiotelephone distress signal should henceforth consist of three letters S.O.S. instead of the word MAYDAY.

2435 France, French O. P. T. A.

(2) The radiotelephony distress signal shall consist of the word MAYDAY pronounced as the French expression "m'aider".

2436 India

(2) In radiotelephony the distress signal consists of the three spoken letters S.O.S.

Reasons

C.C.I.R. Recommendation No. 23.

2437 Japan

(2) In radiotelephony, the distress signal consists of the group S.O.S. pronounced as in the English alphabet.
§ 7. These distress signals indicate that the ship, aircraft, or other vehicle sending the distress signal is threatened by grave and imminent danger and requests immediate assistance.

Section IV. Distress Call

§ 8. The distress call and message are sent only on the authority of the master or person responsible for the ship, aircraft or other vehicle carrying the mobile station.

§ 9. (1) The distress call, when sent by radiotelegraphy on 500 kc/s is, as a general rule, preceded by the alarm signal as defined in 920.

(2) When circumstances permit, the transmission of the call is separated from the end of the alarm signal by an interval of two minutes. In this case, the alarm signal must be followed immediately by the distress signal sent three times, in order to operate the automatic apparatus mentioned in 931.

2438 Morocco

873. Replace the present text by the following:

(2) The radiotelephony distress signal consists of the three letters S.O.S. pronounced separately and distinctly.

Reasons

C.C.I.R. Recommendation No. 23 (1956).

2439 Denmark, Finland, Iceland, Norway, Sweden

876 and 877. See proposals 2394 to 2410.

France, French O. P. T. A., Morocco

2440 876. Read in fine: preceded by the radiotelegraphy alarm signal as defined in 920.

2441 877. In the first sentence, replace: the alarm signal by: the radiotelegraphy alarm signal.
§ 10. The distress call sent by radiotelegraphy comprises:
— the distress signal transmitted three times;
— the word DE;
— the call sign of the mobile station in distress, sent three times.

§ 11. The distress call, when sent by radiotelephony, is generally preceded by the signal produced by a whistle or any other suitable means.

§ 12. The distress call sent by radiotelephony comprises:
— the distress signal MAYDAY spoken three times;
— the words THIS IS, followed by the identification of the mobile station in distress; the whole repeated three times.

§ 13. The distress call has absolute priority over other transmissions. All stations which hear it must immediately cease any transmission capable of interfering with the distress traffic and must listen on the frequency used for the emission of the distress call. Except in the case of aircraft stations, this call must not be addressed to a particular station and acknowledgment of receipt is not to be given before the distress message is sent. In the case of an aircraft station, however, this call should be addressed to a particular ground station which, in the opinion of the commander, is capable of rendering maximum assistance. The ground station should not acknowledge any receipt before the distress message is sent.

§ 9 bis. The distress call, when sent by radiotelephony, is generally preceded by the signal produced by a whistle or any other suitable means. (Present text of § 79 slightly amended.)

§ 9 ter. The distress call has absolute priority over other transmissions. All stations which hear it must immediately cease any transmission capable of interfering with the distress traffic and must listen on the frequency used for the emission of the distress call. Except in the case of aircraft stations, this call must not be addressed to a particular station and acknowledgment of receipt is not to be given before the distress message is sent. In the case of an aircraft station, however, this call should be addressed to a particular ground station which, in the opinion of the commander, is capable of rendering maximum assistance. The ground station should not acknowledge any receipt before the distress message is sent. (Amended text of § 881.)

§ 9 quater. In the case of mobile stations other than aircraft stations:

(1) the distress call sent by radiotelegraphy comprises:
— the distress signal transmitted three times;
— the word DE;
— the call sign of the mobile station in distress sent three times. (Present text of § 878 unchanged.)

(2) the distress call sent by radiotelephony comprises:
— the distress signal S.O.S. spoken three times;
— the words THIS IS followed by the identification of the mobile station in distress, repeated three times. (Amended text of § 880.)
Present Provisions

Proposals

India (cont'd)

2447 § 9 quinquies. In the case of aircraft stations:

(1) the distress call sent by radiotelegraphy comprises:
   — the distress signal transmitted three times;
   — the call sign of the ground station transmitted three times;
   — the word DE;
   — the call sign of the aircraft station in distress sent three times. *(Amended text of 878.)*

2448 (2) the distress call sent by radiotelephony comprises:
   — a distress signal S.O.S. spoken three times;
   — the call sign of the ground station transmitted three times;
   — the words THIS IS followed by the identification of the aircraft station in distress repeated three times. *(Amended text of 880.)*

Reasons

1. Existing provisions of not addressing the distress call of an aircraft station to any particular station create confusion.
2. Due to short time available to the pilot of the aircraft in distress repetition of the words THIS IS three times is unnecessary.
3. Drafting.

2449 France, French O. P. T. A., Morocco

879, 880 and 881. Replace the present text by the following:

§ 11. The distress call, when sent by radiotelephony on 2 182 kc/s, is generally preceded by the radiotelephony alarm signal defined in . . . . (see proposal 2538.)

2450 § 12. The radiotelephone distress call shall comprise:
   — the distress signal MAYDAY, spoken three times;
   — the words THIS IS (spoken once only);
Present Provisions

Proposals

France, French O.P.T.A., Morocco (cont'd)

— the call sign or any other identification signal of the mobile station in distress, repeated three times.

2451 § 13. Read in fine: ..... given before the end of transmission of the distress message which must follow transmission of the distress call as soon as possible.

U. S. S. R.

2452 879-880. Replace the present text by the following:

§ 11. The distress call, when sent by radiotelephony on 2182 kc/s or 156.80 Mc/s, shall ordinarily be preceded by the alarm signal described in Article 37, Section IX.

Reasons

The Göteborg (1955) and Hague (1957) Agreements.

2453 § 12. A distress call sent by radiotelephony shall comprise:

— the distress signal MAYDAY, spoken three times;
— the words THIS IS;
— the call sign or any other identification signal of the mobile station in distress, the whole repeated three times.

Reasons


2454 Morocco

880. Replace the present text by the following:

§ 12. The distress call sent by radiotelephony comprises:

— the distress signal S.O.S. spoken three times;
— the words THIS IS (spoken once only);
— the call sign or any other signal identifying the mobile station in distress, spoken three times.
§ 12. In radiotelephony, the distress call comprises:
— the distress signal S.O.S. spoken three times;
— the words THIS IS followed by the identification of the mobile station in distress, the whole repeated three times.

Reasons
In accordance with C.C.I.R. Recommendation No. 23 (Warsaw, 1956). The C.C.I.R. unanimously recommended that the international radiotelephone distress signal should henceforth consist of the three letters S.O.S. instead of the word MAYDAY.

2456 China

880. Replace the third sub-paragraph by the following text:
— the words THIS IS spoken once only, followed by the identification of the mobile station in distress repeated three times.

Reasons
To strengthen the point that the words THIS IS need be spoken once only.

2457 Japan

880. Replace the present text by the following:
§ 12. The distress call sent by radiotelephony comprises:
— the distress signal S.O.S. spoken three times;
— the words THIS IS;
— the identification of the mobile station in distress spoken three times.

Reasons
To be consistent with proposal 2437. The words THIS IS need not be repeated three times; once is enough.
Section V. Distress Message

882 § 14 (1). The distress call must be followed as soon as possible by the distress message. This message comprises:

— the distress call;
— the name of the ship, aircraft, or vehicle in distress;
— particulars of its position, the nature of the distress and the kind of assistance desired;
— any other information which might facilitate the rescue.

880. Replace the last sub-paragraph by the following text:

— the words THIS IS (spoken once only), followed by the identification of the mobile station in distress spoken three times.

Reasons

To bring into agreement with practice and in conformity with the radio telegraph procedure.

881. After this No. add the following new paragraph:

§ 13bis. A station in distress may call for silence either from all mobile stations in a given region or from any station causing interference to the distress traffic. It may send this information either to all stations or to one station only, according to circumstances. In any case, it shall use the words: "stop transmitting", followed by MAYDAY.

Reasons


882. Replace:

— the distress call by:
— the distress signal.

Reasons

It is considered that the distress call should be replaced by the distress signal as first item of the distress message, since this message is to be taken down in writing by receiving stations.

882. Replace the present text by the following:

§ 14 (1) The distress message shall comprise:

— the name or call sign of the ship, aircraft or vehicle in distress;
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— particulars of its position, the nature of the distress and the kind of assistance desired;
— any other information which might facilitate the rescue.

Reasons

France, French O.P.T.A.:
The former wording of 882 was not very clear since the distress call was repeated at the beginning of the distress message, even when the latter immediately followed the distress call.

Morocco:
The former wording was not very clear.

2462 Japan

882. Add in fine:

However, in case the distress message is transmitted immediately after the distress call, the distress call given in the distress message may be omitted.

Reasons

In the case of the proviso, it is deemed unnecessary to repeat distress call in the distress message.

2463 Netherlands

882. After this No. add the following new sub-paragraph:

(1 bis) When the distress message can be sent immediately following the distress call it is not necessary to transmit the distress call as the first item of the message prescribed (see 882) provided that the originator of the message is convinced that no confusion is likely to result.

Reasons

In the interests of economy in communications, successive transmissions of the distress call should not be mandatory.

883 (2) As a general rule, a ship signals its position in latitude and longitude (Greenwich), using figures for the degrees and minutes, together with one of the words NORTH or SOUTH and one of the words EAST or WEST. The signal — — — is used to separate the degrees from the minutes. When practicable, the true bearing and distance in nautical miles from a known geographical point may be given.

2464 Japan

883. Replace: one of the words NORTH or SOUTH and one of the words EAST or WEST by: one of the letters N or S and one of the letters E or W.

Reasons

The letters N, S, E and W are commonly used to denote directions. For the sake of simplification of communication.
(3) As a general rule, and if time permits, an aircraft shall transmit in its distress message the following information:

- estimated position and time of the estimate;
- true heading and indicated air speed;
- altitude;
- type of aircraft;
- nature of distress;
- intention of person in command (such as forced alighting on the sea or crash landing).

Belgium

884. Replace the present text by the following:

(3) As a general rule, and if time permits, an aircraft shall include the following in its distress message:

- estimated position and time of the estimate;
- course (specifying whether true or magnetic);
- indicated air speed;
- altitude;
- type of aircraft;
- nature of distress;
- intention of person in command (such as forced alighting on the sea or crash landing).

France, French O. P. T. A., Morocco

884. Replace the present text by the following:

(3) As a general rule, and if time permits, an aircraft shall transmit the following information in its distress message:

- estimated position and time of the estimate;
- course, in degrees true or degrees magnetic, and indicated air speed;
- altitude;
- type of aircraft;
- nature of distress and type of assistance desired;
- any other information which might facilitate rescue (including the intention of the person in command, such as forced alighting on the sea or crash landing).

India

884. Replace: true heading by: heading (true or magnetic to be specified).

Reasons
To give more latitude to the commander of an aircraft in distress.
(3) As a general rule, and if time permits, an aircraft shall transmit in its distress message the following information:

— estimated position and time of the estimate;
— heading (stating whether degrees, magnetic or true) and indicated air speed;
— altitude;
— type of aircraft;
— nature of distress and kind of assistance desired;
— any other information which might facilitate the rescue (including the intention of the person in command, such as forced alighting on the sea or crash landing).

Reasons
To keep pace with the actual operation of distress traffic in the aeronautical mobile service.

(3) As a general rule, an aircraft in flight signals its position:

— if possible by latitude and longitude (Greenwich), using figures for the degrees and minutes, together with one of the words NORTH or SOUTH and one of the words EAST or WEST; or
— by the name of the nearest place, and its approximate distance in relation thereto, together with one of the words NORTH, SOUTH, EAST, or WEST, as the case may be, or, when practicable, by words indicating intermediate directions.

a) Replace in the first sub-paragraph: one of the words NORTH or SOUTH and one of the words EAST or WEST by: one of the letters N or S and one of the letters E or W.

b) Replace in the second sub-paragraph: the words NORTH, SOUTH, EAST or WEST by: the letters N, S, E or W.

Abbreviated to allow for the extremely short time available to an aircraft in distress.

(4) As a general rule, an aircraft in flight signals its position:

— if possible by latitude and longitude (Greenwich), using figures for the degrees and minutes, together with one of the letters N or S and one of the letters E or W; or
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— by the name of the nearest place, and its approximate distance in relation thereto, together with one of the letters N, S, E or W, as the case may be, or, when practicable, by letters indicating intermediate directions.

Reasons

See proposal 2464.

2472 France, French O. P. T. A., Morocco

885. After this No. add the following new sub-paragraph:

(4bis) An aircraft transmitting by radiotelegraphy may use, with the figures relative to coordinates or distances, the first letter of the words NORTH, SOUTH, EAST or WEST, i.e. the signals N, S, E or W, to indicate the latitude and longitude or the direction.

2473 Denmark, Finland, Iceland, Norway, Sweden

886 to 889. See proposals 2394 to 2410.

2474 Netherlands

886. At the beginning after the word: transmission add the words: in telegraphy.

Reasons

To make clear that this paragraph applies specifically to telegraphy.

2475 France, French O. P. T. A., Morocco

886. After this No. add the following new sub-paragraph:

In radiotelephony, the mobile station may also be invited to send the appropriate signals followed by its call sign.

Reasons

To make allowances for the possibilities offered by radiotelephony.
§ 16 (1) The distress message, preceded by the distress call, shall be repeated at intervals, especially during the periods of silence prescribed in 733 for radiotelegraphy and (see proposal 2309) for radiotelephony, until an answer is received.

Reasons
In view of the new form of the distress message indicated under 882.

890 (4) When the mobile station in distress receives no answer to a distress message sent on a distress frequency, the message may be repeated on any other available frequency on which attention might be attracted.

§ 17. Immediately before a crash landing, a forced landing (on land or sea) of an aircraft, as well as before total abandonment of a ship or an aircraft, the radio apparatus must, if circumstances permit, be set for continuous emission.

2477 Belgium

891. Read in fine:

..... must, if circumstances permit and provided the risk of fire is not thereby increased, be set for continuous emission.

Reasons
It is for the captain to take a decision of this kind.

2478 France, French O.P.T.A., Morocco

891. Read in fine:

..... must, as a general rule and if circumstances permit, be set for continuous emission.

Reasons
France, French O.P.T.A.:
In some cases, particularly where aircraft are concerned, there may be an additional risk of fire if the radio is left on.

Morocco:
Should not be compulsory, in view of the risk of fire.
§17. Immediately before a crash landing or a forced landing (on land or sea) of an aircraft, as well as before total abandonment of a ship or an aircraft, the radio apparatus should, if circumstances permit, and on condition that no additional risk of fire is created thereby, be set for continuous transmission.

Reasons

The requirement expressed in the present regulations, if made mandatory to existing and future aircraft, will make it necessary to undertake considerable modifications to aircraft equipments not fully justifiable and, by creating an additional fire hazard, result in the introduction of an undesirable practice.

§ 18. A mobile station which learns that another mobile station is in distress may transmit the distress message in either of the following cases:

a) the station in distress is not itself in a position to transmit it;

b) the master or person responsible for the ship, aircraft or other vehicle carrying the station which intervenes, believes that further help is necessary.

§ 18 bis. The distress message thus transmitted will take the following form:

(1) in radiotelegraphy:
- SOS CQ, SOS CQ, SOS CQ;
- CQ;
- the word DE;
- the call sign of the mobile station transmitting the distress message on behalf of other stations in distress three times;
- text of the distress message.

(2) in radiotelephony:
- S.O.S All Stations, S.O.S All Stations, S.O.S All Stations;
- All Stations;
- the words THIS IS;
- the call sign of the mobile station transmitting the distress message on behalf of other stations in distress three times;
- text of the distress message.

Reasons

To avoid confusion.
§ 19. (1) Stations of the mobile service which receive a distress message from a mobile station which is, beyond any possible doubt, in their vicinity, must immediately acknowledge receipt (see 913, 914 and 915). If the distress call has not been preceded by the alarm signal, these stations may transmit this alarm signal with the permission of the authority responsible for the station (for mobile stations see 565), taking care not to interfere with the transmission of acknowledgments of receipt sent by other stations.

(2) Stations of the mobile service which receive a distress message from a mobile station which, beyond any possible doubt, is not in their vicinity, must allow a short interval of time before acknowledging receipt of the message, in order to permit stations nearer to the mobile station in distress to answer and acknowledge receipt without interference.

The provisions of 895 and 896 are equally applicable to all stations working in the bands of the mobile service.

§ 19 bis. After particulars of the emergency have been transmitted by radiotelephony, a mobile station may be asked to transmit the appropriate signals, after which the call sign of this station shall be transmitted, so that the radio direction-finding stations may determine its position. If necessary, such a request may be repeated after a short interval.
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Section VI. Distress Traffic

§ 20. Distress traffic comprises all messages relative to the immediate assistance required by the mobile station in distress.

§ 21. In distress traffic, the distress signal must be sent before the call and at the beginning of the preamble of any radiotelegram.

§ 22. The control of distress traffic is the responsibility of the mobile station in distress or of the mobile station which, by the application of the provisions of § 892 and § 893, has sent the distress call. These stations may, however, delegate the control of the distress traffic to another station.

§ 23. (1) The station in distress may impose silence either on all stations of the mobile service in the area or on any station which interferes with the distress traffic. It addresses these instructions “to all stations” or to one station only, according to circumstances. In either case, it uses the service abbreviation QRT followed by the distress signal • • • • • • • • .

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2485 § 19 ter. A distress message shall be repeated after a short interval during the silent periods laid down in § 826, until such time as an answer is received.

Reasons

2486 France, French O.P.T.A., Morocco

899. Replace the present text by the following:

§ 21. Transmission of these messages shall always be preceded by the distress signal.

France, French O.P.T.A., Morocco

2487 Belgium

901. Read in fine:

In either case, it shall use the service abbreviation QRT followed by the telegraph distress signal • • • • • • • • and the words “stop transmission”, followed by the telephone distress signal S.O.S.

Reasons
To facilitate telephone procedure.

2488 France, French O.P.T.A.,

901. Replace the present text by the following:

§ 23. (1) The station in distress may impose silence either on all mobile stations in the area or on any station which interferes with the distress traffic. It shall address these instructions “to all stations” or to one
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station only, according to the circumstances. In either case, it shall use:
— for radiotelegraphy, the abbreviation QRT, followed by the distress signal ...
— for radiotelephony, the expression ............. followed by the distress signal MAYDAY.

2489 Japan

901. Replace the present text by the following:

§ 23. (1) The station in distress and/or the station controlling the distress traffic may impose silence either on all stations of the mobile service in the area or on any station which interferes with the distress traffic. They address these instructions “to all stations” or to one station only, according to circumstances. In either case, they use the service abbreviation QRT followed by the distress signal ...

Reasons

To make clear that the wording of the present 901 means that not only the station in distress but also the station controlling distress traffic in accordance with the provision of 900 are is allowed to use the service abbreviation QRT followed by the distress signal SOS.

2490 Morocco

901. Replace the present text by the following:

§ 23. (1) The station in distress may impose silence either on all stations of the mobile service in the area or on any station which interferes with the distress traffic. It addresses these instructions “to all stations” or to one station only, according to the circumstances. In either case, it shall use:
— in radiotelegraphy, the service abbreviation QRT, followed by the distress signal ...
— in radiotelephony, the expression ............. followed by the distress signal S.O.S.

902 (2) If it believes it to be essential, any station of the mobile service near the ship, aircraft or other vehicle in distress, may also impose silence. It employs for this purpose the procedure prescribed in 901, substituting for the distress signal the word DISTRESS followed by its own call sign.

2491 France, French O. P. T. A.

902. Delete.
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903 (3) The use of the service abbreviation QRT must be reserved, as far as possible, for the mobile station in distress and for the station controlling distress traffic.

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2492 Finland

903. Delete the words: as far as possible.

Reasons

Excessive use of the abbreviation QRT often endangers efficient distress traffic.

2493 France, French O. P. T. A., Morocco

903. Replace the present text by the following:

(3) The use of the service abbreviation QRT or the expression .......... must be reserved, as far as possible, for the mobile station and the station controlling distress traffic. However, this abbreviation or this expression may also be used by any other mobile station which considers silence essential.

2494 Denmark, Finland, Iceland, Norway, Sweden

903 to 908. Replace these three Nos. by the following text:

(3) Until they receive a message indicating that normal working may be resumed (see 911), it is forbidden for all stations which are aware of distress traffic in progress but not taking part in it to transmit on the frequencies on which the distress traffic is taking place.

Reasons

1. To clarify the existing text in relation to 911.
2. See proposal concerning Appendix 9 (abbreviation QUM).
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2495 France, French O. P. T. A., Morocco

906. Replace the present text by the following:

(3) Until they receive a message indicating that normal service may begin again (see 911) all stations aware of the distress traffic and not taking part therein shall be forbidden:

Netherlands

2496 906. Replace the present text by the following:

(3) Until they receive a message indicating that normal working may be resumed (see 911) it is forbidden for all stations which are aware of distress traffic and which are not taking part in it):

2497 Add the following new footnote:

1) In order to facilitate normal use of frequencies of a family assigned to a given network in the aero mobile service it would be desirable for the aeronautical station concerned to request instructions from the S.A.R Centre, in order to determine when transmission can be resumed on the frequencies which have been reserved for the distress traffic, but are no longer used for that purpose.

Reasons

This is intended to provide a broader extension of 906 to meet the needs of the aeronautical service and to clarify the existing text in relation to 911.

909 (4) A station of the mobile service which, while following distress traffic, is able to continue its normal service, may do so when the distress traffic is well established and on condition that it observes the provisions of 906, 907 and 908 and does not interfere with the distress traffic.

2498 Federal German Republic

909. After this No. add the following new sub-paragraph:

(4 bis) As an exception, urgency and security messages may be advertised during a lull in the distress traffic — preferably by coast stations — on the distress frequencies. This announcement must be accompanied by the indication of the working frequency on which the urgency or security message will be transmitted. In
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this case the signals provided for in 934, 953 and 943, 944 should only be sent once (e. g. XXX DE ABC QSW ...).

Reasons

1. It should be avoided that a distress traffic holds up for hours the transmission of urgency or security reports that are likewise destined for the safeguarding and the safety of the human life at sea and that may eventually be of utmost importance for the craft in distress and the ships participating in the rescue operations.

2. It should be sufficient to send the groups XXX or TTT, or in radiotelephony the equivalent words, only once, since during distress traffic no other transmissions are allowed on the distress frequencies, anyhow.

Denmark, Finland, Iceland, Norway, Sweden

§ 25. A land station receiving a distress message must without delay take the necessary action to advise the authorities participating in the operation of rescue facilities.

2499 After this No. add the following new paragraph:

§ 25 bis. As soon as assistance to the ship or aircraft in distress has been ensured and other circumstances permit, the distress traffic on a distress frequency should cease and the further communication with the ship or aircraft be established on working frequencies.

Reasons

It has often been observed that the period of silence imposed on other stations in the case of a ship in distress has been longer than necessary. (For example simultaneously on 500 kc/s and 2 182 kc/s.)

§ 26. (1) When distress traffic has ceased or when silence is no longer necessary, a station which has controlled such traffic transmits on the distress frequency and if necessary on the frequency used for distress traffic, a message addressed “to all stations” indicating that the distress traffic has ceased.

2500 Replace the present text by the following:

§ 26. (1) When distress traffic has ceased or when silence is no longer necessary on a frequency which has been used for distress traffic, the station which has controlled this traffic shall transmit on the same frequency a message addressed “to all stations” indicating that normal working may be resumed.

Reasons

In order to emphasize that the resumption of “normal working” would not necessarily have to await the complete cessation of distress traffic.
§ 26. (1) When distress traffic has stopped or when silence is no longer necessary on a frequency used for distress traffic, the station which has controlled such traffic shall transmit, on this frequency, a message addressed “to all stations” indicating that normal traffic may begin again.

Reasons
It happens in practice that normal service may begin again before distress traffic has finished.

(2) This message takes the following form:
- distress signal;
- call “to all stations” CQ, (three times);
- the word DE;
- call sign of the station sending the message (once);
- time of handing in of the message;
- name and call sign of the mobile station which was in distress;
- service abbreviation QUM.

§ 26 bis) Distress traffic must be terminated as soon as the arrival of the necessary assistance has been secured and so long as there is no more absolute need for the reservation of the distress frequency for this traffic. Communication with the station in distress must then be transferred to another frequency. In case of prolonged distress situation steps should be taken to transfer normal traffic to other appropriate frequencies.
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Reasons

It has been noticed that some coast stations extend the duration of distress situation beyond what can reasonably be considered as practical even though they might be located far away from the distress area. Also, they sometimes delay the sending of the message indicating that the distress traffic has ceased. It is useless to prohibit normal working on 500 kc/s when the distress traffic is cleared on 2182 kc/s.

2504 U. S. S. R.

912. After this No. add the following new sub-paragraph:

(2 bis) A communication showing that distress traffic has been finished shall, when transmitted by radiotelephony, take the following form:

— the distress signal MAYDAY;
— the call "To all stations" (three times);
— the words THIS IS;
— the call sign of the station transmitting the message (once);
— the time of transmission of the message;
— the call sign of the mobile station in distress;
— the words "I have finished distress traffic".

Reasons


Section VII. Acknowledgment of Receipt of a Distress Message

913 § 27. The acknowledgment of receipt of a distress message is given in the following form:

— call sign of the mobile station in distress (three times);
— the word DE;
— call sign of the station acknowledging receipt (three times);
— group RRR;
— distress signal.

2505 France, French O. P. T. A., Morocco

913. Read, at the beginning:

§ 27. In radiotelegraphy, the acknowledgement of receipt.... (remainder unchanged).

2506 Netherlands

913. After: in the following form begin the list by:

— distress signal;

Reasons

To be consistent with 899.
§ 27 bis. In radiotelephony, the acknowledgement of receipt of a distress message is given in the following form:

- call sign of the mobile station in distress (three times);
- the words THIS IS;
- call sign of the station acknowledging receipt (three times);
- the expression......
- distress signal.

Reasons
France, French O.P.T.A.:
It is necessary to give the form of the acknowledgement of receipt for radiotelephony; the Conference will have to decide on an expression equivalent to RRR in radiotelegraphy.

Morocco:
It is necessary to give the form of the acknowledgement of receipt for radiotelephony.

2508 U. S. S. R.

913. After this No. add the following new sub-paragraph:

Confirmation of receipt of a radiotelephone distress message shall be sent in the following way:

- the call sign of the mobile station in distress (three times);
- the words THIS IS;
- the call sign of the station confirming receipt (three times);
- the word RECEIVED:
- the distress signal.

Reasons
§ 28. (1) Every mobile station which acknowledges receipt of a distress message must, on the order of the master or person responsible for the ship, aircraft or other vehicle, transmit, as soon as possible, the following information in the order shown:

- its name;
- its position in the form prescribed in 883 and 885;
- the speed at which it is proceeding towards the ship, aircraft or other vehicle in distress.

(2) Before sending this message, the station must ensure that it will not interfere with the emissions of other stations better situated to render immediate assistance to the station in distress.

§ 29. (1) Any station of the mobile service which is not in a position to render assistance and which has heard a distress message which has not been immediately acknowledged, must take all possible steps to attract the attention of stations of the mobile service which are in a position to render assistance.

(2) For this purpose, with the approval of the authority responsible for the station, the distress call or the distress message may be repeated. This repetition is made on full power either on the distress frequency or on one of the frequencies which may be used in case of distress (see 868 to 871). At the same time all necessary steps are taken to notify the authorities who may be able to intervene usefully.

France, French O. P. T. A., Morocco

2509 914. Replace:
- the speed at which.....
  by:
- the approximate time it will need to reach the ship in distress.

Federal German Republic

2510 917. Replace the present text by the following:
(2) For this purpose, with the approval of the authority responsible for the station, the distress call or the distress message may be repeated. This repetition is made on full power either on one of the international distress frequencies or on one of the frequencies which may be used in case of distress (see 868 to 871). At the same time, all necessary steps are taken to notify the authorities who may be able to intervene usefully.

917. After the second sentence insert the following text:
Land stations may in any case repeat, if they consider it appropriate to do so, the distress report on the
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(3) In radiotelegraphy, the repetition of the distress call or distress message is generally preceded by the transmission of the alarm signal as defined in 920. A sufficient interval of time is to be allowed between the transmission of an alarm signal and the repetition of the distress call or distress message, so that mobile stations, which do not keep continuous watch and which are warned by the sounding of their automatic alarm apparatus, have time to go on watch.

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distress frequencies or on their normal working frequencies.

Reasons

This procedure is already the usual practice in most of the European coastal stations now.

918 (4) A station which repeats a distress call or distress message, follows it by the word DE and its own call sign transmitted three times.

2512 France, French O.P.T.A., Morocco

918. After this No. add the following new sub-paragraph:

(3 bis) In radiotelephony, repetition of the distress call (or message) shall generally be preceded by transmission of the alarm signal as defined in ... (See proposal 2538.)

919 (4) A station repeating a distress call or distress message shall transmit the repetition in the following way:

— the distress signal followed by the abbreviation RPT, three times;
— the word DE;
— the call sign of the station which repeats the distress call or distress message;
— received from ... (call sign or name of the mobile station in distress) at ... hours;
— the distress message, if any;
— the word DE;
— the call sign of the station which repeats the distress call or distress message.

Reasons

The first reaction of the operator receiving a distress call is to take the bearings of the place where the transmission originates, and to take down the message itself. Hence it is essential that at the same time as he receives the first signal he should be able to determine whether the call comes from a mobile station in distress or from a station which is simply repeating a distress call it has received.

2513 Belgium

919. Replace the present text by the following:

(4) A station repeating a distress call or distress message shall transmit the repetition in the following way:

— the distress signal followed by the abbreviation RPT, three times;
— the word DE;
— the call sign of the station which repeats the distress call or distress message;
— received from ... (call sign or name of the mobile station in distress) at ... hours;
— the distress message, if any;
— the word DE;
— the call sign of the station which repeats the distress call or distress message.
616

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2514 France, French O. P. T. A., Morocco

919. Replace the present text by the following:

(4) In radiotelegraphy, a station repeating a distress call or distress message shall transmit the repetition in the following way:

— the distress signal ♂ ♂ ♂ followed by the abbreviation RPT, three times;
— the abbreviation RPT followed by the word DE;
— the call sign of the station in distress (three times);
— the distress message, if any;
— the abbreviation ER;
— the call sign of the station which repeats the distress call or distress message (three times).

2515 India

919. Read at the beginning:

(4) In the case of mobile stations other than an aircraft station ... (remainder unchanged).

Reasons

Consequential to proposals 2520 and 2521.

2516 Netherlands

919. Replace the present text by the following:

(4) A station which repeats a distress call or distress message in radiotelegraphy shall transmit the repetition in the following form:

— the distress signal SOS transmitted three times, each time followed by the abbreviation RPT;
— the abbreviation ER;
— the call sign of the station repeating the distress call or message three times;
— the abbreviation RPT followed by DE;
— the call sign of the mobile station in distress three times;
— the distress message if any.
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Example: SOS RPT SOS RPT SOS RPT ER FCBH FCBH FCBH
(Identification of station repeating)
RPT DE FCDB FCDB FCDB
(Identification of station in distress)
DISTRESS MESSAGE, IF ANY.

Reasons

See proposal 2523.

2517 Poland (People's Republic of)

919. Replace the present text by the following:

(4) A station which transmits a distress message or distress call on behalf of another station shall use, in radiotelegraphy, the abbreviation OSO instead of SOS and, in radiotelephony, the word DISTRESS instead of the word MAYDAY.

2518 Federal German Republic

919. Replace the present text by the following:

(4) A distress call (or distress message) when repeated by a station, should take the following form:
— distress signal;
— call “to all stations” CQ (three times);
— the word DE;
— call sign of the station repeating the distress message (three times);
— the words SOS received at . . . (time of reception in G. M. T. of the distress call or the distress message) on . . . (frequency on which the distress call or the distress message was received) DE . . . (call sign of the mobile station in distress); and eventually,
— text of the distress message;
— the word DE;
— the own call sign (sent not more than three times).

Reasons

By following the procedure of the existing 919 only at the end of the transmission it will become obvious that the distress message was repeated by the sending station. This may in the early stage of transmission lead to confusion. Therefore, a number of European stations have generally adopted the practice as is proposed above.
2519 France, French O. P. T. A.

919. After this No. add the following new sub-paragraph:

(4 bis) In radiotelephony, a station repeating a distress call or distress message shall transmit the repetition in the following way:

— MAYDAY ECHO (three times);
— the words ECHO DE;
— the call sign of the station in distress (three times);
— the distress message, if any;
— the words THIS IS;
— the call sign of the station repeating the distress call or the distress message (three times).

India

919. After this No. add the following new sub-paragraphs:

2520 (4 bis) In the case of an aircraft station, a station which repeats a distress call or distress message in radiotelegraphy shall transmit the repetition in the following form:

— the distress signal SOS transmitted three times, each time followed by the abbreviation RPT;
— the abbreviation RPT followed by DE;
— the call sign of the aircraft in distress three times;
— the distress message if any;
— the abbreviation ER;
— the call sign of the station repeating the distress call or message, transmitted three times.

2521 (4 ter) In the case of an aircraft station, a station which repeats a distress call or distress message in radiotelephony shall transmit the repetition in the following form:

— the distress signal S.O.S spoken three times, each time followed by the word ECHO;
— the words ECHO FROM;
— the identification of the aircraft in distress, spoken three times.
— the distress message, if any;
— the words THIS IS;
Present Provisions

Proposals

— the identification of the station repeating the distress call or message, spoken three times.

Reasons


2522 Morocco

919. After this No. add the following new sub-paragraph:

(4 bis) In radiotelephony, a station repeating a distress call or distress message shall transmit the repetition as follows:
— S.O.S. ECHO (three times);
— the words ECHO DE;
— the call sign of the station in distress (three times);
— the distress message, if any;
— the words THIS IS;
— the call sign of the station repeating the distress call or the distress message (three times).

2523 Netherlands

919. After this No. add the following new sub-paragraph:

(4 bis) A station which repeats a distress call or distress message in radiotelephony shall transmit the repetition in the following form:
— the distress signal MAYDAY spoken three times;
— each time followed by the word ECHO;
— the words THIS IS;
— the identification of the station repeating the distress call or message;
— the words ECHO FROM;
— the identification of the mobile station in distress, spoken three times;
— the distress message, if any.
Exemple: MAYDAY ECHO MAYDAY ECHO MAYDAY ECHO
Present Provisions

Proposals

THIS IS NEWYORK RADIO NEWYORK RADIO NEWYORK RADIO
(identification of station repeating)
ECHO FROM NORTHAIR FIVE NORTHAIR FIVE NORTHAIR FIVE
(identification of station in distress)
DISTRESS MESSAGE, IF ANY.

Reasons

Experience obtained during search and rescue operations has shown that the present form for retransmission of distress calls and messages is so similar to the actual transmission from the unit in distress as to make proper identification very difficult. This difficulty in identification has at times resulted in direction-finder bearing being taken on a unit retransmitting a distress call instead of the actual unit in distress as intended. The proposed change will facilitate proper identification.

U.S.S.R.

919. After this No. add the following new subparagraphs:

2524 (4bis) In radiotelephony, repetition of a distress call or a distress message shall normally precede transmission of the alarm signal described in Article 37, Section IX.

2525 (4ter) A station repeating a distress call or a distress message in radiotelephony shall transmit there-after the word THIS IS... and its call sign three times.

Reasons


Section IX. Alarm Signal

2526 France, French O.P.T.A., Morocco

Heading. Read:

Section IX. Radiotelegraph Alarm Signal.

Reasons

France, French O.P.T.A.: It seems necessary to devote Section IX entirely to questions relating to the radiotelegraph alarm signal and to add a new Section IXbis dealing with the radiotelephone alarm signal.

Morocco: Devote Section IX entirely to the radiotelegraph alarm signal.
Present Provisions

Proposals

2527 Netherlands

Heading. Read:

Radiotelegraph Alarm Signal

Reasons

To distinguish between the radiotelephone and radiotelegraph alarm signal and specifically apply the Section to the latter.

2528 France, French O. P. T. A., Morocco

920 and 921. Replace: alarm signal by: radiotelegraph alarm signal.

920 § 30. (1) The alarm signal shall consist of a series of twelve dashes sent in one minute, the duration of each dash being four seconds and the duration of the interval between two consecutive dashes one second. It may be transmitted by hand but its transmission by means of an automatic instrument is recommended.

921 (2) Any ship station working in the band 405 to 535 kc/s which is not provided with an automatic apparatus for the transmission of the alarm signal, must be permanently equipped with a clock, clearly marking the seconds, preferably by means of a sweep hand completing one revolution per minute. This clock must be placed at a point sufficiently visible from the operator's table in order that the operator may, by keeping it in view, easily and correctly time the different elements of the alarm signal.

922 (3) This special signal has for its sole purpose the actuation of the automatic devices giving the alarm. It must be used solely either to announce that a distress call or message is about to follow or to announce the transmission of an urgent cyclone warning; in the latter case it may be used only by the coast stations duly authorized by their government.

2529 Finland

922. Read the second sentence:

It must be used solely either to announce that a distress call or message is about to follow, or to announce that a message preceded by the urgency signal or containing an urgent cyclone warning is to be transmitted. For the transmission of messages preceded by the urgency signal, the alarm signal may be used only in case of immediate danger to lives. In the case of urgent cyclone warnings, it may be used only by the coast stations duly authorized by their government.

Reasons

The urgency signal alone does not guarantee sufficient response in cases of immediate danger to lives.
Present Provisions

Proposals

2530 Federal German Republic

922. Read the second sentence:

It must be used solely either to announce that a distress call or message, the transmission of an urgent cyclone warning is about to follow, or to announce a call “To all stations”, that should be preceded by the urgency signal under the provisions of 936.

Reasons

A great number of urgency messages is directed “To all stations”. In the cases mentioned above, a successful assistance will only be possible, when all ships in the vicinity can be raised by way of the auto-alarm equipment to listen in on 500 kc/s and to receive the urgency message.

923 (4) In cases of distress, the use of the alarm signal is governed by 876; in the case of an urgent cyclone warning, the transmission of the warning must not begin until two minutes after the end of the alarm signal.

924 § 31. The automatic devices intended for the reception of the alarm signal must fulfil the following conditions:

925 a) they must respond to the alarm signal transmitted by the telegraphic emissions of at least class A2 or B;

926 b) they must respond to the alarm signal through interference (provided it is not continuous) caused by atmospherics and powerful signals other than the alarm signal; preferably without any manual adjustment being required during any period of watch maintained by the apparatus;

927 c) they must not be actuated by atmospherics or by strong signals other than the alarm signal;

928 d) they must possess a minimum sensitivity such that with negligible atmospheric interference, they are capable of being operated by the alarm signal transmitted by the

2531 France, French O. P. T. A., Morocco

923 to 927. Replace: alarm signal by: radiotelegraph alarm signal.

2532 U. S. S. R.

925. Delete: or B.

Reasons

Class B emissions have been done away with.

2533 France, French O. P. T. A.

928. Replace: alarm signal by: radiotelegraph alarm signal and delete the word: (reserve).
Present Provisions

emergency (reserve) transmitter of a ship station at any distance from this station up to the normal range fixed for this transmitter by the Convention for the Safety of Life at Sea, and preferably at greater distances;

929 e) they must give warning of any fault which would prevent the apparatus from performing its normal functions during watch hours.

930 § 32. Before an automatic alarm receiver may be approved for use on ships, the administration having jurisdiction over those ships must be satisfied by practical tests made under operating conditions equivalent to those obtaining in practice (including interference, vibration, etc.), that the apparatus complies with the provisions of these Regulations.

931 § 33. The adoption of the alarm signal defined in 920 does not prevent an administration from authorizing the use of an automatic apparatus which complies with the preceding conditions and can be actuated by the distress signal ••••••••.

2534 France, French O. P. T. A.

930 and 931. Replace: alarm signal by: radiotelegraph alarm signal.

2535 Denmark, Finland, Iceland, Norway, Sweden

931. Delete.

Reasons

See proposals 2394 to 2410.

2536 Federal German Republic

931. Delete.

Reasons

The International Convention for the Safety of Life at Sea (London, 1948) specifies in Chapter IV, Regulation 11, Paragraph (a) (ii) only radiotelegraph auto-alarm equipments according to RR 920. Therefore, no auto-alarm equipments responding to the signal •••••••• are used in practice, and the proposed deletion of this No. seems appropriate.

France, French O. P. T. A., Morocco

931. After this No. insert the following new section:

2537 Section IXbis: Radiotelephone Alarm Signal.
§ 33bis. (1) The radiotelephone alarm signal shall consist of two more or less sinusoidal signals transmitted alternately, the first having a frequency of 2 200 c/s and the second a frequency of 1 300 c/s; each signal shall last 250 milliseconds. The tolerance on each of the two frequencies shall be ± 1.5%; the tolerance on the duration of each elementary signal is equal to ± 50 ms and the interval between two consecutive signals must not exceed 50 ms; the ratio between the amplitude of the strongest elementary signal and the amplitude of the other signal shall be between 1 and 1.2.

(2) When produced automatically, the radiotelephone alarm signal must be transmitted continuously for not less than 30 seconds and not more than one minute; if produced by other means, this signal must be transmitted as continuously as possible for one minute.

(3) The purpose of this special signal shall be to draw the attention of persons on watch and to actuate any automatic alarm devices there may be. It shall be used solely either to announce that a distress call or message is about to follow or to announce the transmission of an urgent cyclone warning; in the latter case it may be used only by coast stations duly authorized by their administrations.

§ 33ter. The automatic devices intended for the reception of the radiotelephone alarm signal shall fulfil the following conditions:

a) The automatic reception device must respond to the radiotelephone alarm signal through intermittent interference caused by atmospherics and powerful signals other than the radiotelephone alarm signal; preferably without any manual adjustment being required during any period of watch maintained by the apparatus.

b) It must not be actuated by atmospherics or by strong signals other than the alarm signal.

§ 33quater. The automatic device intended for both transmission and reception of the radiotelephone alarm signal on 2 182 kc/s shall:
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Proposals

a) be capable of operating beyond the range of satisfactory speech transmission; and should

b) as far as possible, be capable of signalling faults which might prevent it from working normally during watches.

2543 Morocco

After sub-paragraph b) of § 33 quater above, add the following sub-paragraph:

c) they must be capable of being verified simultaneously by the radiotelephone emitter operating on the artificial antenna.

2544 Netherlands

931. After this No. add the following new section:

Section IX bis. Radiotelephone Alarm Signal.

Reasons

The Netherlands Administration adopts the F.C.C. proposal on this subject, in which the Göteborg provisions are fully incorporated in the RR.

U. S. S. R.

931. After this No. add the following new provisions:

2545 a) The radiotelephone alarm signal defined in C.C.I.R. Recommendation No. 125 shall consist in the alternate transmission of two audio-frequency sine pulses. One pulse shall have a frequency of 2 200 c/s and the other a frequency of 1 300 c/s, both pulses lasting 250 milliseconds.

2546 b) When produced automatically the radiotelephone alarm signal must be transmitted continuously for no less than thirty seconds and not more than one minute; if
Present Provisions

Proposals

U.S.S.R. (cont'd)

produced by other means this signal must be transmitted as continuously as possible for about one minute.

2547 c) The radiotelephone alarm signal shall be used by coast stations either to announce that a distress call or message is about to follow or to announce the transmission of an urgent cyclone warning; in the latter case it may be used only by coast stations which are authorized to this effect by their administrations.

2548 d) The automatic devices intended for the reception of the radiotelephone alarm signal shall fulfil the following conditions:

1. The automatic reception device must respond to the alarm signal through interference caused by atmospherics and powerful signals other than the alarm signal, preferably without any manual adjustment being required during any period of watch maintained by the apparatus;

2. The device must not be actuated by atmospheric electricity or by strong signals other than the alarm signal.

2549 e) The automatic devices intended for both transmission and reception of the alarm signal on the frequency 2182 kc/s shall fulfil the following conditions:

1. They must be capable of operating beyond the range of satisfactory speech transmission;

2. They should as far as possible be capable of signalling faults which might prevent them from working normally during watches.

Reasons

Present Provisions

Section X. Urgency Signal

932 § 34. (1) The urgency signal may be transmitted only on the authority of the master or the person responsible for the ship, aircraft or other vehicle carrying the mobile station.

(2) The urgency signal may be transmitted by a land station only with the approval of the responsible authority.

934 § 35. (1) In radiotelegraphy, the urgency signal consists of three repetitions of the group XXX, sent with the letters of each group and the successive groups clearly separated from each other. It is sent before the call.

(2) In radiotelephony, the urgency signal consists of three repetitions of the word PAN pronounced as the French word "panne". It is sent before the call.

936 § 36. (1) The urgency signal indicates that the calling station has a very urgent message to transmit concerning the safety of a ship, aircraft or other vehicle or of some person on board or within sight.

(2) The urgency signal has priority over all other communications, except distress. All mobile and land stations which hear it must take care not to interfere with the transmission of the message which follows the urgency signal.

(3) Where the urgency signal is used by a mobile station, it must, as a general rule, be addressed to a specific station.

France, French O. P. T. A., Morocco

2550 934. Read in fine: It is transmitted before the call.

2551 935. Read in fine: It is transmitted before the call.

2552 936. After this No. add the following new sub-paragraph:

(1 bis) The urgency signal and the message following it shall be sent on one of the international distress frequencies (500 kc/s or 2 182 kc/s) or on one of the frequencies which may be used in distress (see 868 to 871).

Federal German Republic

2553 938. Replace the present text by the following:

(3) The urgency signal may be addressed to a specific station or “To all stations”. When addressed “To all stations”, it will generally be preceded by the alarm signal.

Reasons

A great number of urgency messages are directed “To all stations”. In the cases mentioned above, a successful assistance will only be possible, when all ships in the vicinity can be raised by way of the auto-alarm equipment to listen in on 500 kc/s and to receive the urgency message.
Present Provisions

Proposals

2554 Denmark, Finland, Iceland, Norway, Sweden

938. After this No. add the following new sub-paragraph:

(3bis) After an announcement to be transmitted on the distress frequency and preceded by the urgency signal, the urgency message should be sent on the working frequency stated in the announcement.

Reasons

In accordance with the proposal concerning a modified use of the frequency 2182 kc/s.

939 § 37. Messages preceded by the urgency signal must, as a general rule, be drawn up in plain language, except in the case of medical messages.

2555 France, French O. P. T. A., Morocco

939. Delete in fine: except in the case of medical messages.

Reasons

France, French O. P. T. A.:
The present wording seems to indicate that medical messages have to be drawn up in code, which is not in fact the case.

940 § 38. (1) Mobile stations which hear the urgency signal must continue to listen for at least three minutes. At the end of this period, if no urgency message has been heard, they may resume their normal service.

941 (2) However, land and mobile stations which are in communication on frequencies other than those used for the transmission of the urgency signal and of the call which follows it may continue their normal work without interruption provided the urgency message is not addressed “to all stations” (CQ).

942 § 39. When the urgency signal has been sent before transmitting a message which is intended for all stations and which calls for action by the stations receiving the message, the station responsible for its transmission must cancel it as soon as it knows that action is no longer necessary. This message of cancellation must likewise be addressed “to all stations” (CQ).
Present Provisions

Section XI. Safety Signal

§ 40. (1) In radiotelegraphy, the safety signal consists of three repetitions of the group TTT, sent with the letters of each group and the successive groups clearly separated from each other. It is sent before the call.

(2) In radiotelephony, the word SÉCURITÉ pronounced as the French word "sécurité", repeated three times, is used for the safety signal.

Proposals

France, French O. P. T. A., Morocco

§ 40. (2) In radiotelephony, the safety signal shall consist of the word SÉCURITÉ pronounced clearly as in French, repeated three times and transmitted before the call.

U. S. S. R.

§ 40. (2)bis Except for messages transmitted within the period laid down, the safety signal SÉCURITÉ, when used in the maritime mobile radiotelephone service, shall be transmitted at the end of the first silent period (see 826). The message shall be transmitted immediately after the silent period.

Denmark, Finland, Iceland, Norway, Sweden

§ 40. (2) The safety signal and the message which follows it are sent on the distress frequency or on one of the frequencies which may be used in case of distress (see 868 to 871).

§ 40. (2) After an announcement to be transmitted on the distress frequency and preceded by the safety signal the safety message should be sent on the working frequency stated in the announcement.

Reasons


In accordance with the proposal concerning a modified use of the frequency 2 182 kc/s.
§ 42. (1) With the exception of messages transmitted at fixed times, the safety signal, when it is used in the maritime mobile service, must be transmitted towards the end of the first available period of silence (see 733); the message is transmitted immediately after the period of silence.

(2) In the cases prescribed in 1050, 1053 and 1056, the safety signal and the message which follows it must be transmitted as soon as possible, but must be repeated as just indicated, at the end of the first period of silence which follows.

§ 43. All stations hearing the safety signal must continue to listen on the frequency on which the safety signal has been transmitted until they are satisfied that the message is of no interest to them. They must, moreover, not make any transmissions likely to interfere with the message.

§ 42. (1) With the exception of messages transmitted at fixed times, the safety signal, when used in the maritime mobile service, shall be transmitted towards the end of the first available period of silence [see 733 for radiotelegraphy and ........ (see proposal 2309) for radiotelephony], the message is transmitted immediately after the period of silence.

(2) In the cases prescribed in 1050, 1053 and 1056, the safety signal and the message which follows it must be transmitted as soon as possible, but must be repeated as just indicated, at the end of the first period of silence which follows.

All stations hearing the safety signal must continue to listen on the frequency on which the safety signal has been transmitted until they are satisfied that the message is of no interest to them. They must, moreover, not make any transmissions likely to interfere with the message.

§ 43bis. (1) In radiotelegraphy, the warning signal consists of three repetitions of the group COC, sent with the letters of each group and the successive groups clearly separated from each other. It is sent before the call.
CHAPTER XV

Radiotelegrams

ARTICLE 38

Order of Priority of Communications in the Mobile Service

The order of priority of communications in the mobile service is as follows:

1st Distress calls, distress messages and distress traffic.
2nd Communications preceded by the urgency signal.
3rd Communications preceded by the safety signal.
4th Communications relative to radio direction-finding bearings.
5th Radiotelegrams relative to the navigation and safe movement of aircraft.
6th Radiotelegrams relative to the navigation, movements, and needs of ships; weather observation messages destined for an official meteorological service.

2564 (2) In radiotelephony, the word ATTENTION pronounced as the French word “attention”, repeated three times, is used for the warning signal.

2565 § 43 ter. The warning signal indicates that the station is about to transmit a message requesting the mobile stations in its vicinity to exchange information on their position, course and speed for the prevention of collision in a dense fog, etc.

Reasons

It is necessary to prescribe appropriate procedures to prevent the collision of ships in a dense fog, etc.

2566 United Kingdom

Replace the present heading by the following:

Radiotelegrams and Radiotelephone Calls

Reasons

To cater for radiotelephone calls.

2567 France, French O.P.T.A., Morocco

950. Replace the present text by the following:

The order of priority of communications in the mobile service shall be as follows:

1st Distress calls, distress messages and distress traffic.
2nd Communications preceded by the urgency signal.
3rd Communications preceded by the safety signal.
4th Communications relative to radio direction-finding bearings.
5th Radiotelegrams and radiotelephone calls relative to the navigation and safe movement of aircraft.
6th Radiotelegrams and radiotelephone calls relative to the navigation, movements, and needs of ships; weather observation messages destined for an official meteorological service.
<table>
<thead>
<tr>
<th>Present Provisions</th>
<th>Proposals</th>
</tr>
</thead>
<tbody>
<tr>
<td>7th Government radiotelegrams for which priority right has been claimed.</td>
<td>7th Government radiotelegrams and radiotelephone calls for which priority right has been claimed.</td>
</tr>
<tr>
<td>8th Service radiotelegrams relating to the working of the radiocommunication service or to radiotelegrams previously transmitted.</td>
<td>8th Service radiotelegrams and radiotelephone calls relating to the working of the radiocommunications service or to radiotelegrams previously transmitted.</td>
</tr>
<tr>
<td>9th All other communications.</td>
<td>9th All other communications.</td>
</tr>
</tbody>
</table>

**Reasons**

Radiotelephone calls should also be included.

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**2568 Italy**

950. Replace the present text by the following:

The order of priority of communications in the mobile service is as follows:

1st Distress calls, distress messages and distress traffic.

2nd Communications preceded by the urgency signal.

3rd Communications preceded by the safety signal.

4th Communications relative to radio direction-finding bearings.

5th Radiotelegrams relative to the navigation and safe movement of aircraft.

6th Radiotelegrams relative to the navigation, movements, and needs of ships; weather observation messages destined for an official meteorological service.

7th Government Nations Priority radiotelegrams.

8th Government radiotelegrams for which priority right has been claimed.

9th Service radiotelegrams relating to the working of the telecommunication service or to radiotelegrams previously transmitted, including acknowledgments of receipt.

10th Radiotelegrams for which the telegraph charge for urgent telegrams has been paid for passage over the general telecommunication network.

11th Government telegrams other than those indicated under 7th and 8th above.

12th All other radiotelegrams.

13th Letter-radiotelegrams.

**Reasons**

To complete the list of priorities, taking into account those specified in the new RTg.
ARTICLE 39
Indication of the Station of Origin of Radiotelegrams

§ 1. When, because of duplication of names, the name of a station is followed by its call sign, the latter is separated from the name of the station by a fraction bar. Example: Oregon/OZOC (not Oregonozoc); Rose/DDOR (not Roseddor).

§ 2. When a coast or aeronautical station retransmits over the general telecommunication network a radiotelegram received from a mobile station, it transmits, as office of origin, the name of the mobile station in which the radiotelegram originated as this name appears in the appropriate list of stations, followed by its own name. If necessary, the provisions of § 1 are also applied.

2569 Japan

950. After: 3rd, add the following:

3rd bis. Communications preceded by the warning signal.

Reasons
To be consistent with proposals 2562 to 2565.

2570 United Kingdom

950. In sub-paragraphs 5th, 6th, 7th and 8th, replace: radiotelegrams, by: communications and in sub-paragraph 8th replace: transmitted by: conducted.

Reasons
To cater for radiotelephone calls.

2571 Netherlands

Heading. Read:
Indication of the Mobile Station of Origin or Destination of Radiotelegrams.

951. Replace the present text by the following:

§ 1. In order to avoid confusion with stations of similar or nearly similar names, the name of the mobile station of origin or destination of radiotelegrams must be followed by its call sign, the latter being separated from the name of the station by a fraction bar.

Example: Oregon/OZOC (not Oregonozoc); Rose/DDOR (not Roseddor).

Reasons
To meet practical needs.

2573 952. Replace: this name appears in the appropriate list of stations by: defined in § 1, and delete the last sentence.

Reasons
To meet practical needs.
§ 3. In order to avoid any confusion with a telegraph office or a fixed station of the same name, the coast or aeronautical station may, if desirable, complete the indication of the name of the mobile station of origin by the word “ship” or “aircraft” placed before the name of the station of origin.

ARTICLE 40

Routing of Radiotelegrams

§ 1. (1) As a general rule, a mobile station which uses emissions of class A2 within the band from 405 to 535 kc/s transmits its radiotelegrams to the nearest coast or aeronautical station. In order to expedite or facilitate the transmission of the radiotelegrams, however, it may transmit them to another mobile station. The latter treats the radiotelegrams so received as if they originated with itself. (See Article 9 of the Additional Radio Regulations).

(2) If, however, the mobile station can choose between several coast or aeronautical stations at approximately the same distance, it must give the preference to that which is established on the territory of the country of destination or of normal transit of radiotelegrams. When the station chosen is not the nearest, the mobile station must cease working or must change the frequency or class of emission upon the first request made by the coast or aeronautical station which is actually the nearest, this request being based upon the interference which the working in question causes to the coast or aeronautical station.

§ 2. Mobile stations using class A1, A2, or A3, outside the band from 405 to 535 kc/s must, as a general rule, give preference to the coast or aeronautical station established on the territory of the country of destination or of the country likely to be the most suitable transit route for radiotelegrams.

§ 3. If the sender of a radiotelegram handed in at a mobile station has indicated the coast or aeronautical station to which he desires his radiotelegram to be sent, the mobile station must, in order to effect this transmission to the coast or aeronautical station indicated, wait, if necessary, until the conditions specified in §§ 954, 955 and 956 above are fulfilled.

Proposals

United Kingdom

§ 1. (1) In disposing of radiotelegrams, a mobile station should as a general rule, give preference to the coast or aeronautical station established on the territory of the country of destination, or the country likely to provide the most suitable transit route for radiotelegrams.

(2) However, in order to expedite or facilitate the transmission of radiotelegrams to a coast or aeronautical station, a mobile station may transmit them to another mobile station. The latter disposes of the radiotelegrams as if they originated with itself. (See Article 9 of the Additional Radio Regulations.)

Italy

§ 3. If the administration of origin or the administration responsible for the ship or aircraft station of origin admits it, the sender of a radiotelegram may designate the coast or aeronautical station(s) to which he wishes his radiotelegram to be transmitted, or he may request that his radiotelegram be routed via one or two ship or aircraft stations.

Reasons

To conform with established practice.
§ 4. In order to facilitate disposal of traffic, and subject to such restrictions as individual governments may impose, coast stations may, in exceptional circumstances and with discretion, without incurring additional charges, exchange radiotelegrams and service messages relating thereto.

However, the exchanges, or the mobile station concerned, shall wait until the conditions specified in 954, 955 and 956 above are fulfilled, before transmitting the message to the coast, aeronautical, or ship station so designated.

The principle whereby the sender who wishes to designate the route for a message must himself indicate it on the form has already been introduced into the RTg (Geneva Revision, 1958) to avoid misunderstandings when the charges are calculated. In addition, choice of route by the sender must be subject to the approval of the administration concerned.

This proposal entails rearrangement of Article 41, which would have the following sections:

Section I — Preamble.
Section II — Establishment of Radiotelegram Accounts.
Section III — Establishment of Radiotelephone Call Accounts.
Section IV — Exchange, verification and settlement of accounts.

Most countries apply the provisions in force for radiotelegrams to accounts relating to radiotelephone calls, but there is no rule on this subject in the Radio Regulations. We propose that this deficiency be made good.
Present Provisions

Proposals

Reasons

France, French O.P.T.A.:
See general comments.

United Kingdom:
To cater for radiotelephone calls.

Section I. Establishment of Accounts

2581 France, French O.P.T.A.

Heading: Read:

Section I. Preamble.

Reasons
See general comments.

2582 Morocco

Heading: Read:

Section I. General.

2583 United Kingdom

Heading: Read:

Section I. Establishment of Accounts for Radiotelegrams.

Reasons
To segregate radiotelegrams.

2584 Federal German Republic

Section I:

The regulations on accounting of the radiotelegrams should be extended to cover also radiotelephone calls.

Reasons
Ever-increasing extent of radiotelephone communication.
§ 1. In principle, land station and ship and aircraft charges do not enter into the international telegraph accounts.

§ 2. Governments reserve to themselves the right to make, between themselves and with the private enterprises concerned, different arrangements with a view to the adoption of other accounting systems, more specifically the adoption, as far as practicable, of the system by which the land station and ship and aircraft charges follow the radiotelegrams from country to country through the medium of the telegraph accounts.\(^1\) Such arrangements are subject to previous agreement between the administrations concerned.

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**Proposals**

**2585 United States of America**

§ 1. Replace the present text by the following:

§ 1. In principle, land station and ship and aircraft charges, together with other charges applicable to radiotelegrams, enter into the international telegraph accounts.

**Reasons**

The practice prescribed by the present regulations probably dates back to the early days of radio when the delivery of radiotelegrams addressed to ships was more or less uncertain, thus there was good reason for retaining the land station and ship station tolls at the office of origin to facilitate refund to the sender in the event of non-delivery. With modern equipment, more efficient long range communication, and better organization of the maritime service, non-delivery of shore to ship radiotelegrams is rather rare, and the prescribed method of handling the accounts for such traffic can no longer be justified. The requirement that the charges due on a single radiotelegram be divided and handled by two different accounting procedures is complicated, cumbersome and costly inasmuch as it requires special handling outside the ordinary routine for a negligible part of the total traffic. The present system is obsolete and should be eliminated.

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**2586 France, French O. P. T. A., Morocco**

§ 1. Replace the present text by the following:

§ 1. In principle, land station and ship and aircraft charges relative to radiotelegrams and radiotelephone calls shall not be entered in international telegraph and telephone accounts.

**Reasons**

To include radiotelephone calls too.

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**2587 United States of America**

§ 2. Replace the present text by the following:

§ 2. Governments reserve to themselves the right to make, between themselves and with the private enterprises concerned, different arrangements with a view to the adoption of other accounting systems. Such arrangements are subject to previous agreement between the administrations concerned.

**Reasons**

See proposal 2585.
The United States and Canada request that this system should be adopted to the greatest possible extent in relations between themselves and other countries.

§ 3. In the absence of a different arrangement in accordance with the provisions of 960, the accounts relating to these charges are prepared monthly by the administrations to which the land stations are subject and are forwarded by them to the administrations concerned.

§ 4. (1) Where the enterprise operating the land station is not the administration of the country, this enterprise may replace the administration of that country as far as accounts are concerned. In this event, the provisions of 964 to 999 shall apply to such enterprise in the same manner as to an administration.
963. At the beginning, before: enterprise, add: recognized private.

Reasons
To align with the RTg (Geneva Revision, 1958).

963. The radiotelegrams referred to in 699 can, if necessary, be included in an account destined for the administration to which the ship or aircraft is subject.


Reasons
Editorial and to correct an error.

963. Replace the present text by the following:

(2) When the provisions of 699 are not carried out, and the operating agency controlling the mobile station is not known, accounts should be sent to the administration to which the mobile station is subject, for forwarding to the appropriate accounting authority for settlement.

Reasons
To facilitate the clearance of accounts when details of the responsible accounting agency have not yet been published in international documents.

Section II. Establishment of Radiotelegram Accounts.

§ 5. (1) In the case of radiotelegrams originating in ship and aircraft stations, the administration to which the land station is subject debits the administration to which the ship or aircraft station of origin is subject with:
Present Provisions

— the land station charges,
— the charges relating to transmission over the general telecommunication network, which will hereafter be called telegraph charges,
— the total charges collected for prepaid replies, land station and telegraph charges made for collation,
— charges collected for delivery by express, by post or by air mail and charges for copies of multiple telegrams.

Proposals

the country where the operator of the ship or aircraft station of origin is established with: (remainder unchanged.)

Reasons

France, French O.P.T.A.:
At present, radiomaritime accounts are sent for verification and payment to the administration to which the ships with which radiotelegrams have been exchanged are subject.

However, it often happens that the radio stations with which these ships are equipped are operated by companies having a nationality different from that of the ship. In this case some administrations, after having divided the accounts among the companies concerned, then lose interest in the payments to be effected by the latter. The result is that the operating companies pay the sums due direct to the administration which has drawn up the accounts, in the form of separate cheques or included in other settlements, but without reference to the original accounts. Sometimes there is no special mention enabling the nature of the payment to be identified.

To avoid these drawbacks which make for complication and delay the settlement of accounts, it would be desirable to consider the nationality of the operating company only instead of that of the ship. Hence we propose that accounts should be exchanged with the administration of the country where the operator of the ship or aircraft station is established.

Morocco:
To simplify service and accelerate the settlement of accounts, it would be desirable to consider the nationality of the ship’s operating company and not that of the ship (as at present).

Italy

2598 964. 1. Replace in fine: charges for copies of multiple telegrams by: the maximum charges laid down by the Telegraph Regulations for copies of multiple telegrams.

Reasons

To align 964 with 972 so as to avoid different charges in the same service according to the direction of transmission.

In fact, Article 7 of the RTg (Geneva, 1958) reads: “it (the rate) shall be the same between the offices of any two countries of the Union by the same route and in the two directions”.

2599 2. Add the following new sub-paragraph:
— charges for additional operations requested by the sender.

Reasons

To complete the text.
Present Provisions

Proposals

2600  Netherlands

964. Delete: land station and telegraph charges made for collation.

Reasons

To simplify international accounting; TC, Poste, Express, TM occur so seldom, that administrations could better pay each other on mutual terms.

965    (2) So far as concerns transmission over the telegraph communication routes, radiotelegrams are treated, from the point of view of accounting, in conformity with the Telegraph Regulations.

966    § 6. (1) For radiotelegrams to a country beyond that to which the land station belongs, the telegraph charges to be settled in accordance with the above provisions are the charges shown in the table of rates relating to international telegraph correspondence, or those fixed by special arrangements between the administrations of adjacent countries and published by those administrations, and not the charges which might be made by applying minimum charges per telegram or by methods of rounding the charges per telegram in any manner.

2601  Italy

966. In fine delete: minimum charges per telegram or by.

Reasons

A consequence of proposal 2607.

2602  United Kingdom

966. After: published by those administrations read: ... and the regulation five-word minimum charge must be taken into account where applicable (see 2024 of the Additional Radio Regulations).

Reasons

Consequential upon the universal extension of the five-word minimum charge in the RTg (Paris Revision, 1949).

Note by the S. G.

2603  Circ. 624/1950.

967. Further to amendments made in the RTg Regulations by the Paris Telegraph and Telephone Conference (1949), the Secretary-General told Administrations that in his opinion 967 should read as follows:

(2) The regulation five-word minimum charge must, however, be taken into account for ordinary radiotelegrams, and that of ten words for press radiotelegrams, as a consequence of 169 of the Telegraph Regulations (Paris Revision, 1949).
Further to the Geneva Telegraph and Telephone Conference (1958), this paragraph should now be worded as follows:

(2) For every ordinary radiogram, a minimum charge shall be levied, equivalent to the charge for seven words, and for press radiograms, this minimum charge shall be that for fourteen words, as a consequence of 35 in the Telegraph Regulations (Geneva Revision, 1958).

2604 Belgium

967. Delete.

2605 United States of America

967. Replace the present text by the following:

(2) The minimum charges prescribed by the Telegraph Regulations i.e. five words for radiograms, ten words for press radiograms and twenty-two words for letter radiograms must be taken into account.

Reasons

To conform to Article 26, Section 3, Paragraph 169 of the RTg (Paris Revision, 1949).*

* Note: Proposal subject to review after the Telephone and Telegraph Conference (Geneva, 1958).

2606 France, French O. P. T. A., Morocco

967. Replace the present text by the following:

(2) The regulation seven-word minimum charge for ordinary radiograms, and the fourteen-word minimum for press radiograms, shall, however, be taken into account.

Reasons

Alignment with the RTg.

2607 Italy

967. Replace the present text by the following:

(2) However, account must be taken of the fact that a seven-word minimum charge is levied for every radiogram; for press radiograms this minimum shall
Present Provisions

Present Provisions

be fourteen words, and for letter-radiotelegrams twenty-two words.

Reasons

Minimum charges are proposed for radiotelegrams because:

a) At present, each radiotelegram is subject to two different charging methods; the first, which applies to the coast charge and the ship or aircraft charge, is based simply on the number of words without considering a minimum; on the other hand, the second, which applies to the land path of the radiotelegram, takes into account the provisions of the Telegraph Regulations relative to the minimum number of words admitted, which the Geneva Telegraph and Telephone Conference recently raised to seven for ordinary and urgent telegrams.

b) The above proposal would remove this anomaly by introducing into the RR the principle of minimum charges already in force for telegrams.

c) The difference between the two systems applied to the same radiotelegram often gives rise to ambiguities and is illogical. The officials responsible for charging sometimes find it difficult to convince users of the reasons for the existence of two different charging principles.

d) Radiotelegrams are often sent or received by users living in the town in which the coast station is situated. According to the existing provisions, these users are greatly favoured by comparison with the others since their radiotelegrams are not subject to the minimum charges as they do not follow a land route.

e) The RR admit that charges for the radio part of the route may not cover the cost of the services rendered and nevertheless admit exceptions to the charging rules, such as the possibility of fixing minimum charges and the possibility of exceeding the maximum charges laid down for coast, ship, or aircraft stations. The aim of the above proposal is to ensure a minimum revenue for each radiotelegram by removing the exceptions at present admitted.

f) Radiotelegraphy is of course run at a loss everywhere. Moreover, it does not seem desirable at this moment to propose increases in charges already high. The Italian proposal could be the first step towards making the charges for radiotelegrams closer to the costs involved, following the criteria already adopted for the telegraph service.

g) A statistical inquiry covering 1000 ordinary radiotelegrams in recent months, to and from different places, has revealed that the average number of chargeable words is about twelve to thirteen.

Proposals

Proposals

967. Delete.

Reasons

Included in 966 as amended. (See proposal 2602.)
§ 7. (1) In the case of radiotelegrams addressed to ship and aircraft stations, the administration to which the office of origin is subject is debited direct by the administration to which the land station is subject, with the land station and ship or aircraft charges plus the land station and ship or aircraft charges applicable to collation, but only where the radiotelegram has been transmitted to the ship or aircraft station. In the case provided for in 2109, however, the administration to which the office of origin is subject is debited with the land station charge by the administration to which the land station is subject.

(2) The administration to which the office of origin is subject is always debited through the medium of the telegraph accounts, from country to country if necessary, by the administration to which the land station is subject, with the telegraph charges, the total charges for prepaid replies, and the telegraph charges for collation. As regards charges for copies of multiple telegrams, the procedure, as far as the telegraph accounts are concerned, is in conformity with the normal telegraph procedure.

2609 United States of America

968. Delete.

Reasons
See proposal 2585.

2610 Netherlands

968. In the middle of the sub-paragraph delete:
plus the land station and ship or aircraft charges applicable to collation.

Reasons
To be consistent with proposal 2600.

2611 United States of America

969. Replace the present text by the following:
(2) In the case of radiotelegrams addressed to ship or aircraft stations, the administration to which the office of origin is subject is always debited through the medium of the telegraph accounts, from country to country if necessary, by the administration to which the land station is subject, with the land station and ship or aircraft charges plus the land station and ship or aircraft charges applicable to collation with the telegraph charges, the total charges for prepaid replies, and the telegraph charges for collation. As regards charges for copies of multiple telegrams, the procedure, as far as the telegraph accounts are concerned, is in conformity with the normal telegraph procedure.

Reasons
See proposal 2585.

Italy

2612 969. 1. At the end of the first sentence, after the words:
... for collation add the following: as well as the charges for any additional operations requested by the sender.

Reasons
To complete the text.

2613 2. Add in fine:
... taking into account, however, the provisions of 2030.

Reasons
A consequence of proposal 3091.
970  (3) When the radiotelegram has been transmitted, the administration to which the land station is subject credits the administration to which the ship or aircraft station of destination is subject:

971  a) with the ship or aircraft charge;

972  b) if occasion arises, with
— the charges due to intermediate ship or aircraft stations,
— the total charge collected for prepaid replies,
— the ship or aircraft charge for collation,
— the maximum charges fixed by the Telegraph Regulations for copies of multiple telegrams.

2614  France, French O. P. T. A., Morocco

970. Replace the present text by the following:

(3) When the radiotelegram has been transmitted, the administration to which the land station is subject shall credit the administration where the operator of the ship or aircraft station of destination is established:

Reasons
See proposal 2597.

2615  Netherlands

972. Replace the present text by the following:

b) if occasion arises, with the total charge collected for prepaid replies.

Reasons
To be consistent with proposal 2600.

2616  Switzerland

973. Replace the present text by the following:

§ 8. When the charge for a radiotelegram is paid in whole or in part by means of a reply-paid coupon, the radiotelegram shall be treated in mobile service accounts as though the charge had been paid in cash.

Reasons
A better, clearer wording.
which the station of origin is subject with all charges collected, less the charges due to this latter station;

976 b) through the medium of a single land station:

the administration to which the land station is subject debits the administration to which the ship or aircraft station of origin is subject with all the charges collected, less the charges due to that ship or aircraft station, in accordance with the provisions of 964 and 965. Thereafter the provisions of 968 to 972 are applied;

2617 United States of America

976. In fine before: 964 and 965 and before: 968 to 972 add: Nos.

Reasons
Editorial.

2618 France, French O. P. T. A., Morocco

976. Replace the present text by the following:

b) through the medium of a single land station:

the administration to which the land station is subject shall debit the administration of the country where the operator of the ship or aircraft station of origin is established with all the charges collected, less the charges due to that ship or aircraft station, in accordance with 964 and 965. Thereafter the provisions of 968 to 972 shall be applicable.

Reasons
See proposal 2597.

2619 United States of America

977. Before: 964 and 965 and before: 968 to 972 add: Nos.

Reasons
Editorial.

2620 France, French O. P. T. A., Morocco

977. Replace the present text by the following:

c) through the medium of two land stations:

the administration to which the first land station is subject shall debit the administration of the country where the operator of the ship or aircraft station of origin is established with all the charges collected, less the charge due to that ship or aircraft station, in accordance with 964 and 965. The provisions of 968 to 972 are then applicable, the first land station being regarded as the office of origin as far as the accounts are concerned.

Reasons
See proposal 2597.
§ 10. In the case of radiotelegrams which, at the request of the sender, are forwarded through one or two intermediate ship or aircraft stations, each such intermediate station debits with the charge accruing to it for transit:

a) the ship or aircraft station of destination, in the case of a radiogram originating on land and destined for a ship or aircraft station, or in the cases contemplated in § 76 and § 77 (second radiotelegraph transmission);

b) the ship or aircraft station of origin, in the case of a radiogram originating on a ship or aircraft station and destined for the land, or in the cases contemplated in § 75 and in § 76 and § 77 (first radiotelegraph transmission).

United States of America

979. After: contemplated in add: Nos.

Reasons

Editorial.

France, French O. P. T. A., Morocco

980. After this No. add the following new section:

Section III. Establishment of Radiotelephone Call Accounts.

§ 10 bis. When radiotelephone calls come from ship and aircraft stations, the administration to which the land station is subject shall debit the administration of the country in which the operator of the ship or aircraft station of origin is established with:

— the land station charges;

— the charges relating to the use of the general telecommunication network, which will hereafter be called line charges.

§ 10 ter. For radiotelephone calls to ship and aircraft stations, the administration to which the land station is subject shall:

— debit the administration to which the office of origin is subject with the land and ship or aircraft station charges;
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Proposals

France, French O.P.T.A., Morocco (cont'd)

— credit the administration of the country where the operator of the ship or aircraft station of destination is established with the ship or aircraft charge.

2626 § 10 quater. For radiotelephone calls exchanged with a country beyond that to which the land station belongs, line charges shall be entered in the international accounts in the same conditions as telephone charges. The line charges to be settled shall be the charges shown in the table of rates relating to international telephone correspondence, or those fixed by special arrangements between the administrations concerned and published by those administrations.

Reasons

To lay down rules for radiotelephone accounts.

2627 and read:

Section IV. Exchange, Verification and Settlement of Accounts.

United Kingdom

980. After this No. add the following new heading and paragraph:

2628 Establishment of Accounts for Radiotelephone Calls.

2629 § 10 bis. (1) In principle, land station and ship and aircraft charges do not enter into the international telephone accounts.

2630 (2) Governments reserve to themselves the right to make, between themselves and with the recognized private enterprises concerned, different arrangements with a view to the adoption of other accounting systems.

2631 (3) In the absence of a different arrangement in accordance with the provisions of sub-paragraph (2) (proposal 2630) the accounts relating to the charges specified in sub-paragraph (1) (proposal 2629) are prepared monthly by the administrations to which the land stations are subject and are forwarded by them to the administrations concerned.
649

Present Provisions

Proposals

United Kingdom (cont'd)

2632  (4) Where the recognized private enterprise operating the land station is not the administration of the country, this enterprise may replace the administration of that country as far as accounts are concerned. In this event the provisions of sub-paragraphs (5) to (8) (proposals 2633 to 2636) shall apply to such enterprise in the same manner as to an administration.

2633  (5) In the case of radiotelephone calls originating in ship or aircraft stations, the administration to which the land station is subject:

a) debits the administration to which the mobile station is subject or the recognized private operating agency controlling the mobile station with the land station and inland charge and any charges relating to transmission over the international telephone system;

b) credits through the international telephone accounts the administration of the country of destination and the administrations of intermediate countries, if any, with the charges relative to international telephone calls.

2634  (6) When the provisions of 699 are not carried out and the recognized private operating agency controlling the mobile station is not known, accounts should be sent to the administration to which the mobile station is subject for forwarding to the appropriate accounting authority for settlement.

2635  (7) In the case of radiotelephone calls to mobile stations, originating in the territory of the administration to which the land station is subject, that administration credits the administration to which the mobile station is subject, or the recognized private operating agency controlling the mobile station, with the mobile station charge.

2636  (8) In the case of radiotelephone calls originating in a country beyond that to which the land station belongs:

(i) the administration to which the land station is subject:

a) debits the administration of the country of origin with the land station and mobile station charges;

b) credits the administration to which the mobile station is subject, or the recognized private operating agency controlling the mobile station, with the mobile station charge.
Present Provisions

Proposals

(ii) The administration of the country from which the call originates credits, through the international telephone account, the administrations of the country to which the land station is subject, and intermediate countries, if any, with the charges relative to international telephone calls.

Reasons

To cater for radiotelephone calls.

Section II. Exchange, Verification and Settlement of Accounts

981 § 11. In principle, radiotelegrams are entered individually, with all necessary particulars, in the monthly accounts which serve as a basis for the radiotelegram accounting mentioned in this article. A specimen statement is given in appendix 14. The accounts are forwarded within a period of three months counting from the month to which they relate.

2637 United States of America

981. Replace: article by: Article and replace: appendix by: Appendix.

Reasons

Editorial.

2638 Italy

981. Read in fine:

Two copies of the accounts shall be forwarded within four months, counting from the month to which they relate.

Reasons

Three months is not long enough for sending radiotelegram accounts.

2639 United Kingdom

981. Replace the first sentence by:

In principle, radiotelegrams and radiotelephone calls are entered individually, with all necessary particulars, in the monthly accounts which serve as a basis for the accounting mentioned in this article.

Reasons

To cater for radiotelephone calls.

2640 Italy

981. After this No. add the following new subparagraph:

However, when, by special agreement, the reciprocal accounts cover more than one month, these accounts shall be forwarded before the end of the
§ 12. The acceptance of an account shall be notified or the observations thereon shall be made before the expiration of the sixth month following that to which that account refers. An administration or recognized private operating agency which has, during that interval, received no correcting observation, shall be entitled to regard the monthly account as admitted by right.

Reasons
a) For sake of clarification (cf. 988).
b) Adaptation to the RTg (934, Paris Revision, 1949).

§ 12 bis. An administration or recognized private operating agency which has not received any correcting observations in this period, shall consider that the correctness of the monthly account has been tacitly admitted.

Reasons
A principle already introduced by the RTg (Geneva, 1958).

§ 13. The periods mentioned in 981 and 982 may be exceeded when exceptional difficulties occur in the transmission of the documents by post between the land stations and the administrations to which they are subject. However, the debtor administration may refuse the settlement and adjustment of accounts presented more than eighteen months after the date of handing-in of the radiotelegrams to which the accounts relate.

United States of America

983. After: mentioned in add: Nos.

Reasons
Editorial.
§ 14. In the absence of an agreement to the contrary, the following provisions are applicable to the radiotelegraph accounts referred to in the present article.

§ 15. (1) The monthly accounts are admitted without revision when the difference between the accounts prepared by the two administrations concerned is not more than ten francs (10 fr.) or does not exceed one per cent of the account of the creditor administration, provided that the amount of this account is not more than one hundred thousand francs (100,000 fr.); when the amount of the account prepared by the creditor administration is more than this sum the difference must not exceed a total amount comprising:

- 1 per cent of the first hundred thousand francs (100,000 fr.);
- 0.5 per cent of the remainder.

§ 15. (2) When there are differences between the accounts prepared by the two administrations concerned, the monthly accounts shall be accepted without revision in the following cases:

<table>
<thead>
<tr>
<th>Creditor account:</th>
<th>Difference not exceeding:</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 2,500 francs</td>
<td>25 francs</td>
</tr>
<tr>
<td>from 2,500 to 100,000 francs</td>
<td>1% of the creditor's account</td>
</tr>
<tr>
<td>more than 100,000 francs</td>
<td>1% of the first 100,000 francs, and 0.5% of the remainder of the creditor's account.</td>
</tr>
</tbody>
</table>

Reasons

Alignment with the RTg (Geneva, 1958). Necessary if 960 is to be applied.
(2) A revision which is in process is stopped as soon as, following the exchange of observations between the administrations concerned, the difference is brought down to a sum not exceeding the maximum fixed by 985.

§ 16. (1) Immediately after the acceptance of the accounts proper to the last month of a quarter, a quarterly account showing the balance for the entire quarter is, unless otherwise arranged between the two administrations concerned, prepared by the creditor administration and forwarded in duplicate to the debtor administration which, after verification, returns one of the copies endorsed with its acceptance.

(2) In default of acceptance of any of the monthly accounts of a given quarter before the expiration of the sixth month following the quarter to which the accounts relate, the quarter account may, nevertheless, be prepared by the creditor administration with a view to a provisional settlement which becomes obligatory for the debtor administration under the conditions fixed by 989. Adjustments subsequently agreed upon are included in a later quarterly settlement.

§ 17. The quarterly account must be verified and the amount must be paid within a period of six weeks dating from the day on which it is received by the debtor administration. Beyond this period, the sums due to one administration by another are subject to interest at the rate of six per cent per annum reckoned from the day following the date of expiration of the said period.

2648 United States of America

986. In fine after: fixed by add: No.

Reasons

Editorial.

2649 Italy

987. Replace the present text by the following:

§ 16. (1) Unless otherwise agreed upon by the two administrations concerned, the administration to which the land station is subject shall immediately draw up an account showing the balance for the month to which it relates at the foot of the monthly accounts mentioned in 981, and shall forward two copies thereof to the corresponding administration. The latter shall check and return one of these two copies endorsed with its acceptance.

Reasons

To make a rule of usual practice.

2650 United States of America

988. After: fixed by add: No.

Reasons

Editorial.

2651 Italy

988. Replace the present text by the following:

(2) In default of acceptance of a monthly account before the expiration of a period of six months from the date when it was forwarded, the creditor administration may demand a provisional settlement which shall become obligatory for the debtor administration under the conditions laid down in 989. Adjustments subsequently considered necessary in consequence of the application of 983 shall be included in a later settlement.

Reasons

A consequence of proposal 2649.

2652 Ghana

989. Replace: six per cent by: fifteen per cent.
§ 17. The debtor administration shall pay the amount required for provisional settlement or the amount of the account already accepted within a period of one month, starting from the day on which it received the invitation to do so by the creditor administration. Beyond this period... (remainder unchanged)

Reasons
A consequence of proposals 2649 and 2651.

§ 18. (1) The balance of the quarterly account in gold francs is paid by the debtor administration to the creditor administration, by a sum equivalent to its value; this payment may be effected:

a) at the choice of the debtor administration, in gold or by means of cheques or drafts fulfilling the conditions prescribed in 994 and 995 and payable at sight on the capital or on a commercial centre of the creditor country;

b) by agreement between the two administrations, through the intermediary of a bank clearing through the Bank of International Settlements at Basle;

c) by any other means agreed upon between the administrations concerned.

(2) In the case of payment by means of cheques or drafts, these instruments are drawn in the money of a country where the central bank of issue or other official institution of issue buys and sells gold or gold currency for the national money at fixed rates determined by law or by virtue of an agreement with the government.

United States of America

991. After: prescribed in add: Nos.

Editorial.
995 (3) If the currencies of several countries fulfil these conditions, the creditor administration indicates the currency which is convenient to it. The conversion is effected at the gold par rate.

996 (4) Where the currency of the creditor country does not fulfil the conditions specified under 994, the cheques or drafts may also be expressed in the currency of the creditor country if the two countries are agreed on this procedure. In this case the balance is converted at the gold par rate into the currency of a country fulfilling the above-mentioned conditions. The result arrived at is then converted into the currency of the debtor country, and from this into the currency of the creditor country, at the rate of exchange current in the capital or at a commercial centre of the debtor country on the date of purchase of the cheque or draft.

997 (5) When the amount of the balance is more than 5000 gold francs, the date of the dispatch of the cheque or draft, the date of its purchase and its amount must, upon a request by the creditor administration, be notified by the debtor administration by means of a service telegram.

998 § 19. The costs of payment are borne by the debtor administration.

Section III. Period of Retention of Accounting Records

999 § 20. The originals of radiotelegrams and the corresponding documents retained by the administrations are held, with all necessary precautions from the point of view of secrecy, until the settlement of the relative accounts and, in any case, for at least ten months counting from the month following the month of handing-in of the radiotelegrams.

2656 United States of America

996. After: specified under add: No.

Reasons

Editorial.

2657 Italy

999. Read in fine:

... for at least six months counting from the month following the month in which the account mentioned in 981 was sent!

Reasons

To reduce the minimum period for which records must be kept for the benefit of administrations which prepare their accounts diligently.

2658 United Kingdom

999. Replace the present text by the following:

§ 20. The originals of radiotelegrams and documents relating to radiotelegrams and radiotelephone calls retained by the administrations are held, with all necessary precautions from the point of view of
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secrecy, until the settlement of the relative accounts, and, in any case, for at least ten months counting from the month following the month of handing-in of the radiotelegrams or the date of establishment of the radiotelephone calls.

Reasons

To cater for radiotelephone calls.

2659

Italy

999. After this No. add the following new sub-paragraph:

However, if an administration or recognized private operating agency deems it useful to destroy its documents before the expiration of the above-mentioned periods, and hence is unable to carry out an inquiry concerning its services, the said administration or recognized private operating agency shall bear all the consequences, as regards both reimbursements of charges and the discrepancies which might be noted in international accounts.

Reasons

This principle has already been introduced in the RTg (Geneva, 1958).

CHAPTER XVI

Miscellaneous Stations and Services

·ARTICLE 42

Amateur Stations

1000 § 1. Radiocommunications between amateur stations of different countries shall be forbidden if the administration of one of the countries concerned has notified that it objects to such radiocommunications.

1001 § 2. (1) When transmissions between amateur stations of different countries are permitted they must be made in plain language and must be limited to messages of a technical nature relating to tests and to remarks of a personal character for which, by reason of their unimportance, recourse to the public telecommunications service is not justified. It is absolutely forbidden for amateur stations to be used for transmitting international communications on behalf of third parties.
Present Provisions

1002  (2) The preceding provisions may be modified by special arrangements between the countries concerned.

1003  § 3. (1) Any person operating the apparatus in an amateur station must have proved that he is able to transmit, and to receive by ear, texts in Morse code signals. Administrations concerned may, however, waive this requirement in the case of stations making use exclusively of frequencies above 1000 (one thousand) Mc/s.

Proposals

2660  Australia (Commonwealth of)

1003. Replace: 1 000 (one thousand) Mc/s by: 50 (fifty) Mc/s.

Reasons

Since little use is made of Morse operations in the VHF and UHF bands, it is considered that this provision should apply to frequencies above 50 Mc/s.

2661  Morocco

1003. Delete.

Reasons

Many amateur stations operate by radiotelephony. Moreover, since the amateur service is a "service of self training" (31 of the RR) it is not necessary to require operators to be so qualified.

United Kingdom

2662  1003. At the end of the first sentence replace: texts by: plain language and figures.

2663  In fine replace: 1 000 (one thousand) Mc/s by: 400 Mc/s.

Reasons

To ensure that texts are not confined to plain language and to permit relaxation where this is considered desirable in the light of developments in the amateur field.

1004  (2) Administrations shall take such measures as they judge necessary to verify the qualifications, from a technical point of view, of any person operating the apparatus of an amateur station.

2664  Morocco

1004. Replace the present text by the following:

(2) Administrations shall take such measures as they judge necessary to verify the qualification, from a technical point of view, of any person operating the apparatus of an amateur station. In particular, before they issue a licence to an amateur station equipped with a transmitter having continuous frequency adjustment, it is recommended that they should:

a) verify the existence and good operating condition of an appropriate device to indicate to the operator that the band occupied by his basic emission
Present Provisions

§ 4. The maximum power of amateur stations shall be fixed by the administrations concerned, having regard to the technical qualifications of the operators and to the conditions under which these stations must work.

§ 5. (1) All the general rules of the Convention and of the present Regulations shall apply to amateur stations. In particular, the transmitting frequency must be as constant and as free from harmonics as the state of technical development for stations of this nature permits.

(2) During the course of their transmissions amateur stations must transmit their call sign at short intervals.

ARTICLE 43

Experimental Stations

§ 1. (1) An experimental station may enter into communication with an experimental station of another country only after it has been authorized to do

Proposals

is contained in its entirety in one of the bands authorized for the amateur service;

b) ensure that the operator knows how to use this control apparatus correctly.

Reasons

To avoid harmful interference.

France, French O. P. T. A., Morocco

§ 5. (1) All the general rules of the Convention and of the present Regulations shall apply to amateur stations. In particular, the transmitting frequency must be as stable and as free from spurious radiation as the state of technical development for stations of this nature permits.

Reasons

France, French O. P. T. A.:
Clearer text, better adapted to the terminology of the C. C. I. R.

Morocco:
C. C. I. R. terminology.

India

Delete.

Reasons

This paragraph is unnecessary.

2665 France, French O. P. T. A., Morocco

1006. Replace the present text by the following:

§ 5. (1) All the general rules of the Convention and of the present Regulations shall apply to amateur stations. In particular, the transmitting frequency must be as stable and as free from spurious radiation as the state of technical development for stations of this nature permits.

Reasons

France, French O. P. T. A.:
Clearer text, better adapted to the terminology of the C. C. I. R.

Morocco:
C. C. I. R. terminology.
Present Provisions

so by its administration. Each administration notifies other administrations concerned when such authorizations are issued.

1009 (2) The administrations concerned determine by special arrangement the conditions under which communications may be established.

1010 §2. (1) In experimental stations any person operating radiotelegraph apparatus, either on his own account or for another, must have proved his ability to transmit and to receive by ear, texts in Morse code signals.

1011 (2) Administrations shall take such steps as they think necessary to verify the qualifications, from the technical point of view, of any person operating the apparatus of an experimental station.

1012 §3. The administrations concerned fix the maximum power of experimental stations, having regard to the conditions under which the stations are to work.

1013 §4. (1) All the general rules of the Convention, and these Regulations, apply to experimental stations. In particular, experimental stations must comply with the technical conditions imposed upon transmitters operating in the same frequency bands, except where the technical principles of the experiments prevent this.

1014 (2) During their emissions, experimental stations must transmit, at short intervals, their call sign, or, in the case of stations not yet provided with a call sign, their name.

1015 §5. Where there is no risk of an experimental station causing harmful interference with a service of another country, the administration concerned may, if considered desirable, adopt different provisions from those contained in this article.

ARTICLE 44

Radiolocation Service

Section I. General Provisions

1016 §1. Administrations which have established a radiolocation service must take the necessary steps to ensure the effectiveness and regularity of that

Proposals

United Kingdom

2667 1010. In fine replace: texts by: plain language and figures.

Reasons

To ensure that tests are not confined to plain language.

2668 1012. Add in fine: and to the purpose for which their establishment has been authorized.

Reasons

Clarification.
Present Provisions

service; but they accept no responsibility for the consequences that might arise from the use of inaccurate information furnished, defective working, or failure of their stations.

1017 § 2. In the case of a doubtful or unreliable bearing or position, the station taking the bearing or fixing the position must, whenever possible, notify the station for which the information is being obtained of any such doubt or unreliability.

Proposals

2669 France, French O. P. T. A., Morocco

1017. Delete: ... or unreliable ... and: ... or unreliability.

Reasons

It is preferable to delete the words "unreliable" and "unreliability" which might give rise to a misinterpretation.

1018 § 3. Administrations notify to the Secretary General of the Union the characteristics of each radiolocation station in the international service and, if considered necessary, for each station or group of stations, the sectors in which the information furnished is normally reliable. This information is published in the List of Radiolocation Stations, and the Secretary General of the Union is notified of any change of a permanent nature.

2670 United Kingdom

1018. In the second sentence, after: information add: except that relating to aeronautical stations.

Reasons

Consequential on proposal for Service Documents, Article 20.

1019 § 4. The method of identification of radiolocation stations must be so chosen as to avoid any doubt when it is necessary to identify a station.

1020 § 5. Signals sent by radiolocation stations must permit accurate and precise observations.

1021 § 6. Any information concerning modification or irregularity of working of a radiolocation station must be notified without delay in the following manner:

1022 a) Land stations of countries operating a radiolocation service send out daily, if necessary, notices of modifications or irregularities in working until such time as normal working is restored or, if a permanent alteration has been made, until such time as it can reasonably be taken that all navigators interested have been warned.
Present Provisions

1023  

b) Permanent alterations or irregularities of long duration are published as soon as possible in the relevant notices to navigators.

1024  § 7. In the case where radiocommunication by telegraphy or telephony is part of a radiolocation service, such communication will be subject to the provisions of these Regulations.

Section II. Service of Radio Direction-Finding Stations

France, French O. P. T. A., Morocco

2671  Heading. Read:

Section II. Radio Direction-Finding Stations.

1025  § 8. In the maritime radionavigation service the frequency normally used for direction-finding is 410 kc/s. All direction-finding stations of the maritime radionavigation service must be able to use this frequency. They must, in addition, be able to take bearings on the frequency 500 kc/s especially for locating stations sending signals of distress, alarm and urgency.

1026  § 9. The procedure to be followed by radio direction-finding stations is given in appendix 15.

1027  § 10. In the absence of prior arrangements, an aircraft station which calls a radio direction-finding station for a bearing must use for this purpose a frequency on which the station called normally keeps watch.

1028  § 11. In the exclusively aeronautical radionavigation service, the procedure contemplated for radio direction-finding in this section is applicable, except where special procedures are in force as a result of agreements made between the administrations concerned.

Section III. Service of Radiobeacon Stations

2672  1025. Replace the present text by the following:

§ 8. For maritime radionavigation, the frequency normally used for direction-finding shall be 410 kc/s. All direction-finding maritime radionavigation stations must be able to use this frequency. They must, in addition, be able to take bearings on 500 kc/s and as far as possible on 2182 kc/s, especially for locating stations sending signals of distress, alarm or urgency.

Reasons

France, French O. P. T. A.:

Bearings on 2182 kc/s may, in some cases, supply valuable information.

2673  Heading. Read:

Section III. Radiobeacon Stations.
§ 12. When an administration thinks it desirable in the interests of navigation to organize a service of radiobeacon stations, it may use for this purpose:

a) radiobeacons properly so called, established on land or on ships permanently moored or, exceptionally, on ships navigating in a restricted area, the limits of which are known and published. The emissions of these radiobeacons may have either directional or non-directional patterns;

b) fixed stations, coast stations or aeronautical stations designated to act as radiobeacons, at the request of mobile stations.

§ 13. (1) Radiobeacons properly so called use the frequency bands which are available to them under chapter III.

(1 bis) The power radiated by each radiobeacon shall be adjusted to the minimum necessary to produce the required field strength at the limit of the range required.

Reasons

Comprehensive proposal to accommodate Articles 4 and 5 of the Paris Beacon Conference and 26 to 28 of the Final Acts of the E.A.R.C. It is not considered appropriate to specify field strength in the Regulations.

(2) Other stations notified as radiobeacons use for this purpose their normal working frequency and their normal class of emission.

Section IV. Watch Radar Stations.

When an administration considers that a watch radar station could usefully be set up, it shall also take suitable steps to transmit information about the position thereof to any ship requesting such information, as well as information about any type of obstacle which might hamper the movements of the ship in the area in question.
ARTICLE 45

Special Services

Section I. Meteorology

1034 § 1. (1) Meteorological messages comprise:

1035 a) messages addressed to meteorological services officially entrusted with weather forecasts, more specifically for the protection of maritime and air navigation;

1036 b) messages from these meteorological services intended specially for:

1037 — ship stations;

1038 — protection of aircraft;

1039 — the public.

1040 § 2. (1) The various national meteorological services mutually agree to prepare common transmission programmes so as to use the transmitters best situated to serve the regions concerned.

1041 a) observations taken at fixed times;

1042 b) warnings of dangerous phenomena;

1043 c) forecasts and warnings;

1044 d) statements of the general meteorological situation.

1045 § 2. (1) The various national meteorological services mutually agree to prepare common transmission programmes so as to use the transmitters best situated to serve the regions concerned.

1046 (2) The meteorological observations contained in the classes mentioned in 1035, 1036, 1037 and 1038 are, in principle, drawn up in an international meteorological code, whether they are transmitted by or intended for mobile stations.

1047 § 3. For observation messages intended for an official meteorological service, use shall be made of the facilities resulting from the allocation of exclusive frequencies to synoptic meteorology and the aeronautical meteorological service, in conformity with regional agreements made by the services concerned for the use of these frequencies.
§ 4. (1) Meteorological messages intended specially for all ship stations are sent, in principle, in conformity with a fixed time table, and, as far as practicable, at times when they can be received by ship stations having only one operator. The speed of transmission is chosen so that an operator possessing only a second class certificate may be able to read the signals.

(2) During the transmission “to all stations” of meteorological messages intended for stations of the maritime mobile service, all stations of this service whose transmissions might interfere with the reception of these messages, must keep silent in order to permit all stations which desire to do so, to receive these messages.

(3) Meteorological warning messages for the maritime mobile service are transmitted without delay. They must be repeated at the end of the first silence period which follows (see 733) as well as at the end of the first silence period which occurs in the working hours of a ship station having a single operator. They are preceded by the safety signal and are sent on the frequencies laid down by 946.

(4) In addition to the regular information services contemplated in the preceding sub-paragraphs, administrations take the necessary steps to ensure that certain stations shall, upon request, communicate meteorological messages to stations in the maritime mobile services.

(5) The provisions of 1048 to 1051 are applicable to the aeronautical mobile service, insofar as they are not contrary to more detailed special arrangements ensuring at least equal protection to air navigation.

§ 5. (1) Messages originating in mobile stations containing information concerning the presence of tropical cyclones must be transmitted, with the least possible delay, to other mobile stations in the vicinity and to the appropriate authorities at the first point of the coast with which contact can be established. Their transmission is preceded by the safety signal.

(2) Any mobile station may, for its own use, listen to messages containing meteorological observations sent out by other mobile stations, even those which are addressed to a national meteorological service.

France, French O. P. T. A., Morocco

Replace the present text by the following:

§ 4. (1) Meteorological messages specially intended for all ship stations shall in principle be sent in accordance with a definite timetable, and, as far as possible, at times when they can be received by ship stations with only one operator. In radiotelegraphy the transmission speed shall never exceed sixteen (16) words a minute.

(2) Any mobile station may, for its own use, listen to messages containing meteorological observations sent out by other mobile stations, even those which are addressed to a national meteorological service.
Present Provisions

1054a  (3) Stations of mobile services which transmit meteorological observations addressed to a national meteorological service, are not required to repeat them to other stations. However, the exchange between mobile stations, on request, of information relating to the state of the weather is authorized.

Section II. Time Signals, Notices to Mariners

1055 § 6. The provisions of 1048 to 1052 are applicable to time signals and to notices to mariners. However, the provisions of 1050 are not applicable to time signals.

Belgium

2678 1055. Replace the present text by the following:

§ 6. The provisions of 1048, 1049, 1051 and 1052 shall be applicable to time signals.

2679 1055. After this No. add the following new paragraph:

§ 6 bis. Notices for shipping for use by the maritime mobile service, when transmitted by coast stations, shall be transmitted immediately. They shall be repeated in accordance with 1050 and shall be preceded by the safety signal. They shall be transmitted, however, after prior announcement on 500 and 2 182 kc/s, on the normal working frequencies of coast stations between 405 and 535 kc/s and between 1 605 and 3 800 kc/s. The provisions of 1048, 1049, 1051 and 1052 shall also apply to such notices.

Reasons

The number of notices for shipping transmitted by coast stations for use by the maritime mobile service has constantly increased since the Atlantic City Conference in 1947, with the result that the volume of these transmissions causes harmful interference on 500 and 2 182 kc/s. It is advisable to apply the procedure in § 6bis, which is already followed by a considerable number of coast stations in Region I.

1056 § 7. Messages containing information concerning the presence of dangerous ice, dangerous wrecks, or any other imminent danger to marine navigation, must be transmitted as soon as possible to other ship stations in the vicinity, and to the appropriate authorities at the first point of the coast with which contact can be established. These transmissions must be preceded by the safety signal.
§ 8. When thought desirable, and provided the sender agrees, administrations may authorize their land stations to communicate information concerning maritime damage or casualties or information of general interest to navigation, to the marine information agencies approved by them and subject to the conditions fixed by them.

CHAPTER XVII

ARTICLE 46

International Radio Consultative Committee (C.C.I.R.)

United Kingdom

1057. After this No. add the following new Section:

Section III. Medical Advice.

§ 8 bis. Mobile stations requiring medical advice may obtain it through any of the coast stations shown as providing this service in the List of Special Service Stations.

§ 8 ter. Radiograms and radiophone calls concerning medical advice may be prefixed by the urgency signal (see 932–942).

Reasons
To cater for the medical advice service.

China

Delete the whole of Chapter XVII.

Reasons
More appropriate to be treated in the Convention.

United Kingdom

Replace the present text of article 46 by the following:

International Radio Consultative Committee (C.C.I.R.)

The constitution, duties and working arrangements of the International Radio Consultative Committee (C.C.I.R.) are laid down in the Convention and in Part II of the General Regulations annexed thereto.

Reasons
As the Convention lays down the constitution of the Union and of its permanent organs and is completed by the four sets of Administrative Regulations, there is no need to duplicate provisions of the Convention or General Regulations in the RR.
Present Provisions

Proposals

2684 France, French O. P. T. A., Morocco

1058. Before this No. add the following new sub-paragraph:

The duties of the International Radio Consultative Committee are defined in the Convention as follows [Article 7, § 1 (3)]:

Reasons

These duties are defined in the Convention, but it might be well to include them in the Regulations too.

1058 § 1. The duties of the International Radio Consultative Committee (C. C. I. R.) shall be to study technical radio questions and operating questions the solution of which depends principally on considerations of a technical radio character, and to make recommendations on them.

1059 § 2. The questions to be studied by the C. C. I. R. and on which it shall issue recommendations are those which are submitted to it by the Plenipotentiary Conference, by the Radio Administrative Conference, by the Administrative Council of the Union, by another International Consultative Committee of the Union, or by the International Frequency Registration Board, as well as those adopted for study by the Plenary Assembly of the C. C. I. R., or those which are presented by at least twelve members of the Union in the interval between meetings of the Plenary Assembly.

2685 United States of America

1059 to 1075. Replace these Nos. by the following text:

§ 1 bis. The constitution and working arrangements of the C. C. I. R. are laid down in Article 7 of the Convention and in Part II of the General Regulations annexed thereto.

Reasons

In view of the fact that the Convention and the General Regulations include all of the above omitted paragraphs, and (particularly the General Regulations) treat these matters in much more detail than the Radio Regulations, it would appear more clear and consistent to simply refer to them here, rather than to recapitulate them either in whole or in part.

Note: The RTg (Paris, 1948) treated the C.C.I.T.T. in a similar abbreviated fashion.

2686 France, French O. P. T. A., Morocco

1059. Replace: twelve members of the Union, by: twelve Union Members or Associate Members.

Reasons

The Convention, Article 7, § 2.
1060 § 3. (1) The C. C. I. R. shall have, as members:

1061 a) administrations of countries, members of the Union; and

1062 b) such recognized private operating agencies as have expressed a desire to have their experts participate in the work of the C. C. I. R.

1063 (2) International organizations which are coordinating their work with the International Telecommunication Union and which have related activities may be admitted to participation in the work of the C. C. I. R. in an advisory capacity.

1064 (3) Scientific or manufacturing organizations, which are engaged in the study of telecommunications problems or in the design or manufacture of telecommunications equipment and which are approved by the respective administrations of countries, members of the Union, may be admitted to meetings of the Study Groups of the C. C. I. R. in an advisory capacity.

2687 U. S. S. R.

1059. Replace the present text by the following:

§ 2. The questions to be studied by the C. C. I. R. for recommendations to be made in connection therewith, shall be those submitted to it by the Plenipotentiary Conference, by the Administrative Radio Conference, by the Administrative Council of the Union or by the C. C. I. T. The C. C. I. R. shall also study questions referred to it by the C. C. I. R. Plenary Assembly, and such questions as may be presented by at least twelve Members of the Union between two meetings of the Plenary Assembly.

Reasons
Clearer wording. The International Frequency Registration Bureau refers questions to the C. C. I. R. only through the I. T. U. Administrative Council or through administrations.

2688 France, French O. P. T. A., Morocco

1061. Replace the present text by the following:

a) as of right, the administrations of all Members and Associate Members of the Union; and

Reasons
The Convention, Article 7, § 3.

2689 France, French O. P. T. A., Morocco

1062. Replace the present text by the following:

b) any recognized private operating agency which, with the approval of the Member or Associate Member which has recognized it, wishes to take part in the Committee’s activities.

Reasons
The Convention, Article 7, § 3.
<table>
<thead>
<tr>
<th>Present Provisions</th>
<th>Proposals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1065 § 4.</strong> The C.C.I.R. shall work through the medium of:</td>
<td><strong>2690 France, French O.P.T.A., Morocco</strong></td>
</tr>
<tr>
<td><strong>1066</strong> a) a Plenary Assembly, which shall normally be held every two years, provided that a meeting shall take place about one year previous to the meeting of the general Administrative Radio Conference. Each meeting of a Plenary Assembly shall be held in a place fixed by the previous meeting of the Plenary Assembly;</td>
<td><strong>1066. Replace the present text by the following:</strong> a) a Plenary Assembly, which shall normally meet every three years, provided one such meeting is held about six months before each Administrative Radio Conference, at a place decided on at the previous meeting of the Assembly.</td>
</tr>
<tr>
<td><strong>1067</strong> b) Study Groups, which shall be set up by the Plenary Assembly to deal with questions to be studied;</td>
<td><strong>2691 France, French O.P.T.A.</strong></td>
</tr>
<tr>
<td><strong>1068</strong> c) the Director, assisted by a Vice-Director specialized in broadcasting, both of whom shall be appointed by the Plenary Assembly for an indefinite period, but with the reciprocal rights of terminating their appointments;</td>
<td><strong>1068. Read at the beginning:</strong> c) the Director, assisted by a Vice-Director, one of the two being specialized in broadcasting... <em>(remainder unchanged).</em></td>
</tr>
<tr>
<td><strong>2692 India</strong></td>
<td><strong>Reasons</strong></td>
</tr>
<tr>
<td><strong>1068. At the beginning read:</strong> c) the Director and a Vice-Director (only one of whom shall be specialized in broadcasting) shall ... <em>(remainder unchanged).</em></td>
<td>The Committee's activities in the fields of sound broadcasting and television are such as to justify this new wording.</td>
</tr>
</tbody>
</table>
| **Reasons** Qualifications of Director and Vice-Director may be prescribed in such a way that both the Director and the Vice-Director should not be specialists in broadcasting.
Present Provisions

1069  

1070  

d) the specialized Secretariat, which assists the Director in the performance of the work;

e) such laboratories or technical installations, as may be set up by the Union.

1071 § 5. The Secretary General of the Union, or his representative, the representatives of the International Frequency Registration Board, and the representatives of the other Consultative Committees of the Union may attend meetings of the C.C.I.R. in an advisory capacity.

1072 § 6. The C.C.I.R. may form joint Study Groups with other Consultative Committees of the Union to study, and issue recommendations, on questions of common interest.

1073 § 7. The C.C.I.R. may appoint a representative to attend, in an advisory capacity, meetings of other Committees of the Union or other international organizations, to which the C.C.I.R. has been invited.


1075 (2) The Plenary Assembly of the C.C.I.R. may adopt such additional rules of procedure as may facilitate the work of the Committee, provided that they do not conflict with the General Regulations.

CHAPTER XVIII

ARTICLE 47

Effective Date of the Radio Regulations

1076 § 1. These Regulations shall come into force on January 1, 1949, except for the table of allocation of frequencies covering the bands below 27500 kc/s(1) and the provisions listed below, which shall come into force upon the effective date of the new International Frequency List, as determined by a special Administrative Radio Conference:

2693 U.S.S.R.

Chapter XVIII. Delete.

Reasons

The whole of Chapter XVIII is obsolete.

2694 Japan

1076. Replace the present text by the following:

§ 1. These Regulations shall come into force on . . .
Present Provisions

articles 2, 10, 11, 12, 17, 20, 28; 621; article 33; 869; article 34; 1025 and 1032; appendices 1, 3, 4, 5, 6, 7, 8, 10 and 12.

1076.1 However, all or any portion of the band 150–2850 kc/s, which is not subject to consideration by the Provisional Frequency Board, may come into force in Region 2 on or after January 1, 1949, in accordance with special arrangements agreed upon by the interested countries of that Region.

1077 § 2. The procedure provided in the Cairo Radio Regulations for the notification and registration of frequencies, and the Cairo allocation table below 27500 kc/s shall remain in force until the effective date of the new International Frequency List (see 1076).

1078 § 3. In witness whereof the delegates of the countries members of the Union represented at the International Radio Conference of Atlantic City (1947) have signed in the names of their respective countries the present Regulations in a single copy which will remain in the archives of the Government of the United States of America and of which a certified copy will be delivered to every country member of the Union.

Done at Atlantic City, the 2nd of October, 1947.

C. Various proposals concerning the Appendices annexed to the RR.

2697 India

Include the following general provision as an appendix to the RR in an appropriate place:

The administrations may adopt, as far as possible, in radio communication services the rationalized M.K.S. system (also known as the rationalized Giorgi System).

Reasons

In accordance with C.C.I.R. Recommendation No. 143. In line with India's policy.
APPENDICES TO RADIO REGULATIONS
(Atlantic City, 1947)

FIRST SERIES
APPENDIX 1

Form of Notice

For use when notifying to the International Frequency Registration Board a frequency assignment to a fixed, land, broadcasting, radionavigation land, or standard frequency station

1. Notifying Government

2. Date of the notice

3. Reference to preliminary telegraphic notice (if any)

4. Assigned frequency in kc/s (or Mc/s).

5. Class of emission [note a].


7. Power in kW.

8. Antenna Location
   A) Country
   B) Place
   C) Latitude and Longitude [note b].

9. Directivity of Antenna [note c]
   A) Azimuth of maximum radiation in degrees from true north (clockwise).
   B) Angular width of the main lobe in the horizontal plane in degrees [note d].
   C) Gain in decibels (db) in direction of maximum radiation at the assigned frequency [note e].

10. Call sign.

11. Class of Station [note f].

12. Nature of Service [CP, CO, etc. — note f].

13. Locality (or localities) or regions with which communication is established or projected [note g].

14. Projected date of service or date put into service.

15. Maximum hours of use of frequency (G.M.T.) [note h].

2698 Australia (Commonwealth of)

Under item 9 insert the following:

D) In the case of fixed stations using power in excess of 500 watts;
   i) Vertical distribution of radiation at the assigned frequency;
   ii) Direction and gain of minor lobes or sufficient mechanical and electrical details to permit calculation.

Reasons

To provide the I.F.R.B. with full information in respect of aerial characteristics.

2699 France, French O. P. T. A.

Item 15. Replace the present text by the following:

Maximum hours of use for each of the circuits for which the frequency is used (U.T.) [Note h].
The maximum hours of use of the frequency shall be taken to mean the earliest and latest hours of use of this frequency for a complete day during all schedules for a complete sunspot cycle, for each of the circuits listed under 13. For example, if during a particular period the schedule is 1000 to 1500 hours U.T., and again from 1100 to 1600 hours U.T., the information to be shown will be 1000–1600 hours U.T.

### India

The form may be replaced by the current form used by the I.F.R.B. in accordance with the E.A.R.C. Agreement.

### Morocco

Replace the present text by the following:

Replace the present text by the following:

Form of Notice

For use when notifying to the International Frequency Registration Board a frequency assignment — or modification of an assignment — to a fixed, land, broadcasting, radionavigation land, or standard frequency station.

Notifying Administration

Reference: At (date) ......

1. Assigned frequency in kc/s or Mc/s [note a].
2. Date of bringing into service.
3. Call sign [note b].
4a Name, geographical position [note c] of the emitting station and indication of the country to which it belongs.
4b Locality (or localities) or region(s) with which communication is established [note d].
4c Length of each intended circuit in km [note e].
5. Class of station and nature of service [note f].
e) Gain to be calculated with reference to a theoretical free space half-wave dipole (see article 1).

f) Reference should be made to appendix 7.

g) When more than one locality is served list all localities; giving the location of the control point or points in all cases.

h) The maximum hours of use of the frequency shall be taken to mean the earliest and latest hours of use of this frequency for a complete day during all schedules for a complete sunspot cycle. For example: if during one period the schedule would be 1000 to 1500 hours (G.M.T.) and for another period of 1100 to 1600 hours (G.M.T.), the information to be shown will be 1000 to 1600 hours (G.M.T.).

i) In the case of forked fixed circuits the distance to each locality should be shown.

In the case of fixed networks, the maximum distance between any two stations should be shown.

In the case of emissions intended to serve a large geographical region the distance to the approximate centre of the region or the maximum and minimum distances of the extremes of the region may be furnished.

j) The information to be furnished under item 17 should include:

— in the case of telegraphy, the type of code used such as "on" "off" Morse — Frequency shift Morse — 7 unit code — Hell-Schreiber Facsimile, etc.;
— in the case of telephony, details such as the use of single sideband one or two channel working should be given.

In the case where the assigned frequency is not actually transmitted, the reference frequency should be given here.

k) The addresses required are those to which communication should be sent on urgent matters regarding interference, quality of emissions, and questions referring to the technical operation of the circuit (see article 14).

l) Any other useful data which might assist the International Frequency Registration Board should be furnished.

Morocco (cont'd)

6. Occupied bandwidth and class of emission [note g)].

7. Description of transmission [note h)].

8. Mean antenna power in kilowatts.

9a Azimuth of maximum radiation from true north (clockwise).

9b Angular width of the main lobe in the horizontal plane, in degrees [note i)].

9c Antenna gain in decibels (db) in direction of maximum radiation at the assigned frequency [note j)].

10. Maximum hours of use of each of the circuits (to each locality or region) for which the frequency is used (U.T.) [note k)].

11. Operating administration or company.

12. Postal and telegraphic address of centralizing office (see Article 14 of the present Regulations) under whose jurisdiction the station is placed.

13. Remarks [note l)].

Additional information: [note m)].

Notes

a) Use "kc/s" for any frequencies equal to or below 27,500 kc/s, and "Mc/s" for any frequencies above 27.5 Mc/s.

b) Enter only the call sign of the international series. When the call sign is established in accordance with 413 of the present Regulations an asterisk in line 3 should refer to line 13 in which the identification signals are recorded.

c) Only in degrees and minutes, except for radiowave navigation land stations for which the position should be given in degrees, minutes and seconds.

d) When more than one locality is served, list all localities. When a region and not a locality is indicated, this region must be clearly defined and sufficiently small to enable the frequency to be used allowing for propagation conditions.

e) In the case of fixed networks, the maximum distance between any two stations should be shown.

f) Use the symbols listed in Appendix 7 below.
g) See Article 2 of the present Regulations.

h) Designation of the transmission system and code used.

i) The angular width of the main lobe in the horizontal plane is the total angle, in degrees, within which the radiated power in any direction is not more than 6 db less than the power radiated in the direction of maximum radiation.

j) Gain to be calculated with reference to a theoretical free space half-wave dipole (see Article 1). If it is difficult to determine this gain, the administration should supply a scaled diagram of the directional network used.

k) The maximum hours of use of each of the circuits for which the frequency is used shall be taken to mean the earliest and latest hours of use of this frequency for a complete day during all schedules for a complete sunspot cycle, for each of the circuits listed under 4b. For example: if during one period the schedule would be 1000 to 1500 hours (U.T.) and for another period from 1100 to 1600 hours (U.T.) the information to be shown will be 1000–1600 hours (U.T.). Indicate with the letter “I” any periods during which the circuit is used intermittently.

l) When possible and appropriate, indicate the season and period (index) of solar activity during which the frequency is likely to be used, and whether it will be used during the daytime, the night-time or the transition period (in the emitting station).

If the present notification is the outcome of a regional or service agreement, describe the said agreement.

m) Any other useful data which might assist the International Frequency Registration Board should be supplied.
**United Kingdom**

**Form of Notice**

For use when notifying to the International Frequency Registration Board a change in frequency usage

(See Article II)

<table>
<thead>
<tr>
<th>Notifying Member or Associate Member</th>
<th>Additional assignment</th>
<th>Amendment* to an existing assignment</th>
<th>Cancellation of an assignment</th>
<th>Notice No.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For I. F. R. B. use

2c Date of use

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Call sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>kc/s</td>
<td>M/s</td>
</tr>
</tbody>
</table>

Ref. to preliminary telegr. notice

4a Location of transmitter:

Name Geographical position Country

4b Localities or areas of reception

<table>
<thead>
<tr>
<th>Length of circuit in kms</th>
<th>Azimuth of maximum radiation</th>
<th>Angular width of main radiation lobe</th>
<th>Antenna gain in db</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5 Class of station and nature of service

6 Bandwidth necessarily occupied and class of emission

7 Description of transmission

8 Peak power in kW

9 Hours of use of circuits G. M. T

10 Operating Administration or Company

11 Telegr. address:

12 Centralizing Office:

13 Remarks:

Co-ordination effected with the following interested Administrations:

*) The amended particulars are underlined
- Geographical position.
  Indicate the latitude and longitude of the transmitting station in degrees and minutes, except for radionavigation land stations, for which the position should be given in degrees, minutes, and seconds.

- Localities or areas of intended reception.
  When more than one locality or area is served, list all the specific localities or areas, giving the location of the receiver or receivers where appropriate.

- Length of circuit in Kms.
  In the case of forked fixed circuits the distance to each locality should be shown.
  In the case of fixed networks, the maximum distance between any two stations should be shown.
  In the case of emissions intended to serve a large geographical region the distance to the approximate centre of the region or the maximum and minimum distances of the extremes of the region may be furnished.

- Azimuth of maximum radiation.
  In degrees (clockwise) from true North.

- Angular width of main radiation lobe.
  The angular width of the main lobe in the horizontal plane is that total angle, in degrees, within which the radiated power in any direction is not more than 6 db less than the power radiated in the direction of maximum radiation.

- Antenna gain in db.
  Gain to be calculated with reference to a theoretical free space half-wave dipole (see Article 1).

- Class of station and nature of service.
  Reference should be made to Appendix 7.

- Bandwidth necessarily occupied and class of emission.
  Indicate the full designation of the emission in accordance with Article 2. Additional information regarding the emissions should be furnished under items 7 or 13.

- Description of transmission.
  The information to be furnished should include:
  — in the case of telegraphy, the type of code used such as "on" "off" Morse — Frequency
Present Provisions

Proposals

United Kingdom (cont'd)

shift Morse — 7 unit code — Hell-Schreiber Facsimile, etc.;

— in the case of telephony, details such as the use of single sideband one or two channel working should be given.

In the case where the assigned frequency is not actually transmitted, the reference frequency should be given here.

10 Hours of use of circuit (G. M. T.).

Indicate the maximum hours of use in G. M. T. of each circuit to each locality or area of intended reception. The maximum hours of use of the frequency shall be taken to mean the earliest and latest hours of use of this frequency for a complete day during all schedules for a complete sunspot cycle. For example: if during one period the schedule would be 1000 to 1500 hours (G. M. T.) and for another period of 1100 to 1600 hours (G. M. T.), the information to be shown will be 1000 – 1600 hours (G. M. T.).

12 Centralizing office.

The addresses required are those to which communication should be sent on urgent matters regarding interference, quality of emissions, and questions referring to the technical operation of the circuit (see Article 14).

13 Remarks.

Any other useful data which might assist the International Frequency Registration Board should be furnished.

2704 U. S. S. R.

APPENDIX I

Replace the present text by the following:

Form of Notice

For use when notifying a frequency assignment made to a fixed, land, broadcasting, radionavigation land, or standard frequency station to the International Frequency Registration Bureau.

1. Notifying Government

2. Date of notice

3. Reference to preliminary telegraphic notice (if any)

4. Assigned frequency in kc/s (or Mc/s).
APPENDIX 2

Report of an Irregularity or of an Infringement of the
Telecommunications Convention or of the Radio
Regulations

(See articles 13, 14, 15 and 23)

Particulars concerning the station
infringing the Regulations:

1. Name, if known (in BLOCK letters) [Note a]
2. Call sign (in BLOCK letters)
3. Nationality, if known
4. Frequency used (kc/s or Mc/s)
5. Class of Emission [Note b]

Particulars concerning the station, the centralizing office
or inspection service reporting the irregularity
or infringement:

6. Name (in BLOCK letters)
7. Call sign (in BLOCK letters)
8. Nationality
9. Approximate Position [Notes c and h]
Present Provisions

Details of the irregularity or infringement:

10. Name [Note d)] of the station (in BLOCK letters) in communication with the station committing the irregularity or infringement

11. Call sign (in BLOCK letters) of the station in communication with the station committing the irregularity or infringement

12. Time [Note e)] and date

13. Nature of the irregularity or infringement [Note f)]

14. Extracts from ship log and other documents supporting the report (to be continued on the back of the form, if necessary)

Information on the transmitting station which was subject to interference [Note g)]:

15. Name of the station (in BLOCK letters) which was subject to interference

16. Call sign (in BLOCK letters)

17. Frequency assigned (kc/s or Mc/s)

18. Frequency measured at the time of the interference

19. Class of emission and width of the band

20. Receiving location (in BLOCK letters) where the interference was troublesome [Notes c) and h)]

21. Certificate

I certify that the foregoing report represents, to the best of my knowledge, a complete and accurate account of what took place.

Date .................... 19...*)

*) This report must be signed by the operator who has reported the infringement and countersigned by the Master of the ship or aircraft, or the officer in charge of the station in the case of an infringement reported by a station of the mobile service.

When the report originates from a centralizing office or from an inspection service it must be signed by the head of that office or service and countersigned by an official of the administration transmitting it.

Instructions for Filling in This Form

Note a) Each report will refer only to one station [see Note d)].

Note b) See Article 2.

Note c) Applicable only to ships and aircraft; the position must be expressed either in latitude and longitude (Greenwich) or by a true bearing and distance in nautical miles, or in kilometres from some well known place.

Note d) If both communicating stations infringe the Regulations, a separate report shall be made for each of these stations.

France, French O. P. T. A., Morocco

2705 Information on the transmitting station which was subject to interference:

Replace the heading by:

Information on the transmission suffering interference [Note g)]:

Reasons

Not the transmitter, but the transmission, suffers interference.

2706 Item 15. Replace the present text by the following:

15. Name of the station (in BLOCK letters) the transmissions of which are suffering interference.

Reasons

It is not the transmitter itself which so suffers.
Present Provisions

Note e) The time must be expressed as Greenwich mean time (G.M.T.) by a group of four figures (0000 to 2400). If the infringement covers a considerable period of time, the times must be shown.

Note f) A separate report is required for each irregularity or infringement, unless they have obviously all been made by the same person and within a short time. All reports must be forwarded in duplicate and, whenever practicable, must be typewritten. (Indelible pencil and carbon paper may be used.)

Note g) This information is to be given only in case of a complaint about interference.

Note h) In the case of land or fixed stations position must be expressed in latitude and longitude (Greenwich).

For Use of Administrations Only

1. Company controlling the installation of the station against which complaint is made ................................................

2. Name of operator of the station held responsible for the irregularity or infringement of the Regulations ..............................

3. Action taken ........................................................................

APPENDIX 3

Table of Frequency Tolerances

(See article 17)

1. Frequency tolerance is defined in article 1.

2. For ship stations, in the absence of an assigned frequency (see article 11) to a particular ship or ship transmitter the substitute for the assigned frequency is that frequency on which an emission begins.

Proposals

France, French O.P.T.A., Morocco (cont'd)

2707 Note e) Replace: Greenwich mean time (G. M.T.) by: universal time (U.T.).

Reasons

France, French O.P.T.A.:

G.M.T. is Greenwich mean time, from 1200 to 1200 hours. In reality what is used is Greenwich local time, which is the same thing as universal time (U.T.). The International Astronomical Union has twice condemned the use of the expression G.M.T. instead of U.T. The footnote ** to Warsaw Recommendation 179 of the C.C.I.R. alludes to universal time.

Morocco:

To use universal time of the International Astronomical Union.

2708 France, French O.P.T.A.

In connection with Article 17, we suggested three alternative versions as to how these tolerances should be set out. We may be submitting proposals in greater detail at the Conference.
### Present Provisions

#### Table of Frequency Tolerances

<table>
<thead>
<tr>
<th>Frequency Bands and Categories of Stations</th>
<th>Tolerances (in %) applicable until January 1st 1953 to transmitters now in use and those to be installed before January 1st 1950</th>
<th>Tolerances (in %) applicable: — to new transmitters installed after January 1st 1950; — to all transmitters after January 1st 1953</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. From 10 to 535 kc/s.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Fixed Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>— from 10 to 50 kc/s,</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>— from 50 kc/s to end of band.</td>
<td>0.1</td>
<td>0.02</td>
</tr>
<tr>
<td>2. Land Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Coast Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>— power above 200 watts,</td>
<td>0.1</td>
<td>0.02</td>
</tr>
<tr>
<td>— power below 200 watts.</td>
<td>0.1</td>
<td>0.05</td>
</tr>
<tr>
<td>b) Aeronautical Stations.</td>
<td>0.1</td>
<td>0.02</td>
</tr>
<tr>
<td>3. Mobile Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>— Ship Stations,</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>— Aircraft Stations,</td>
<td>0.3</td>
<td>0.05</td>
</tr>
<tr>
<td>— Emergency (reserve) ship transmitters, and life-boat, liferaft and survival craft transmitters.</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>4. Radionavigation Stations.</td>
<td>0.05</td>
<td>0.02</td>
</tr>
<tr>
<td>5. Broadcasting Stations.</td>
<td>20 cycles per second</td>
<td>20 cycles per second</td>
</tr>
<tr>
<td><strong>B. From 535 to 1605 kc/s.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broadcasting Stations.</td>
<td>20 cycles per second</td>
<td>20 cycles per second</td>
</tr>
<tr>
<td><strong>C. From 1605 to 4000 kc/s.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Fixed Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>— power above 200 watts,</td>
<td>0.01</td>
<td>0.005</td>
</tr>
<tr>
<td>— power below 200 watts.</td>
<td>0.02</td>
<td>0.01</td>
</tr>
<tr>
<td>2. Land Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Coast Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>— power above 200 watts,</td>
<td>0.02</td>
<td>0.005</td>
</tr>
<tr>
<td>— power below 200 watts.</td>
<td>0.02</td>
<td>0.01</td>
</tr>
<tr>
<td>b) Aeronautical Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>— power above 200 watts,</td>
<td>0.02</td>
<td>0.005</td>
</tr>
<tr>
<td>— power below 200 watts.</td>
<td>0.02</td>
<td>0.01</td>
</tr>
<tr>
<td>c) Base Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>— power above 200 watts,</td>
<td>0.02</td>
<td>0.005</td>
</tr>
<tr>
<td>— power below 200 watts.</td>
<td>0.02</td>
<td>0.01</td>
</tr>
<tr>
<td>3. Mobile Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>— Ship Stations,</td>
<td>0.05</td>
<td>0.02</td>
</tr>
<tr>
<td>— Aircraft Stations,</td>
<td>0.05</td>
<td>0.02</td>
</tr>
<tr>
<td>— Land Mobile Stations.</td>
<td>0.05</td>
<td>0.02</td>
</tr>
<tr>
<td>4. Radionavigation Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>— power above 200 watts,</td>
<td>0.02</td>
<td>0.005</td>
</tr>
<tr>
<td>— power below 200 watts.</td>
<td>0.02</td>
<td>0.01</td>
</tr>
<tr>
<td>5. Broadcasting Stations.</td>
<td>0.005</td>
<td>0.005</td>
</tr>
</tbody>
</table>
Present Provisions

<table>
<thead>
<tr>
<th>Frequency Bands and Categories of Stations</th>
<th>Tolerances (in %) applicable until January 1st 1953 to transmitters now in use and those to be installed before January 1st 1950</th>
<th>Tolerances (in %) applicable: — to new transmitters installed after January 1st 1950; — to all transmitters after January 1st 1953</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>D. From 4000 to 30000 kc/s.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Fixed Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>— power above 500 watts,</td>
<td>0.01</td>
<td>0.003</td>
</tr>
<tr>
<td>— power below 500 watts.</td>
<td>0.02</td>
<td>0.01</td>
</tr>
<tr>
<td>2. Land Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>a) Coast Stations:</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>— power above 500 watts,</td>
<td>0.02</td>
<td>0.005</td>
</tr>
<tr>
<td>— power below 500 watts.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>b) Aeronautical Stations:</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>— power above 500 watts,</td>
<td>0.02</td>
<td>0.005</td>
</tr>
<tr>
<td>— power below 500 watts.</td>
<td>0.02</td>
<td>0.01</td>
</tr>
<tr>
<td><em>c) Base Stations:</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>— power above 500 watts,</td>
<td>0.02</td>
<td>0.005</td>
</tr>
<tr>
<td>— power below 500 watts.</td>
<td>0.02</td>
<td>0.01</td>
</tr>
<tr>
<td>3. Mobile Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>— Ship Stations,</td>
<td>0.05</td>
<td>0.02</td>
</tr>
<tr>
<td>— Aircraft Stations,</td>
<td>0.05</td>
<td>0.02</td>
</tr>
<tr>
<td>— Land Mobile Stations,</td>
<td>0.05</td>
<td>0.02</td>
</tr>
<tr>
<td>— Transmitters in lifeboats, liferafts and survival craft.</td>
<td>0.05</td>
<td>0.02</td>
</tr>
<tr>
<td>4. Broadcasting Stations.</td>
<td>0.005</td>
<td>0.003</td>
</tr>
<tr>
<td><strong>E. From 30 to 100 Mc/s.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Fixed Stations.</td>
<td>0.03</td>
<td>0.02</td>
</tr>
<tr>
<td>2. Land Stations.</td>
<td>0.03</td>
<td>0.02</td>
</tr>
<tr>
<td>3. Mobile Stations.</td>
<td>0.03</td>
<td>0.02</td>
</tr>
<tr>
<td>4. Radionavigation Stations.</td>
<td>0.02)</td>
<td>0.02)</td>
</tr>
<tr>
<td>5. Broadcasting Stations.</td>
<td>0.01</td>
<td>0.003</td>
</tr>
<tr>
<td><strong>F. From 100 to 500 Mc/s.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Fixed Stations.</td>
<td>0.03</td>
<td>0.01</td>
</tr>
<tr>
<td>2. Land Stations.</td>
<td>0.03</td>
<td>0.01</td>
</tr>
<tr>
<td>3. Mobile Stations.</td>
<td>0.03</td>
<td>0.01)</td>
</tr>
<tr>
<td>4. Radionavigation Stations.</td>
<td>0.02)</td>
<td>0.02)</td>
</tr>
<tr>
<td>5. Broadcasting Stations.</td>
<td>0.01</td>
<td>0.003</td>
</tr>
<tr>
<td><strong>G. From 500 to 10.500 Mc/s.</strong></td>
<td>0.75</td>
<td>0.75</td>
</tr>
</tbody>
</table>

Notes Referring to Table of Tolerances

1) It is recognized that certain countries will encounter difficulties in fitting, prior to 1953, all their ships with equipment which will satisfy the indicated tolerance; however, it is requested that these countries complete the necessary conversion as soon as possible.
Present Provisions

2) The frequency tolerance of 0.02% is maintained temporarily for fixed station transmitters now in operation using a power between 200 and 500 watts.

3) For this category, the final date of January 1st 1953, is extended until the date when the Radio Regulations of the next Conference are put into force.

4) In this band and for this category, it is recognized that certain countries are not sure that their equipment can satisfy a stricter frequency tolerance than that fixed for the 30-100 Mc/s band; however, these countries will endeavour to satisfy the tolerance for the band 100-500 Mc/s.

5) In bands E and F it is recognized that there are in service in category 4 pulse transmitters which cannot meet tolerances closer than 0.5%.

6) Frequency deviations are to be measured over a period not exceeding ten minutes from the commencement of an emission.

This provision, however, is applicable only to transmitters in service before January 1st, 1950 and until the replacement of these transmitters by modern equipment, and only in exclusive maritime mobile bands, and excepting such parts of these bands as are reserved for ship radiotelephony. Thereafter the frequency tolerances specified shall be adhered to during the whole period of an emission.

Proposals

2709 India

Replace the present table by the following:

Table of Frequency Tolerances

| Frequency Bands and Categories of Stations | Tolerances (in %) applicable until January 1st 1966 to transmitters now in use and those to be installed before January 1st 1964 | Tolerances (in %) applicable: to new transmitters installed after January 1st 1964; to all transmitters after January 1st 1966 |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A. From 10 to 535 kc/s:                 |                                                                                                                                                                                                                                                                  |
| 1. Fixed Stations:                      |                                                                                                                                                                                                                                                                  |
|  — from 10 to 50 kc/s,                  | 0.1                                                                                                                                                                                                                                                            |
|  — from 50 kc/s to end of band.         | 0.02                                                                                                                                                                                                                                                           |
| 2. Land Stations:                       |                                                                                                                                                                                                                                                                  |
|  a) Coast Stations:                     | 0.02                                                                                                                                                                                                                                                            |
|  — power above 200 watts,               | 0.05                                                                                                                                                                                                                                                            |
|  — power below 200 watts.               | 0.02                                                                                                                                                                                                                                                            |
|  b) Aeronautical Stations:              |                                                                                                                                                                                                                                                                  |
| 3. Mobile Stations:                     | 0.1                                                                                                                                                                                                                                                            |
|  — Ship Stations,                       | 0.05                                                                                                                                                                                                                                                            |
|  — Aircraft Stations                    | 0.5                                                                                                                                                                                                                                                             |
|  — Emergency (reserve) ship transmitters, and life-boat, liferaft and survival craft transmitters. | 0.02                                                                                                                                                                                                                                                            |
| 4. Radionavigation Stations.            | 20 cycles per second                                                                                                                                                                                                                                          |
| 5. Broadcasting Stations.              | 20 cycles per second                                                                                                                                                                                                                                          |

B. From 535 to 1 605 kc/s.

Broadcasting Stations.

20 cycles per second

C. From 1 605 to 4 000 kc/s.

1. Fixed Stations:
  — power above 200 watts,                   | 0.005                                                                                                                                                                                                                                                            |
  — power below 200 watts.                  | 0.01                                                                                                                                                                                                                                                            |
<table>
<thead>
<tr>
<th>Frequency Bands and Categories of Stations</th>
<th>Tolerances (in %) applicable until January 1st 1966 to transmitters now in use and those to be installed before January 1st 1964</th>
<th>Tolerances (in %) applicable: — to new transmitters installed after January 1st 1964; — to all transmitters after January 1st 1966</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Land Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Coast Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>— power above 200 watts,</td>
<td>0.005</td>
<td>0.005</td>
</tr>
<tr>
<td>— power below 200 watts</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>b) Aeronautical Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>0.005</td>
<td>0.005</td>
</tr>
<tr>
<td>— power below 200 watts</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>c) Base Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>— power above 200 watts,</td>
<td>0.005</td>
<td>0.005</td>
</tr>
<tr>
<td>— power below 200 watts</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>3. Mobile Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>— Ship Stations,</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>— Aircraft Stations,</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>— Land Mobile Stations.</td>
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<td>0.02</td>
</tr>
<tr>
<td>4. Radionavigation Stations:</td>
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<td></td>
</tr>
<tr>
<td>— power above 200 watts,</td>
<td>0.005</td>
<td>0.005</td>
</tr>
<tr>
<td>— power below 200 watts</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>5. Broadcasting Stations.</td>
<td>0.005</td>
<td>0.005</td>
</tr>
<tr>
<td>D. From 4000 to 30 000 kc/s.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Fixed Stations:</td>
<td>0.003</td>
<td>0.0015</td>
</tr>
<tr>
<td>— Power above 500 watts,</td>
<td>0.01</td>
<td>0.005</td>
</tr>
<tr>
<td>— power below 500 watts</td>
<td>0.01</td>
<td>0.005</td>
</tr>
<tr>
<td>2. Land Stations:</td>
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<td></td>
</tr>
<tr>
<td>a) Coastal and Aeronautical Stations:</td>
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<td>0.005</td>
</tr>
<tr>
<td>— power below 500 watts (Coastal)</td>
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<td>0.01</td>
</tr>
<tr>
<td>— power below 500 watts (Aeronautical)</td>
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<td>0.005</td>
</tr>
<tr>
<td>— power above 500 watts but below 5 kW.</td>
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</tr>
<tr>
<td>— power above 5 kW.</td>
<td>0.005</td>
<td>0.0015</td>
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<tr>
<td>b) Base Stations:</td>
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<td>0.005</td>
</tr>
<tr>
<td>— power above 500 watts,</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>— power below 500 watts</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>3. Mobile Stations:</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>— Ship Stations,</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>— Aircraft Stations,</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>— Land Mobile Stations,</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>— Transmitters in lifeboats, liferafts and survival craft.</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>4. Broadcasting Stations. *)</td>
<td>0.003</td>
<td>i) 50 cycles per second</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii) 100 cycles per second</td>
</tr>
<tr>
<td>E. From 30 to 100 Mc/s.</td>
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</tr>
<tr>
<td>1. Fixed Stations:</td>
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<td>0.02</td>
</tr>
<tr>
<td>— power of or below 200 watts,</td>
<td>0.02</td>
<td>0.03</td>
</tr>
<tr>
<td>— power above 200 watts</td>
<td>0.02</td>
<td>0.03</td>
</tr>
<tr>
<td>2. Land Stations:</td>
<td>0.02</td>
<td>0.005</td>
</tr>
<tr>
<td>— power of or below 5 watts,</td>
<td>0.02</td>
<td>0.002</td>
</tr>
<tr>
<td>— power above 5 watts</td>
<td>0.02</td>
<td>0.002</td>
</tr>
<tr>
<td>3. Mobile Stations:</td>
<td>0.02</td>
<td>0.005</td>
</tr>
<tr>
<td>— power of or below 5 watts,</td>
<td>0.02</td>
<td>0.002</td>
</tr>
<tr>
<td>— power above 5 watts</td>
<td>0.02</td>
<td>0.002</td>
</tr>
<tr>
<td>4. Radionavigation Stations.</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>5. Broadcasting Stations.</td>
<td>0.003</td>
<td>0.002</td>
</tr>
<tr>
<td>6. Television Broadcasting.</td>
<td>—</td>
<td>1000 cycles per second</td>
</tr>
<tr>
<td>7. Wide-Band Radio Relay.</td>
<td>—</td>
<td>0.02</td>
</tr>
</tbody>
</table>
### Frequency Bands and Categories of Stations

<table>
<thead>
<tr>
<th>Frequency Bands and Categories of Stations</th>
<th>Tolerances (in %) applicable until January 1st 1966 to transmitters now in use and those to be installed before January 1st 1964</th>
<th>Tolerances (in %) applicable:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>to new transmitters installed after January 1st 1964;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>to all transmitters after January 1st 1966</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>F. From 100 to 500 Mc/s.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Fixed Stations.</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>2. Land Stations.</td>
<td>0.01</td>
<td>0.002</td>
</tr>
<tr>
<td>3. Mobile Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>— Ship Stations on or near about 156.8 Mc/s,</td>
<td>0.01</td>
<td>0.002</td>
</tr>
<tr>
<td>— Other Ship Stations,</td>
<td>0.01</td>
<td>0.005</td>
</tr>
<tr>
<td>— Other Mobile Stations.</td>
<td>0.01</td>
<td>0.002</td>
</tr>
<tr>
<td>4. Radionavigation Stations.</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>5. Television Broadcasting (including Sound and Vision transmitters).</td>
<td>0.003</td>
<td>0.002</td>
</tr>
<tr>
<td>6. Wide-Band Radio Relay.</td>
<td>1000 cycles per second</td>
<td></td>
</tr>
<tr>
<td>7. Wide-Band Radio Relay.</td>
<td>—</td>
<td>0.01</td>
</tr>
<tr>
<td><strong>G. From 500 to 10,500 Mc/s.</strong></td>
<td></td>
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<tr>
<td>1. Wide-Band Radio Relay.</td>
<td>0.75</td>
<td>0.05 for some years^5^</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.03 afterwards</td>
</tr>
</tbody>
</table>

### Notes Referring to Table of Tolerances

1) Frequency tolerances for transmitters working on simultaneously shared channels shall be 50 c/s.

2) For other transmitters the frequency tolerance shall not exceed 100 c/s for each transmitter; the minimum separation of the assignments for the two transmitters is assumed as 10 kc/s.

3) For this category, the final date of coming into force of the tolerance figures is January 1st 1961 (in accordance with note 3, Appendix 3, Atlantic City Radio Regulations).

4) In bands E and F it is recognised that there are in service in category 4 pulse transmitters which cannot meet tolerances closer than 0.5 %.

5) For facilitating international interconnection of wide-band radio relay systems, administrations may apply the tolerances laid down for these systems as soon as possible before the stipulated dates.

6) The above tolerances are applicable to those stations which might cause international interference or which are used in international services.

### Reasons

Table of Frequency Tolerances

<table>
<thead>
<tr>
<th>Frequency Bands and Categories of Stations</th>
<th>Tolerances (in parts in 10^6) applicable until January 1st 1965 to transmitters now in use and those to be installed before January 1st 1963</th>
<th>Tolerances (in parts in 10^6) applicable:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>— to new transmitters installed after January 1st 1963;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>— to all transmitters after January 1st 1965</td>
</tr>
<tr>
<td><strong>A. From 10 to 535 kc/s.</strong></td>
<td></td>
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</tr>
<tr>
<td>1. Fixed Stations:</td>
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<td></td>
</tr>
<tr>
<td>— from 10 to 50 kc/s,</td>
<td>1 000</td>
<td>1 000</td>
</tr>
<tr>
<td>— from 50 kc/s to end of band.</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>2. Land Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Coast Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>— power more than 200 watts,</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>— power not more than 200 watts.</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>b) Aeronautical Stations.</td>
<td>200</td>
<td>100</td>
</tr>
<tr>
<td>3. Mobile Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Ship Stations,</td>
<td>1 000</td>
<td>1 000</td>
</tr>
<tr>
<td>— Aircraft Stations.</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>— Emergency (reserve) transmitters on ships, lifeboats, liferafts and survival craft.</td>
<td>5 000</td>
<td>5 000</td>
</tr>
<tr>
<td>4. Radionavigation Stations:</td>
<td>200</td>
<td>100</td>
</tr>
<tr>
<td>5. Broadcasting Stations:</td>
<td>20 c/s</td>
<td>10 c/s</td>
</tr>
<tr>
<td><strong>B. From 535 to 1 605 kc/s.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broadcasting Stations.</td>
<td>20 c/s</td>
<td>10 c/s</td>
</tr>
<tr>
<td><strong>C. From 1 605 to 4 000 kc/s.</strong></td>
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<td></td>
</tr>
<tr>
<td>1. Fixed Stations:</td>
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<td></td>
</tr>
<tr>
<td>— power more than 200 watts,</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>— power not more than 200 watts.</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>2. Land Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Coast Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>— power more than 200 watts,</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>— power not more than 200 watts.</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>b) Aeronautical Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>— power more than 200 watts,</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>— power not more than 200 watts.</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>c) Base Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>— power more than 200 watts,</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>— power not more than 200 watts.</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>3. Mobile Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Ship Stations,</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>b) Aircraft Stations,</td>
<td>200</td>
<td>100</td>
</tr>
<tr>
<td>c) Land Mobile Stations,</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>d) Emergency (reserve) transmitters on ships, lifeboats, liferafts and survival craft.</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Frequency Bands and Categories of Stations</td>
<td><strong>Tolerances (in parts in 10^6)</strong> applicable until January 1st 1965 to transmitters now in use and those to be installed before January 1st 1963</td>
<td><strong>Tolerances (in parts in 10^6)</strong> applicable:</td>
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<tr>
<td>------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------</td>
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<tr>
<td></td>
<td>2</td>
<td>— to new transmitters installed after January 1st 1963;</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>— to all transmitters after January 1st 1965</td>
</tr>
<tr>
<td>4. Radionavigation Stations:</td>
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<td></td>
</tr>
<tr>
<td>— power more than 200 watts,</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>— power not more than 200 watts.</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>5. Broadcasting Stations.</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. From 4,000 to 29,700 kc/s.</td>
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<tr>
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</tr>
<tr>
<td>— power more than 500 watts,</td>
<td>30</td>
<td>15</td>
</tr>
<tr>
<td>— power not more than 500 watts.</td>
<td>100</td>
<td>50</td>
</tr>
<tr>
<td>2. Land Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Coast Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>— power more than 5 kilowatts,</td>
<td>50</td>
<td>15</td>
</tr>
<tr>
<td>— power more than 500 watts, but not more</td>
<td>50</td>
<td>30</td>
</tr>
<tr>
<td>than 5 kilowatts,</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>— power not more than 500 watts.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Aeronautical Stations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>— power more than 5 kilowatts,</td>
<td>50</td>
<td>15</td>
</tr>
<tr>
<td>— power more than 500 watts, but not more</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>than 5 kilowatts,</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>— power not more than 500 watts.</td>
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<td></td>
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<tr>
<td>c) Base Stations:</td>
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<td></td>
</tr>
<tr>
<td>— power more than 500 watts,</td>
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<td>50</td>
</tr>
<tr>
<td>— power not more than 500 watts.</td>
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<td>100</td>
</tr>
<tr>
<td>3. Mobile Stations:</td>
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<td></td>
</tr>
<tr>
<td>a) Ship Stations:</td>
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<td></td>
</tr>
<tr>
<td>(i) class A1 emissions:</td>
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<td></td>
</tr>
<tr>
<td>— power more than 1 kilowatt,</td>
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<td>50</td>
</tr>
<tr>
<td>— power not more than 1 kilowatt.</td>
<td>200</td>
<td>100</td>
</tr>
<tr>
<td>(ii) emissions other than class A1:</td>
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<td></td>
</tr>
<tr>
<td>— power more than 1 kilowatt,</td>
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<td>30</td>
</tr>
<tr>
<td>— power more than 50 watts, but not more</td>
<td>200</td>
<td>50</td>
</tr>
<tr>
<td>than 1 kilowatt,</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>— power not more than 50 watts.</td>
<td>200</td>
<td>100(1)</td>
</tr>
<tr>
<td>b) Aircraft Stations.</td>
<td>200</td>
<td>100</td>
</tr>
<tr>
<td>c) Land Mobile Stations.</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>d) Emergency (reserve) transmitters on</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>ships, lifeboats, liferafts and survival</td>
<td></td>
<td></td>
</tr>
<tr>
<td>craft.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Broadcasting Stations.</td>
<td>30</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. From 29.7 to 100 Mc/s.</td>
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</tr>
<tr>
<td>1. Fixed Stations:</td>
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<tr>
<td>— power more than 50 watts,</td>
<td>200</td>
<td>20</td>
</tr>
<tr>
<td>— power not more than 50 watts.</td>
<td>200</td>
<td>50</td>
</tr>
<tr>
<td>2. Land Stations:</td>
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<td></td>
</tr>
<tr>
<td>— power more than 5 watts,</td>
<td>200</td>
<td>20</td>
</tr>
<tr>
<td>— power not more than 5 watts.</td>
<td>200</td>
<td>50</td>
</tr>
<tr>
<td>3. Mobile Stations:</td>
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<td></td>
</tr>
<tr>
<td>— power more than 5 watts,</td>
<td>200</td>
<td>20</td>
</tr>
<tr>
<td>— power not more than 5 watts.</td>
<td>200</td>
<td>50</td>
</tr>
<tr>
<td>4. Radionavigation Stations:</td>
<td>200</td>
<td>200</td>
</tr>
</tbody>
</table>
### Frequency Bands and Categories of Stations

<table>
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<tr>
<th></th>
<th>Tolerances (in parts in $10^6$) applicable until January 1st 1965 to transmitters now in use and those to be installed before January 1st 1963</th>
<th>Tolerances (in parts in $10^6$) applicable:</th>
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</thead>
<tbody>
<tr>
<td>5. Broadcasting Stations (Television Stations excluded):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>— power more than 50 watts,</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>— power not more than 50 watts.</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>6. Broadcasting Stations (Television Stations)$^a$):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>— power more than 50 watts,</td>
<td>30</td>
<td>1 000 c/s</td>
</tr>
<tr>
<td>— power not more than 50 watts.</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

#### F. From 100 to 470 Mc/s.

1. Fixed Stations:
   - power more than 50 watts, 100 20
   - power not more than 50 watts. 100 50

2. Land Stations:
   - Power more than 5 watts, 100 20
   - Power not more than 5 watts. 100 50

   a) Coast Stations:
      - power more than 5 watts, 100 20
      - power not more than 5 watts. 100 50

   b) Aeronautical Stations.
   c) Base Stations:
      - power more than 5 watts, 100 20
      - power not more than 5 watts. 100 50

3. Mobile Stations:
   a) Ship Stations:
      - in the international maritime mobile service, 100 20
      - in other services. 100 50

   b) Aircraft Stations.

   c) Transmitters on lifeboats, liferafts and survival craft.

   d) Land Mobile Stations:
      - power more than 5 watts, 100 20
      - power not more than 5 watts. 100 50

4. Radionavigation Stations:
   - power more than 5 watts, 200 50
   - power not more than 5 watts. 200 200

5. Broadcasting Stations (Television Stations excluded).

6. Broadcasting Stations (Television Stations)$^a$):
   - power more than 100 watts, 30 1 000 c/s
   - power not more than 100 watts. 30 100

#### G. From 470 to 2 450 Mc/s.

1. Fixed Stations:
   - power more than 100 watts, 7 500 100$^a$
   - power not more than 100 watts. 7 500 300$^a$

2. Land Stations.

3. Mobile Stations.

4. Radionavigation Stations (radar excluded):
   - power more than 5 watts, 7 500 300$^a$
   - power not more than 5 watts. 7 500 500
# Frequency Bands and Categories of Stations

<table>
<thead>
<tr>
<th>Frequency Bands and Categories of Stations</th>
<th>Tolerances (in parts in 10⁶) applicable until January 1st 1965 to transmitters now in use and those to be installed before January 1st 1963</th>
<th>Tolerances (in parts in 10⁶) applicable:</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Radionavigation Stations (radar):</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>— frequencies not more than 960 Mc/s.</td>
<td>7 500</td>
<td>300³)</td>
</tr>
<tr>
<td>— frequencies more than 960 Mc/s.</td>
<td>7 500</td>
<td>5 000</td>
</tr>
<tr>
<td>6. Broadcasting Stations (Television Stations excluded).</td>
<td>7 500</td>
<td>100</td>
</tr>
<tr>
<td>7. Broadcasting Stations (Television Stations):</td>
<td>From 470 to 960 Mc/s.</td>
<td>7 500</td>
</tr>
<tr>
<td>— power more than 100 watts.</td>
<td>7 500</td>
<td>100</td>
</tr>
<tr>
<td>— power not more than 100 watts.</td>
<td>7 500</td>
<td></td>
</tr>
<tr>
<td>H. From 2 450 to 10 500 Mc/s.</td>
<td>1. Fixed Stations:</td>
<td></td>
</tr>
<tr>
<td>— power more than 100 watts.</td>
<td>7 500</td>
<td>100³)</td>
</tr>
<tr>
<td>— power not more than 100 watts.</td>
<td>7 500</td>
<td>300³)</td>
</tr>
<tr>
<td>2. Land Stations.</td>
<td>7 500</td>
<td>300³)</td>
</tr>
<tr>
<td>3. Mobile Stations.</td>
<td>7 500</td>
<td>300³)</td>
</tr>
<tr>
<td>4. Radionavigation Stations (radar excluded).</td>
<td>7 500</td>
<td>2 000</td>
</tr>
<tr>
<td>5. Radionavigation Stations (radar).</td>
<td>7 500</td>
<td>5 000</td>
</tr>
</tbody>
</table>

### Notes Referring to Table of Tolerances

1) For certain ship transmitters using only frequencies below 13 Mc/s in tropical regions, the tolerance of 100 can be increased to 200. These transmitters are sometimes used in these parts of the world in the same circumstances as those of band 1 605 to 4 000 kc/s.

2) The frequency tolerances for television stations are applied to emissions for both the sound and the image.

3) For certain stations using the time division multiplex system, the frequency tolerance of 300 may read 500.

4) This tolerance applies only to such emissions for which the maximum bandwidth is 3 Mc/s; for larger bandwidth emissions a tolerance of 300 applies.

---

**2711 Morocco**

*Insert here the new Table of Frequency Tolerances which will be drawn up at the IXth Plenary Assembly of the C.C.I.R. (Los Angeles, 1959).*
Table of Frequency Tolerances

(See Article 17)

1. Frequency tolerance is defined in Article 1.

2. For ship stations, in the absence of an assigned frequency (see Article 11) to a particular ship or ship transmitter the substitute for the assigned frequency is that frequency on which an emission begins.

<table>
<thead>
<tr>
<th>Frequency Bands and Categories of Stations</th>
<th>Tolerances (in %) applicable until January 1st 1965 to transmitters now in use and those to be installed before January 1st 1963</th>
<th>Tolerances (in %) applicable: — to new transmitters installed after January 1st 1963; — to all transmitters after January 1st 1965</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. From 10 to 535 kc/s.</td>
<td>---------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1. Fixed Stations:</td>
<td>---------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>— from 10 to 50 kc/s,</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>— from 50 kc/s to end of band.</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>2. Land Stations:</td>
<td>---------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>— power above 200 watts,</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>— power of 200 watts or less.</td>
<td>0.05</td>
<td>0.05</td>
</tr>
<tr>
<td>3. Mobile Stations:</td>
<td>---------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>— Ship Stations,</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>— Aircraft Stations,</td>
<td>0.05</td>
<td>0.05</td>
</tr>
<tr>
<td>— Emergency (reserve) ship transmitters,</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>and lifeboat, liferaft and survival craft transmitters.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Radionavigation Stations.</td>
<td>0.02</td>
<td>0.01</td>
</tr>
<tr>
<td>5. Broadcasting Stations.</td>
<td>20 cycles per second,</td>
<td>10 cycles per second,</td>
</tr>
<tr>
<td>B. From 535 to 1 605 kc/s.</td>
<td>---------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Broadcasting Stations</td>
<td>20 cycles per second,</td>
<td>10 cycles per second,</td>
</tr>
<tr>
<td>C. From 1 605 to 4 000 kc/s.</td>
<td>---------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1. Fixed Stations:</td>
<td>---------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>— power above 200 watts,</td>
<td>0.005</td>
<td>0.005</td>
</tr>
<tr>
<td>— power of 200 watts or less.</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>2. Land Stations:</td>
<td>---------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>— power above 200 watts,</td>
<td>0.005</td>
<td>0.005</td>
</tr>
<tr>
<td>— power of 200 watts or less.</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>3. Mobile Stations.</td>
<td>---------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>4. Radionavigation Stations:</td>
<td>---------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>— power above 200 watts,</td>
<td>0.005</td>
<td>0.005</td>
</tr>
<tr>
<td>— power of 200 watts or less.</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>5. Broadcasting Stations.</td>
<td>---------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Frequency Bands and Categories of Stations</td>
<td>Tolerances (in %) applicable until January 1st 1965 to transmitters now in use and those to be installed before January 1st 1965</td>
<td>Tolerances (in %) applicable: — to new transmitters installed after January 1st 1963; — to all transmitters after January 1st 1965</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>D. From 4 000 to 30 000 kc/s.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Fixed Stations:</td>
<td>0.003 0.0015</td>
<td>0.005 0.005</td>
</tr>
<tr>
<td>2. Land Stations:</td>
<td>0.005 0.005</td>
<td>0.005 0.005</td>
</tr>
<tr>
<td>a) Coast Stations:</td>
<td>0.005 0.005</td>
<td>0.005 0.005</td>
</tr>
<tr>
<td>b) Other Land Stations:</td>
<td>0.005 0.005</td>
<td>0.005 0.005</td>
</tr>
<tr>
<td>3. Mobile Stations:</td>
<td>0.02 0.02</td>
<td>0.02 0.005</td>
</tr>
<tr>
<td>4. Broadcasting Stations.</td>
<td>0.003 0.0015</td>
<td>0.005 0.005</td>
</tr>
<tr>
<td>E. From 30 to 100 Me/s.†</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Fixed Stations:</td>
<td>0.02 0.003</td>
<td>0.02 0.02</td>
</tr>
<tr>
<td>2. Land Stations:</td>
<td>0.02 0.005</td>
<td>0.02 0.005</td>
</tr>
<tr>
<td>3. Mobile Stations:</td>
<td>0.02 0.005</td>
<td>0.02 0.005</td>
</tr>
<tr>
<td>4. Radionavigation Stations.</td>
<td>0.02 0.02</td>
<td>0.02 0.005</td>
</tr>
<tr>
<td>5. Broadcasting Stations:</td>
<td>0.003 0.002</td>
<td>0.005 0.005</td>
</tr>
<tr>
<td>— Sound Broadcasting Stations,</td>
<td>0.003 0.002</td>
<td>0.005 0.005</td>
</tr>
<tr>
<td>— Television Stations (sound and vision transmitters).</td>
<td>0.003 1 000 cycles per second‡</td>
<td>0.005 1 000 cycles per second‡</td>
</tr>
<tr>
<td>F. From 100 to 470 Me/s.‡</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Fixed Stations including wide-band radio relay systems.</td>
<td>0.01 0.01</td>
<td>0.01 0.01</td>
</tr>
<tr>
<td>2. Land Stations:</td>
<td>0.01 0.002</td>
<td>0.01 0.005</td>
</tr>
<tr>
<td>— excluding Aeronautical Stations,</td>
<td>0.01 0.002</td>
<td>0.01 0.005</td>
</tr>
<tr>
<td>— Aeronautical Stations.</td>
<td>0.01 0.005</td>
<td>0.01 0.005</td>
</tr>
<tr>
<td>3. Mobile Stations:</td>
<td>0.01＊ 0.0055</td>
<td>0.005 0.005</td>
</tr>
<tr>
<td>— Ship Stations,</td>
<td>0.01 0.0055</td>
<td>0.005 0.005</td>
</tr>
<tr>
<td>— Aircraft Stations,</td>
<td>0.01 0.0055</td>
<td>0.005 0.005</td>
</tr>
<tr>
<td>— Survival Craft transmitters,</td>
<td>0.01 0.0055</td>
<td>0.005 0.005</td>
</tr>
<tr>
<td>— Land Mobile Stations.</td>
<td>0.01＊ 0.0052</td>
<td>0.005 0.005</td>
</tr>
<tr>
<td>4. Radio-navigation Stations:</td>
<td>0.02 0.005</td>
<td>0.02 0.005</td>
</tr>
<tr>
<td>— excluding radar,</td>
<td>0.02 0.005</td>
<td>0.02 0.005</td>
</tr>
<tr>
<td>— Radar</td>
<td>0.02 0.005</td>
<td>0.02 0.005</td>
</tr>
<tr>
<td>5. Broadcasting Stations:</td>
<td>0.003 0.002</td>
<td>0.005 0.005</td>
</tr>
<tr>
<td>— Sound Broadcasting Stations,</td>
<td>0.003 0.002</td>
<td>0.005 0.005</td>
</tr>
<tr>
<td>— Television Stations (sound and vision transmitters).</td>
<td>0.003 1 000 cycles per second‡</td>
<td>0.005 1 000 cycles per second‡</td>
</tr>
</tbody>
</table>
Frequency Bands and Categories of Stations | Tolerances (in %) applicable until January 1st 1965 to transmitters now in use and those to be installed before January 1st 1963 | Tolerances (in %) applicable:— to new transmitters installed after January 1st 1963;— to all transmitters after January 1st 1965
---|---|---
1. Fixed Stations (including wide-band radio relay systems). | 0.05 | 0.03
2. Television Stations (sound and vision transmitters). | 0.75 | 5000 cycles per second
3. All Stations other than 1 and 2 above. | 0.75 | 0.1

**H. Above 2 450 Mc/s.**
1. Fixed Stations (including wide-band radio relay systems). | 0.75 | 0.03
2. All Stations other than 1 above. | 0.75 | 0.75 until C.C.I.R. opinion is available

**Notes Referring to Table of Tolerances**

1) These tolerances are applicable to those stations which might cause international interference or which are used in international services.

2) In sections E, F and G it is recognized that there are in service pulse transmitters which cannot meet tolerances closer than 0.5%, e.g. Navigational Services and Radio Astronomy.

3) In the case of television stations using offset carrier working it may be necessary to adopt a closer tolerance, e.g., 500 cycles per second was agreed at the European Broadcasting Conference, (Stockholm, 1952), for such stations.

4) In the frequency band 100 to 470 Mc/s and for this category, it is recognized that certain countries are not sure that their equipment can satisfy a stricter frequency tolerance than that fixed for the 30 to 100 Mc/s band; however, these countries will endeavour to satisfy the tolerance for the band 100 to 470 Mc/s.

5) For ship stations the tolerance should be 0.002% in the frequency band 156 to 162 Mc/s.

**Reasons**

In general, the figures in column 3 of the present table have been transferred to column 2 and C.C.I.R. Recommendation No. 148, paragraph 1, has been used to provide the figures for the new column 3. The obsolete footnotes have been deleted. Other revisions have been made mainly in the light of C.C.I.R. Recommendation No. 148.

**Present Provisions**

**APPENDIX 4**

**Table of Tolerances for the Intensity of Harmonics and Parasitic Emissions**

(See article 17)

<table>
<thead>
<tr>
<th>Frequency Band</th>
<th>Tolerances</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 to 30000 kc/s</td>
<td>The power (^2) of a harmonic or a parasitic emission must be at least 40 db below the power of the fundamental, and in no case shall it be above 200 milliwatts.(^3)</td>
</tr>
</tbody>
</table>

\(^1\) For mobile stations, endeavour will be made, as far as practicable, to reach the figures specified.

\(^2\) The power here referred to is the power supplied to the antenna on the frequency of the harmonic or of the parasitic emission.

\(^3\) The latter limiting figure refers to the mean power.
Proposals

2713  France, French O. P. T. A., Morocco

*Heading. Read:*

Table of Tolerances for the Intensity of out-of-band Spurious Radiation

(See Article 17)

2714  France, French O. P. T. A.

In connection with Article 17, we suggested three alternative versions as to how these tolerances should be set forth. We may be submitting proposals in greater detail at the Conference.

2715  India

*Replace the present text by the following:*

Table of Tolerances for the Intensity of Spurious Radiation

<table>
<thead>
<tr>
<th>Frequency band of the fundamental frequency of transmitters</th>
<th>Tolerances</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 kc/s to 30 Mc/s</td>
<td>a) The mean power supplied to the antenna of a spurious radiation, the mid-frequency of which lies between 10 kc/s and 60 Mc/s, should be at least 40 db below the power of the fundamental without exceeding the value of 200 mW and without the necessity of reducing this value below 10 mW.†</td>
</tr>
<tr>
<td></td>
<td>b) For any spurious radiation the mid-frequency of which is above 60 Mc/s, 200 mW in a) above shall be replaced by 25 mW, other provisions remaining the same.</td>
</tr>
</tbody>
</table>

† Tolerances applicable to new transmitters installed after January 1, 1964; to all transmitters after January 1, 1966.

† With a possible exception in the case of mobile transmitters.

Reasons

C.C.I.R. Recommendation No. 147 (Warsaw, 1956).

2716  Morocco

*Insert here the new table which will be drawn up at the IXth Plenary Assembly of the C.C.I.R. (Los Angeles, 1959).*
Table of Tolerances for the Intensity of Spurious Emissions\(^1\)
(See Article 17)

<table>
<thead>
<tr>
<th>Fundamental Frequency Band</th>
<th>Spurious Emission Frequency Band</th>
<th>Tolerances</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 to 30,000 kc/s</td>
<td>10 kc/s to 60 Mc/s</td>
<td>The mean power(^2) supplied to the antenna(^3) should be at least 40 db below the power of the fundamental without exceeding 200 mW.</td>
</tr>
<tr>
<td></td>
<td>Above 60 Mc/s</td>
<td>The mean power(^2) supplied to the antenna(^3) should be at least 40 db below the power of the fundamental without exceeding 25 mW.</td>
</tr>
<tr>
<td>Above 30,000 kc/s</td>
<td></td>
<td>The subject is being studied by C.C.I.R.(^4)</td>
</tr>
</tbody>
</table>

\(^1\) For mobile stations, endeavour will be made, as far as practicable, to reach the figures specified.
\(^2\) For any spurious emission the mid-frequency of which lies in the specified frequency band.
\(^3\) Spurious emissions from any part of the system other than from the antenna should not have an effect greater than that due to the maximum power specified for the emission of spurious frequencies from the antenna.
\(^4\) It is expected that C.C.I.R. will formulate a recommendation on this subject, which should include bands used for scatter propagation, at the IXth Plenary Assembly.

Reasons

Mainly to incorporate C.C.I.R. Recommendation No. 147, paragraphs 3 and 6.

Present provisions

APPENDIX 5

Band of Frequencies Required for Certain Types of Radiocommunication

The width of the frequency band which is necessary in the overall system, including both the transmitter and the receiver, for the proper reproduction at the receiver of the desired information, does not necessarily indicate the interfering characteristics of an emission.

For the determination of this necessary bandwidth, the following table may be considered as a guide. In the formulation of the table, the following working terms have been employed:

\[ B = \text{Telegraph speed in bauds.} \]
\[ \frac{N}{T} = \text{Maximum possible number of black plus white elements to be transmitted per second, in facsimile and television.} \]
\[ M = \text{Maximum modulation frequency expressed in cycles per second.} \]
\[ D = \frac{1}{2} \text{the difference between the maximum and minimum values of the instantaneous frequencies; } D \text{ being greater than } 2M, \text{ greater than } \frac{N}{T} \text{ or greater than } B, \text{ as the case may be. Instantaneous frequency is the rate of change of phase.} \]
\[ t = \text{Pulse length expressed in seconds.} \]
\[ K = \text{An overall numerical factor which differs according to the emission and depends upon the allowable signal distortion and, in television, the time lost from the inclusion of a synchronizing signal.} \]
# Present Provisions

Table of Necessary Bandwidths

<table>
<thead>
<tr>
<th>Description and Class of Emission</th>
<th>Necessary Bandwidth in Cycles per Second</th>
<th>Examples</th>
<th>Details</th>
<th>Designation of Emission</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. AMPLITUDE MODULATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuous wave Telegraphy</td>
<td>$BK$</td>
<td>Morse code at 25 words per minute, $B = 20$, Bandwidth: 100 c/s</td>
<td>0.1A1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$K = 5$ for fading circuits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$K = 3$ for non-fading circuits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Four channel multiplex, 7 unit code, 60 words per minute per channel, $B = 170$, $K = 5$, Bandwidth: 850 c/s</td>
<td>0.85A1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Telegraphy modulated at audio frequency</td>
<td>$BK + 2M$</td>
<td>Morse code at 25 words per minute with 1000-cycle tone, $B = 20$, Bandwidth: 2 100 c/s</td>
<td>2.1A2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$K = 5$ for fading circuits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$K = 3$ for non-fading circuits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial Telephony</td>
<td>$M$, for single sideband</td>
<td>For ordinary single sideband telephony, $M = 3000$</td>
<td>3A3a</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$2M$, for double sideband</td>
<td>For high-quality single sideband telephony, $M = 4 000$</td>
<td>4A3a</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broadcasting</td>
<td>$2M$</td>
<td>$M$ may vary between 4 000 and 10 000 depending upon the quality desired.</td>
<td>8A3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facsimile</td>
<td>$\frac{KN}{T} + 2M$</td>
<td>The total number of picture elements (black and white) transmitted per second = the circumference of the cylinder (height of picture) × number of lines per unit length × speed of rotation of cylinder in revolutions per second</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carrier modulated by tone and by keying</td>
<td>$K = 1.5$</td>
<td>Diameter of cylinder = 70 mm. Number of lines per mm = 3.77 Speed of rotation 1 turn per second</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Frequency of modulation = 1 800 c/s Bandwidth: 3 600 + 1 242 = 4 842 c/s</td>
<td>4.84A4</td>
<td></td>
</tr>
<tr>
<td>Television</td>
<td>$\frac{KN}{T}$</td>
<td>The total number of picture elements (black and white) transmitted per second = the number of lines forming each image × number of elements per line × number of pictures transmitted per second.</td>
<td>9 000A5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$K = 1.5$ (this allows for synchronization and filter shaping)</td>
<td>Note: This band can be appropriately reduced when asymmetrical transmission is employed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Number of lines = 500 Number of elements per line = 500 Number of pictures per second = 25 Bandwidth: approximately 9 Mc/s</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Present Provisions

<table>
<thead>
<tr>
<th>Description and Class of Emission</th>
<th>Necessary Bandwidth in Cycles per Second</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Details</td>
<td>Designation of Emission</td>
</tr>
<tr>
<td><strong>II. FREQUENCY MODULATION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency-shift Telegraphy</td>
<td>$BK + 2D$</td>
<td>Four-channel multiplex with 7-unit code. 60 words per minute per channel $B = 170$, $K = 5$, $D = 425$. Bandwidth: 1700 c/s</td>
</tr>
<tr>
<td>F1</td>
<td>$K = 5$ for fading circuits</td>
<td>1.7F1</td>
</tr>
<tr>
<td></td>
<td>$K = 3$ for non-fading circuits</td>
<td></td>
</tr>
<tr>
<td>Commercial Telephony and Broadcasting</td>
<td>$2M + 2DK$</td>
<td>For an average case of commercial telephony with $D = 15000$, $M = 3000$ Bandwidth: 36 000 c/s</td>
</tr>
<tr>
<td>F3</td>
<td>For commercial telephony, $K = 1$. For high-fidelity transmission, higher values of $K$ may be necessary</td>
<td>36F3</td>
</tr>
<tr>
<td>Facsimile</td>
<td>$KN + 2M + 2D$</td>
<td>(See facsimile, amplitude modulation) Cylinder diameter = 70 mm Lines per mm = 3.77 Cylinder speed = 1 rps Modulation tone = 1800 c/s $D = 10000$ c/s Bandwidth: 25 000 c/s (approximately)</td>
</tr>
<tr>
<td>F4</td>
<td>$K = 1.5$</td>
<td>25F4</td>
</tr>
</tbody>
</table>

## III. PULSE EMISSIONS

<table>
<thead>
<tr>
<th>Description and Class of Emission</th>
<th>Necessary Bandwidth in Cycles per Second</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Details</td>
<td>Designation of Emission</td>
</tr>
<tr>
<td>Unmodulated pulse</td>
<td>$\frac{K}{2} \cdot T$</td>
<td>$T = 3 \times 10^{-6}$ $K = 6$ Bandwidth: $4 \times 10^4$ c/s</td>
</tr>
<tr>
<td>P0</td>
<td>$K$ varies from 1 to 10 according to the permissible deviation in each particular case from a rectangular pulse shape. In many cases the value of $K$ does not need to exceed 6.</td>
<td>4 000P0</td>
</tr>
<tr>
<td>Modulated pulse</td>
<td>The bandwidth depends upon the particular types of modulation used, many of these being still in the development stage.</td>
<td>—</td>
</tr>
</tbody>
</table>
Proposals

2718 France, French O. P. T. A., Morocco

Heading. Read:

Bandwidths Required for Certain Types of Radiocommunication

2719 France, French O. P. T. A.

In connection with Article 17, we suggested three alternative ways in which these bandwidths might be set out. We may submit proposals in greater detail at the Conference.

2720 India

Heading. Read: Bandwidth Necessarily Occupied by Emissions in Certain Types of Radiocommunication.

2721 Replace the first two sub-paragraphs by:

The bandwidth necessarily occupied in the overall system, including both the transmitter and the receiver, does not necessarily indicate the interfering characteristics of an emission.

For the determination of the bandwidth necessarily occupied by an emission, the following table may be considered as a guide:

2722 Table in Appendix 5

Replace the present title of the table by the following:

Table of bandwidth necessarily occupied

2723 Replace the heading of column 2 by:

Bandwidth necessarily occupied in c/s.

2724 Section I. AMPLITUDE MODULATION. Commercial Telephony A 3.

Replace the present text of Columns 3 and 4 by:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>For ordinary double sideband</td>
<td>M = 3000</td>
<td>6A3</td>
</tr>
<tr>
<td>telephony:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>For ordinary single sideband</td>
<td>M = 3000</td>
<td>3A3a</td>
</tr>
<tr>
<td>telephony:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>For high-quality single sideband telephony:</td>
<td>M = 4000</td>
<td>4A3a</td>
</tr>
<tr>
<td>For ordinary telephony two independent sidebands, reduced carriers:</td>
<td>M = 3000</td>
<td>6A3b</td>
</tr>
<tr>
<td>For high quality telephony, two independent sidebands, reduced carriers:</td>
<td>M = 6000</td>
<td>12A3b</td>
</tr>
</tbody>
</table>
Section II. FREQUENCY MODULATION. Frequency-shift Telegraphy.

Replace the present text of Columns 2, 3 and 4 by:

<table>
<thead>
<tr>
<th>Condition</th>
<th>Equation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>$2.5D + 0.5B$ for $2.5 &lt; 2D \leq 8 \frac{B}{D}$</td>
<td>$2D + 2.5B$ for $8 &lt; 2D \leq 20 \frac{B}{D}$</td>
<td>Four-channel Multiplex with 7 unit code 60 words/min. per channel. $B = 170$ and $D = 425$; Bandwidth = 1150 c/s</td>
</tr>
</tbody>
</table>

Section III. PULSE EMISSIONS. Modulated pulse.

In Column 1, delete: P2 or P3.

Reasons
2. See proposals for Article 2.

Japan

2727 The title and the preamble to be amended as follows:

Bandwidth Necessarily Occupied by an Emission for Certain Types of Radiocommunication.

(See Articles 2 and 17)

For the determination of bandwidth necessarily occupied by an emission, the following table may be considered as a guide. In the case of absence in this table, the bandwidth necessarily occupied by an emission may be determined by computation in accordance with the latest C.C.I.R. recommendations. And in the absence of such recommendations, it may be determined by measurement in accordance with any available method given in the C.C.I.R. recommendations. In the formulation of the table, the following working terms have been employed: ... (remainder of preamble unchanged).
Table of Bandwidths Necessarily Occupied

<table>
<thead>
<tr>
<th>Description and Class of Emission</th>
<th>Bandwidth Necessarily Occupied in Cycles per Second</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Details</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Designation of Emission</td>
</tr>
</tbody>
</table>

I. AMPLITUDE MODULATION

(remainder unchanged.)

Morocco

Insert here the text of the Recommendation which will be issued on this subject by the IXth Plenary Assembly of the C.C.I.R. (Los Angeles, 1959).

United Kingdom

Replace the present text by the following:

Bandwidth Necessarily Occupied by an Emission

The bandwidth in the overall system, including both the transmitter and the receiver, necessarily occupied by an emission for the proper reproduction at the receiver of the desired information, does not necessarily indicate the interfering characteristics of the emission.

For the determination of bandwidth necessarily occupied by an emission, the following table may be considered as a guide.

In the formulation of the table, the following working terms have been employed:

B = Telegraph speed in bauds.
N = Maximum possible number of black plus white elements to be transmitted per second in facsimile and television.
M = Maximum modulation frequency in cycles per second.
C = Sub-carrier frequency in cycles per second.
D = Half the difference between the maximum and minimum values of the instantaneous frequencies. Instantaneous frequency is the rate of change of phase.
t = Pulse duration in seconds.
K = An overall numerical factor which differs according to the emission. It depends upon the allowable signal distortion and upon the ratio of pulse duration to rise time.
### Table of Bandwidths Necessarily Occupied by Emissions

<table>
<thead>
<tr>
<th>Description and Class of Emission</th>
<th>Bandwidth Necessarily Occupied by the Emission in c/s</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. AMPLITUDE MODULATION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuous Wave Telegraphy</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>BK</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$K = 5$ for fading circuits</td>
<td>Morse code at 25 words per minute, $B = 20$, $K = 5$.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bandwidth: 100 c/s</td>
</tr>
<tr>
<td></td>
<td><strong>A1</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$K = 3$ for non-fading circuits</td>
<td>Four channel time-division multiplex, 7-unit code, 42.5 bauds per channel.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bandwidth: 850 c/s</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>BK + 2M</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$K = 5$ for fading circuits</td>
<td>Morse code at 25 words per minute with 1000 c/s tone, $B = 20$, $M = 1000$, $K = 5$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bandwidth: 2 100 c/s</td>
</tr>
<tr>
<td></td>
<td><strong>A2</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$K = 3$ for non-fading circuits</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>M</strong> for single sideband</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>A3</strong></td>
<td>Ordinary single sideband telephony $M = 3000$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bandwidth: 3 000 c/s</td>
</tr>
<tr>
<td></td>
<td><strong>2M</strong></td>
<td>Speech and music $M = 4 500$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bandwidth: 9 000 c/s</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Broadcasting</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>A3</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>2M</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Television</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>A5</strong></td>
<td>C.C.I.R. Report No. 83 (Warsaw, 1956) gives the bandwidths of the commonly-used television systems.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facsimile by frequency-modulating a sub-carrier which in turn amplitude modulates the main carrier</td>
<td><strong>KN + 2C + 2D</strong></td>
<td>The total number of picture elements (black and white) transmitted per second = the circumference of the cylinder x number of lines per unit length x speed of rotation of cylinder in revolutions per second.</td>
</tr>
<tr>
<td></td>
<td>$K = 1.5$</td>
<td>Number of lines per mm. $= \frac{16}{3}$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Speed of rotation = 60 r.p.m.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$N = 1 100$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$C = 1 900$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$D = 400$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bandwidth: 6 250 c/s</td>
</tr>
<tr>
<td></td>
<td><strong>A7a</strong></td>
<td>Bandwidth: 3 125 c/s</td>
</tr>
</tbody>
</table>
## II. FREQUENCY MODULATION

<table>
<thead>
<tr>
<th>Description and Class of Emission</th>
<th>Bandwidth Necessarily Occupied by the Emission in c/s</th>
<th>Examples</th>
<th>Details</th>
<th>Designation of Emission</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frequency-shift Telegraphy</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F1</td>
<td>$2.5D + 0.5B$ for $2.5 \leq 2D \leq 8$</td>
<td>Two-channel time-division multiplex with 7-unit code, 50 bauds per channel</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$2D + 2.5B$ for $8 \leq 2D \leq 20$</td>
<td>B = 100</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>D = 200</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bandwidth: 550 c/s</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.55 F1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Commercial Telephony and Broadcasting</strong></td>
<td>2M + 2DK</td>
<td>For an average case of commercial telephony with</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F3</td>
<td></td>
<td>D = 15 000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M = 3 000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bandwidth: 36 000 c/s</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>36 F3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Four-frequency Diplex Telegraphy</strong></td>
<td>If the channels are not synchronized the bandwidth is:</td>
<td>Four-frequency diplex system with 400 c/s spacing between frequencies, channels not synchronized; 100 bauds keying in each channel.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F6</td>
<td>$2.5D + 2.5B$ where B is the speed of the higher speed channel</td>
<td>D = 600</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>If the channels are synchronized the bandwidth is as for F1, B being the speed of either channel.</td>
<td>B = 100</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bandwidth: 1 750 c/s</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.75 F6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## III. PULSE EMISSIONS

<table>
<thead>
<tr>
<th>Description</th>
<th>Bandwidth Necessarily Occupied by the Emission in c/s</th>
<th>Examples</th>
<th>Details</th>
<th>Designation of Emission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrier amplitude modulated by pulses which are themselves unmodulated</td>
<td>$2K$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P0</td>
<td></td>
<td>$t = 3 \times 10^{-6}$</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$K$ varies from 1 to 10 according to the permissible deviation in each particular case from a rectangular pulse shape. In many cases the value of $K$ does not need to exceed 6.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>$K = 6$</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bandwidth: $4 \times 10^6$ c/s</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4000 P0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modulated Pulse P2 or P3</td>
<td></td>
<td>The bandwidth depends on the particular types of modulation used, many of these being still in the development stage.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Reasons

The revised appendix takes account of the proposal for 83 (proposals 348) and of C.C.I.R. Recommendation 145. It also represents a general simplification and bringing up to date of the existing appendix.

### India

2731 *Add the following new appendix:*

**APPENDIX 5 bis**

**Standard Frequency and Time Broadcast Service**

The standard frequency and time broadcast service shall conform to the following specifications:
1. a standard frequency transmission should comprise a standard carrier frequency, modulated by time signals and, if desired, by one or more standard audio frequencies;

2. the standard audio frequencies should be chosen preferably from 440, 600, or 1 000 c/s;

3. the time signals should consist of impulses repeated at intervals of one second and maintained within 50 milliseconds of universal time UT2;

4. the impulses should consist preferably of N cycles of 200 n c/s tone; where N is an integral number limited by the bands allotted for standard frequency transmissions and time signals;

5. the first impulse of each minute should be prolonged so as to be easily identified;

6. preferably the time signals should be transmitted without any other modulation for periods of 60 seconds or more and a total of at least 10 minutes per hour;

7. each standard frequency station should have a silent period of at least 4 minutes per hour;

8. the frequencies transmitted should be accurate within $\pm 2 \text{ parts in } 10^{-8}$;

9. the time intervals transmitted should be accurate within $\pm 2 \text{ parts in } 10^{-8} \pm \text{microsecond}$;

10. the requirements of paragraphs 8 and 9 should be realised by direct or indirect reference to an atomic or molecular frequency standard e.g., that based on the Cesium Fm(4.0) $\leftrightarrow (3.0)$ resonance at zero field (9 192 631 830 ± 10 c/s).

Reasons

See proposals 1393 et seq.

APPENDIX 5 ter

Four Frequency Diplex Systems

1. The preferred values for spacing between adjacent frequencies used in Four Frequency Diplex Systems as given in the table below should be adopted:

<table>
<thead>
<tr>
<th>Spacing between adjacent frequencies (c/s)</th>
<th>Nominal Telegraph Speed of each channel (bauds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>over 300</td>
</tr>
<tr>
<td>500 *)</td>
<td>200 to 300</td>
</tr>
<tr>
<td>400 *)</td>
<td>100 to 200</td>
</tr>
<tr>
<td>200 or 250 *)</td>
<td>below 100</td>
</tr>
</tbody>
</table>

*) Lower telegraph speeds may be used with both these spacings at present.

2. The value of the frequency separation between adjacent frequencies employed should be the lowest of the preferred values compatible with the maximum telegraph speeds regularly used, the propagation conditions and the equipment stability;

3. In cases where the two channels are not synchronized, it is desirable to limit the maximum rate of change of frequency in order to minimise the bandwidth of the emission.

Reasons

APPENDIX 6

Service Documents

(See Articles 10, 11 and 20)

List I. International Frequency List

| Assigned Frequency (kc/s or Mc/s) | Of registration | Of notification | Of putting into service | Call sign | Name, geographical position(s) of transmitting station and indication of country to which the station belongs | Locality or area(s) with which it is intended to establish communication | Length of circuit (kms) | Class of station and nature of service | Class and bandwidth of emission | Description of transmission | Power in kW | Azimuth of maximum radiation of antenna, in degrees (clockwise) from true north | Angular width of main lobe in the horizontal plane, in degrees | Gain of the antenna in decibels (dB) in maximum radiation at the assigned frequency | Maximum schedule of use in G.M.T. | Operating Administration or Company | Postal and telegraphic address of controlling office responsible for control of station (see art. 14) | Remarks |
|----------------------------------|-----------------|-----------------|-------------------------|-----------|-----------------------------------------------------------------|-----------------------------------------------------------------|------------------------|-------------------------------|---------------------------------|-----------------------------|-----------|----------------------------------|----------------------------------|----------------------------------|-------------------------------|----------------------------------|-----------------------------|
| 1      | 2a               | 2b              | 2c                      | 3         | 4a                                                               | 4b                                                               | 4c                     | 5                              | 6                              | 7                           | 8         | 9a                                | 9b                                | 9c                              | 10                            | 11                           | 12                           | 13                           |

1) For exact significance of these dates see article 11.

2) In degrees and minutes (Meridian of Greenwich), except for radionavigation stations for which the position should be given in degrees, minutes, and seconds.

3) Columns 11 and 12 will contain only reference numbers to lists to be printed in the front of the volume.

4) See appendix 1.

Proposals

France, French O. P. T. A., Morocco

2733 List I. Column 2 c: Does not affect the English text.

2734 Column 10. Read:

Maximum schedule of use for each of the circuits for which the frequency is used (U.T.).
### List I. International Frequency List

<table>
<thead>
<tr>
<th>Assigned frequency (kc/s or Mc/s)</th>
<th>Dates</th>
<th>Circuits</th>
<th>Power in kW</th>
<th>Class and bandwidth of emission</th>
<th>Description of transmission</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Call sign</td>
<td>Assigned frequency of registration</td>
<td>Assigned frequency of putting into service</td>
<td>Name, geographical position of transmitting station and indication of country to which the station belongs</td>
<td>Locality or area(s) with which communications are established</td>
<td>Class of station and nature of service</td>
<td>Operating Administration or Company</td>
</tr>
<tr>
<td>Remarks</td>
<td>Call sign of registration</td>
<td>Call sign of putting into service</td>
<td>Name of transmitting station and indication of country to which the station belongs</td>
<td>Locality or area(s) with which communications are established</td>
<td>Class of station and nature of service</td>
<td>Remarks</td>
</tr>
<tr>
<td>Dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2a</td>
<td>2b</td>
<td>2c</td>
<td>3</td>
<td>4a</td>
<td>4b</td>
</tr>
</tbody>
</table>

#### United Kingdom

After List I add a new section:

**APPENDIX 6**

**List IA. List of frequency assignments shown in List I (International Frequency List)**

<table>
<thead>
<tr>
<th>Assigned frequency (kc/s or Mc/s)</th>
<th>Call sign</th>
<th>Circuits</th>
<th>Power in kW</th>
<th>Maximum schedule of use in G.M.T.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assigned frequency</td>
<td>Call sign</td>
<td>Name, geographical position of transmitting station and indication of country to which the station belongs</td>
<td>Locality or area(s) with which it is intended to establish communication</td>
<td>Class of station and nature of service</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3a</td>
<td>3b</td>
<td>3c</td>
</tr>
</tbody>
</table>

1) In degrees and minutes (Meridian of Greenwich) except for radionavigation stations for which the position should be given in degrees, minutes and seconds.

**Reasons**

Consequential on proposal 1453.
Present Provisions

List II. List of Fixed Stations

(Index to the List of Frequencies of fixed stations shown in List I)

Alphabetical index of stations arranged:

a) by stations

<table>
<thead>
<tr>
<th>Station</th>
<th>Call sign</th>
<th>Frequency kc/s or Mc/s</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1) The distinguishing call sign of each frequency must be indicated opposite this frequency.

b) by countries

<table>
<thead>
<tr>
<th>Station</th>
<th>Call sign</th>
<th>Frequency kc/s or Mc/s</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1) The distinguishing call sign of each frequency must be indicated opposite this frequency.

Proposals

2737

France, French O. P. T. A.

List II. Replace the present text by the following:

List II. List of Fixed Stations

(Index to the Frequency List for the fixed stations mentioned in List I.)

Alphabetical List of stations classified:

a) by stations:

| Station | see Part b), page(s)...
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

b) by countries:

<table>
<thead>
<tr>
<th>Station</th>
<th>Call Sign</th>
<th>Frequency kc/s or Mc/s</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

1) The particular call sign for each frequency shall be shown opposite it.

Reasons

Since Part b) shows the frequencies and call signs in use at every station, there is no call to repeat them in Part a). In this part, a line would suffice for the entry of each station. The result would be that this unwieldy volume could be cut down by some 40%.
List II. List of Fixed Stations

(Index to the List of Frequencies of fixed stations shown in Lists I and IA.)

Alphabetical index of stations arranged by countries

<table>
<thead>
<tr>
<th>Station</th>
<th>Call Sign</th>
<th>Frequency kc/s or Mc/s</th>
<th>Remarks</th>
</tr>
</thead>
</table>

1) The distinguishing call sign of each frequency must be indicated opposite this frequency.

Reasons

Consequential on proposal for 1454.

Present provisions

List III. List of Broadcasting Stations

Part A. Alphabetical index of stations

<table>
<thead>
<tr>
<th>Name of the station</th>
<th>Call sign</th>
<th>See Part B, page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Part B. Particulars of stations

1. LF, MF and HF broadcasting stations using AM.

{ Name of the country } { Names of the stations } in alphabetical order.

<table>
<thead>
<tr>
<th>Name of the station</th>
<th>Call sign</th>
<th>Frequencies kc/s</th>
<th>Latitude and longitude of the transmitting antenna, in degrees and minutes</th>
<th>Power kW</th>
<th>Name and address of the administration or operating agency</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

2) The identifying call sign of each frequency must be shown opposite that frequency.
Present Provisions

2. FM broadcasting stations.

Name of the country Names of the stations in alphabetical order.

<table>
<thead>
<tr>
<th>Name of the station</th>
<th>Call sign</th>
<th>Frequencies Mc/s</th>
<th>Latitude and longitude of the transmitting antenna, in degrees and minutes</th>
<th>Power kW</th>
<th>Name and address of the administration or operating agency</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

3. Television broadcasting stations.

Name of the country Names of the stations in alphabetical order.

<table>
<thead>
<tr>
<th>Name of the station</th>
<th>Call sign</th>
<th>Channel limits, Mc/s</th>
<th>Frequencies</th>
<th>Television carrier, Mc/s</th>
<th>Sound carrier Mc/s</th>
<th>Latitude and longitude of the transmitting antenna, in degrees and minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Television Channel, kW</th>
<th>Sound Channel, kW</th>
<th>Television Channel</th>
<th>Sound Channel</th>
<th>Name and address of the administration or operating agency</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
</tr>
</tbody>
</table>

4. Facsimile broadcasting stations.

Name of the country Names of the stations in alphabetical order.

<table>
<thead>
<tr>
<th>Name of the station</th>
<th>Call sign</th>
<th>Frequency Mc/s</th>
<th>Latitude and longitude of the transmitting antenna, in degrees and minutes</th>
<th>Power kW</th>
<th>Class of emission</th>
<th>Name and address of the administration or operating agency</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>
Proposals

India

List III. **Delete**: 4. Facsimile Broadcasting Stations and the corresponding table.

**Reasons**

The list of Broadcasting Stations published by the I.T.U. does not contain the Facsimile Broadcasting Stations.

United Kingdom

List III, Part B. **Amend tabular matter in each sub-section (1-4) as follows:**

<table>
<thead>
<tr>
<th>Frequencies</th>
<th>Name of the station</th>
<th>Call sign</th>
<th>Latitude and longitude of the transmitting antenna, in degrees and minutes</th>
<th>Locality(ies), country(ies) or area(s) of reception</th>
<th>Power kW</th>
<th>Azimuth of radiation</th>
<th>Hours of use</th>
<th>Administrations or operating agencies</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
</tbody>
</table>

**Reasons**

To provide for revised layout as in I.T.U. publication of 14th edition of the list.

**Present Provisions**

**List IV. List of Coast and Ship Stations**

- **Part A. Alphabetical index of coast stations**

<table>
<thead>
<tr>
<th>Name of the station</th>
<th>Call sign</th>
<th>See part B, page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Present Provisions

**Part B. Particulars of coast stations**

<table>
<thead>
<tr>
<th>Name of the country</th>
<th>Names of the stations</th>
<th>Emission</th>
<th>Service</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Frequencies</td>
<td>Class</td>
<td>Power</td>
</tr>
<tr>
<td></td>
<td></td>
<td>kc/s or Mc/s</td>
<td></td>
<td>kW</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1) The normal working frequency is printed in heavy type. In the case of duplex telephony, frequencies used for transmission and reception are indicated in conformity with 810.
2) Meridian of Greenwich in degrees, minutes and seconds.
3) In the case of directive antennae, indicate under the power, the azimuth of the direction or directions of maximum gain, in degrees, beginning from true north clockwise.
4) Greenwich mean time (G. M. T.).
5) The internal telegraph charge of the country to which the coast station is subject and the charge applied by this country to telegrams destined for adjacent countries are given at the end of the present List.
6) If the accounts for charges are settled by a private enterprise, the name and address of such private enterprise should be stated, if necessary.
7) Special information concerning the times for calling, for the transmission of traffic lists, and the times during which the coast station keeps watch on the various frequencies, etc.
8) There must be indicated, for each country, the coast station or coast stations to which radiotelegrams intended for high frequency transmission to ship stations must be sent.

**Part C. Particulars of ship stations**

The information concerning these stations is published in two or three lines in the following order:

1st line:
- call sign, name of the ship in alphabetical order irrespective of nationality, followed by the call sign in the case of duplication of names; in that case the name and the call sign are separated by a fraction bar; then the service symbols (see appendix 7);
- power in the antenna in kW;
- metre-amperes, between brackets, for frequency 500 kc/s.1)

To obtain the product “metre-amperes” the actual height of the aerial in metres from the loadline is multiplied by the effective current in amperes at the base of the aerial;
- nature of service;

1) If the Safety of Life at Sea Conference should adopt a different system of rating the normal range of a ship station, the information published here shall conform to the system adopted by that Conference.
Present Provisions

— hours of service in the form of a symbol or a reference.
Times indicated otherwise than by a symbol must be given in Greenwich mean time (G.M.T.).

2nd and 3rd lines:
— below the call sign is shown the ship charge, followed by a note to indicate the administration or private enterprise to which the accounts for charges must be addressed. In the case of change of address of the operating authority, a second note after the charge gives the new address and the date from which the change will take effect;
— when two or more ships of the same nationality bear the same name, and also where the accounts for charges must be sent direct to the owner of the ship, the name of the shipping line or of the firm to whom the ship belongs is given by means of a note;
— country to which the station is subject (abbreviated indication);
— indication of the classes of emission and frequency bands.

The bands of frequencies are indicated by means of the following abbreviations printed in heavy type:

\[\begin{align*}
  w &= 110 \text{ to } 150 \text{ kc/s} \\
  x &= 405 \text{ to } 535 \text{ kc/s} \\
  y &= 1605 \text{ to } 2850 \text{ kc/s} \\
  z &= 4000 \text{ to } 23000 \text{ kc/s} \\
  v &= 152 \text{ to } 162 \text{ Mc/s}
\end{align*}\]

These abbreviations are printed at the foot of every second page of the List.
These abbreviations are, if necessary, followed by references to brief notes and indications of the frequencies for which the transmitter is adjusted, the normal working frequencies being printed in heavy type, which appear at the end of the List.

Proposals

Belgium

2741 List IV. Replace the title by:
List of Coast Stations
Part A. Unchanged.
Part B. Unchanged.
Delete Part C. Particulars of Ship Stations and replace by:

List IV bis. List of Ship Stations.
Particulars of Ship Stations.
In the abbreviations for bands of frequencies, read:
\[
y = 1605 \text{ to } 3800 \text{ kc/s}
\]
\[
v = 156 \text{ to } 157.4 \text{ Mc/s}
\]

France, French O. P. T. A., Morocco

List IV. Part A. Unchanged.

Part B. Replace note 4) by:
4) Universal time (U. T.)

Part C (1st line) At the end of the paragraph, replace:

... Greenwich mean time (G. M. T.),

by:

Universal time (U. T.).

Part C (2nd and 3rd lines). Replace y and v by:
\[
y = 1605 \text{ to } 3800 \text{ kc/s}
\]
\[
v = 156 \text{ to } 162 \text{ Mc/s}
\]

Netherlands

List IV. Heading. Read:
List IV. List of Coast Stations

Replace the present text by the following:
This List comprises:
1. Remarks and Explanations in connection with:
   Part A. Alphabetic index of coast stations.
   Part B. Particulars of coast stations.
   Abbreviations denoting the countries which have particulars of stations included in Part B.
   Annex: Table of inland telegraph rates, etc. Table of allocation of call signs. Table of abbreviations.
2. Part A. Alphabetic Index of Coast stations.
3. Part B. Particulars of Coast Stations.
4. Table of Inland Telegraph Rates, Limitrophic Rates, etc.
and add:

List IV bis. List of Ship Stations.
The List of Ship Stations comprises:
1. Remarks and Explanations in connection with:
   Particulars of ship stations.
Abbreviations denoting the countries which have particulars of stations in this List.

Table of allocation of call signs.

Table of abbreviations.

Hours of service for ships in the second category.

2. Particulars of ship stations.

3. Remarks relating to the ship stations.

Recommendations

List of Coast and Ship Stations (30th edition).

A. The particulars of the coast stations could be considerably limited without harming the clearness, resulting in an important saving of pages.

For instance:

a) On pages 76/80 inclusive appears 9 × a schedule under the same heading of 4 lines. By combining these 9 schedules under 1 heading 32 lines could be saved.

b) On page 95 appears after L O V:
   — 9 × a frequency followed by A1A3 0,5
   — 12 × a frequency followed by A1A3 0,1
   It is not considered as necessary to occupy a separate line for each of these frequencies.

c) On pages 238/240 inclusive appears 4 × a remark of 7 lines concerning SLT’s. These remarks differ only in one word (remarks 10, 16, 21, 22). These remarks could be combined in a single one.

d) On pages 315/318 inclusive much space could be saved by a more concise mentioning of the data.

e) Countries with more than 1 coast station could combine the particulars concerning the emission of traffic lists in 1 schedule.

f) Big parts of pages are not utilized without any obvious reason by the printer (pages 73, 74, 155, 159, 168, 197, 202, 205, 217, 218, 326, 343, 344, 352, 395, 408, 431, 433).

B. The size of the List of Particulars of Ship Stations could be considerably reduced by the following means:

a) mentioning only the strictly necessary data, i. e:
   — call sign,
   — name of the ship,
   — eventual lifeboat-transmitter,
   — eventual lifeboat-transmitter
   — CP (CO, CR, CV),
   — H...
   — ship-charge with remarks,
   — nationality,
   — type of emission (A1, A2, A3),
   — frequency-band (X, Z, etc.)

b) mentioning these data as concisely as possible.
EXAMPLE I:
CSGV Alvaro Martins Homem [1] △

\[
\begin{align*}
0.3 & \quad \quad \\
0.05 & \quad \quad \\
0.2 & \quad \quad \\
0.05 & \quad
\end{align*}
\]
CP H8

40) Port A1, A2

A2

A1, A2

A3

(9 lines in total). This could be reduced to 2 lines as follows:

CSGV Alvaro Martins Homem 1 CP H8

40) Port A1, A2 x — A1 z — A3 y

EXAMPLE II:

ELBS Atholl Mc Bean [1]

\[
\begin{align*}
0.25 & \quad (810) \\
0.04 & \quad \\
0.022 & \quad \\
0.3 & \quad
\end{align*}
\]

(13 lines in total) This could be reduced to 2 lines as follows:

ELBS Atholl Mc Bean [1] CP H8

...3) Libe A1, A2 350– 500 [CP H8

A2* 300– 500

A2 † 500– 8 364

A1, A2 2 000–24 000

* Emetteur de secours. Emergency transmitter. Transmisor de emergencia.
† Canot de sauvetage. Lifeboat. Bote salvavidas.

EXAMPLE III:

ONMI Marguerite/ONMI △

\[
\begin{align*}
0.035 & \quad \quad \\
0.075 & \quad (128) \\
0.125 & \quad (128) \\
0.125 & \quad \\
0.035 & \quad \\
0.03 & \quad \\
0.03 & \quad
\end{align*}
\]
CP H8

40) Belg A2

A2

A1, A2

A1

A2

A3

A3

(15 lines in total) This could be reduced to 2 lines as follows:

ONMI Marguerite/ONMI CP H8

40) Belg A1, A2 x — A1, A3 z — A3 y.
United Kingdom

2750 List IV. Part C. Replace present heading by:
   List IV A. List of Ship Stations Fitted with Radiotelegraphy only and Ship Stations Fitted with both Radiotelegraphy and Radiotelephony
   and

2751 List IV. B. List of Ship Stations Fitted with Radiotelephony only.

Reasons

See proposals 1464 and 1465.

Present Provisions

List V. List of Aeronautical and Aircraft Stations

Part A. Alphabetical index of aeronautical stations

<table>
<thead>
<tr>
<th>Name of the station</th>
<th>Call sign</th>
<th>See Part B, page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Part B. Particulars of aeronautical stations

<table>
<thead>
<tr>
<th>Name of the station</th>
<th>Call sign</th>
<th>For transmission</th>
<th>For reception</th>
<th>Service</th>
<th>Charges</th>
<th>Exact geographical position of the transmitting antenna</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Freq. (kc/s or Mc/s)</td>
<td></td>
<td>Power (kW)</td>
<td>Hours of service</td>
<td>Nature</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Class of emission</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Freq. (kc/s or Mc/s)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Class of emission</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

1) The normal working frequency is printed in heavy type.
2) Meridian of Greenwich in degrees and minutes.
3) In the case of directive antennae, indicate under the power, the azimuth of the direction or directions of maximum gain, in degrees, beginning from true North clockwise.
4) Greenwich mean time (G.M.T.).
5) The internal telegraph charge of the country to which the aeronautical station is subject and the charge applied by that country to telegrams destined for adjacent countries are given at the end of this List.
6) If the accounts for charges are settled by a private enterprise, the name and address of the private enterprise should be given.
Present Provisions

Part C. Particulars of aircraft stations

The stations are arranged in alphabetical order of their call signs irrespective of nationality.

<table>
<thead>
<tr>
<th>Call sign</th>
<th>Name of the station or mark of nationality and registration</th>
<th>Emissions</th>
<th>Country</th>
<th>Nature of service</th>
<th>Charges</th>
<th>Name and address of the administration to which communications must be sent</th>
<th>Type and make of aircraft</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>

1) The normal working frequency is printed in heavy type.
2) The bands of frequencies are indicated by means of the following abbreviations:
   a = below 415 kc/s
   b = 415 to 2850 kc/s
   c = 2850 to 25000 kc/s
   d = 118 to 132 Mc/s

Proposals

France, French O.P.T.A., Morocco

2752 List V. Heading. Replace by:
List V. List of Aeronautical Stations

2753 Part A. Unchanged.

2754 Part B. For footnote 4) read: 4) Universal time (U.T.).

2755 Part C. Delete.

Reasons

France, French O.P.T.A.:
A consequence of proposal 1467.

United Kingdom

List V. Delete entire section.

Reasons

Consequential on proposal 1468.

Present Provisions

List VI. List of Radiolocation Stations
Part A. Alphabetical index of stations

<table>
<thead>
<tr>
<th>Name of the station</th>
<th>Call sign</th>
<th>Nature of the station</th>
<th>See Part B, page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
# Present Provisions

## Part B. Particulars of stations

### 1. Direction-finding stations

<table>
<thead>
<tr>
<th>Name of the country</th>
<th>Name of the stations</th>
<th>Frequencies and classes</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>For calling the direction-finding station</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>For transmitting to the direction-finding station</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>For transmitting the bearings by the direction-finding station</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Power</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Name and call sign of the station with which communication must be established if the direction-finding station is not equipped with a transmitter</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Charges</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Remarks</td>
<td></td>
</tr>
</tbody>
</table>

#### a) Sectors in which bearings are normally accurate and references to national or international publications other than these Lists.

#### b) Hours of service, etc.

### 2. Radiobeacon stations

Radiobeacons are arranged in two sections:

#### a) Maritime Service.

#### b) Aeronautical Service.

<table>
<thead>
<tr>
<th>Name of the country</th>
<th>Name of the stations</th>
<th>Emission</th>
<th>Calling frequency</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Frequency</td>
<td>Class</td>
<td>Normal range</td>
</tr>
<tr>
<td></td>
<td></td>
<td>kc/s or Mc/s</td>
<td>c/s</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Frequency of modulation (if any)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Call sign of the station to which requests for the emission of beacon signals may be addressed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Name and call sign of the station</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>kc/s or Mc/s</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### a) sectors normally reliable and references to national or international publications other than these Lists;

#### b) hours of service;

#### c) charges, etc.;

#### d) description of the emission

---

1) Meridian of Greenwich, in degrees, minutes and seconds.

2) Greenwich mean time (G.M.T.).

Note: The Secretary General of the Union, if he considers it necessary, will introduce in this List additional sections to cover new radiolocation systems that may be developed and used.
Proposals

France, French O.P.T.A., Morocco

2757 List VI. Part A. Unchanged.

2758 Part B. 1. Replace by:

Part B. Particulars of Stations

1. Direction-finding stations

These shall appear in two sections:

a) Maritime;

b) Aeronautical.

Within each section, they shall be classified by country and by stations (in alphabetical order).

Reasons

This would make the List easier to consult for users of both the maritime and aeronautical services.

2759 Table to be kept

Replace footnote 2) by: 4) Universal time (U.T.).

2760 Part B. 2. Replace by:

2. Radiobeacon stations.

These shall be classified in two sections:

a) Maritime;

b) Aeronautical.

Within each section, radiobeacon stations shall be classified by country and by stations (in alphabetical order).

Reasons

As for the direction-finding stations.

2761 Table to be kept

Replace footnote 2) by:

3) Ranges shall be shown in nautical miles for maritime stations, and in nautical miles or kilometres for aeronautical ones.

Reasons

Use of the nautical mile is much more common for these purposes.

2762 Replace footnote 3) by:

5) Universal time (U.T.).
United Kingdom

2763 List VI. Heading. Read:

List VI. List of Maritime Radiolocation Stations and Special Service Stations transmitting Regular Meteorological Bulletins, Notices to Navigators, Medical Advice and Epidemiological Bulletins.

Reasons
Consequential on proposal 1472.

2764 Part A. Amend heading of column 4 to read:

See page(s) ....

Reasons
Consequential on proposal 1472.

2765 Part B. Amend heading to read: Part B. Particulars of radiolocation stations.

Reasons
Consequential on proposal 1472.

2766 1. Direction-finding stations.

Replace: \{ Name of the country \\
Names of the stations \} in alphabetical order

by: Stations arranged according to countries on international shipping routes.

Reasons
To provide for rearrangement of the layout of stations.

2767 2. Radiobeacon stations.

Delete: Radiobeacons are arranged ................. Aeronautical Service.

Reasons

Consequential on proposal 1472.

2768 Replace: \{ Name of the country \\
Names of the stations \} in alphabetical order

by: Stations arranged according to countries on international shipping routes.

Reasons
To provide for rearrangement of the layout of stations.

2769 In column 8 of the table, replace: Normal range ²) by: Normal range (nautical miles) and delete footnote ³) to the table.

Reasons
To provide for the omission of aeronautical stations.
2770 Add the following new sub-sections 2bis, 2ter, 2quater, and 2quinques:

2bis. Loran stations.

<table>
<thead>
<tr>
<th>Name of the station</th>
<th>Geographical position</th>
<th>Characteristic</th>
<th>Range</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

2771 2ter. Ocean-Station vessels

<table>
<thead>
<tr>
<th>Name of the station</th>
<th>Geographical position assigned to the station</th>
<th>Call sign of the station vessel</th>
<th>For calling the station</th>
<th>Characteristic signal of the radio beacon</th>
<th>Transmitting frequency of the radio beacon</th>
<th>Class</th>
<th>Frequency of modulation (if any)</th>
<th>Range</th>
<th>For transmitting to the station the signals necessary for taking bearings</th>
<th>For the transmission of the bearings by the station</th>
<th>Antenna power of the D/F station</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
</tr>
</tbody>
</table>

2772 2quater. Radar stations

<table>
<thead>
<tr>
<th>Station</th>
<th>Position</th>
<th>Call sign</th>
<th>Hours of service</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5 2)</td>
</tr>
</tbody>
</table>

2) Details of procedure for obtaining radar information.
2773 2quinques. Direction-finder Calibration Stations

United Kingdom (cont'd)

<table>
<thead>
<tr>
<th>Name of the station</th>
<th>Exact geographical position of the transmitting antenna (in miles or nautical miles), minutes and seconds)</th>
<th>Characteristic signal of the radiobeacon</th>
<th>Frequency of the radiobeacon (if any)</th>
<th>Emission</th>
<th>Frequency of modulation (if any)</th>
<th>Normal range (ranges are indicated in nautical miles)</th>
<th>Name and call sign of the station to which requests for the emission of beacon signals may be addressed</th>
<th>Calling Frequency</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Reasons

To cater for stations not included in the present Appendix 6.

2774 Add the following new Part Bbis:

Part Bbis. Particulars of special service stations

1. Stations transmitting regular meteorological bulletins.

   a) Name of the country
   b) Names of the stations in alphabetical order

   Name of the Station | Call Sign | Frequencies kc/s or Mc/s | Class of emission | Times of emission \(^{1}\) | Remarks \(^{2}\)
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

\(^{1}\) Greenwich mean time (G.M.T.)

\(^{2}\) General instructions concerning meteorological bulletins, including Code used.

2. Stations transmitting notices to navigators.

   (Names of the stations by countries with the necessary particulars.)
   a) Maritime service
   b) Aeronautical service

3. Stations transmitting medical advice.

   The information should include the name of the country, the name of the station, its call sign, frequency used, class of emission, hours of service and remarks. (Indicate whether the radiotelegram of enquiry and/or reply is chargeable and whether any charge is made for medical advice.)
4. Stations transmitting epidemiological bulletins.

The information should include the name of the station, its call sign, frequency used, class of emission, times of emission and remarks.

**Reasons**

Consequential on proposal 1472.

**Present Provisions**

**List VII. List of Special Service Stations**

**Part A. Alphabetical index of the stations**

<table>
<thead>
<tr>
<th>Name of station</th>
<th>Call sign</th>
<th>Nature of service</th>
<th>See Part B, page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

**Part B. Particulars of stations**

1. Stations transmitting time signals.

<table>
<thead>
<tr>
<th>Name of the country</th>
<th>Names of the stations</th>
<th>Call sign</th>
<th>Frequencies kc/s or Mc/s</th>
<th>Class of emission</th>
<th>Times of emission</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1) Greenwich mean time (G. M. T.).
2) General instructions concerning time signals.

2. Stations transmitting regular meteorological bulletins.

<table>
<thead>
<tr>
<th>Name of the country</th>
<th>Names of the stations</th>
<th>Call sign</th>
<th>Frequencies kc/s or Mc/s</th>
<th>Class of emission</th>
<th>Times of emission</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1) Greenwich mean time (G. M. T.).
2) General instructions concerning meteorological bulletins, including Code used.
Present Provisions

   (Names of the stations by countries with the necessary particulars.)
   a) Maritime service.
   b) Aeronautical service.

4. Stations transmitting medical advice.
   The information should include the name of the country, the name of the station, its call sign, frequency used, class of emission, hours of service and remarks. (Indicate whether the radiotelegram of enquiry and/or reply is chargeable and whether any charge is made for medical advice.)

5. Stations transmitting standard frequencies.
   The frequency stability should be indicated.

Proposals

Finland

2775 List VII. Part B. Point 2.

The list of stations transmitting regular meteorological bulletins should include adequate information on CQ-transmissions radiated for different waters. Thus the need for separate auxiliary lists would be eliminated.

Reasons

The information available at present is of a very limited nature. A radio operator very seldom has at his disposal maps or decipher publications of the W.M.O. or of other corresponding institutions.

France, French O.P.T.A., Morocco

2776 List VII. Part A. Unchanged.

2777 Part B. 1.
   Replace footnote 1) by:
   1) Universal time (U.T.).

2778 Part B. 2.
   Replace heading by:
   2. Stations transmitting meteorological bulletins.

Reasons

France, French O.P.T.A.:
A consequence of proposal 1475.

2779 Table. Add an extra column:
4 bis: Power in kW.
Replace footnote 1) by:

1) Universal time (U.T.).

Part B. 3.
Replace the present text by the following:

3. Stations transmitting navigational notices.

Stations which transmit navigational notices shall be classified in two sections:

a) Maritime;
b) Aeronautical.

Within each section, stations shall appear by country and in alphabetical order of station names.

Reasons

France, French O.P.T.A.,
Same as for direction-finding stations and radiobeacons.


Part B. 5. Unchanged.

United Kingdom

List VII. Amend heading to read:

List VII. List of Special Service Stations transmitting signals, standard frequencies and URSIgrams.

Reasons

Consequential on proposal 1473.

Part B. Delete entire sub-sections 2 to 4.

Reasons

Transferred to List VI under proposal 1472.

Add new Sub-section:

5 bis. Stations transmitting URSIgrams

<table>
<thead>
<tr>
<th>Name of the station</th>
<th>Call sign</th>
<th>Frequencies kc/s or Mc/s</th>
<th>Class of emission</th>
<th>Times of emission</th>
<th>Remarks and nature of information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

Reasons

To provide for such stations not included in existing Appendix 6.
## Present Provisions

### General Radiocommunication Statistics

<table>
<thead>
<tr>
<th>Name of Country</th>
<th>Administrative Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Part I. Number of Stations

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Coastal</td>
<td></td>
<td>Mixed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Aeronautical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ship</td>
<td></td>
<td>Mixed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Aircraft</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Part II. Number of Transmitters

### Part III. Traffic

<table>
<thead>
<tr>
<th>1. With amplitude modulation</th>
<th>2. With frequency modulation</th>
<th>3. With pulse modulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed and land stations</td>
<td>Fixed and land stations</td>
<td>Fixed and land stations</td>
</tr>
<tr>
<td>Mobile stations</td>
<td>Mobile stations</td>
<td>Mobile stations</td>
</tr>
<tr>
<td>Fixed and land stations</td>
<td>Fixed and land stations</td>
<td>Fixed and land stations</td>
</tr>
<tr>
<td>Mobile stations</td>
<td>Mobile stations</td>
<td>Mobile stations</td>
</tr>
<tr>
<td>Telegrams transmitted</td>
<td>Telegrams transmitted</td>
<td>Telegrams transmitted</td>
</tr>
<tr>
<td>Telegrams received</td>
<td>Telegrams received</td>
<td>Telegrams received</td>
</tr>
<tr>
<td>Phototelegrams transmitted</td>
<td>Phototelegrams transmitted</td>
<td>Phototelegrams transmitted</td>
</tr>
<tr>
<td>Phototelegrams received</td>
<td>Phototelegrams received</td>
<td>Phototelegrams received</td>
</tr>
<tr>
<td>Radioelectricity received by</td>
<td>Radioelectricity received by</td>
<td>Radioelectricity received</td>
</tr>
<tr>
<td>coastal stations</td>
<td>coastal stations</td>
<td>coastal stations</td>
</tr>
<tr>
<td>Telephone conversations</td>
<td>Telephone conversations</td>
<td>Telephone conversations</td>
</tr>
<tr>
<td>Raddiotelegrams received by</td>
<td>Raddiotelegrams received by</td>
<td>Raddiotelegrams received</td>
</tr>
<tr>
<td>coastal stations</td>
<td>coastal stations</td>
<td>coastal stations</td>
</tr>
<tr>
<td>Medical consultations</td>
<td>Medical consultations</td>
<td>Medical consultations</td>
</tr>
<tr>
<td>Raddiotelegrams sent by land</td>
<td>Raddiotelegrams sent by land</td>
<td>Raddiotelegrams sent by</td>
</tr>
<tr>
<td>stations</td>
<td>stations</td>
<td>stations</td>
</tr>
<tr>
<td>Raddiotelegrams received by</td>
<td>Raddiotelegrams received by</td>
<td>Raddiotelegrams received</td>
</tr>
<tr>
<td>land stations</td>
<td>land stations</td>
<td>land stations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1. Fixed Service</th>
<th>2. Service with Ship Stations</th>
<th>3. Service with Aircraft Stations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>3</td>
<td>4</td>
<td>5</td>
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<td>4</td>
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<td>6</td>
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<td>10</td>
<td>11</td>
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<td>10</td>
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<td>12</td>
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<td>19</td>
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<td>21</td>
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<td>22</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td>23</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Proposals

2787 France, French O. P. T. A.

Replace the present table by the following:

General Radio Communication Statistics

<table>
<thead>
<tr>
<th>Part I. Number of Stations</th>
<th>Part II. Traffic</th>
<th>Of coast stations transmitting public correspondence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Maritime mobile</td>
<td>2. Amateurs</td>
<td></td>
</tr>
<tr>
<td>Coast stations transmitting public correspondence</td>
<td>Ship stations</td>
<td>Radio-telegrams transmitted</td>
</tr>
<tr>
<td>Telegraph</td>
<td>Telephone</td>
<td>Mixed</td>
</tr>
</tbody>
</table>

Reasons

We propose that the Statistics be limited:
— to coast stations transmitting public correspondence;
— to ship stations;
— to amateur stations.

As regards the fixed public correspondence service, some of the information is already given in the General Telegraph Statistics.

Those responsible for the other stations feel that the inclusion of data relative to such stations is uncalled for.

2788 India

Delete: Column 23.

Reasons

See proposal 2739.
APPENDIX 7

Service Document Symbols
(See article 20 and appendix 6)

- station on board a warship or a military or naval aircraft
- automatic alarm apparatus
- station classified as situated in a region of heavy traffic (article 33)
  by day
  by night
- a ship which carries lifeboats equipped with radio apparatus; a number inside the brackets shows the number of such lifeboats
- radio direction-finder on board a mobile station
- aeronautical radionavigation land station
- aeronautical radionavigation mobile station
- broadcasting station
- coastal telephone station
- station open to official correspondence exclusively
- station open to public correspondence
- station open to limited public correspondence
- coastal telegraph station
- station open exclusively to the correspondence of a private agency
- directive antenna having maximum radiation in the direction of 30° (expressed in degrees from the true north, from 0 to 360 clockwise)
- directive antenna provided with a reflector
- aeronautical station
- aeronautical fixed station
- base station
- coast station
- receiving station only, connected with the general network of telecommunication channels
- land station established solely for the safety of life
- fixed station
- Greenwich mean time
- ship station of the second category carrying on 8 hours of service
- ship station of the second category carrying on 16 hours of service
- station having a continuous day and night service

Proposals

2789 Australia (Commonwealth of)
Delete the first seven symbols and replace them respectively by the following:

GS station on board a warship or a military or naval aircraft;
AA automatic alarm apparatus;
TI station classified as situated in a region of heavy traffic (article 33);
DJ by day;
DN by night;
S- a ship which carries lifeboats equipped with radio apparatus; a number following the letter shows the number of such lifeboats;
GM radio direction-finder on board a mobile station.

Reasons
To eliminate the hand operations now required to reproduce those symbols when preparing notices for inclusion in I.T.U. documents.

2790 Denmark, Finland, Iceland, Norway, Sweden
Delete the following symbols:
- automatic alarm apparatus.
- radio direction-finder on board a mobile station.

Reasons
These particulars seem to be of no international use in the service documents. These symbols and the symbol for "radar on board a mobile station" could therefore also be deleted in part C of the List of Coast and Ship Stations.

2791 United States of America
After the heading read:
(See Article 20 and Appendix 6).

2792 In the definition replace: article by: Article.
Present Provisions

- HJ: station open from sunrise to sunset (day service)
- HX: station having no specific working hours
- OT: stations open exclusively to operational traffic of the service concerned
- RC: non-directional radiobeacon
- RD: directional radiobeacon
- RG: radio direction-finding station
- RM: maritime radionavigation mobile station
- RT: revolving radiobeacon
- SF: ship telephone station
- SS: standard frequency station
- ST: ship telegraph station

Proposals

United States of America

2793 △ After the definition add:

(List of Coast and Ship Stations.)

2794 Before AL insert the following items:

- RC: radar on board a mobile station.
- AG: aeronautical radio direction-finding station

2795 BC: Delete.

2796 CF: Delete.

2797 Between AM and CO, insert the following new items:

- AP: aeronautical radiobeacon station
- AX: aeronautical fixed station
- BA: broadcasting station, amplitude modulation
- BF: broadcasting station, frequency modulation
- BT: broadcasting station, television
- C: continuous operation, during hours shown

2798 CT: Delete.

2799 FAX: Delete.

2800 Between FC and FR, insert the following new item:

- FL: land station.

2801 After G. M. T., insert the following new item:

- H: station maintaining a scheduled operation
Present Provisions

Proposals

United States of Amerika (cont'd)

2802  H8   Read:
station maintaining 8 hours of service, also applicable to a ship station of the second category carrying on 8 hours of service.

2803  H16  Read:
station maintaining 16 hours of service, also applicable to a ship station of the second category carrying on 16 hours of service.

2804  After H24, insert the following new item:
HD   station utilizes this frequency on a daytime basis only.

2805  After HJ, insert the following new items:
HN   station utilizes this frequency on a nighttime basis only.
HT   station utilizes this frequency on a transition basis only.

2806  Between HX and OT, insert the following new items:
I    station having specific working hours; however, transmissions are intermittent.
LP   land radiopositioning station.
MA   aircraft station.
ML   land mobile station.
MO   mobile station.
MP   mobile radiopositioning station.
MS   ship station.
NL   maritime radionavigation land station.

2807  After RG, insert the following new item:
RL   radionavigation land station.
Present Provisions

Proposals

United States of America (cont'd)

2808 SF Delete.

2809 Before SS, insert the following new item:
SM meteorological aids station.

2810 ST Delete.

Reasons
To bring current the provisions concerning symbols to be used in service documents; to provide more definitive symbols; to incorporate into the Appendix symbols presently used by the I.F.R.B. to describe operations in the International Frequency List.

2811 France, French O. P. T. A.

A Delete.

Reasons
Superfluous symbol.

2812 Add the following new symbol:
Radar installation on board a mobile station.

2813 CF Delete.

2814 CT Delete.

Reasons
These symbols are little used. A coast station is usually indicated by the symbol FC, regardless of the service it provides. The symbols CF and CT are rarely used. Some countries, moreover, make no distinction between the symbols FC and CF or CT. Moreover, the emission class, given in the particulars of the frequency or the station, enables the character of the service provided to be ascertained.

2815 ST Delete.

Reasons
See proposal 2826.
Present Provisions

Proposals

France, French O.P.T.A. (cont'd)

2816  SF  Delete.

Reasons
See proposal 2826.

2817  Add the following new symbol:
SM  Meteorological aids station.

France, French O.P.T.A., Morocco

2818  Add the following new symbol:
DM  Station providing a weather bulletin service.

2819  G.M.T  Delete.

Reasons
Replace by U.T.

2820  H8  Replace by:
8-hour service provided by a ship station of the second category

2821  H16  Replace by:
16-hour service provided by a ship station of the second category.

2822  H24  Replace by:
Continuous day and night service.

2823  HJ  Replace by:
Day service.
Present Provisions

Proposals

France, French O.P.T.A., Morocco (cont'd)

2824 Add the following new symbol:
HN Night service.

2825 HX Replace by:
Intermittent day and night service.

Reasons
France, French O.P.T.A.:
Drafting amendment so that the definitions may apply both to the operating hours of the circuits (List I) and to the hours when the stations are open.

2826 Add the following new symbol:
MS Ship station.

Reasons
France, French O.P.T.A.:
Instead of the symbols SF and ST the deletion of which is proposed above. The emission class given in the particulars of the station or frequency enables the type of service to be identified.

2827 Add the following new symbol:
RS Watch radar station.

2828 Add the following new symbol:
U.T. Universal time.

Reasons
France, French O.P.T.A.:
Symbol to be used instead of G.M.T.

India

2829 Replace: RC by: NDB.

Reasons
The term NDB is commonly understood and widely used.
APPENDIX 8

Documents with which Ship and Aircraft Stations must be provided

(See articles 20, 22, 23, 24, 28 and appendix 6)

Section I. For Stations on Board Ships Compulsorily Equipped with a Radiotelegraph Installation:

1st licence provided for by article 22;
2nd certificates of the operator or operators;
3rd log (diary of the radio service) in which the following are recorded as they occur, together with the time of their occurrence:
   a) all communications relating to distress traffic in full,
   b) urgency and safety communications,
   c) communications exchanged between the ship station and land or mobile stations,
   d) service incidents of all kinds,
   e) if the ship’s rules permit, the position of the ship at least once a day;
4th alphabetical List of Call Signs;
5th List of Coast and Ship Stations;
6th List of Radiolocation Stations;
7th List of Stations performing Special Services;
8th Radio Regulations and Additional Radio Regulations, also such provisions of the Convention as relate to the radiocommunication service on board ship;
9th telegraph tariffs of the countries for which the station most frequently accepts radiotelegrams;
10th if administrations concerned consider it necessary, the Telegraph Regulations.

Present Provisions

Proposals

2830 France, French O. P. T. A.

General Comment

We consider that the Administrative Radio Conference will have to revise Appendix 8 bearing in mind the modifications to be made to Articles 20, 22, 23, 24, 28 and to Appendix 6, and do not therefore think it appropriate to submit proposals at the present stage.

2831 Belgium

Section I. Amend as follows:

Section I. For Stations on Board Ships Compulsorily Equipped with Radiotelegraphy:

1st Unchanged.
2nd Unchanged.
3rd Unchanged.
4th Read:
   Alphabetical List of Call Signs of maritime mobile radio stations.
5th Read:
   List of Coast Stations.
6th Unchanged.
7th Unchanged.
8th Unchanged.
9th Unchanged.
10th Delete.

United States of America

2832 After the heading, replace: articles by: Articles and: appendix by: Appendix.

2833 Section I. 1st Replace: article by: Article.

Reasons

Editorial.

2834 6th and 7th. Delete. The three sub-paragraphs which follow should accordingly be renumbered: 6th, 7th and 8th.

Reasons

To conform with the changes made in Article 20 proposing to delete the List of Aeronautical and Aircraft Stations, List of Radiolocation Stations and List of Stations performing Special Services.
Present Provisions

Finland

2835 10th Read: ... the Telegraph Regulations in force.

Reasons
In order to be able to interpret in the proper way the RA and to master the word-count it is important that every radio operator should have these regulations available.

Netherlands

2836 Replace the present text by the following:
4th alphabetical List of the Maritime Call Signs.

2837 Replace the present text by the following:
5th List of Coast Stations;

2838 and add the following new sub-paragraph:
5th bis) List of Ship Stations.

Reasons
To be consistent with proposals 1459.

United Kingdom

2839 Section I. Replace the present heading by the following:
Section I. For Stations on Board Ships for which a Radiotelegraph Installation is Prescribed by International Agreement.

Reasons
The proposed wording is more appropriate to the context.

2840 4th Replace the present text by the following:
4th Alphabetical List of Maritime Call Signs.

2841 5th Replace the present text by the following:
5th List of Coast Stations.
and add the following new sub-paragraph:

2842 5th bis. List of Ship Stations fitted with Radiotelegraphy and with both Radiotelegraphy and Radiotelephony.

Reasons
See proposals for Article 20.

2843 6th and 7th. Replace the present text by the following:

List of Radiolocation Stations;
List of Stations performing Special Services; unless a national list is carried giving the complete information likely to be required by ships on any voyage throughout the world.

Reasons
To permit the carrying of a national list.

Section II. For other Radiotelegraph Stations on Ships:
— the documents mentioned in items 1 to 5 of Section I.

2844 Section II. Replace the present text by the following:
— the documents mentioned in items 1st to 5th bis, 8th and 9th of Section I.

Reasons
See proposals for Article 20.

2845 After the present Section II add the following new Section:

Section II bis. For Stations on Board Ships for which a Radiotelephone Installation is Prescribed by International Agreement:

1st the documents mentioned in items 1 and 2 of Section I.

2nd the log (diary of the radio service) in which the following are recorded as they occur, together with the time of their occurrence:

a) a summary of all communications relating to distress, urgency and safety traffic;

b) a summary of communications exchanged between the ship station and land or mobile stations;
Present Provisions

Proposals

c) a reference to important service incidents;
d) if the ship’s rules permit, the position of the ship at least once a day.

3rd List of Coast Stations, or have available for their information a list of coast stations with which communications are likely to be conducted showing watchkeeping hours, frequencies and charges.


5th Telegraph and Telephone tariffs of the countries with which communications are likely to be conducted.

Reasons

To cater for radiotelephony under a heading parallel to that of Section I, and to incorporate Göteborg Resolution No. 7.

Section III. For Ship Stations Equipped Solely for Radiotelephony:

1st the documents mentioned in items 1 and 2 of section I;

2nd the log (diary of the radio service) in which the following are recorded as they occur, together with the time of their occurrence:

a) a summary of all communications relating to distress, urgency and safety traffic,

b) a summary of communications exchanged between the ship station and land or mobile stations,

c) a reference to important service incidents;

3rd documents containing information necessary for the operation of the service.

Australia (Commonwealth of)

Replace the present Section III by the following text:

Section III. For Ship Stations Equipped Solely for Radiotelephony:

Compulsorily equipped ships between 500 and 1 600 gross tonnage, engaged on international voyages and fitted only with radiotelephony, must carry the following documents:

1st licence provided for by Article 22;

2nd certificates of the operator or operators;

3rd the log (diary of the radio service) in which the following are recorded as they occur, together with the time of their occurrence:

a) a summary of all communications relating to distress, urgency and safety traffic;

b) a summary of communications exchanged between the ship station and land or mobile stations;

c) a reference to important service incidents; and

d) if the ship’s rules permit, the position of the ship at least once a day;

4th a list of coast stations with which communications are likely to be conducted, showing watchkeeping hours, frequencies and charges; and
Present Provisions

Proposals

5th Radio Regulations and Additional Radio Regulations in so far as they are applicable to the radiotelephone service.

Reasons

In view of developments which have occurred in the maritime mobile radiotelephone service, it is considered that the more detailed list is necessary.

Belgium

2847 Heading. Read:

Section III. For Stations Equipped Solely for Radiotelephony.

2848 1st Unchanged.

2849 2nd Add the following new sub-paragraph:

d) if the ship's regulations permit, the position of the ship at least once a day.

2850 3rd Read:

a) a list of coast stations with which they are liable to communicate, stating working hours, frequencies and charges;

b) the complete section dealing with the procedure to be followed in maritime mobile radiotelephony.

Denmark, Finland, Iceland, Norway, Sweden

2851 Section III. Replace the present text by the following:

Section III. For Ship Stations Equipped Solely for Radiotelephony.

1st licence provided for by Article 22 of the RR;

2nd certificates of the operator or operators;

3rd the log (diary of the radio service) in which the following are recorded as they occur, together with the time of their occurrence:

a) a summary of all communications relating to distress, urgency and safety traffic;
Present Provisions

Proposals

b) a summary of communications exchanged between the ship station and land or mobile stations;

c) a reference to important service incidents;

d) if the ship's rules permit, the position of the ship at least once a day;

4th a list of coast stations with which communications are likely to be conducted, showing watchkeeping hours, frequencies and charges;

5th international and national radio regulations in so far as they are applicable to the radiotelephone service.

Reasons

In accordance with Resolution No. 7 of the Göteborg Conference, 1955.

United States of America

2852 Section III. 1st Replace: section by: Section.

Reasons

Editorial.

2853 2nd Replace the present text by the following:

2nd the log (diary of the radio service) in which a summary of all communications relating to distress and urgency signals is recorded as they occur, together with the time of their occurrence;

Reasons

To afford flexibility to administrations in their regulation of ship radiotelephone stations which operate under a wide variety of conditions and classes of radio operators.

2854 United Kingdom

Section III. Replace the present text by the following:

Section III. For other Radiotelephone Stations on Ships:

1st the documents mentioned in items 1st and 2nd of Section I;

2nd the documents mentioned in items 3rd and 5th of Section II bis.

Reasons

To cater for radiotelephony under a heading parallel to that of Section II.
Present Provisions

Proposals

U. S. S. R.

2855 Section III. 2nd. Add a new sub-paragraph:

d) the geographical coordinates of the ship's position, at least once a day, if permitted by the ship's rules.

Reasons

The decisions taken by the Baltic and North Sea Radiotelephone Conference (Göteborg, 1955).

United States of America

2856 Section IV.

1st Replace: section by: Section.

2857 2nd Replace: section by: Section.

Reasons

Editorial.

United Kingdom

2858 Section IV. 1st Add in fine:

or items 1st and 2nd of Section II bis, as appropriate;

2859 2nd Replace: III by: II bis.

Reasons

Consequential on the introduction of Section II bis. (See proposal 2845.)

United States of America

2860 Section V. 1st and 2nd. Replace: section by: Section.

Reasons

Editorial.

2861 3rd Replace the present text by the following:

3rd documents containing official information relating to stations which the aircraft station may use for the execution of its service.

Reasons

To conform with the changes made in Article 20 proposing to delete these publications.
APPENDIX 9

Miscellaneous Abbreviations and Signals to be used in Radiocommunications

(See article 29)

SECTION I. Q CODE

Present Provisions

Proposals

United Kingdom

2862 Section V. 3rd

Replace the present text by the following:

3rd the documents containing official information relating to stations which the aircraft station may use for the execution of its service.

Reasons

See proposals for Article 20.

General Comments

2863 Denmark, Finland, Iceland

Norway, Sweden

As a general principle, the Q signals should not have several alternative meanings marked with numbers. In most cases, a clarifying addition could instead be made in plain language. However, as a guidance for the use of Q signals, additional meanings might be given as examples.

2864 United States of America

In respect of the table which follows, it has been proposed that all the Q Code abbreviations which are useful to Search and Rescue operations should be available to both the maritime and aeronautical services. Up to the present time some have been available only in the series which is reserved for the aeronautical service. In the list that follows, certain of the code significations have been lifted from the aeronautical series and have been placed in the series reserved for use by all services. In a few instances, also, modifications are proposed in existing significations to improve their utilization value.

2865 France, French O. P. T. A.

In view of the fact that under existing radio operating conditions the abbreviations used are taken from various codes (Q Code, Z Code, Civil Aviation Code, International Code of Signals, etc.), the French Administration considers that the Administrative Radio Conference should examine in what way an I.T. U. international code could meet the requirements of operators who wish to express an ever-growing number of questions, answers or advices in the form of abbreviations.
Present Provisions

Proposals

2866 Poland (People’s Republic of)

It is proposed to expand Appendix 9 to include all radio abbreviations and signals.

2867 Finland

Introduction. Add the following new sub-paragraph:

7 bis. The use of plain language abbreviations derived from English is also admitted. Such abbreviations are, e.g. GE, GN, SL, SRI, SU, TKS, etc.

Reasons

The abbreviations referred to above are already used; they should be officially approved.

2868 India

Introduction. Sub-paragraph 3. Replace the letter N by: NO.

Reasons

Consequential to proposal 2469.

2869 Japan


Reasons

To be consistent with proposal 2967.

United Kingdom

2870 Introduction. Sub-paragraph 1. Replace: QUZ by: QVZ, and delete the words: listed in this Appendix.

Reasons

To provide 26 additional signals for future needs.

2871 Sub-paragraph 3. Replace: C by: YES, and: N by: NO.

Reasons

NO to avoid confusion with N used to denote North. YES as the logical converse, which is already widely used.

Introduction

1. The series of groups QRA to QUZ listed in this Appendix, is for use by all services.

2. The QAA to QNZ series are reserved for the aeronautical service and the QOA to QQZ series are reserved for the maritime services. These series are not listed in these regulations.

3. Certain abbreviations may be given an affirmative or negative sense by sending “C” or “N” respectively, immediately following the “Q” code abbreviation.

4. The meanings assigned to “Q” code abbreviations may be amplified or completed by the addition of appropriate other groups, call signs, place names, figures, numbers, etc. It is optional to fill in the blanks shown in parentheses. Any data which is filled in where blanks appear should be sent in the same order as shown in the significations.

5. Abbreviations are given the form of a question when followed by a question mark. When an abbreviation is used as a question and is followed by additional or complementary information, the question mark should follow this information.

6. Abbreviations, with numbered alternative significations, must be followed by the appropriate figure to indicate the exact meaning intended. This figure should be sent immediately following the abbreviation.

7. All time should be given in Greenwich mean time (G.M.T.) unless otherwise indicated in the question or reply.
## Present Provisions

### Abbreviations Available for All Services

#### A. List of Abbreviations in alphabetical order

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Question</th>
<th>Answer or advice</th>
</tr>
</thead>
<tbody>
<tr>
<td>QRA</td>
<td>What is the name of your station?</td>
<td>The name of my station is ...</td>
</tr>
<tr>
<td>QRB</td>
<td>How far approximately are you from my station?</td>
<td>The approximate distance between our stations is ... nautical miles (or kilometres)</td>
</tr>
<tr>
<td>QRC</td>
<td>By what private enterprise (or State Administration) are the accounts for charges for your station settled?</td>
<td>The accounts for charges of my station are settled by the private enterprise ... (or State Administration).</td>
</tr>
<tr>
<td>QRD</td>
<td>Where are you bound and where are you from?</td>
<td>I am bound for ... from ...</td>
</tr>
<tr>
<td>QRE</td>
<td>What is your estimated time of arrival at ... (place)?</td>
<td>My estimated time of arrival at ... (place) is ... hrs.</td>
</tr>
<tr>
<td>QRF</td>
<td>Are you returning to ... (place)?</td>
<td>I am returning to ... (place) or ...</td>
</tr>
<tr>
<td>QRG</td>
<td>Will you tell me my exact frequency (or that of ...)?</td>
<td>Your exact frequency (or that of ...) is ... kc/s (or Mc/s).</td>
</tr>
<tr>
<td>QRH</td>
<td>Does my frequency vary?</td>
<td>Your frequency varies.</td>
</tr>
<tr>
<td>QRI</td>
<td>How is the tone of my transmission?</td>
<td>The tone of your transmission is ... (1. Good; 2. Variable; 3. Bad).</td>
</tr>
<tr>
<td>QRK</td>
<td>What is the readability of my signals (or those of ...)?</td>
<td>The readability of your signals (or those of ...) is ... (1. Unreadable; 2. Readable now and then; 3. Readable, but with difficulty; 4. Readable; 5. Perfectly readable).</td>
</tr>
<tr>
<td>QRL</td>
<td>Are you busy?</td>
<td>I am busy (or I am busy with ...). Please do not interfere.</td>
</tr>
<tr>
<td>QRM</td>
<td>Are you being interfered with?</td>
<td>I am being interfered with.</td>
</tr>
<tr>
<td>QRN</td>
<td>Are you troubled by static?</td>
<td>I am troubled by static.</td>
</tr>
<tr>
<td>QRO</td>
<td>Shall I increase power?</td>
<td>Increase power.</td>
</tr>
<tr>
<td>QRP</td>
<td>Shall I decrease power?</td>
<td>Decrease power.</td>
</tr>
<tr>
<td>QRQ</td>
<td>Shall I send faster?</td>
<td>Send faster (... words per minute).</td>
</tr>
<tr>
<td>QRR</td>
<td>Are you ready for automatic operation?</td>
<td>I am ready for automatic operation. Send at ... words per minute.</td>
</tr>
<tr>
<td>QRS</td>
<td>Shall I send more slowly?</td>
<td>Send more slowly (... words per minute).</td>
</tr>
<tr>
<td>QRT</td>
<td>Shall I stop sending?</td>
<td>Stop sending.</td>
</tr>
<tr>
<td>QRU</td>
<td>Have you anything for me?</td>
<td>I have nothing for you.</td>
</tr>
<tr>
<td>QRV</td>
<td>Are you ready?</td>
<td>I am ready.</td>
</tr>
<tr>
<td>QRW</td>
<td>Shall I inform ... that you are calling him on ... kc/s (or Mc/s)?</td>
<td>Please inform ... that I am calling him on ... kc/s (or Mc/s).</td>
</tr>
<tr>
<td>QRX</td>
<td>When will you call me again?</td>
<td>I will call you again at ... hours [on ... kc/s (or Mc/s)].</td>
</tr>
<tr>
<td>QRY</td>
<td>What is my turn? (Relates to communication)</td>
<td>Your turn is Number ... (or according to any other indication.) (Relates to communication.)</td>
</tr>
<tr>
<td>QRZ</td>
<td>Who is calling me?</td>
<td>You are being called by ... [on ... kc/s (or Mc/s)].</td>
</tr>
<tr>
<td>QSA</td>
<td>What is the strength of my signals (or those of ...)?</td>
<td>The strength of your signals (or those of ...) is ... (1. Scarcely perceptible; 2. Weak; 3. Fairly good; 4. Good; 5. Very good).</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Question</td>
<td>Answer or advice</td>
</tr>
<tr>
<td>--------------</td>
<td>----------</td>
<td>-----------------</td>
</tr>
<tr>
<td>QSB</td>
<td>Are my signals fading?</td>
<td>Your signals are fading.</td>
</tr>
<tr>
<td>QSC</td>
<td>Are you a cargo vessel?</td>
<td>I am a cargo vessel.</td>
</tr>
<tr>
<td>QSD</td>
<td>Is my keying defective?</td>
<td>Your keying is defective.</td>
</tr>
<tr>
<td>QSG</td>
<td>Shall I send ... telegrams at a time?</td>
<td>Send ... telegrams at a time.</td>
</tr>
<tr>
<td>QSI</td>
<td></td>
<td>I have been unable to break in on your transmission.</td>
</tr>
<tr>
<td>QSJ</td>
<td></td>
<td>Will you inform ... (call sign) that I have been unable to break in on his transmission [on ... kc/s (or Mc/s)].</td>
</tr>
<tr>
<td>QSK</td>
<td>Can you hear me between your signals?</td>
<td>I can hear you between my signals.</td>
</tr>
<tr>
<td>QSL</td>
<td>Can you acknowledge receipt?</td>
<td>I am acknowledging receipt.</td>
</tr>
<tr>
<td>QSM</td>
<td>Shall I repeat the last telegram which I sent you, or some previous telegram?</td>
<td>Repeat the last telegram which I sent me [or telegram(s) number(s) ... ].</td>
</tr>
<tr>
<td>QSN</td>
<td>Did you hear me [or ... (call sign)] on ... kc/s (or Mc/s)?</td>
<td>I did hear you [or ... (call sign)] on ... kc/s (or Mc/s).</td>
</tr>
<tr>
<td>QSO</td>
<td>Can you communicate with ... direct or by relay?</td>
<td>I can communicate with ... direct (or by relay through ... ).</td>
</tr>
<tr>
<td>QSP</td>
<td>Will you relay to ... free of charge?</td>
<td>I will relay to ... free of charge.</td>
</tr>
<tr>
<td>QSQ</td>
<td>Have you a doctor on board [or is ... (name of person) on board]?</td>
<td>I have a doctor on board [or ... (name of person) is on board].</td>
</tr>
<tr>
<td>QSU</td>
<td>Shall I send or reply on this frequency [or on ... kc/s (or Mc/s)] with emissions of class ... ?</td>
<td>Send or reply on this frequency [or on ... kc/s (or Mc/s)] (with emissions of class ... ).</td>
</tr>
<tr>
<td>QSV</td>
<td>Shall I send a series of V's on this frequency [or ... kc/s (or Mc/s)]?</td>
<td>Send a series of V's on this frequency [or ... kc/s (or Mc/s)].</td>
</tr>
<tr>
<td>QSW</td>
<td>Will you send on this frequency [or on ... kc/s (or Mc/s)]?</td>
<td>I am going to send on this frequency [or on ... kc/s (or Mc/s)] (with emissions of class ... ).</td>
</tr>
<tr>
<td>QSX</td>
<td>Will you listen to ... [call sign(s)] on ... kc/s (or Mc/s)?</td>
<td>I am listening to ... [call sign(s)] on ... kc/s (or Mc/s).</td>
</tr>
<tr>
<td>QSY</td>
<td>Shall I change to transmission on another frequency?</td>
<td>Change to transmission on another frequency [or on ... kc/s (or Mc/s)].</td>
</tr>
<tr>
<td>QSZ</td>
<td>Shall I send each word or group more than once?</td>
<td>Send each word or group twice (or ... times).</td>
</tr>
<tr>
<td>QTA</td>
<td>Shall I cancel telegram number ... as if it had not been sent?</td>
<td>Cancel telegram number ... as if it had not been sent.</td>
</tr>
<tr>
<td>QTB</td>
<td>Do you agree with my counting of words?</td>
<td>I do not agree with your counting of words; I will repeat the first letter or digit of each word or group.</td>
</tr>
<tr>
<td>QTC</td>
<td>How many telegrams have you to send?</td>
<td>I have ... telegrams for you (or for ... ).</td>
</tr>
<tr>
<td>QTE</td>
<td>What is my TRUE bearing from you?</td>
<td>Your TRUE bearing from me is ... degrees (at ... hours) or ... degrees at ... hours.</td>
</tr>
<tr>
<td></td>
<td>What is my TRUE bearing from ... (call sign)?</td>
<td>Your TRUE bearing from ... (call sign) was ... degrees (at ... hours) or ... degrees at ... hours.</td>
</tr>
<tr>
<td>QTF</td>
<td>Will you give me the position of my station according to the bearings taken by the direction-finding stations which you control? (see appendix 15)</td>
<td>The TRUE bearing of ... (call sign) from ... (call sign) was ... degrees at ... hours.</td>
</tr>
<tr>
<td>QTG</td>
<td>Will you send two dashes of ten seconds each followed by your call sign (repeated ... times) [on ... kc/s (or Mc/s)]?</td>
<td>The position of your station according to the bearings taken by the direction-finding stations which I control was ... latitude, ... longitude, class ... at ... hours. (see appendix 15)</td>
</tr>
<tr>
<td></td>
<td>or Will you request ... to send two dashes of ten seconds followed by his call sign (repeated ... times) on ... kc/s (or Mc/s)?</td>
<td>I am going to send two dashes of ten seconds each followed by my call sign (repeated ... times) [on ... kc/s (or Mc/s)] or I have requested ... to send two dashes of ten seconds followed by his call sign (repeated ... times) on ... kc/s (or Mc/s).</td>
</tr>
<tr>
<td>QTH</td>
<td>What is your position in latitude and longitude (or according to any other indication)?</td>
<td>My position is ... latitude ... longitude (or according to any other indication).</td>
</tr>
</tbody>
</table>
### Present Provisions

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Question</th>
<th>Answer or advice</th>
</tr>
</thead>
<tbody>
<tr>
<td>QTI</td>
<td>What is your TRUE track?</td>
<td>My TRUE track is ... degrees.</td>
</tr>
<tr>
<td>QTI</td>
<td>What is your speed?</td>
<td>My speed is ... knots (or kilometres per hour).</td>
</tr>
<tr>
<td>QTJ</td>
<td>(Requests the speed of a ship or aircraft through the water or air respectively.)</td>
<td>(Indicates the speed of a ship or aircraft through the water or air respectively.)</td>
</tr>
<tr>
<td>QTK</td>
<td>What is the speed of your aircraft in relation to the surface of the earth?</td>
<td>The speed of my aircraft in relation to the surface of the earth is ... knots (or kilometres per hour).</td>
</tr>
<tr>
<td>QTL</td>
<td>What is your TRUE heading (TRUE course with no wind)?</td>
<td>My TRUE heading is ... degrees.</td>
</tr>
<tr>
<td>QTN</td>
<td>At what time did you depart from ... (place)?</td>
<td>I departed from ... (place) at ... hours.</td>
</tr>
<tr>
<td>QTO</td>
<td>Have you left dock (or port)?</td>
<td>I have left dock (or port) or I am airborne.</td>
</tr>
<tr>
<td>QTP</td>
<td>Are you going to enter dock (or port)?</td>
<td>I am going to enter dock (or port) or I am going to alight (or land).</td>
</tr>
<tr>
<td>QTR</td>
<td>What is the correct time?</td>
<td>The correct time is ... hours.</td>
</tr>
<tr>
<td>QTS</td>
<td>Will you send your call sign for ... minute(s) now (or at ... hours) [on ... kc/s (or Mc/s)] so that your frequency may be measured?</td>
<td>I will send my call sign for ... minute(s) now (or at ... hours) [on ... kc/s (or Mc/s)] so that my frequency may be measured.</td>
</tr>
<tr>
<td>QTU</td>
<td>What are the hours during which your station is open?</td>
<td>My station is open from ... to ... hours.</td>
</tr>
<tr>
<td>QTV</td>
<td>Shall I stand guard for you on the frequency of ... kc/s (or Mc/s) (from ... to ... hours)?</td>
<td>Stand guard for me on the frequency of ... kc/s (or Mc/s) (from ... to ... hours).</td>
</tr>
<tr>
<td>QTX</td>
<td>Will you keep your station open for further communication with me until further notice (or until ... hours)?</td>
<td>I will keep my station open for further communication with you until further notice (or until ... hours).</td>
</tr>
<tr>
<td>QUA</td>
<td>Have you news of ... (call sign)?</td>
<td>Here is news of ... (call sign).</td>
</tr>
<tr>
<td>QUB</td>
<td>Can you give me, in the following order, information concerning: visibility, height of clouds, direction and velocity of ground wind at ... (place of observation)?</td>
<td>Here is the information requested ...</td>
</tr>
<tr>
<td>QUC</td>
<td>What is the number (or other indication) of the last message you received from me [or from ... (call sign)]?</td>
<td>The number (or other indication) of the last message I received from you [or from ... (call sign)] is ...</td>
</tr>
<tr>
<td>QUD</td>
<td>Have you received the urgency signal sent by ... (call sign of mobile station)?</td>
<td>I have received the urgency signal sent by ... (call sign of mobile station) at ... hours.</td>
</tr>
<tr>
<td>QUF</td>
<td>Have you received the distress signal sent by ... (call sign of mobile station)?</td>
<td>I have received the distress signal sent by ... (call sign of mobile station) at ... hours.</td>
</tr>
<tr>
<td>QUG</td>
<td>Will you be forced to alight (or land)?</td>
<td>I am forced to alight (or land) immediately or I shall be forced to alight (or land) at ... (position or place).</td>
</tr>
<tr>
<td>QUH</td>
<td>Will you give me the present barometric pressure at sea level?</td>
<td>The present barometric pressure at sea level is ... (units).</td>
</tr>
<tr>
<td>QUI</td>
<td>Are your navigation lights working?</td>
<td>My navigation lights are working.</td>
</tr>
<tr>
<td>QUJ</td>
<td>Will you indicate the TRUE course for me to steer towards you (or ...) with no wind?</td>
<td>The TRUE course for you to steer towards me (or ...) with no wind is ... degrees at ... hours.</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Question</td>
<td>Answer or advice</td>
</tr>
<tr>
<td>--------------</td>
<td>----------</td>
<td>-----------------</td>
</tr>
<tr>
<td>QUK</td>
<td>Can you tell me the condition of the sea observed at ... (place or coordinates)?</td>
<td>The sea at ... (place or coordinates) is ...</td>
</tr>
<tr>
<td>QUL</td>
<td>Can you tell me the swell observed at ... (place or coordinates)?</td>
<td>The swell at ... (place or coordinates) is ...</td>
</tr>
<tr>
<td>QUM</td>
<td>Is the distress traffic ended?</td>
<td>The distress traffic is ended.</td>
</tr>
<tr>
<td>QUN</td>
<td>Will vessels in my immediate vicinity [(or in the vicinity of ... latitude ... longitude) (or of ...)] please indicate their position, TRUE course and speed?</td>
<td>My position, TRUE course and speed are ...</td>
</tr>
<tr>
<td>QUO</td>
<td>Shall I search for ... (1. Aircraft; 2. Ship; 3. Survival craft) in the vicinity of ... latitude ... longitude (or according to any other indication)?</td>
<td>Please search for ... (1. Aircraft; 2. Ship; 3. Survival craft) in the vicinity of ... latitude ... longitude (or according to any other indication).</td>
</tr>
<tr>
<td>QUP</td>
<td>Will you indicate your position by ... (1. Searchlight; 2. Black smoke trail; 3. Pyrotechnic lights)?</td>
<td>My position is indicated by ... (1. Searchlight; 2. Black smoke trail; 3. Pyrotechnic lights).</td>
</tr>
<tr>
<td>QUQ</td>
<td>Shall I train my searchlight nearly vertical on a cloud, occulting if possible and, if your aircraft is seen, deflect the beam up wind and on the water (or land) to facilitate your landing?</td>
<td>Please train your searchlight on a cloud, occulting if possible and, if my aircraft is seen or heard, deflect the beam up wind and on the water (or land) to facilitate my landing.</td>
</tr>
<tr>
<td>QUR</td>
<td>Have survivors ... (1. Received survival equipment; 2. Been picked up by rescue vessel; 3. Been reached by ground rescue party)?</td>
<td>Survivors ... (1. Are in possession of survival equipment dropped by ...; 2. Have been picked up by rescue vessel; 3. Have been reached by ground rescue party).</td>
</tr>
<tr>
<td>QUS</td>
<td>Have you sighted survivors or wreckage? If so, in what position?</td>
<td>Have sighted ... (1. Survivors in water; 2. Survivors on rafts; 3. Wreckage) in-position ... latitude ... longitude (or according to any other indication).</td>
</tr>
<tr>
<td>QUT</td>
<td>Is position of incident marked?</td>
<td>Position of incident is marked (by ...).</td>
</tr>
<tr>
<td>QUU</td>
<td>Shall I home ship or aircraft to my position?</td>
<td>Home ship or aircraft [1. ... (call sign) to your position by transmitting your call sign and long dashes on ... kc/s (or Mc/s); 2. ... (call sign) by transmitting on ... kc/s (or Mc/s) courses to steer to reach you].</td>
</tr>
<tr>
<td>QUV</td>
<td>What is my MAGNETIC bearing from you (or from ...)?</td>
<td>Your MAGNETIC bearing from me (or from ...) was ... degrees at ... hours.</td>
</tr>
<tr>
<td>QUX</td>
<td>Will you indicate the MAGNETIC course for me to steer towards you (or ...) with no wind?</td>
<td>The MAGNETIC course for you to steer to reach me (or ...) with no wind was ... degrees at ... hours.</td>
</tr>
</tbody>
</table>
### Present Provisions

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

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Question</th>
<th>Answer or Advice</th>
</tr>
</thead>
<tbody>
<tr>
<td>QRA</td>
<td>What is the name of your station?</td>
<td>The name of my station is ...</td>
</tr>
<tr>
<td>QRD</td>
<td>Where are you bound and where are you from?</td>
<td>I am bound for ... from ...</td>
</tr>
<tr>
<td>QRB</td>
<td>How far approximately are you from my station?</td>
<td>The approximate distance between our stations is ... nautical miles (or kilometres).</td>
</tr>
<tr>
<td>QTH</td>
<td>What is your position in latitude and longitude (or according to any other indication)?</td>
<td>My position is ... latitude ... longitude (or according to any other indication)</td>
</tr>
<tr>
<td>QTN</td>
<td>At what time did you depart from ... (place)?</td>
<td>I departed from ... (place) at ... hours.</td>
</tr>
<tr>
<td>QRI</td>
<td>How is the tone of my transmission?</td>
<td>The tone of your transmission is ... (1. Good; 2. Variable; 3. Bad.)</td>
</tr>
<tr>
<td>QRK</td>
<td>What is the readability of my signals (or those of ...)?</td>
<td>The readability of your signals (or those of ...) is ... (1. Unreadable; 2. Readable now and then; 3. Readable, but with difficulty; 4. Readable; 5. Perfectly readable).</td>
</tr>
<tr>
<td>QRO</td>
<td>Shall I increase power?</td>
<td>Increase power.</td>
</tr>
<tr>
<td>QRP</td>
<td>Shall I decrease power?</td>
<td>Decrease power.</td>
</tr>
<tr>
<td>QSA</td>
<td>What is the strength of my signals (or those of ...)?</td>
<td>The strength of your signals (or those of ...) is ... (1. Scarcely perceptible; 2. Weak; 3. Fairly good; 4. Good; 5. Very good).</td>
</tr>
<tr>
<td>QSB</td>
<td>Are my signals fading?</td>
<td>Your signals are fading.</td>
</tr>
<tr>
<td>QRO</td>
<td>Shall I send faster?</td>
<td>Send faster (... words per minute).</td>
</tr>
<tr>
<td>QRR</td>
<td>Are you ready for automatic operation?</td>
<td>I am ready for automatic operation. Send at ... words per minute.</td>
</tr>
<tr>
<td>QRS</td>
<td>Shall I send more slowly?</td>
<td>Send more slowly (... words per minute).</td>
</tr>
<tr>
<td>QSD</td>
<td>Is my keying defective?</td>
<td>Your keying is defective.</td>
</tr>
<tr>
<td>QRM</td>
<td>Are you being interfered with?</td>
<td>I am being interfered with.</td>
</tr>
<tr>
<td>QRN</td>
<td>Are you troubled by static?</td>
<td>I am troubled by static.</td>
</tr>
<tr>
<td>QRG</td>
<td>Will you tell me my exact frequency (or that of ...)?</td>
<td>Your exact frequency (or that of ...) is ... kc/s (or Mc/s).</td>
</tr>
<tr>
<td>QRH</td>
<td>Does my frequency vary?</td>
<td>Your frequency varies.</td>
</tr>
<tr>
<td>QTS</td>
<td>Will you send your call sign for ... minute(s) now (or at ... hours) [on ... kc/s (or Mc/s)] so that your frequency may be measured?</td>
<td>I will send my call sign for ... minute(s) now (or at ... hours) [on ... kc/s (or Mc/s)] so that my frequency may be measured.</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Question</td>
<td>Answer or advice</td>
</tr>
<tr>
<td>--------------</td>
<td>----------</td>
<td>------------------</td>
</tr>
<tr>
<td><strong>Choice of Frequency and/or Class of Emission</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QSN</td>
<td>Did you hear me [or ... (call sign)] on ... kc/s (or Mc/s)?</td>
<td>I did hear you [or ... (call sign)] on ... kc/s (or Mc/s).</td>
</tr>
<tr>
<td>QSU</td>
<td>Shall I send or reply on this frequency [or on ... kc/s (or Mc/s)] (with emissions of class ...)?</td>
<td>Send or reply on this frequency [or on ... kc/s (or Mc/s)], (with emissions of class ...).</td>
</tr>
<tr>
<td>QSV</td>
<td>Shall I send a series of V's on this frequency [or ... kc/s (or Mc/s)]?</td>
<td>Send a series of V's on this frequency [or ... kc/s (or Mc/s)].</td>
</tr>
<tr>
<td>QSW</td>
<td>Will you send on this frequency [or on ... kc/s (or Mc/s)] (with emissions of class ...)?</td>
<td>I am going to send on this frequency [or on ... kc/s (or Mc/s)] (with emissions of class ...).</td>
</tr>
<tr>
<td>QSX</td>
<td>Will you listen to ... [call sign(s)] on ... kc/s (or Mc/s)?</td>
<td>I am listening to ... [call sign(s)] on ... kc/s (or Mc/s).</td>
</tr>
<tr>
<td><strong>Change of Frequency</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QSY</td>
<td>Shall I change to transmission on another frequency?</td>
<td>Change to transmission on another frequency [or ... kc/s (or Mc/s)].</td>
</tr>
<tr>
<td><strong>Establishing Communication</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QRL</td>
<td>Are you busy?</td>
<td>I am busy (or I am busy with ...). Please do not interfere.</td>
</tr>
<tr>
<td>QRV</td>
<td>Are you ready?</td>
<td>I am ready.</td>
</tr>
<tr>
<td>QRX</td>
<td>When will you call me again?</td>
<td>I will call you again at ... hours [on ... kc/s (or Mc/s)].</td>
</tr>
<tr>
<td>QRY</td>
<td>What is my turn?</td>
<td>Your turn is Number ... [or according to any other indication]. (Relates to communication.)</td>
</tr>
<tr>
<td>QSC</td>
<td>Are you a cargo vessel?</td>
<td>You are being called by ... [on ... kc/s (or Mc/s)].</td>
</tr>
<tr>
<td>QSQ</td>
<td>Are you a cargo vessel? (See article 33, section V)</td>
<td>I am a cargo vessel.</td>
</tr>
<tr>
<td><strong>Time</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QTR</td>
<td>What is the correct time?</td>
<td>The correct time is ... hours.</td>
</tr>
<tr>
<td>QTU</td>
<td>What are the hours during which your station is open?</td>
<td>My station is open from ... to ... hours.</td>
</tr>
<tr>
<td><strong>Charges</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QRC</td>
<td>By what private enterprise (or State Administration) are the accounts for charges for your station settled?</td>
<td>The accounts for charges of my station are settled by the private enterprise ... (or State Administration).</td>
</tr>
<tr>
<td>QSJ</td>
<td>What is the charge to be collected per word to ... including my internal telegraph charge?</td>
<td>The charge to be collected per word to ... including my internal telegraph charge is ... francs.</td>
</tr>
<tr>
<td><strong>Transit</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QRW</td>
<td>Shall I inform ... that you are calling him on ... kc/s (Mc/s)?</td>
<td>Please inform ... that I am calling him on ... kc/s (Mc/s).</td>
</tr>
<tr>
<td>QSO</td>
<td>Can you communicate with ... direct or by relay?</td>
<td>I can communicate with ... direct (or by relay through ...).</td>
</tr>
<tr>
<td>QSP</td>
<td>Will you relay to ... free of charge?</td>
<td>I will relay to ... free of charge.</td>
</tr>
<tr>
<td>QSQ</td>
<td>Have you a doctor on board [or is ... (name of person) on board]?</td>
<td>I have a doctor on board [or ... (name of person) is on board].</td>
</tr>
<tr>
<td>QUA</td>
<td>Have you news of ... (call sign)?</td>
<td>Here is news of ... (call sign).</td>
</tr>
<tr>
<td>QUC</td>
<td>What is the number (or other indication) of the last message you received from me [or from ... (call sign)]?</td>
<td>The number (or other indication) of the last message I received from you [or from ... (call sign)] is ...</td>
</tr>
<tr>
<td><strong>Exchange of Correspondence</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QRU</td>
<td>Have you anything for me?</td>
<td>I have nothing for you.</td>
</tr>
<tr>
<td>QSG</td>
<td>Shall I send ... telegrams at a time?</td>
<td>Send ... telegrams at a time.</td>
</tr>
<tr>
<td>QSI</td>
<td></td>
<td>I have been unable to break in on your transmission.</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Question</td>
<td>Answer or advice</td>
</tr>
<tr>
<td>--------------</td>
<td>----------</td>
<td>-----------------</td>
</tr>
<tr>
<td>QSK</td>
<td>Can you hear me between your signals?</td>
<td>Will you inform ... (call sign) that I have been unable to break in on his transmission [on ... kc/s (or Mc/s)]. I can hear you between my signals.</td>
</tr>
<tr>
<td>QSL</td>
<td>Can you acknowledge receipt?</td>
<td>I am acknowledging receipt.</td>
</tr>
<tr>
<td>QSM</td>
<td>Shall I repeat the last telegram which I sent you, or some previous telegram?</td>
<td>Repeat the last telegram which you sent me [or telegram(s) number(s) ...]</td>
</tr>
<tr>
<td>QSZ</td>
<td>Shall I send each word or group more than once?</td>
<td>Send each word or group twice (or ... times).</td>
</tr>
<tr>
<td>QTA</td>
<td>Shall I cancel telegram number ... as if it had not been sent?</td>
<td>Cancel telegram number ... as if it had not been sent.</td>
</tr>
<tr>
<td>QTB</td>
<td>Do you agree with my counting of words?</td>
<td>I do not agree with your counting of words; I will repeat the first letter or digit of each word or group.</td>
</tr>
<tr>
<td>QTC</td>
<td>How many telegrams have you to send?</td>
<td>I have ... telegrams for you (or for ...).</td>
</tr>
<tr>
<td>QTV</td>
<td>Shall I stand guard for you on the frequency of ... kc/s (or Mc/s) (from ... to ... hours)?</td>
<td>Stand guard for me on the frequency of ... kc/s (or Mc/s) (from ... to ... hours).</td>
</tr>
<tr>
<td>QTX</td>
<td>Will you keep your station open for further communication with me until further notice (or until ... hours)?</td>
<td>I will keep my station open for further communication with you until further notice (or until ... hours).</td>
</tr>
<tr>
<td>QRE</td>
<td>What is your estimated time of arrival at ... (place)?</td>
<td>My estimated time of arrival at ... (place) is ... hrs. I am returning to ... (place) or</td>
</tr>
<tr>
<td>QRF</td>
<td>Are you returning to ... (place)?</td>
<td>Return to ... (place). My TRUE track is ... degrees.</td>
</tr>
<tr>
<td>QTI</td>
<td>What is your TRUE track?</td>
<td>My speed is ... knots (or kilometres per hour). (Indicates the speed of a ship or aircraft through the water or air respectively.)</td>
</tr>
<tr>
<td>QTJ</td>
<td>What is your speed? (Requests the speed of a ship or aircraft through the water or air respectively.)</td>
<td>The speed of my aircraft in relation to the surface of the earth is ... knots (or kilometres per hour). My TRUE heading is ... degrees.</td>
</tr>
<tr>
<td>QTK</td>
<td>What is the speed of your aircraft in relation to the surface of the earth?</td>
<td></td>
</tr>
<tr>
<td>QTL</td>
<td>What is your TRUE heading (TRUE course with no wind)?</td>
<td></td>
</tr>
<tr>
<td>QTN</td>
<td>At what time did you depart from ... (place)?</td>
<td>I departed from ... (place) at ... hours. I have left dock (or port). or</td>
</tr>
<tr>
<td>QTO</td>
<td>Have you left dock (or port)?</td>
<td>I am airborne. I am going to enter dock (or port). or</td>
</tr>
<tr>
<td></td>
<td>Are you airborne?</td>
<td>I am going to alight (or land).</td>
</tr>
<tr>
<td>QTP</td>
<td>Are you going to enter dock (or port)?</td>
<td>I am forced to alight (or land) immediately. or</td>
</tr>
<tr>
<td></td>
<td>Are you going to alight (or land)?</td>
<td>I shall be forced to alight (or land) at ... (position or place).</td>
</tr>
<tr>
<td>QUG</td>
<td>Will you be forced to alight (or land)?</td>
<td>The TRUE course for you to steer towards me (or ...) with no wind is ... degrees at ... hours. My position, TRUE course and speed are ...</td>
</tr>
<tr>
<td>QUJ</td>
<td>Will you indicate the TRUE course for me to steer towards you (or ...) with no wind?</td>
<td>The MAGNETIC course for you to steer to reach me (or ...) with no wind was ... degrees at ... hours. (This signal, in general, will not be used in the Maritime Mobile Service)</td>
</tr>
<tr>
<td>QUN</td>
<td>Will vessels in my immediate vicinity [(or in the vicinity of ... latitude ... longitude) (or of ...)] please indicate their position, TRUE course and speed?</td>
<td></td>
</tr>
<tr>
<td>QUX</td>
<td>Will you indicate the MAGNETIC course for me to steer towards you (or ...) with no wind?</td>
<td>(This signal, in general, will not be used in the Maritime Mobile Service)</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Question</td>
<td>Answer or advice</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>QUB</td>
<td>Can you give me, in the following order, information concerning: visibility, height of clouds, direction and velocity of ground wind at ... ( \text{place of observation} )?</td>
<td>Here is the information requested ...</td>
</tr>
<tr>
<td>QUH</td>
<td>Will you give me the present barometric pressure at sea level?</td>
<td>The present barometric pressure at sea level is ... ( \text{units} ).</td>
</tr>
<tr>
<td>QUK</td>
<td>Can you tell me the condition of the sea observed at ... ( \text{place or coordinates} )?</td>
<td>The sea at ... ( \text{place or coordinates} ) is ...</td>
</tr>
<tr>
<td>QUL</td>
<td>Can you tell me the swell observed at ... ( \text{place or coordinates} )?</td>
<td></td>
</tr>
<tr>
<td>QTE</td>
<td>What is my TRUE bearing from you? or What is my TRUE bearing from ... ( \text{call sign} )? or What is the TRUE bearing of ... ( \text{call sign} ) from ... ( \text{call sign} )?</td>
<td>Your TRUE bearing from me is ... degrees at ... hours. or Your TRUE bearing from ... ( \text{call sign} ) was ... degrees at ... hours. or The TRUE bearing of ... ( \text{call sign} ) from ... ( \text{call sign} ) was ... degrees at ... hours.</td>
</tr>
<tr>
<td>QTF</td>
<td>Will you give me the position of my station according to the bearings taken by the direction-finding stations which you control? ( \text{See Appendix 15} ).</td>
<td>The position of your station according to the bearings taken by the direction-finding stations which I control was ... latitude, ... longitude, class ... at ... hours. ( \text{See Appendix 15} ).</td>
</tr>
<tr>
<td>QTG</td>
<td>Will you send two dashes of ten seconds each followed by your call sign (repeated ... times) ( \text{on} ) ... ( \text{kc/s} ) ( \text{or} ) ( \text{Mc/s} )?</td>
<td>I am going to send two dashes of ten seconds each followed by my call sign (repeated ... times) ( \text{on} ) ... ( \text{kc/s} ) ( \text{or} ) ( \text{Mc/s} ). or I have requested ... to send two dashes of ten seconds followed by his call sign (repeated ... times) ( \text{on} ) ... ( \text{kc/s} ) ( \text{or} ) ( \text{Mc/s} ).</td>
</tr>
<tr>
<td>QUV</td>
<td>What is my MAGNETIC bearing from you ( \text{or from} ... )? ( \text{This signal, in general, will not be used in the Maritime Mobile Service} ).</td>
<td>Your MAGNETIC bearing from me ( \text{or from} ... ) was ... degrees at ... hours. ( \text{This signal, in general, will not be used in the Maritime Mobile Service} ).</td>
</tr>
<tr>
<td>QRT</td>
<td>Shall I stop sending?</td>
<td>Stop sending.</td>
</tr>
<tr>
<td>QUD</td>
<td>Have you received the urgency signal sent by ... ( \text{call sign of mobile station} ) ?</td>
<td>I have received the urgency signal sent by ... ( \text{call sign of mobile station} ) at ... hours.</td>
</tr>
<tr>
<td>QUG</td>
<td>Will you be forced to alight ( \text{or land} )?</td>
<td>I am forced to alight ( \text{or land} ) immediately. or I shall be forced to alight ( \text{or land} ) at ... ( \text{position or place} ).</td>
</tr>
<tr>
<td>QUF</td>
<td>Have you received the distress signal sent by ... ( \text{call sign of mobile station} ) ?</td>
<td>I have received the distress signal sent by ... ( \text{call sign of mobile station} ) at ... hours.</td>
</tr>
<tr>
<td>QUM</td>
<td>Is the distress traffic ended?</td>
<td>The distress traffic is ended.</td>
</tr>
<tr>
<td>QUI</td>
<td>Are your navigation lights working?</td>
<td>My navigation lights are working.</td>
</tr>
<tr>
<td>QUN</td>
<td>Will vessels in my immediate vicinity ( \text{or in the vicinity of} ... ) ... ( \text{latitude} ) ... ( \text{longitude} ) ( \text{or of} ... ) please indicate their position, TRUE course and speed?</td>
<td>My position, TRUE course and speed are ...</td>
</tr>
</tbody>
</table>

**Meteorology**

**Radio Direction-finding**

**Suspension of Work**

**Urgency**

**Distress**

**Search and Rescue**
### Present Provisions

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Question</th>
<th>Answer or advice</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUO</td>
<td>Shall I search for ...</td>
<td>Please search for ...</td>
</tr>
<tr>
<td></td>
<td>in the vicinity of ... latitude ... longitude (or according to any other indication)?</td>
<td>in the vicinity of ... latitude ... longitude (or according to any other indication).</td>
</tr>
<tr>
<td>QUP</td>
<td>Will you indicate your position by ...</td>
<td>My position is indicated by ...</td>
</tr>
<tr>
<td>QUQ</td>
<td>Shall I train my searchlight nearly vertical on a cloud, occulting if possible and, if your aircraft is seen, deflect the beam up wind and on the water (or land) to facilitate your landing?</td>
<td>Please train your searchlight on a cloud, occulting if possible and, if my aircraft is seen or heard, deflect the beam up wind and on the water (or land) to facilitate my landing.</td>
</tr>
<tr>
<td>QUR</td>
<td>Have survivors ...</td>
<td>Survivors ...</td>
</tr>
<tr>
<td></td>
<td>(1. Received survival equipment; 2. Been picked up by rescue vessel; 3. Been reached by ground rescue party)</td>
<td>(1. Are in possession of survival equipment dropped by ...; 2. Have been picked up by rescue vessel; 3. Have been reached by ground rescue party).</td>
</tr>
<tr>
<td>QUS</td>
<td>Have you sighted survivors or wreckage? If so, in what position?</td>
<td>Have sighted ...</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1. Survivors in water; 2. Survivors on rafts; 3. Wreckage)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>in position ... latitude ... longitude (or according to any other indication).</td>
</tr>
<tr>
<td>QUT</td>
<td>Is position of incident marked?</td>
<td>Position of incident is marked (by ...)</td>
</tr>
<tr>
<td>QUU</td>
<td>Shall I home ship or aircraft to my position?</td>
<td>Home ship or aircraft</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[1. ... (call sign) to your position by transmitting your call sign and long dashes on ... kc/s (or Mc/s); 2. ... (call sign) by transmitting on ... kc/s (or Mc/s) courses to steer to reach you].</td>
</tr>
</tbody>
</table>

### Proposals

#### Note by the S.G.

The Q code is made up of two parts:

- A. List of abbreviations in alphabetical order, and
- B. List of abbreviations according to the nature of the question, answer or advice.

Proposed modifications of the code have only been shown in Part A, but they will also have to be included in Part B if they are adopted.
**Proposed addition:**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Question</th>
<th>Answer or advice</th>
</tr>
</thead>
<tbody>
<tr>
<td>QTT</td>
<td>—</td>
<td>The call signal which follows is superimposed on another transmission.</td>
</tr>
</tbody>
</table>

**Reasons**

See proposal 1449.

---

**Denmark, Finland, Iceland, Norway, Sweden**

**Proposed Modification**

<table>
<thead>
<tr>
<th>QUM</th>
<th>Read:</th>
<th>Read:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Is silence still necessary?</td>
<td>Silence no longer necessary. Normal working may be resumed.</td>
</tr>
</tbody>
</table>

**Reasons**

See proposals 2494 to 2497 and 2500.

---

**United States of America**

**Proposed Modifications**

<table>
<thead>
<tr>
<th>QSW</th>
<th>Read:</th>
<th>Read:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Will you send on this frequency (or on ... kc/s) (or ... Mc/s) (with emissions of class...)?</td>
<td>1. I am going to send on this frequency (or on ... kc/s) (or ... Mc/s) (with emissions of class...).</td>
</tr>
<tr>
<td></td>
<td>2. What working frequency will you use?</td>
<td>2. I will use the working frequency of ... kc/s (or ... Mc/s).</td>
</tr>
</tbody>
</table>

**QTF**

Delete in fine: (see Appendix 15).

**QTL**

Add the following note:

Special Note. — Stations of the international aeronautical telecommunication service will disregard the I.T.U. explanatory note shown in parentheses.

**QUG**

Read:

I am forced to alight (or land) immediately. or
I will be forced to alight (or land) at ... (position or place) at ... (time).

Add the following note:

Special Note. — In the aeronautical service substitute heading for course.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Question</th>
<th>Answer or advice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>QUT</strong></td>
<td>Read: 1. Is position of incident marked? or 2. Is position of survival craft marked?</td>
<td>Read: 1. Position of incident is marked (by . . .). or 2. Position of survival craft was marked at . . . (hours) by: 1. flame or smoke float, 2. sea marker, 3. sea marker dye, 4. . . . (<em>specify other marking</em>).</td>
</tr>
<tr>
<td><strong>QUU</strong></td>
<td>2. Is position of survival craft marked?</td>
<td>Home ship or aircraft . . . 1. . . . <em>(call sign)</em> to your position by transmitting your call sign and long dashes on . . . kc/s (or . . . Mc/s). 2. . . . <em>(call sign)</em> by transmitting on . . . kc/s (or . . . Mc/s) courses to steer to reach you (headings).</td>
</tr>
</tbody>
</table>

**Proposed Additions**

The identification that follows is superimposed on another transmission.

**Reasons**

There is a need to alert receiving and monitoring personnel that the following identification signal is superimposed upon the regular transmission. See C.C.I.R. Recommendation No. 220.

<table>
<thead>
<tr>
<th><strong>Q</strong></th>
<th></th>
<th>Fly for . . . minutes on a magnetic heading of . . . degrees.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Q</strong></td>
<td>What is your MAGNETIC heading?</td>
<td>My MAGNETIC heading is . . . degrees.</td>
</tr>
<tr>
<td><strong>Q</strong></td>
<td>Do you intend to ask me for a series of bearings?</td>
<td>I intend to ask you for a series of bearings.</td>
</tr>
<tr>
<td><strong>Q</strong></td>
<td>Will you indicate the MAGNETIC heading for me to steer towards you (or . . . ) with no wind?</td>
<td>The MAGNETIC heading for you to steer to reach me (or . . . ) with no wind was . . . (degrees) at . . . (hours).</td>
</tr>
<tr>
<td><strong>Q</strong></td>
<td>How long will your power source permit you to communicate?</td>
<td>My power source will permit me to: 1. transmit and receive . . . (hours). 2. transmit . . . (hours). 3. receive . . . (hours).</td>
</tr>
<tr>
<td><strong>Q</strong></td>
<td>Can you use telephony employing the language of . . . <em>(numbered alternatives)</em> with interpreter if necessary; if so on what frequencies?</td>
<td>I can use telephony in the language of . . . <em>(numbered alternative)</em> on this frequency (or on . . . kc/s [Mc/s]).</td>
</tr>
<tr>
<td><strong>Q</strong></td>
<td>Are you proceeding to scene of distress and if so at what time do you expect to arrive?</td>
<td>I am proceeding to scene of distress and expect to arrive at . . . (hours) (GMT) . . . date.</td>
</tr>
<tr>
<td><strong>Q</strong></td>
<td>Are you in the search area designated as . . . <em>(designator or latitude/longitude)</em>?</td>
<td>I am in the . . . <em>(designation)</em> search area.</td>
</tr>
<tr>
<td><strong>Q</strong></td>
<td>What other units are (or will be) taking part in the operation . . . <em>(identification of operation)</em>?</td>
<td>In the operation . . . <em>(identification)</em>, the following units are (or will be) taking part . . . <em>(name of units)</em> or . . . <em>(name of unit)</em> is taking part in operation . . . <em>(identification)</em> (with effect from . . . hours).</td>
</tr>
<tr>
<td><strong>Q</strong></td>
<td>What are the sea conditions at <em>(position)</em>?</td>
<td>The sea conditions at . . . <em>(position)</em> . . . 1. permit alighting but not takeoff. 2. render alighting extremely hazardous.</td>
</tr>
<tr>
<td><strong>Q</strong></td>
<td>Will you send up pyrotechnical lights?</td>
<td>I will send up pyrotechnical lights.</td>
</tr>
<tr>
<td><strong>Q</strong></td>
<td>What is the estimated drift of the survival craft?</td>
<td>The estimated drift of the survival craft is . . . <em>(figures and units)</em>.</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Question</td>
<td>Answer or advice</td>
</tr>
<tr>
<td>--------------</td>
<td>----------</td>
<td>-----------------</td>
</tr>
<tr>
<td>2895</td>
<td>Q. How much fuel have you remaining (expressed as hours and/or minutes of consumption)?</td>
<td>Fuel remaining is ... (hours and/or minutes of consumption).</td>
</tr>
<tr>
<td>2896</td>
<td>Q. Will relief take place when ... (identification) establishes: 1. visual, 2. communications, contact with survivors?</td>
<td>Relief will take place when ... (identification) establishes: 1. visual, 2. communications, contact with survivors.</td>
</tr>
<tr>
<td>2897</td>
<td>Q. Which pattern of search is being followed?</td>
<td>The search pattern is: 1. parallel sweep, 2. square search, 3. creeping line ahead, 4. track crawl, 5. contour search, 6. combined search by aircraft and ship, 7. ... (specify).</td>
</tr>
<tr>
<td>2898</td>
<td>Q. Report details of the parallel sweep (track) search being (or to be) conducted? or in the parallel sweep (track) search being (or to be) conducted, what is (are): 1. the direction of sweeps, 2. the separation between sweeps, 3. the height above the datum, employed in the search pattern?</td>
<td>The parallel sweep (track) search is being (or to be) conducted: 1. with direction of sweeps ... degrees ... (true or magnetic), 2. with ... (distance figures and units) separation between sweeps, 3. at a height of ... (figure above ... [datum]).</td>
</tr>
<tr>
<td>2899</td>
<td>Q. What has the rescue vessel or rescue aircraft recovered?</td>
<td>... (identification) has recovered... 1. ... (number) survivors, 2. wreckage, 3. ... (number) bodies.</td>
</tr>
<tr>
<td>2900</td>
<td>Q. Have you effected rescue?</td>
<td>I have effected rescue and am proceeding to ... base (with ... persons injured requiring ambulance).</td>
</tr>
<tr>
<td>2901</td>
<td>Q. What is the condition of survivors?</td>
<td>Survivors are in ... (condition), and urgently need... Condition 2. good 4. fair 6. critical condition, unspecified or exposure 8. critical condition, serious injury, fractures, burns or shock. Needs 0. no urgent requirements, can carry on with present supplies 1. doctor 3. blankets, clothing, warming up 5. medicine 7. water or food 9. urgent evacuation to hospital. Notes 3. will be interpreted according to circumstances, if isolated in the Arctic, also heating equipment, fuel, etc. might be sent. 5. the medical supplies might be different for 6+5 and 8+5.</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Question</td>
<td>Answer or advice</td>
</tr>
<tr>
<td>--------------</td>
<td>----------</td>
<td>-----------------</td>
</tr>
<tr>
<td>2902</td>
<td>Q: Have you abandoned the search?</td>
<td>(if no digit): I have abandoned search; (if followed by digit): I am continuing search for</td>
</tr>
<tr>
<td>2903</td>
<td>Q: May I be relieved at ... (hours)?</td>
<td>You may expect to be relieved at ... hours. (by ...) 1. aircraft ... (identification) (type ...) 2. vessel whose call sign is ... (call sign) and/or whose name is ... (name).</td>
</tr>
<tr>
<td>2904</td>
<td>Q: Are you able to home on your DF equipment?</td>
<td>I am homing on my DF equipment on ... station.</td>
</tr>
</tbody>
</table>

**Note**

All of the Code abbreviations which appear in Section IA should also appear in Section IB. They should, of course, be integrated with those Q signals already listed in this category and should be placed in alphabetical order.

**Reasons**

To bring together in one place, under one heading, all the Q signals useful in Search and Rescue operations which are available to all services.

**India**

**Proposed Modifications**

<table>
<thead>
<tr>
<th>2905</th>
<th>QRE</th>
<th>Read:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>What is your estimated time of arrival at/over ... (place)?</td>
</tr>
</tbody>
</table>

**Reasons**

The amendment will help the aeronautical service also.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Question</th>
<th>Answer or advice</th>
</tr>
</thead>
</table>

**Reasons**

To give additional information and to make it fall in line with SINPO code.


**Reasons**

1. Same as for QRM.
2. In accordance with I.C.A.O. recommendations.

| 2908 QSW     | Read: 1. Will you send on this frequency [or on ... kc/s (or ... Mc/s)] (with emissions of class ...)? 2. What working frequency will you use? | Read: 1. I am going to send on this frequency [or ... kc/s (or ... Mc/s)] (with emissions of class ...)? 2. I will use the working frequency of ... kc/s, (or Mc/s). |

| 2909 QUT     | Read: 1. Is position of incident marked? or, 2. Is position of survival craft marked? | Read: 1. Position of incident is marked (by ...)
2. Position of survival craft was marked at ... (hours) by:
1. Flame or smoke float
2. sea marker
3. sea marker dye
4. ... (specify other marking). |

**Note:**

Coincident with a revision of the QUT signification, the signal QKM should be deleted from the aeronautical code signals.

| 2910 QUV     | Read as follows the note in the bracketed portion in the question and answer or advice columns:
(This signal will not be used in the aeromobile service.) | |

**Reasons**

Separate codes already exist for aeromobile service. Deletion will avoid duplication.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Question</th>
<th>Answer or advice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2912</strong> QUX</td>
<td><em>Read as follows the note in the bracketed portion in the question and answer or advice columns:</em>&lt;br&gt;<em>(This signal will not be used in the aeromobile service.)</em></td>
<td></td>
</tr>
</tbody>
</table>

**Reasons**
Separate codes already exist for aeromobile service. Deletion will avoid duplication.

---

**Proposed Additions**

| **2913** QSR | May I be relieved *(at ... hours)*? | You may expect to be relieved at .. hours by...
1. aircraft *(identification)* *(type ...)*
2. vessel whose call sign is ... *(call sign)* and/or whose name is ... *(name).* |

**Reasons**
Transfer to the series of groups for use by all services the meaning of abbreviation QKF used in the aeronautical service.

| **2914** QST | What other units *(or will be)* taking part in the operation *(identification of operation)*? | In the operation *(Identification)* the following units are *(or will be)* taking part *(name of units)* or *(name of unit)* is taking part in operation *(identification)* *(with effect from ... hours).* |

**Reasons**
Transfer to the series of groups for use by all services the meaning of abbreviation QKO used in the aeronautical service.

| **2915** QTD | What has the rescue vessel or rescue aircraft recovered? | *(identification)* has recovered...
1) ... *(number)* survivors.
2) wreckage
3) ... *(number)* bodies. |

**Reasons**
Transfer to the series of groups for use by all services the meaning of abbreviation QKW used in the aeronautical service.

| **2916** QTM | What is your MAGNETIC heading? | My MAGNETIC heading is ... degrees. |

**Reasons**
Same as for QRE.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Question</th>
<th>Answer or advice</th>
</tr>
</thead>
</table>
| 2917 QTW     | What is the condition of survivors? | Survivors are in ... condition, and urgently need ...  
*Condition*  
2. good  
4. fair  
6. critical condition, *(unspecified or exposure)*  
8. critical condition, *(serious injury, fractures, burns or shock)*.  
*Needs*  
0. No urgent requirements, can carry on with present supplies  
1. doctor  
3. blankets, clothing, warming up  
5. medicine  
7. water or food  
9. urgent evacuation to hospital.  
*Notes*  
3. Will be interpreted according to circumstances, if isolated in the Arctic, also heating equipment, fuel, etc. might be sent.  
5. The medical supplies might be different for 6 + 5 and 8 + 5.  
7. Water is much more critical than food within a 24-hour period; this should be applied according to circumstances, in the desert or tropical seas only water might be sent, in the Arctic predominantly food.  
8. Indicates that special surgical treatment, transfusion, etc. might be required.  
9. Would generally refer to surgical facilities; might also include a hospital on a ship; evacuation will be by helicopter, rescue launch, etc. Assistance by this code should only be requested in real emergencies.  
I am proceeding to scene of distress and expect to arrive at ... hours (G.M.T.) ... (date).  
(if no digit): I have abandoned search;  
(if followed by digit): I am continuing search for  
1. aircraft, 2. ship, 3. survival craft, 4. survivors, 5. wreckage.  
I can use telephony in the language of ... *(numbered alternative(s))* on this frequency (or on ... kc/s [Mc/s]).  
My power source will permit me to:  
1. transmit and receive ... hours  
2. transmit ... hours  
3. receive ... hours |
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Question</th>
<th>Answer or advice</th>
</tr>
</thead>
<tbody>
<tr>
<td>2922 QUW</td>
<td>Are you in the search area designated as... (designator or latitude/longitude)?</td>
<td>I am in the... (designation) search areas.</td>
</tr>
</tbody>
</table>

**Reasons**

Transfer to the series of groups for use by all services the meaning of abbreviation QKY used in the aeronautical service.

---

**Italy**

*Proposed Additions*

| 2923 QSE | Shall I keep a watch for you? (or for ...) on ... kc/s (Mc/s)? | Listen out for me (or for ...) on ... kc/s (Mc/s). |
| 2924 QSF | | Begin sending on ... kc/s (Mc/s) and if contact is not made in five minutes, return to the other frequency on which you sent. |
| 2925 QSH | | I cannot hear you (or I cannot hear ...) on ... kc/s (Mc/s). |
| 2926 QSS | What frequency are you going to use? | I am going to use ... kc/s (as a general rule only the last three figures of the frequency need be given). |
| 2927 QTM | What is your MAGNETIC heading? | My course is ... degrees MAGNETIC. |

**Reasons**

New Q Code abbreviations.

---

**2928 Lebanon, Philippines (Republic of)**

*Proposed modification*

| QUG | Read: I am forced to alight (or land) immediately or I shall have to alight (or land) at (position or place) at ... (time). |

**Reasons**

To agree with I.C.A.O.
### Proposed additions

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Question</th>
<th>Answer or advice</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUW</td>
<td>Will you give me a ditching report for your position (or for ... position)?</td>
<td>Here is the ditching report for ... (position). Here is the ditching report for ... (position). Sea * Level PRESSURE ... (figures and units) (followed by the word APPROXIMATE when not reported by an Ocean Station, Vessel or a Selected Ship). SURFACE WIND ... degrees True ... knots. ** The SWELL (QUL) has an intensity of ... (number) and is from the direction of ... (cardinal or quadrantal point). Ø The SEA * (QUK) is ... (number) VISIBILITY ... (figures and units) CLOUDBASE ... eighths at ... (figures and units) height above the Sea * PRESENT WEATHER ... (code figure from W.M.O. Code 92) [REMARKS ... (if any)] * or WATER, in the case of rivers or lakes ** Signal QUL is transmitted preceding the reporting of SWELL conditions Ø Signal QUK is transmitted preceding the reporting of SEA conditions. Example = QUW 5120N 40W 1006MB 360 - 10 QUL 4 NW QUK 3 3NM 8 200 FT 63 =</td>
</tr>
</tbody>
</table>

### Federal German Republic

**Proposed Addition**

| QSR | Shall I repeat the call on the calling frequency? | Repeat your call on the calling frequency, did not hear you (or: have interference). |

**Reasons**

When a ship station in the band between 4 000 and 23 000 kc/s has changed over from its calling frequency to one of its working frequencies and cannot be heard (or can only be badly heard) by the coastal station, it will often be necessary to have the ship station switch back to the calling frequency in order to arrange a new change of frequency. This can best be done by using a Q-signal.

### United Kingdom

**Proposed Modifications**

<table>
<thead>
<tr>
<th>QRO</th>
<th>Read:</th>
<th>Read:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Shall I increase transmitter power?</td>
<td>Increase transmitter power.</td>
</tr>
</tbody>
</table>

**Clarification.**
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Question</th>
<th>Answer or advice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2932</strong> QRP</td>
<td>Read: Shall I decrease transmitter power?</td>
<td>Read: Decrease transmitter power.</td>
</tr>
</tbody>
</table>

**Reasons**
Clarification.

| **2933** QSJ | Read: What is the charge to be collected per word (or per minute for a radiotelephone call) to ... including your coast station and internal charge? | Read: The charge to be collected per word (or per minute for a radiotelephone call) to ... including my coast station and internal charge is ... francs. |

**Reasons**
Clarification and to cater for enquiries about radiotelephone calls made by radiotelegraph ship stations.

| **2934** QSK | Read: Can you hear me between your signals and if so can I break in on your transmission? (See Article 29, Section IV). | Read: I can hear you between my signals; break in on my transmission. |

**Reasons**
To facilitate the transmission of long radiotelegrams or series of radiotelegrams.

| **2935** QTA | Read: Shall I cancel radiotelegram number ...? | Read: Cancel radiotelegram number ... |

**Reasons**
The deleted phrase is superfluous and could lead to accounting difficulties.

| **2936** QTF | Read: The position of your station according to the bearings taken by the direction-finding stations which I control was ... latitude ... longitude (or other indication of position), class ... at ... hours. | |

**Reasons**
To permit use of the signal when the position is not specified in latitude and longitude.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Question</th>
<th>Answer or advice</th>
</tr>
</thead>
<tbody>
<tr>
<td>QTJ</td>
<td>Read: My speed is ... knots [or ... kilometres per hour or ... statute miles per hour (MPH)].</td>
<td></td>
</tr>
</tbody>
</table>

**Reasons**
To permit the use of statute miles per hour using the abbreviation MPH.

| QTK          | Read: The speed of my aircraft in relation to the surface of the earth is ... knots [or ... kilometres per hour or ... statute miles per hour (MPH)]. | |

**Reasons**
See proposal 2937.

| QTL          | Read: What is your TRUE heading? | |

**Reasons**
Parenthetical alternative deleted to eliminate the possibility of misinterpretation by aeronautical stations.

| QTS          | Read: Will you send your call sign for tuning purposes or so that your frequency can be measured now (or at ... hours) on ... kc/s (or Mc/s)? | Read: I will send my call sign for tuning purposes or so that my frequency may be measured now (or at ... hours) on ... kc/s (or Mc/s). |

**Reasons**
Clarification and to avoid the need for a separate signal when transmission of the call sign is required for tuning purposes.

| QUA          | Read: Have you news of ... (ship, aircraft, survivors, etc.)? | Read: Here is news of ... (ship, aircraft, survivors, etc.). |

**Reasons**
To widen the scope of the signal, particularly to cover survivors.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Question</th>
<th>Answer or advice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2942</strong> QUB</td>
<td><strong>Read:</strong> Can you give me, in the following order, information concerning the direction in degrees true and speed of the surface wind, visibility, present weather, and amount, type and height of base of cloud above surface elevation at ... <em>(place of observation)</em>?</td>
<td></td>
</tr>
</tbody>
</table>

**Reasons**

To align the order of elements with that used in the Aeronautical service and facilitate communications between aeronautical and maritime stations.

| **2943** QUG | **Read:** I am forced to alight *(or land)* immediately *(or)* I shall be forced to alight *(or land)* at ... *(position or place)* at ... *(time)*. | |

**Reasons**

To increase the usefulness of the signal.

| **2944** QUH | **Read:** What is the present barometric pressure at water level? | **Read:** The present barometric pressure at water level is ... *(units)*. |

**Reasons**

To eliminate the possibility of confusion or error due to misunderstanding of the term "at sea level".

| **2945** QUM | **Read:** May I resume normal working? | **Read:** Normal working may be resumed. |

**Reasons**

To permit traffic working when silence is no longer necessary.

| **2946** QUT | **Read:** Position of incident is marked by ... *(flame or smoke float, sea marker, sea marker dye, or ... *(specify other marking)*).* | |

**Reasons**

To facilitate search and rescue operations.
2947 QUV and QUX

**Proposed Deletions:**

**Reasons**

No longer required for aeronautical use.

**Proposed Additions:**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Question</th>
<th>Answer or advice</th>
</tr>
</thead>
<tbody>
<tr>
<td>QSS</td>
<td>What working frequency will you use?</td>
<td>I will use the working frequency ... kc/s (normally only the last three figures of the frequency need be inserted).</td>
</tr>
</tbody>
</table>

**Reasons**

To facilitate working at busy HF stations. The addition was implemented on 1.12.54. (See Notification No. 709 of the I.T.U.)

2949 QTD

**Reasons**

To facilitate search and rescue operations. Corresponds to QKW in the aeronautical code.

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Question</th>
<th>Answer or advice</th>
</tr>
</thead>
<tbody>
<tr>
<td>QTD</td>
<td>What has the rescue vessel or rescue aircraft recovered?</td>
<td>... (identification) has recovered ... (survivors, wreckage, bodies).</td>
</tr>
</tbody>
</table>

2950 QTM

**Reasons**

To eliminate the possibility of confusion between TRUE and MAGNETIC heading.

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Question</th>
<th>Answer or advice</th>
</tr>
</thead>
<tbody>
<tr>
<td>QTM</td>
<td>What is your MAGNETIC heading?</td>
<td>My MAGNETIC heading is ... degrees.</td>
</tr>
</tbody>
</table>

2951 QTT

**Reasons**

In accordance with C.C.I.R. Recommendation No. 220.

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Question</th>
<th>Answer or advice</th>
</tr>
</thead>
<tbody>
<tr>
<td>QTT</td>
<td></td>
<td>The identification call signal which follows is superimposed on another transmission.</td>
</tr>
</tbody>
</table>

2952 QTY

**Reasons**

To facilitate search and rescue operations.

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Question</th>
<th>Answer or advice</th>
</tr>
</thead>
<tbody>
<tr>
<td>QTY</td>
<td>Are you proceeding to position of incident and if so at what time do you expect to arrive?</td>
<td>I am proceeding to the position of incident and expect to arrive at ... hours (G.M.T.) ... date.</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Question</td>
<td>Answer or advice</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>QTZ</td>
<td>Are you continuing the search?</td>
<td>I am continuing the search for ... (aircraft, ship, survival craft, survivors or wreckage).</td>
</tr>
</tbody>
</table>

**Reasons**

To facilitate search and rescue operations.

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Question</th>
<th>Answer or advice</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUE</td>
<td>Can you use telephony in ... (language) with interpreter if necessary: if so on what frequencies?</td>
<td>I can use telephony in ... (language) on ... kc/s (or Mc/s).</td>
</tr>
</tbody>
</table>

**Reasons**

To facilitate search and rescue operations.

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Question</th>
<th>Answer or advice</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUU</td>
<td>Is position of survival craft marked?</td>
<td>Position of survival craft was marked at ... hours by ... (flame or smoke float, sea marker, sea marker dye or ... (specify other markings)).</td>
</tr>
</tbody>
</table>

**Reasons**

To facilitate search and rescue operations. Corresponds to QKM in the aeronautical code.

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Question</th>
<th>Answer or advice</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUZ</td>
<td>(No interrogative form needed.) Stop sending; distress working in progress.</td>
<td>(No interrogative form needed.) Stop sending; distress working in progress.</td>
</tr>
</tbody>
</table>

**Reasons**

Consequential on proposal relative to 902.

**Present provisions**

**SECTION II. MISCELLANEOUS ABBREVIATIONS AND SIGNALS**

<table>
<thead>
<tr>
<th>Abbreviation or Signal</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>All after ... (used after a question mark to request a repetition).</td>
</tr>
<tr>
<td>AB</td>
<td>All before ... (used after a question mark to request a repetition).</td>
</tr>
<tr>
<td>ABV</td>
<td>Repeat (or I repeat) the figures in abbreviated form.</td>
</tr>
<tr>
<td>ADS</td>
<td>Address (used after a question mark to request a repetition).</td>
</tr>
<tr>
<td>AR</td>
<td>End of transmission (--- to be sent as one signal).</td>
</tr>
<tr>
<td>AS</td>
<td>Waiting period (--- to be sent as one signal).</td>
</tr>
<tr>
<td>BK</td>
<td>Signal used to interrupt a transmission in progress.</td>
</tr>
</tbody>
</table>
### Present Provisions

<table>
<thead>
<tr>
<th>Abbreviation or signal</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>BN</td>
<td>All between ... and ... * (used after a question mark to request a repetition).*</td>
</tr>
<tr>
<td>BQ</td>
<td>A reply to an RQ.</td>
</tr>
<tr>
<td>C</td>
<td>Yes.</td>
</tr>
<tr>
<td>CFM</td>
<td>Confirm (or I confirm).</td>
</tr>
<tr>
<td>CL</td>
<td>I am closing my station.</td>
</tr>
<tr>
<td>COL</td>
<td>Collate (or I collate).</td>
</tr>
<tr>
<td>CP</td>
<td>General call to two or more specified stations * (see article 32).*</td>
</tr>
<tr>
<td>CQ</td>
<td>General call to all stations * (see article 31).*</td>
</tr>
<tr>
<td>CS</td>
<td>Call sign * (used to request a call sign).*</td>
</tr>
<tr>
<td>DB</td>
<td>I cannot give you a bearing, you are not in the calibrated sector of this station.</td>
</tr>
<tr>
<td>DC</td>
<td>The minimum of your signal is suitable for the bearing.</td>
</tr>
<tr>
<td>DE</td>
<td>Used to separate the call sign of the station called from the call sign of the calling station.</td>
</tr>
<tr>
<td>DF</td>
<td>Your bearing at ... <em>(time)</em> was ... degrees, in the doubtful sector of this station, with a possible error of ... degrees.</td>
</tr>
<tr>
<td>DG</td>
<td>Please advise me if you note an error in the bearing given.</td>
</tr>
<tr>
<td>DI</td>
<td>Bearing doubtful in consequence of the bad quality of your signal.</td>
</tr>
<tr>
<td>DJ</td>
<td>Bearing doubtful because of interference.</td>
</tr>
<tr>
<td>DO</td>
<td>Bearing doubtful. Ask for another bearing later * (or at ... <em>(time)</em>).*</td>
</tr>
<tr>
<td>DP</td>
<td>Possible error of bearing may amount to ... degrees.</td>
</tr>
<tr>
<td>DS</td>
<td>Adjust your transmitter, the minimum of your signal is too broad.</td>
</tr>
<tr>
<td>DT</td>
<td>I cannot furnish you with a bearing; the minimum of your signal is too broad.</td>
</tr>
<tr>
<td>DY</td>
<td>This station is not able to determine the sense of the bearing. What is your approximate direction relative to this station?</td>
</tr>
<tr>
<td>DZ</td>
<td>Your bearing is reciprocal. <em>(To be used only by the control station of a group of direction-finding stations when it is addressing stations of the same group.)</em></td>
</tr>
<tr>
<td>ER</td>
<td>Here ...</td>
</tr>
<tr>
<td>ETA</td>
<td>Estimated time of arrival.</td>
</tr>
<tr>
<td>ITP</td>
<td>The punctuation counts.</td>
</tr>
<tr>
<td>JM</td>
<td>Make a series of dashes if I may transmit. Make a series of dots to stop my transmission * (not to be used on 500 kc/s except in cases of distress).*</td>
</tr>
<tr>
<td>K</td>
<td>Invitation to transmit.</td>
</tr>
<tr>
<td>MN</td>
<td>Minute <em>(or Minutes).</em></td>
</tr>
<tr>
<td>MSG</td>
<td>Prefix indicating a message to or from the master of a ship concerning its operation or navigation.</td>
</tr>
<tr>
<td>N</td>
<td>No.</td>
</tr>
<tr>
<td>NIL</td>
<td>I have nothing to send to you.</td>
</tr>
<tr>
<td>NW</td>
<td>Now.</td>
</tr>
<tr>
<td>OK</td>
<td>We agree <em>(or It is correct).</em></td>
</tr>
<tr>
<td>P</td>
<td>Prefix indicating a private radiotelegram.</td>
</tr>
<tr>
<td>PBL</td>
<td>Preamble * (used after a question mark to request a repetition).*</td>
</tr>
<tr>
<td>PTR</td>
<td>Used by a coast station to request the position and next port of call of a mobile station. <em>(See 700.)</em></td>
</tr>
<tr>
<td>R</td>
<td>Received.</td>
</tr>
<tr>
<td>REF</td>
<td>Reference to ... <em>(or Refer to ...).</em></td>
</tr>
<tr>
<td>RPT</td>
<td>Repeat *(or I repeat) <em>(or Repeat ...).</em></td>
</tr>
<tr>
<td>RQ</td>
<td>Indication of a request.</td>
</tr>
<tr>
<td>SIG</td>
<td>Signature * (used after a question mark to request a repetition).*</td>
</tr>
<tr>
<td>SOS</td>
<td>Distress Signal <em>(... — — — ... to be sent as one signal).</em></td>
</tr>
<tr>
<td>SS</td>
<td>Indicator preceding the name of a ship station.</td>
</tr>
<tr>
<td>SVC</td>
<td>Prefix indicating a service telegram.</td>
</tr>
<tr>
<td>SYS</td>
<td>Refer to your service telegram.</td>
</tr>
<tr>
<td>TFC</td>
<td>Traffic.</td>
</tr>
<tr>
<td>TR</td>
<td>Used as a prefix to indicate reply to PTR.</td>
</tr>
<tr>
<td>TTT</td>
<td>This group when sent three times constitutes the safety signal <em>(see 943).</em></td>
</tr>
<tr>
<td>TU</td>
<td>Thank you.</td>
</tr>
<tr>
<td>TXT</td>
<td>Text * (used after a question mark to request a repetition).*</td>
</tr>
<tr>
<td>VA</td>
<td>End of work <em>(... — — — ... to be sent as one signal).</em></td>
</tr>
<tr>
<td>W</td>
<td>Word <em>(s)</em> or [Group(s)].</td>
</tr>
<tr>
<td>WA</td>
<td>Word after ... <em>(used after a question mark to request a repetition).</em></td>
</tr>
<tr>
<td>WB</td>
<td>Word before ... <em>(used after a question mark to request a repetition).</em></td>
</tr>
<tr>
<td>XXX</td>
<td>This group when sent three times constitutes the urgency signal <em>(see 934).</em></td>
</tr>
</tbody>
</table>
Proposals

India

Proposed Modifications

2957  *Opposite signal N replace: NO by:* North (Cardinal).

Reasons
Consequential to proposal 2469.

2958  *Opposite signal W replace:* Word(s) [or Group(s)] by the words: West (Cardinal).

Reasons
Consequential to proposal 2469.

Proposed Additions

<table>
<thead>
<tr>
<th>Abbreviation or signal</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>East (Cardinal)</td>
</tr>
<tr>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>WD</td>
<td>Word(s) [or Group(s)]</td>
</tr>
<tr>
<td>S</td>
<td>South (Cardinal)</td>
</tr>
</tbody>
</table>

Reasons
Consequential to proposals above.

Incorporate the following miscellaneous abbreviations and signals appearing in I.C.A.O. Annex 10 Document, Chapter 3 in the miscellaneous abbreviations and signals.

2963  **MISCELLANEOUS ABBREVIATIONS AND SIGNALS**

*appearing in Chapter 3 of Annex 10 to the Convention of International Civil Aviation*

Abbreviations or signals annotated (*) are also available for use in communicating with stations of the maritime mobile service.
<table>
<thead>
<tr>
<th>Abbreviation or Signal</th>
<th>Signification</th>
<th>Abbreviation or Signal</th>
<th>Signification</th>
</tr>
</thead>
<tbody>
<tr>
<td>*A0</td>
<td>Estimated time of departure.</td>
<td>ETD</td>
<td>Estimated time of departure.</td>
</tr>
<tr>
<td>*A1</td>
<td>The information is estimated.</td>
<td>ETI</td>
<td>The information is estimated.</td>
</tr>
<tr>
<td>*A2</td>
<td>Cf. Designation of Emissions. Same signification as in 80 RR.</td>
<td>*F0</td>
<td>Degrees Fahrenheit.</td>
</tr>
<tr>
<td>*A3</td>
<td>Cf. Designation of Emissions, same signification as in 80 RR.</td>
<td>*F1</td>
<td>Light (used to qualify icing, turbulence, interference or static reports).</td>
</tr>
<tr>
<td>*A3a</td>
<td>CF. Designation of Emissions. Same signification as in 80 RR.</td>
<td>*F2</td>
<td>Flight forecast.</td>
</tr>
<tr>
<td>*A3b</td>
<td>Same signification as in RR.</td>
<td>*F3</td>
<td>Flight information region.</td>
</tr>
<tr>
<td>*A4</td>
<td>The indication of vertical distance is given as flight level reference number.</td>
<td>*F4</td>
<td>Flight.</td>
</tr>
<tr>
<td>*A5</td>
<td>*F5</td>
<td>Final approach.</td>
<td></td>
</tr>
<tr>
<td>*A9</td>
<td>*F9</td>
<td>Units of English system.</td>
<td></td>
</tr>
<tr>
<td>*A9e</td>
<td>Same signification as in RR.</td>
<td>FAH</td>
<td>Feet (dimensional unit).</td>
</tr>
<tr>
<td>AC</td>
<td>Aircraft.</td>
<td>FBL</td>
<td>Flight.</td>
</tr>
<tr>
<td>ACC</td>
<td>Area control.</td>
<td>FIE</td>
<td>Full stop landing.</td>
</tr>
<tr>
<td>ACFT</td>
<td>Aerodrome.</td>
<td>FIS</td>
<td>Feet (dimensional unit).</td>
</tr>
<tr>
<td>AD</td>
<td>Advise.</td>
<td>FL</td>
<td>Flight.</td>
</tr>
<tr>
<td>ADZ</td>
<td>Aero form of the International Code.</td>
<td>GMT</td>
<td>Greenwich mean time.</td>
</tr>
<tr>
<td>AERO</td>
<td>Again.</td>
<td>GND</td>
<td>Relative to ground</td>
</tr>
<tr>
<td>AGN</td>
<td>Relative to air.</td>
<td>HBN</td>
<td>Hazard beacon.</td>
</tr>
<tr>
<td>AIR</td>
<td>Before.</td>
<td>HEL</td>
<td>Helicopter.</td>
</tr>
<tr>
<td>ANT</td>
<td>Approach control.</td>
<td>HFA</td>
<td>High frequency [3 000 to 30 000 kc/s].</td>
</tr>
<tr>
<td>APR</td>
<td>After ... (time or place).</td>
<td>HRL</td>
<td>Hours (period of time).</td>
</tr>
<tr>
<td>ARFOR</td>
<td>Area forecast.</td>
<td>IAR</td>
<td>Intersection of air routes.</td>
</tr>
<tr>
<td>ARR</td>
<td>Arrive (or arrival).</td>
<td>ID</td>
<td>Identification.</td>
</tr>
<tr>
<td>AS</td>
<td>Altocumulus.</td>
<td>IFR</td>
<td>Instrument flight rules.</td>
</tr>
<tr>
<td>ASC</td>
<td>Break-off height.</td>
<td>ILS</td>
<td>Instrument landing system.</td>
</tr>
<tr>
<td>ATC</td>
<td>Beam approach beacon system.</td>
<td>*IMI</td>
<td>Interrogation sign (question mark)</td>
</tr>
<tr>
<td>AT</td>
<td>Air traffic control (in general).</td>
<td></td>
<td>[<em>...</em>].</td>
</tr>
<tr>
<td>AWY</td>
<td>At ... (time or place).</td>
<td>IMT</td>
<td>Immediately.</td>
</tr>
<tr>
<td>BABS</td>
<td>Broadcast.</td>
<td>INA</td>
<td>Initial approach.</td>
</tr>
<tr>
<td>BCST</td>
<td>Break-off height.</td>
<td>INF</td>
<td>Below ...</td>
</tr>
<tr>
<td>BHF</td>
<td>Beam approach beacon system.</td>
<td>INP</td>
<td>If not possible.</td>
</tr>
<tr>
<td>BRF</td>
<td>Short (used to indicate the type of approach desired or required).</td>
<td>INS</td>
<td>Inches (dimensional unit).</td>
</tr>
<tr>
<td>BTN</td>
<td>Between.</td>
<td>IR</td>
<td>Ice on runway.</td>
</tr>
<tr>
<td>CB</td>
<td>Cumulonimbus.</td>
<td>IRL</td>
<td>Intersection or range legs.</td>
</tr>
<tr>
<td>CC</td>
<td>Cirrocumulus.</td>
<td>IVB</td>
<td>If forward visibility is less than ... (figures and units).</td>
</tr>
<tr>
<td>CEN</td>
<td>Degrees centigrade.</td>
<td>IVR</td>
<td>If forward flight visibility remains ... (figures and units).</td>
</tr>
<tr>
<td>CI</td>
<td>Cirrus.</td>
<td>KC</td>
<td>Kilocycles per second.</td>
</tr>
<tr>
<td>CLA</td>
<td>Clear type of ice formation.</td>
<td>KG</td>
<td>Kilogrammes.</td>
</tr>
<tr>
<td>CLR</td>
<td>Cleared to ...</td>
<td>KM</td>
<td>Kilometres.</td>
</tr>
<tr>
<td>CS</td>
<td>Cirrostratus.</td>
<td>KMH</td>
<td>Kilometres per hour.</td>
</tr>
<tr>
<td>CTA</td>
<td>Control area.</td>
<td>KT</td>
<td>Knots.</td>
</tr>
<tr>
<td>CTB</td>
<td>Control tone.</td>
<td>LB</td>
<td>Pounds (weight).</td>
</tr>
<tr>
<td>CU</td>
<td>Cumulus.</td>
<td>LEFT</td>
<td>Left (direction of turn).</td>
</tr>
<tr>
<td>*DB</td>
<td>Same signification as in RR.</td>
<td>LF</td>
<td>Low Frequency [30 to 300 kc/s].</td>
</tr>
<tr>
<td>*DC</td>
<td>Same signification as in RR.</td>
<td>LMG</td>
<td>Long (used to indicate the type of approach desired or required).</td>
</tr>
<tr>
<td>DCT</td>
<td>Direct (in relation to flight plan clearances and type of approach).</td>
<td>LRG</td>
<td>Long range.</td>
</tr>
<tr>
<td>DES</td>
<td>I am descending [to ... (figures and units) height above ... (datum)].</td>
<td>LSA</td>
<td>Low intensity approach lighting system.</td>
</tr>
<tr>
<td>*DF</td>
<td>Same signification as in RR.</td>
<td>LSB</td>
<td>High intensity approach lighting system.</td>
</tr>
<tr>
<td>*DG</td>
<td>Same signification as in RR.</td>
<td>M</td>
<td>Metres.</td>
</tr>
<tr>
<td>*DI</td>
<td>Keep straight ahead.</td>
<td>MAG</td>
<td>Magnetic.</td>
</tr>
<tr>
<td>*DJ</td>
<td>Same signification as in RR.</td>
<td>MB</td>
<td>Millibars.</td>
</tr>
<tr>
<td>*DO</td>
<td>Same signification as in RR.</td>
<td>MC</td>
<td>Megacycles per second.</td>
</tr>
<tr>
<td>*DP</td>
<td>Same signification as in RR.</td>
<td>MER</td>
<td>The indication of vertical distance is given as TRUE height above mean sea level (e.g. after applying the correction for ambient temperature to the altitude reading of a pressure altimeter set to QNH).</td>
</tr>
<tr>
<td>DRT</td>
<td>Simple signification as in RR.</td>
<td>M</td>
<td>Metres.</td>
</tr>
<tr>
<td>*DS</td>
<td>Simple signification as in RR.</td>
<td>MAG</td>
<td>Magnetic.</td>
</tr>
<tr>
<td>*DT</td>
<td>Simple signification as in RR.</td>
<td>MB</td>
<td>Millibars.</td>
</tr>
<tr>
<td>DU</td>
<td>Position not guaranteed.</td>
<td>MC</td>
<td>Megacycles per second.</td>
</tr>
<tr>
<td>*DY</td>
<td>Same signification as in RR.</td>
<td>ER</td>
<td>The indication of vertical distance is given as TRUE height above mean sea level (e.g. after applying the correction for ambient temperature to the altitude reading of a pressure altimeter set to QNH).</td>
</tr>
<tr>
<td>*DZ</td>
<td>Same signification as in RR.</td>
<td>ERB</td>
<td>Landing off a runway is permitted.</td>
</tr>
<tr>
<td>E</td>
<td>East or Eastern longitude.</td>
<td>ETA</td>
<td>Same signification as in RR.</td>
</tr>
<tr>
<td>Abbreviation or Signal</td>
<td>Signification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>---------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MET</td>
<td>Meteorological.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MF</td>
<td>Medium frequency [300 to 3,000 kc/s].</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MKR</td>
<td>Marker radio beacon.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ML</td>
<td>Statute mile(s).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*MN</td>
<td>Same significance as in RR.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MNTN</td>
<td>Maintain.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOD</td>
<td>Moderate (used to qualify icing, turbulence, interference or static reports).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MPH</td>
<td>Statute miles per hour.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MRG</td>
<td>Medium range.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MS</td>
<td>Minus.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MSL</td>
<td>The indication of vertical distance is given as the reading, without correction for ambient temperature, of a pressure altimeter set to QNH.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTU</td>
<td>Metric units.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MX</td>
<td>Mixed type of ice formation (white and clear).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>North Latitude. <em>(To be used only with figures indicating latitude, e.g. 47°30′ N).</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NDB</td>
<td>Non-directional radio beacon.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*NIL</td>
<td>I have nothing to send to you.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NM</td>
<td>Nautical mile(s).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NML</td>
<td>Normal.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NO</td>
<td>No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N*OR</td>
<td>North (cardinal point of direction).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NR</td>
<td>Number.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NS</td>
<td>Nimbostratus.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NW</td>
<td>North-West.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPA</td>
<td>White type of ice formation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPC</td>
<td>The control indicated is Operational Control.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ORD</td>
<td>Indication of an order.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*P0</td>
<td>Cf. Designation of Emissions, same signification as in 80 of RR.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*P1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*P2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*P2e</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*P2f</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*P3d</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*P3e</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*P3f</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PP</td>
<td>Practice low approach.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRES</td>
<td>Descent through cloud (procedure).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PREVU</td>
<td>The indication of vertical distance is (or is to be) replaced by the indication of the pressure, expressed in millibars, at the level and the position of the aircraft.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSGR</td>
<td>Passenger(s).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PS</td>
<td>Plus.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTN</td>
<td>Procedure turn.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QUAD</td>
<td>Quadrant.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RAD</td>
<td>The control referred to is Radio Control.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RCA</td>
<td>Reach cruising altitude.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RDO</td>
<td>Radio.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>REP</td>
<td>Reporting point.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RTE</td>
<td>Right (direction of turn).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RNG</td>
<td>Radio range.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RWY</td>
<td>Runway.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROFOR</td>
<td>Route forecast.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Abbreviation or Signal</th>
<th>Signification</th>
</tr>
</thead>
<tbody>
<tr>
<td>RON</td>
<td>Receiving only.</td>
</tr>
<tr>
<td>RP</td>
<td>Rapid.</td>
</tr>
<tr>
<td>RTT</td>
<td>Radioteletypewriter.</td>
</tr>
<tr>
<td>RUT</td>
<td>Standard regional route transmitting frequencies.</td>
</tr>
<tr>
<td>S</td>
<td>South or Southern latitude.</td>
</tr>
<tr>
<td>SAP</td>
<td>As soon as possible.</td>
</tr>
<tr>
<td>SC</td>
<td>Stratocumulus.</td>
</tr>
<tr>
<td>SE</td>
<td>South-East.</td>
</tr>
<tr>
<td>SEV</td>
<td>Severe (used to qualify icing and turbulence reports).</td>
</tr>
<tr>
<td>SIA</td>
<td>Standard instrument approach.</td>
</tr>
<tr>
<td>SID</td>
<td>Standard instrument departure.</td>
</tr>
<tr>
<td>SKED</td>
<td>Schedule.</td>
</tr>
<tr>
<td>SLW</td>
<td>Slow.</td>
</tr>
<tr>
<td>SOL</td>
<td>The indication of vertical distance is given as the reading, without correction for ambient temperature, of a pressure altimeter set to QFE. <em>(The abbreviation should only be used in the vicinity of the station which provided the QFE setting.)</em></td>
</tr>
<tr>
<td>SRG</td>
<td>Short range.</td>
</tr>
<tr>
<td>ST</td>
<td>Stratus.</td>
</tr>
<tr>
<td>STA</td>
<td>Straight in approach.</td>
</tr>
<tr>
<td>STD</td>
<td>The indication of vertical distance is given as the reading, without correction for ambient temperature, of a pressure altimeter having the sub-scale set to 1013.2 millibars (29.92 inches).</td>
</tr>
<tr>
<td>SUP</td>
<td>Above.</td>
</tr>
<tr>
<td>SW</td>
<td>South-West.</td>
</tr>
<tr>
<td>TAF</td>
<td>Abbreviated aerodrome forecast.</td>
</tr>
<tr>
<td>TAFOR</td>
<td>Aerodrome forecast.</td>
</tr>
<tr>
<td>TER</td>
<td>The indication of vertical distance is given as TRUE height above official aerodrome level <em>(e.g. after applying the correction for ambient temperature to the vertical distance reading of a pressure altimeter set to QFE).</em></td>
</tr>
<tr>
<td>TFZ</td>
<td>Traffic zone.</td>
</tr>
<tr>
<td>TGL</td>
<td>Touch and go landing.</td>
</tr>
<tr>
<td>TIL</td>
<td>Until.</td>
</tr>
<tr>
<td>TIP</td>
<td>Until past ... <em>(place).</em></td>
</tr>
<tr>
<td>TO</td>
<td>To ... <em>(place).</em></td>
</tr>
<tr>
<td>TRB</td>
<td>It is not necessary to keep to the runways and taxiways after landing.</td>
</tr>
<tr>
<td>TT</td>
<td>Teletypewriter.</td>
</tr>
<tr>
<td>TWR</td>
<td>Aerodrome control.</td>
</tr>
<tr>
<td>UAB</td>
<td>Until advised by ...</td>
</tr>
<tr>
<td>UFN</td>
<td>Until further notice.</td>
</tr>
<tr>
<td>VAN</td>
<td>Runway control van.</td>
</tr>
<tr>
<td>VFR</td>
<td>Visual flight rules.</td>
</tr>
<tr>
<td>VHF</td>
<td>Very high frequency [30,000 kc/s to 300 Mc/s].</td>
</tr>
<tr>
<td>VIA</td>
<td>By way of ...</td>
</tr>
<tr>
<td>VIO</td>
<td>Heavy <em>(used to qualify interference or static reports).</em></td>
</tr>
<tr>
<td>VLR</td>
<td>Very long range.</td>
</tr>
<tr>
<td>VOX</td>
<td>VHF omnidirectional radio range.</td>
</tr>
<tr>
<td>VSA</td>
<td>By visual reference to the ground.</td>
</tr>
<tr>
<td>W</td>
<td>West or Western longitude.</td>
</tr>
<tr>
<td>WX</td>
<td>Weather.</td>
</tr>
<tr>
<td>XS</td>
<td>Atmospherics.</td>
</tr>
<tr>
<td>YD</td>
<td>Yards.</td>
</tr>
<tr>
<td>YR</td>
<td>Your.</td>
</tr>
</tbody>
</table>
Section II:

After the inclusion if the I.C.A.O. abbreviations as above, it is recommended that this section may be re-edited as under:

Part 1 will deal with general abbreviations common to all services
Part 2 will deal with abbreviations used in Maritime Service.
Part 3 will deal with abbreviations used in Aeronautical Service.

Reasons
1. To incorporate I.C.A.O. Abbreviations.
2. To facilitate reference.

Add Section II bis to suitably incorporate in the RR the C.C.I.R. Recommendation No. 221 regarding SINPO and SINPFEMO Codes*.

Reasons
This administration is in favour of acceptance of the SINPO and SINPFEMO Codes.

*) Note by the S.G.:

This recommendation reads as follows:

RECOMMENDATION No. 221

ADDITION TO APPENDIX 9 OF THE RADIO REGULATIONS

(Question No. 28)

The C.C.I.R.,


CONSIDERING

a) that a code should not be inserted in the Radio Regulations unless it provides a sufficiently accurate assessment of the quality of transmissions;
b) that it would be advisable for all the administrations to use the same codes, and that the number of officially recognized codes must consequently be as restricted as possible;
c) that the abbreviations in the Q code are in general inadequate for obtaining a clear idea of the quality of a transmission;
d) that the SINPO code has been used for several years by some administrations;
e) that the FRAME and RAFISBENQO codes have been used for a long time but:
   — the SINPO code gives a more accurate description of the transmission quality than the FRAME code and is easier to use;
   — the SINPFEMO code is derived from the SINPO code by adding three letters relating to special features of telephone transmissions and is easier to use than the RAFISBENQO or RISAFMONE code;
f) that the information which is not included in the SINPO or SINPFEMO code may be transmitted satisfactorily by service message;
UNANIMOUSLY RECOMMENDS:

1. that the SINPO and SINPFEMO codes described in the Annex should be included in the Radio Regulations;
2. that, in the meantime, these signal codes may be placed in service by interested operating agencies or administrations at the earliest time that may be mutually arranged between them. In this respect, the Secretary General is asked to circularize all administrations to know if they are prepared to apply these codes by 1st January, 1952.

Special remarks:

a) A signal report shall consist of the code word SINPO or SINPFEMO followed by a five or eight figure group respectively rating the five or eight characteristics of the signal code.

b) The letter X shall be used instead of a numeral for characteristics not rated.

c) Although the code word SINPFEMO is intended for telephony, either code word may be used for telegraphy or telephony as may be desired.

d) The overall rating for telegraphy shall be as indicated in Tables I and II.

<table>
<thead>
<tr>
<th>TABLE I</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mechanized Operations</strong></td>
</tr>
<tr>
<td>5. Excellent</td>
</tr>
<tr>
<td>4. Good</td>
</tr>
<tr>
<td>3. Fair</td>
</tr>
<tr>
<td>2. Poor</td>
</tr>
<tr>
<td>1. Unusable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TABLE II</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Morse Operation</strong></td>
</tr>
<tr>
<td>5. Excellent</td>
</tr>
<tr>
<td>4. Good</td>
</tr>
<tr>
<td>3. Fair</td>
</tr>
<tr>
<td>2. Poor</td>
</tr>
<tr>
<td>1. Unusable</td>
</tr>
</tbody>
</table>

e) The overall rating for telephony shall be as indicated in Table III.

<table>
<thead>
<tr>
<th>TABLE III</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating condition</strong></td>
</tr>
<tr>
<td>5. Excellent</td>
</tr>
<tr>
<td>4. Good</td>
</tr>
<tr>
<td>3. Fair</td>
</tr>
<tr>
<td>2. Poor</td>
</tr>
<tr>
<td>1. Unusable</td>
</tr>
</tbody>
</table>
ANNEX

SINPO signal reporting code

<table>
<thead>
<tr>
<th>Rating scale</th>
<th>S</th>
<th>I</th>
<th>N</th>
<th>P</th>
<th>O</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Signal strength</td>
<td>Degrading effect of</td>
<td>Overall readability (QRK)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interference (QRM)</td>
<td>Noise (QRN)</td>
<td>Propagation disturbance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Excellent</td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
<td>Excellent</td>
</tr>
<tr>
<td>4</td>
<td>Good</td>
<td>Slight</td>
<td>Slight</td>
<td>Slight</td>
<td>Good</td>
</tr>
<tr>
<td>3</td>
<td>Fair</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Fair</td>
</tr>
<tr>
<td>2</td>
<td>Poor</td>
<td>Severe</td>
<td>Severe</td>
<td>Severe</td>
<td>Poor</td>
</tr>
<tr>
<td>1</td>
<td>Barely audible</td>
<td>Extreme</td>
<td>Extreme</td>
<td>Extreme</td>
<td>Unusable</td>
</tr>
</tbody>
</table>

SINPFEMO signal reporting code

<table>
<thead>
<tr>
<th>Rating scale</th>
<th>S</th>
<th>I</th>
<th>N</th>
<th>P</th>
<th>F</th>
<th>E</th>
<th>M</th>
<th>O</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Signal strength</td>
<td>Degrading effect of</td>
<td>Frequency of fading</td>
<td>Modulation</td>
<td>Overall rating</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interference (QRM)</td>
<td>Noise (QRN)</td>
<td>Propagation disturbance</td>
<td>Quality</td>
<td>Depth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Excellent</td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
<td>Excellent</td>
<td>Maximum</td>
<td>Excellent</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Good</td>
<td>Slight</td>
<td>Slight</td>
<td>Slight</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Fair</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Fair</td>
<td>Fair</td>
<td>Fair</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Poor</td>
<td>Severe</td>
<td>Severe</td>
<td>Severe</td>
<td>Poor or nil</td>
<td>Poor or nil</td>
<td>Poor</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Barely audible</td>
<td>Extreme</td>
<td>Extreme</td>
<td>Extreme</td>
<td>Continuously overmodulated</td>
<td>Continuously overmodulated</td>
<td>Unusable</td>
<td></td>
</tr>
</tbody>
</table>

2967 Japan

Proposed Modifications

Replace: C by: ES and: N by: NO.

Reasons

As N is used for denoting the position and direction, it seems to be more adequate to replace the present negative N by NO and the affirmative C by ES.
### Proposed Additions

<table>
<thead>
<tr>
<th>Code</th>
<th>Abbreviation</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHR</td>
<td>AH R Prefix indicating the 2nd telegram and each of succeeding telegrams being sent in series.</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>East.</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>North.</td>
<td></td>
</tr>
<tr>
<td>NM</td>
<td>No more to send.</td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>South.</td>
<td></td>
</tr>
<tr>
<td>UP</td>
<td>Change (or I change) to the normal working frequency.</td>
<td></td>
</tr>
<tr>
<td>W</td>
<td>West.</td>
<td></td>
</tr>
</tbody>
</table>

**Reasons**

These abbreviations and signals in general and international use should be added for the sake of quicker disposal of traffic.

<table>
<thead>
<tr>
<th>Code</th>
<th>Abbreviation</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>COC</td>
<td>This group when sent three times constitutes the warning signal [see Art. 37, § 43 bis (1)].</td>
<td>To be consistent with proposal 2563.</td>
</tr>
</tbody>
</table>

**Reasons**

<table>
<thead>
<tr>
<th>Code</th>
<th>Abbreviation</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morocco</td>
<td>Add to Section II the SINPO and SINPFEMO Codes.</td>
<td>C.C.I.R. Recommendation No. 221 (1956).</td>
</tr>
</tbody>
</table>

**Reasons**

<table>
<thead>
<tr>
<th>Code</th>
<th>Abbreviation</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note by the S.G.: For C.C.I.R. Recommendation No. 221, see proposal 2966.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### United Kingdom

**Proposed Modifications**

<table>
<thead>
<tr>
<th>Code</th>
<th>Abbreviation</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE</td>
<td>Definition, read: “From”.</td>
<td>More comprehensive.</td>
</tr>
<tr>
<td>ER</td>
<td>Replace by: “ERE”.</td>
<td>ERE is widely used and is considered preferable.</td>
</tr>
</tbody>
</table>
MN Replace by: MIN.

MIN is widely used and is considered preferable.

TR Replace the definition by:
Prefix to position and next port of call of a mobile station. When followed by K indicates invitation to transmit these particulars.

Reasons
To conform with current usage (see proposal 1917).

Proposed Deletions

ABV Not considered necessary.

C To be replaced by YES.

CP Not considered necessary (see proposal for Article 32).

DB
DC
DG
DI
DJ
DO
DP
DS
DT
DY
DZ

Considered unnecessary and liable to be misleading.

JM

Unnecessary.
United Kingdom (cont'd)

2997 N
     To be replaced by NO.

Reasons

2998 PTR
     Not used (see proposal for 700).

Reasons

Proposed additions

2999 MPH  *Definition:* Statute miles per hour.

Reasons

MPH is widely used.

3000 OL  *Definition:* Ocean Letter.

Reasons

Widely used (see C.C.I.R. Report No. 90).

3001 SLT  *Definition:* Radiomaritime Letter.

Reasons

Widely used (see C.C.I.R. Report No. 90).

Sweden

Proposed modification

3002 TR  Used as a prefix of the information mentioned in 700–702 (whether given in reply to PTR or spontaneously).

Reasons

Consequence of proposal 1922.

3003 France, French O.P.T.A.

*After Appendix 9, add a new Appendix 9 bis.*

*Study of a Means of Expression in International Radiotelephony for the Maritime Mobile Service*

General Comments

1. *Introduction*

   The growth of maritime mobile radiotelephony over the past fifteen years has shown the need for an international means of expression permitting at least the rapid exchange of communications in cases of
distress, urgency and safety of navigation, as well as contact between maritime mobile stations or between maritime mobile stations and aircraft stations of different nationalities.

Recommendation No. 5 by the Baltic and North Sea Radiotelephone Conference (Göteborg, 1955) reveals that several administrations are anxious to solve this important problem. Taking the solution adopted for radiotelegraphy as an example, it advocates a solution based on the International Code of Signals.

The present comments are intended to define our views as to the various possible ways of solving the problem and then to propose a system for signalling phrases and expressions used for the communications exchanged between stations of the maritime mobile service or between stations of the maritime mobile service and aircraft stations of different nationalities, relative to the safety of navigation and radiotelephone procedure.

2. Radiotelephony users

Before studying a system we must first consider the types of users for whom it is intended, for its success will depend on the ability of the users to understand it and to assimilate its rules and chief expressions.

The maritime mobile radiotelephone service covers three quite separate frequency ranges each of which is intended for different categories of users.

*Hectometric waveband* (1 605-3 800 kc/s) — Use of radiotelephony in this band, which is compulsory for merchant ships with a gross tonnage of between 500 and 1 600, has spread, at least in Western Europe, chiefly among fishing vessels venturing further and further afield; fishing grounds are becoming more and more international and several of them are crossed by civil airlines. Trawlers have sometimes helped in aircraft rescue operations and have found it difficult to make themselves understood.

Users in this waveband are hence for the most part relatively uneducated fishermen aboard small ships who do not generally speak foreign languages.

*Decametric wavebands* (4 000 to 23 000 kc/s) — Use of radiotelephony in these wavebands, which before 1939 was limited to transatlantic liners for the sole use of passengers, is now growing fairly quickly among cargo ships. The chief difficulties lie in communications with coast stations of other nationalities.

*Metric waveband* (156-162 Mc/s) — Although radiotelephony in this waveband is only just starting, it may be expected that it will spread rapidly in ships of all categories and it will be used not only in port areas, but also on the high seas between ships within "radar sight" and in air-sea rescue operations involving all categories of users.

3. Conditions to be fulfilled by an international radiotelephone means of expression.

From an analysis of categories of users and their requirements it may be concluded that an international radiotelephone means of expression must meet the following needs:

3.1 It must be simple enough both in form and method of application to be correctly understood and used by relatively uneducated seamen having no special linguistic knowledge.

3.2 It should be capable of almost immediate translation, at least as far as very urgent information is concerned.

3.3 It should allow at least the exchange of information relative to distress, urgency, search, rescue and safety of navigation, as well as the establishment of communications.

4. Examination of the various ways of preparing an international radiotelephone means of expression.

4.1 The simplest apparent way would be to adopt the language most widely used at sea. However, this method is unacceptable because it does not fulfil condition 3.1 above which appears fundamental.
4.2 Turning again to Göteborg Recommendation No. 5, all the "radio" symbols of the International Code of Signals could be used for radiotelephony. The result would be a veritable international maritime dictionary provided the present code is amplified with the expressions pertaining to new navigational techniques. This method would hardly meet conditions 3.1 and 3.2 above.

4.3 Finally, a "code" could be drawn from the International Code of Signals, which would have to be kept to the strict minimum in order to meet condition 3.3.

Such a concise code could also be made to satisfy conditions 3.1 and 3.2 if the symbols were suitably chosen and the document properly arranged.

5. Symbols of phrases and expressions.

There are several ways of forming symbols:

5.1 The symbol may consist of a conventional word the sound of which gives some indication of what is meant by the sentence.

This system, obviously, cannot be applied internationally.

5.2 The symbol may be any conventional word.

In this case it would be necessary to find a good many conventional words pronounced in nearly the same way in most of the languages of the seafaring nations, care being taken to avoid confusion between two different words. This would be difficult and the results uncertain.

5.3 The symbol could consist of a combination of very few letters, figures, or figures and letters which would be spelt out from an international spelling analogy table.

The number of words with "international" pronunciations would thus be reduced to 36 (26 letters — 10 figures).


There are at present two spelling analogy tables in current international use: the I.C.A.O. table and the I.T.U. table appended to the Radio Regulations. Neither is fully satisfactory where the spelling out of figures is concerned, and it must be stressed that the sure and speedy spelling out of figures is of great importance in the maritime service.

We propose that the table of figures indicated below should be added to whatever table is adopted for letters.

The advantage of this table is that it would only use easily pronounceable words, easily remembered, of an international character.

A number would be pronounced digit by digit, e. g.:

1959 = wun nona penta nona.


Hence we propose the adoption of an international radiotelephone code like the one given in Appendix 9 bis\(^1\).

7.1 This code would appear as a booklet of standard size which would be kept with the lists of radio signals and other navigational documents. It would comprise:

— a general description and method of use. [Explanation of the way in which the chief and complementary signals have been composed (course — bearings — position, etc....). The spelling tables.]

\(^1\) Important Note. — In the attached draft, we have used the symbols of the International Code of Signals (visual signals) for the sake of clarity and, by way of example, the I.C.A.O. spelling analogy table, completed by the table proposed for figures.
— decoding part.
— coding part.
— towing signals.
— signals of procedure for the establishment of communications.

7.2 A table taken from this document would be posted up in a prominent position where it could be seen by the ship's radio operator; this table would show the form of the distress signal, call and message, the chief expressions to be inserted in the distress message, the spelling table, the method of signalling positions and a specimen distress message. Thus a distress message could be sent immediately, without reference to the code.

APPENDIX 9 bis

International Radiotelephone Code for the Maritime Mobile Service

This appendix is divided into six parts:

Part 1 — Description.
— Method for composing a complete signal.
— Signalling of positions and other information.
— Spelling tables.

Part 2 — Decoding.

Part 3 — Coding.

Part 4 — Towing signals.

Part 5 — Radiotelephone procedure signals.

Part 6 — Table of urgent and distress signals.
(to be posted permanently beside the wireless set).

PART I

1. Description.

The code comprises a number of the phrases and expressions which are most widely used to-day in distress, search and rescue operations or which relate to the safety of ships or aircraft. Each phrase or expression is represented by a symbol consisting of two or three letters or of one letter followed by digits. The letters and digits are transmitted in accordance with the spelling table below (paragraph 4).

2. Main Signal and Complementary Signals.

An item of information may be expressed in one or more symbols. In the latter event, the most important idea to be communicated is expressed by the symbol called the "main signal" and the details by one or more symbols called "complementary signals" or, in abbreviated form, "complements". An indication of necessary complementary signals is usually given in the text of the main signal; the complementary signals must be made in the order specified.

Example: A drifting wreck was sighted or signalled at (position) at (time) on (date).

This information includes the main signal above and, in order, the complementary signals: position of the wreck, time and date. Should the name of the wreck have been recognized and be useful to know (in search or rescue operations, for example), it may be a complement of primary importance and the signal would become:
The wreck of (name of ship) was sighted at (position) at (time) on (date). In this case, the name of the ship is called an "incidental complement".

3. How are Complements Signalled?

3.1. *Azimuth (or true bearing, true course, etc....)* — By the letter A followed always by three digits indicating the degrees; e.g. 45° is expressed as A. O. 4.5. — Alfa zero quarto penta.

3.2. *Distances.* — By the letter R followed by digits indicating the distance in nautical miles; e.g. 152 miles is expressed as R. 1. 5. 2. — Romeo wun penta bis.

3.3. *Date.* By the letter D followed by two, four or six digits. The first two digits indicate the day of the month. When used alone, they refer to the current month.
   - Where necessary, the year may be indicated by two further digits.

3.4. *Local time.* By the letter H followed always by four digits. The first two digits indicate the hours, the second two digits the minutes.

3.5. *U. T.* By the letter T followed always by four digits having the same meaning as above.

3.6. *Wind direction and speed.* By the letter W followed always by five digits, the first three giving the azimuth from which the wind blows, the last two the speed of the wind according to the Beaufort scale.

3.7. *Name of the ship.* By pronouncing the name slowly and clearly, or preferably by the call sign spelled according to the spelling table. Whenever possible, by the name followed by the call sign.
   - E. G.: Cap Lihou (T.K.K.H.) is transmitted:
     Cap Lihou tango kilo zulu hotel.

3.8. *Figures.* By the letter N followed by the figure to be transmitted:
   - E. G.: 2 078 is transmitted as: November bis zero sette octo.

3.9. *Position.* There are two ways of signalling one's position:
   - by indicating the latitude and longitude (see 3.10)
   - by indicating the azimuth and the distance from a given point (see 3.11).

3.10. *Latitude — Longitude.*

   *Latitude* is transmitted by the letter L followed always by four figures (the first two giving the degrees and the last two the minutes). Only when misunderstanding is possible are the words North or South transmitted (the pronunciation of which is practically the same in the main maritime languages).

   *Longitude* is transmitted by the letter G followed always by five figures (the first three giving the degrees and the last two the minutes). Only when misunderstanding is possible are the words East or West transmitted.
E. G.: position: 48° 52' N—006° 35' W is transmitted as: Lima quarto octo penta bis North golf zero exo ter penta West.

3.11. **Azimuth and distance from a given point.** By the name of the point, followed by the letter and by four or more figures, the first three of which indicate the azimuth in degrees from the given point and the rest the distance in nautical miles.

E. G.: a position in the 64 and 25 miles from Barfleur is transmitted as: Barfleur X-ray zero exo quarto bis penta.

3.12. **Speed.** By the letter V followed by a whole number of knots:

E. G.: speed 12 knots is transmitted as: Victor wun bis.

3.13. **Separation.** Each group of letters or figures is separated from the following group by the word “Stop”.

Thus, in a distress message, the code groups relating to the position of the ship, to the nature of the distress, and possibly to the type of service requested will be separated from each other by the word “Stop”.

E. G.: Latitude 43° 52’ N Longitude 023° 20’ W I must abandon ship. Send all lifeboats available.

is transmitted as follows:

```
LIMA QUARTO TER PENTA BIS GOLF ZERO BIS TER BIS ZERO STOP ALFA DELTA
```

4. **Spelling analogy tables**

4.1. **Letter spelling table.** Two systems are possible. If the principle of the abbreviated code is acceptable, all that is necessary is to decide which of these systems should be adopted.

```
I. T. U. Spelling Analogy Table

<table>
<thead>
<tr>
<th>Letter to be transmitted</th>
<th>Word to be used</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Amsterdam</td>
</tr>
<tr>
<td>B</td>
<td>Baltimore</td>
</tr>
<tr>
<td>C</td>
<td>Casablanca</td>
</tr>
<tr>
<td>D</td>
<td>Danemark</td>
</tr>
<tr>
<td>E</td>
<td>Edison</td>
</tr>
<tr>
<td>F</td>
<td>Florida</td>
</tr>
<tr>
<td>G</td>
<td>Gallipoli</td>
</tr>
<tr>
<td>H</td>
<td>Havana</td>
</tr>
<tr>
<td>I</td>
<td>Italia</td>
</tr>
<tr>
<td>J</td>
<td>Jerusalem</td>
</tr>
<tr>
<td>K</td>
<td>Kilogramme</td>
</tr>
<tr>
<td>L</td>
<td>Liverpool</td>
</tr>
<tr>
<td>M</td>
<td>Madagascar</td>
</tr>
<tr>
<td>N</td>
<td>New York</td>
</tr>
<tr>
<td>O</td>
<td>Oslo</td>
</tr>
<tr>
<td>P</td>
<td>Paris</td>
</tr>
<tr>
<td>Q</td>
<td>Quebec</td>
</tr>
<tr>
<td>R</td>
<td>Roma</td>
</tr>
<tr>
<td>S</td>
<td>Santiago</td>
</tr>
<tr>
<td>T</td>
<td>Tripoli</td>
</tr>
<tr>
<td>U</td>
<td>Upsala</td>
</tr>
<tr>
<td>V</td>
<td>Valencia</td>
</tr>
<tr>
<td>W</td>
<td>Washington</td>
</tr>
<tr>
<td>X</td>
<td>Xantippe</td>
</tr>
<tr>
<td>Y</td>
<td>Yokohama</td>
</tr>
<tr>
<td>Z</td>
<td>Zurich</td>
</tr>
</tbody>
</table>
```

France, French O.P.T.A. (cont'd)
I.C.A.O. SPELLING ANALOGY TABLE

<table>
<thead>
<tr>
<th>Letter</th>
<th>Code word</th>
<th>Pronunciation of code word 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Alfa</td>
<td>AL FAH</td>
</tr>
<tr>
<td>B</td>
<td>Bravo</td>
<td>BRAH YOH</td>
</tr>
<tr>
<td>C</td>
<td>Charlie</td>
<td>CHAR LEE or SHAR LEE</td>
</tr>
<tr>
<td>D</td>
<td>Delta</td>
<td>DELL TAH</td>
</tr>
<tr>
<td>E</td>
<td>Echo</td>
<td>ECK OH</td>
</tr>
<tr>
<td>F</td>
<td>Foxtrot</td>
<td>FOKS TROT</td>
</tr>
<tr>
<td>G</td>
<td>Golf</td>
<td>GOLF</td>
</tr>
<tr>
<td>H</td>
<td>Hotel</td>
<td>HOH TELL</td>
</tr>
<tr>
<td>I</td>
<td>India</td>
<td>IN DEE AH</td>
</tr>
<tr>
<td>J</td>
<td>Juliette</td>
<td>JEW LEE ETT</td>
</tr>
<tr>
<td>K</td>
<td>Kilo</td>
<td>KEY LOH</td>
</tr>
<tr>
<td>L</td>
<td>Lima</td>
<td>LEE MAH</td>
</tr>
<tr>
<td>M</td>
<td>Mike</td>
<td>MIKE</td>
</tr>
<tr>
<td>N</td>
<td>November</td>
<td>NO YEM BER</td>
</tr>
<tr>
<td>O</td>
<td>Oscar</td>
<td>OSS CAH</td>
</tr>
<tr>
<td>P</td>
<td>Papa</td>
<td>PAH PAH</td>
</tr>
<tr>
<td>Q</td>
<td>Quebec</td>
<td>KEH BECK</td>
</tr>
<tr>
<td>R</td>
<td>Romeo</td>
<td>ROW ME OH</td>
</tr>
<tr>
<td>S</td>
<td>Sierra</td>
<td>SEE AIR RAH</td>
</tr>
<tr>
<td>T</td>
<td>Tango</td>
<td>TANG GO</td>
</tr>
<tr>
<td>U</td>
<td>Uniform</td>
<td>YOU NEE FORM or OO NEE FORM</td>
</tr>
<tr>
<td>V</td>
<td>Victor</td>
<td>VIK TAH</td>
</tr>
<tr>
<td>W</td>
<td>Whiskey</td>
<td>WISS KEY</td>
</tr>
<tr>
<td>X</td>
<td>X-ray</td>
<td>ECKS RAY</td>
</tr>
<tr>
<td>Y</td>
<td>Yankee</td>
<td>YANG KEY</td>
</tr>
<tr>
<td>Z</td>
<td>Zulu</td>
<td>ZOO LOO</td>
</tr>
</tbody>
</table>

4.2. Figure Spelling Analogy Table

<table>
<thead>
<tr>
<th>Figure to be transmitted</th>
<th>Word to be used</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Zero</td>
</tr>
<tr>
<td>1</td>
<td>Wun</td>
</tr>
<tr>
<td>2</td>
<td>Bis</td>
</tr>
<tr>
<td>3</td>
<td>Ter</td>
</tr>
<tr>
<td>4</td>
<td>Quarto</td>
</tr>
<tr>
<td>5</td>
<td>Penta</td>
</tr>
<tr>
<td>6</td>
<td>Exo</td>
</tr>
<tr>
<td>7</td>
<td>Sette</td>
</tr>
<tr>
<td>8</td>
<td>Octo</td>
</tr>
<tr>
<td>9</td>
<td>Nona</td>
</tr>
<tr>
<td>Point</td>
<td>Decimal</td>
</tr>
</tbody>
</table>

E.g.: 250 will be: bis penta zero.

43.1 will be: quarto ter decimal wun.

1) The syllables underlined carry the accent.
PART TWO

Decoding Part

A

A Azimuth (or true bearing, true course, etc. . . ) which must be followed by 3 figures.
AC Aircraft (indicated if necessary) will have to be abandoned.
AD I must abandon my vessel.
AE I shall abandon my vessel unless you will stand by me.
AF I (or crew of vessel indicated) wish to abandon my (or their) vessel but have not the means.
AG I do not intend to abandon my vessel.
AH You should abandon your vessel as quickly as possible.
AI You should not abandon aircraft. I shall attempt to take you in tow.
AJ You should not abandon your vessel.
AK Do you intend to abandon your vessel?
AM Accident has occurred. I require a doctor.
AT I am aground and require immediate help.
AV I am aground; will you try to tow me off?

B

BD I have headway.
BJ You should keep going ahead.
BKW I have intercepted S.O.S. (or MAYDAY) from (vessel indicated) (in position indicated), and I am going to her assistance.
BKX I have received S.O.S. (or MAYDAY) from (vessel indicated) (in position indicated) at (time indicated) but am unable to render assistance. Can you assist her?
BM Aeroplane reported in distress is receiving assistance.
BTK Can I cross the bar? What will be the best time to cross the bar?
BV I am alighting (in position indicated) — am short of petrol.
BW I am alighting (in position indicated) with engine trouble.
BX I am alighting to pick up crew of disabled aircraft (in position indicated).
BY I am forced to alight. Stand by to pick up crew.

CA I sighted an aeroplane at (time indicated) (in position indicated) steering (course indicated).
CD Sea is smooth enough for you to alight near me.
CE Sea is too rough for you to alight.
CG You should alight as near to me as possible.
CH You should alight to leeward of me, I am stopped.
CI You should alight to windward of me, I am stopped.
CN Have you sighted or heard of aeroplane in distress?
CR Is the sea smooth enough for me to alight near you?
CS You should try to come alongside.
CT You should not come alongside.
D

D Followed by two, four or six figures.
The first two figures indicate the day of the month. Used alone they indicate that the month in
question is the current one.
The two following figures indicate the month.
The year may be specified by two other figures.
DIP You should keep as close as possible to pick up my people.
DN I am coming to your assistance.
DO I am drifting and require help.
DQ I am on fire and require immediate help.
DR I am proceeding to the help of vessel in distress (in position indicated).
DS I cannot assist you (or vessel indicated).
DV I have sprung a leak and require immediate help.
DX I require assistance, of, from...

E

E I am coming to starboard, I am coming to the right.
EA I will stand by you (or vessel indicated).
EC Vessel indicated is in distress and requires immediate help.
ED Vessel indicated requires help.
EI Can you help me (or vessel indicated)?
EJ Do you require any further help?
EK Do you require help of, from...?
EM Do you require immediate help?
EN What help do you require?
EP Will you help me into port (or port indicated)? I am disabled (as indicated).
EU Bar is dangerous.
EW Bar is not dangerous.
EX Bar is impassable.

F

FER Doctor(s) (Surgeon).
FM I am sinking. Send boats to take off passengers and crew.

G

G Longitude (followed by 5 figures and if necessary the words East or West).
GU Breakers, reef, rock or shoal ahead of you.
GV Breakers, reef, rock or shoal on your port bow.
GW Breakers, reef, rock or shoal on your starboard bow.

H

H Local time (followed by four figures).
HV (Vessel indicated) is standing into danger.
HY You should beware of derelict dangerous to navigation in (position indicated).

I

I I am coming to port, I am coming to the left.
IL You should remain where you are.
IN You should not come any closer.
IY I have sunk a vessel (name indicated if necessary).
IZ There has been a collision between (vessels indicated).
France, French O.P.T.A. (cont’d)

JA (Vessel indicated) has been in collision.
JD You are standing into danger.
JM I am altering course, at, to...
JN You should alter course, at, to...
JZ I have damaged my rudder. I cannot steer.

KA My vessel is very seriously damaged.
KB My vessel is very seriously damaged. I wish to transfer passengers.
KF Derelict has been sighted, or reported, off (place indicated) or in (position indicated), at (time indicated) and on (date indicated).
KI Have you seen derelict.
KL I cannot save the vessel. Take off passengers and crew.
KM I will endeavour to connect with line throwing apparatus.
KR Can you connect with line throwing apparatus?

L

LC You should keep within visual signal distance.
LEW My position is:...
LFB Position given by vessel making S.O.S (or MAYDAY) is wrong. I have her bearing by D.F. and can exchange bearings with any other vessel.
LFX What is your present position?
LI I am disabled.
LJ I am disabled. Will you tow in (or into place indicated).
LK I passed disabled vessel in (position indicated).
LN I sighted a disabled vessel in (position indicated) apparently without radio.
LO My engines are disabled.
LP My steering gear is disabled.
LR Have you sighted a disabled vessel?
LV I am in distress for want of fuel.
LW There is a raft (in position indicated).
LY My aircraft is in distress. Stand by me.
LZ My vessel is not under command.

M

MA Position given with S.O.S (or MAYDAY) from aircraft was...
MB There is a vessel in distress in direction or position indicated.
MC Vessel indicated appears to be in distress.
MD Did you hear S.O.S (or MAYDAY) made by aircraft at time indicated?
ME Have you sighted or heard of a vessel in distress?
MF Is vessel (bearing indicated if necessary) in distress?
MG What was position given with S.O.S (or MAYDAY) from aircraft?
MT My engines are stopped.
N
(followed by figures) number...

NC I am in distress and require immediate help.

NSE I have intercepted S.O.S (or MAYDAY) from an aeroplane (in approximate position indicated).

NSF I have intercepted S.O.S (or MAYDAY) from vessel (in approximate position indicated).

NSG I have received S.O.S (or MAYDAY) from (vessel indicated) (in position indicated) at (time indicated), but have heard nothing since.

NW I am on fire. Send boats to take off passengers and crew.

NZ Vessel indicated is on fire.

ONO I have rescued (number indicated) survivors from (vessel indicated).

PKM Ocean-going tug(s).

PKN Salvage tug(s).

PY I have no lifeboat.

QA Lifeboat(s) cannot get alongside.

QB Lifeboat cannot reach you.

QC Lifeboat is going to you.

QG You should send all available lifeboats.

QH Do you need a lifeboat?

QJ You should keep a light showing.

QXD I have found aircraft wreckage (in position indicated).

QXE Wreckage is reported (in position indicated).

R Followed by requisite number of figures: distance in nautical miles.

R The way is off my ship; you may feel your way past me.

RDG Fire boat(s). Fire float(s).

RJJ Lightship(s). Light vessel(s).

S My engines are going full speed astern.

SA What is the name of the vessel (or signal station) in sight (bearing indicated if necessary)?

SB What is the name of vessel with which you collided?

SC What is the name of your vessel?

SF Can you discharge some oil to smooth sea?

SI I require orders.

T Universal time (followed by 4 figures).

TH I have lost my propeller.

TI Propeller shaft is broken.
UI Reply is "Yes" (in the affirmative).
UJ Reply is "No" (in the negative).

V
V Speed (followed by the knots in whole numbers).
VC Your distress signals are understood. Assistance is coming out to you.

W
W Direction and force of wind (followed by 5 figures).

X
X Position in azimuth distance from a landmark (followed by 4, 5 or 6 figures of which the first three must be the azimuth, the others being the distance in miles).
XU I cannot take you (or vessel indicated) in tow.
XV I (or vessel indicated) require(s) towing.
XZ Shall I take you in tow?

Y
YC Tug is (or number indicated tugs are) on its (their) way to you.
YP I have sternway.

Z
ZL You should sound whistle or siren at intervals.
ZN What is the wind direction and force?

PART THREE

Coding Part

The coding part of the present appendix is divided into nine sections with general titles giving an idea of the messages contained under each.

To code a message it is sufficient to refer to the section recalling the general idea to be expressed and to seek the phrase which is closest to the idea to be transmitted by code.

The same idea may well appear in several sections, thus facilitating use of the code.

Sections

Section 1. Aircraft.
Section 2. Damage.
Section 3. Dangers, urgency, safety of navigation.
Section 4. Distress, request for aid.
Section 5. Manoeuvres.
Section 6. Position, date, time, number and miscellaneous.
Section 7. Search.
Section 8. Towing. Tugs.
Section 9. Distress and rescue traffic.
Section 1. Aircraft.

CD Sea is smooth enough for you to alight near me.
CE Sea is too rough for you to alight.
CG You should alight as near to me as possible.
CH You should alight to leeward of me; I am stopped.
CI You should alight to windward of me; I am stopped.
BV I am alighting (in position indicated); I am short of petrol.
BW I am alighting (in position indicated) with engine trouble.
BX I am alighting to pick up crew of disabled aircraft (in position indicated).
BY I am forced to alight. Stand by to pick up crew.
CR Is the sea smooth enough for me to alight near you?
AC Aircraft (indicated if necessary) will have to be abandoned.
LY My aircraft is in distress. Stand by me.
MA Position given with S.O.S (or MAYDAY) from aircraft was:
CA I sighted an aeroplane (at time indicated), (in position indicated) steering (course indicated).
CN Have you sighted or heard of aeroplane in distress?

Section 2. Damage.

KA My vessel is very seriously damaged.
KB My vessel is seriously damaged. I wish to transfer passengers.
LO My engines are disabled.
LP My steering gear is disabled.
JZ I have damaged my rudder. I cannot steer.
TI Propellor shaft is broken.
TH I have lost my propellor.
DV I have sprung a leak and require immediate help.

Section 3. Dangers, Urgency, Safety of Navigation.

UI Reply is "Yes" (in the affirmative).
UJ Reply is "No" (in the negative).
ZN What is the wind direction and force?
W Direction and force of wind (followed by 5 figures).
AM Accident has occurred. I require a doctor.
HV (Vessel indicated) is standing into danger.
JD You are standing into danger.
HY You should beware of derelict dangerous to navigation (in position indicated).
EU Bar is dangerous.
EW Bar is not dangerous.
EX Bar is impassable.
BTK Can I cross the bar? What will be the best time to cross the bar?
GU Breakers, reef, rock or shoal ahead of you.
GV Breakers, reef, rock or shoal on your port bow.
GW Breakers, reef, rock or shoal on your starboard bow.

Section 4. Distress, Request for Aid.

NC I am in distress and require immediate help.
AT I am aground and require immediate help.
FM I am sinking. Send boats to take off passengers and crew.
DV I have sprung a leak and require immediate help.
DQ I am on fire and require immediate help.
DO I am drifting and require help.
NW I am on fire. Send boats to take off passengers and crew.
LY My aircraft is in distress. Stand by me.
AD I must abandon my vessel.
AE I shall abandon my vessel unless you will stand by me.
AF I (or crew of vessel indicated) wish to abandon my (or their) vessel but have not the means.
LI I am disabled.
LO My engines are disabled.
LV I am in distress for want of fuel.
DX I require assistance, of, from...
EP Will you help me into port (or port indicated)? I am disabled (as indicated).
KB My vessel is seriously damaged. I wish to transfer passengers.
KL I cannot save the vessel: take off passengers and crew.
EI Can you help me (or vessel indicated)?
LJ I am disabled. Will you tow me in (or into place indicated)?
AV I am aground. Will you try to tow me off?

Section 5. Manoeuvres.

I I am coming to port. I am coming to the left.
E I am coming to starboard. I am coming to the right.
S My engines are going full speed astern.
R The way is off my ship; you may feel your way past me.
MT My engines are stopped.
BD I have headway.
YP I have sternway.
JM I am altering course, at, to...
JN You should alter course, at, to...
CS You should try to come alongside.
CT You should not come alongside.
IN You should not come any closer.
BJ You should keep going ahead.
LZ My vessel is not under command.
BTK Can I cross the bar? What will be the best time to cross the bar?

Section 6. Position, Date, Time, Number and Miscellaneous.

LFX What is your present position?
LEW My position is:
LFB Position given by vessel making S.O.S (or MAYDAY) is wrong. I have her bearing by D.F. and can exchange bearings with any other vessel.
MB There is a vessel in distress in direction or position indicated.
A Azimuth (or true bearing, true course, etc.) which must be followed by 3 figures.
MG What was position given with S.O.S (or MAYDAY) from aircraft?
MA Position given with S.O.S (or MAYDAY) from aircraft was...
G Longitude (followed by 5 figures and if necessary the words East or West).
L Latitude (followed by 4 figures and if necessary the words North or South).
X Position in azimuth distance from a landmark (followed by 4, 5 or 6 figures, of which the first three must be the azimuth, the others being the distance in miles).
N (followed by figures): number...
R Distances (Range) (followed by requisite number of figures).
D Followed by 2, 4 or 6 figures. The first two figures indicate the day of the month. Used alone they indicate that the month in question is the current one. The two following figures indicate the month. The year may be specified by two other figures.
H Local time (followed by four figures).
Section 7. Search.

MB There is a vessel in distress in direction or position indicated.
MC Vessel indicated appears to be in distress.
MF Is vessel (bearing indicated if necessary) in distress?
ME Have you sighted or heard of a vessel in distress?
LR Have you sighted a disabled vessel?
LK I passed disabled vessel (in position indicated).
LN I sighted a disabled vessel (in position indicated) apparently without radio.
KI Have you seen derelict?
KF Derelict has been sighted, or reported, off (place indicated or in position indicated) at (time indicated) and on (date indicated).
NZ Vessel indicated is on fire.
LVV There is a raft (in position indicated).
CA I sighted an aeroplane at (time indicated) (in position indicated) steering (course indicated).
QXD I have found aircraft wreckage (in position indicated).
QXE Wreckage is reported (in position indicated).
BM Aeroplane reported in distress is receiving assistance.
BX I am alighting to pick up crew of disabled aircraft (in position indicated).
MG What was position given with S.O.S (or MAYDAY) from aircraft?
MA Position given with S.O.S (or MAYDAY) from aircraft was...
MD Did you hear S.O.S (or MAYDAY) by aircraft at (time indicated).
BKX I have received S.O.S (or MAYDAY) from (vessel indicated) (in position indicated) at (time indicated), but have heard nothing since.
BKW I have intercepted S.O.S (or MAYDAY) from (vessel indicated) (in position indicated), and I am going to her assistance.
NSF I have intercepted S.O.S (or MAYDAY) from vessel (in approximate position indicated).
NSE I have intercepted S.O.S (or MAYDAY) from an aeroplane (in approximate position indicated).
NSG I have received S.O.S (or MAYDAY) from (vessel indicated) (in position indicated) at (time indicated), but have heard nothing since.
LFB Position given by vessel making S.O.S (or MAYDAY) is wrong. I have her bearing by D.F and can exchange bearings with any other vessel.
SC What is the name of your vessel?
SA What is the name of the vessel (or signal station) in sight (bearing indicated if necessary)?
SB What is the name of vessel with which you collided?
SI I require orders.
IL You should remain where you are.
QJ You should keep a light showing.
ZL You should sound whistle or siren at intervals.

Section 8. Towing.

XU I cannot take you (or vessel indicated) in tow.
XV I (or vessel indicated) require(s) towing.
XZ Shall I take you in tow?
LJ  I am disabled. Will you tow me in (or into place indicated)?
AV  I am aground; will you try to tow me off?
EP  Will you help me into port (or port indicated)? I am disabled (as indicated).
YC  Tug is (or number indicated tugs are) on its (their) way to you.
PKM Ocean-going tug(s).
PKN Salvage tug(s)


EC  Vessel indicated is in distress and requires immediate help.
MB  There is a vessel in distress in direction or position indicated.
DR  I am proceeding to the help of vessel in distress (in position indicated).
DS  I cannot assist you (or vessel indicated).
NZ  Vessel indicated is on fire.
BKW I have intercepted S.O.S (or MAYDAY) from (vessel indicated) (in position indicated), and I am going to her assistance.
BKX I have received S.O.S (or MAYDAY) from (vessel indicated) (in position indicated) and (time indicated), but am unable to render assistance. Can you assist her?
EK  Do you require help of, from...
EM  Do you require immediate help?
EJ  Do you require any further help?
ED  Vessel indicated requires help.
AK  Do you intend to abandon your vessel?
AG  I do not intend to abandon my vessel.
AH  You should abandon your vessel as quickly as possible.
AJ  You should not abandon your vessel.
AI  You should not abandon aircraft. I shall attempt to take you in tow.
AC  Aircraft (indicated if necessary) will have to be abandoned.
IY  I have sunk a vessel (name indicated if necessary).
EN  What help do you require?
VC  Your distress signals are understood. Assistance is coming out to you.
YC  Tug is (or number indicated tugs are) on its (their) way to you.
DN  I am coming to your assistance.
QA  Lifeboat(s) cannot get alongside.
QH  Do you require a lifeboat?
PY  I have no lifeboat.
QB  Lifeboat cannot reach you.
QC  Lifeboat is going to you.
QG  You should send all available lifeboats.
CS  You should try to come alongside.
CT  You should not come alongside.
LY  My aircraft is in distress. Stand by me.
DIP You should keep as close as possible to pick up my people.
IN  You should not come any closer.
CR  Is the sea smooth enough for me to alight near you?
CE  Sea is too rough for you to alight.
CD  Sea is smooth enough for you to alight near me.
EA  I will stand by you (or vessel indicated)
SF  Can you discharge some oil to smooth sea?
KM  I will endeavour to connect with line-throwing apparatus.
KR  Can you connect with line-throwing apparatus?
QJ  You should keep a light showing.
IZ  There has been a collision between (vessels indicated).
JA  (Vessel indicated) has been in collision.
LC  You should keep within visual signal distance.
ZL  You should sound whistle or siren at intervals.
ONO I have rescued (number indicated) survivors from (vessel indicated).
Towing Signals

To be used only when towing and being towed. In fact, the flags do not always have the same meaning here as in single-letter signals of the concise Code.

They may be made in the following way:

1. By day:
   By a single flag, which may be exhibited by being held in the hand or by hoisting at the stay or fore shrouds, or at the gaff, according to circumstances.

2. By night:
   By flashing Morse signs, care being taken not to confuse other ships.

3. In radiotelephony, in accordance with whatever spelling analogy table is adopted.

These signals are indicated in the following table:

<table>
<thead>
<tr>
<th>By the ship towing</th>
<th>By the ship towed</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Towing hawser is fast.</td>
</tr>
<tr>
<td>B</td>
<td>All is ready for towing.</td>
</tr>
<tr>
<td>C</td>
<td>Yes (or Affirmative).</td>
</tr>
<tr>
<td>D</td>
<td>Shorten in the towing hawser.</td>
</tr>
<tr>
<td>E</td>
<td>I am altering my course to starboard.</td>
</tr>
<tr>
<td>F</td>
<td>Pay out the towing hawser.</td>
</tr>
<tr>
<td>G</td>
<td>Cast off the towing hawser.</td>
</tr>
<tr>
<td>H</td>
<td>I must cast off the towing hawser.</td>
</tr>
<tr>
<td>I</td>
<td>I am altering my course to port.</td>
</tr>
<tr>
<td>J</td>
<td>The towing hawser has parted.</td>
</tr>
<tr>
<td>K</td>
<td>Shall I continue the present course?</td>
</tr>
<tr>
<td>L</td>
<td>I am stopping my engines.</td>
</tr>
<tr>
<td>M</td>
<td>I am keeping away before the sea.</td>
</tr>
<tr>
<td>N</td>
<td>No (or Negative).</td>
</tr>
<tr>
<td>O</td>
<td>Man overboard.</td>
</tr>
<tr>
<td>P</td>
<td>I must get shelter or anchor as soon as possible</td>
</tr>
<tr>
<td>Q</td>
<td>Shall we anchor at once.</td>
</tr>
<tr>
<td>R</td>
<td>I will go slower.</td>
</tr>
<tr>
<td>S</td>
<td>My engines are going astern.</td>
</tr>
<tr>
<td>T</td>
<td>I am increasing speed.</td>
</tr>
<tr>
<td>U</td>
<td>You are standing into danger.</td>
</tr>
<tr>
<td>V</td>
<td>Set sails.</td>
</tr>
<tr>
<td>W</td>
<td>I am paying out the towing hawser.</td>
</tr>
<tr>
<td>X</td>
<td>Get spare towing hawser ready.</td>
</tr>
<tr>
<td>Y</td>
<td>I cannot carry out your order.</td>
</tr>
<tr>
<td>Z</td>
<td>I am commencing to tow.</td>
</tr>
<tr>
<td>A</td>
<td>Towing hawser is fast.</td>
</tr>
<tr>
<td>B</td>
<td>All is ready for towing.</td>
</tr>
<tr>
<td>C</td>
<td>Yes (or Affirmative).</td>
</tr>
<tr>
<td>D</td>
<td>Shorten in the towing hawser.</td>
</tr>
<tr>
<td>E</td>
<td>Steer to starboard.</td>
</tr>
<tr>
<td>F</td>
<td>Pay out the towing hawser.</td>
</tr>
<tr>
<td>G</td>
<td>Cast off the towing hawser.</td>
</tr>
<tr>
<td>H</td>
<td>Cast off the towing hawser.</td>
</tr>
<tr>
<td>I</td>
<td>Steer to port.</td>
</tr>
<tr>
<td>J</td>
<td>The towing hawser has parted.</td>
</tr>
<tr>
<td>K</td>
<td>Continue the present course.</td>
</tr>
<tr>
<td>L</td>
<td>Stop your engines at once.</td>
</tr>
<tr>
<td>M</td>
<td>Keep away before the sea.</td>
</tr>
<tr>
<td>N</td>
<td>No (or Negative).</td>
</tr>
<tr>
<td>O</td>
<td>Man overboard.</td>
</tr>
<tr>
<td>P</td>
<td>Bring me to shelter or to an anchor as soon as possible.</td>
</tr>
<tr>
<td>Q</td>
<td>I wish to anchor at once.</td>
</tr>
<tr>
<td>R</td>
<td>Go slower.</td>
</tr>
<tr>
<td>S</td>
<td>Go astern.</td>
</tr>
<tr>
<td>T</td>
<td>Increase speed.</td>
</tr>
<tr>
<td>U</td>
<td>You are standing into danger.</td>
</tr>
<tr>
<td>V</td>
<td>I will set sails.</td>
</tr>
<tr>
<td>W</td>
<td>I am paying out the towing hawser.</td>
</tr>
<tr>
<td>X</td>
<td>Spare towing hawser is ready.</td>
</tr>
<tr>
<td>Y</td>
<td>I cannot carry out your order.</td>
</tr>
<tr>
<td>Z</td>
<td>Begin towing.</td>
</tr>
</tbody>
</table>
# PART FIVE

## Radiotelephony Procedure Signals

The following abbreviations are given in the form of a question when followed by the letter B (question mark).

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Question</th>
<th>Answer or advice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transmission quality</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QRK</td>
<td>What is the intelligibility of my signals?</td>
<td>The intelligibility is:</td>
</tr>
<tr>
<td>1.</td>
<td>bad</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>mediocre</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>fairly good</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>good</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>excellent</td>
<td></td>
</tr>
<tr>
<td>QRM</td>
<td>Are you being interfered with?</td>
<td>I am being interfered with.</td>
</tr>
<tr>
<td>QRN</td>
<td>Are you troubled by static?</td>
<td>I am troubled by static.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Choice of Frequency</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>QSW</td>
<td>Will you send on this frequency [or on ... kc/s (or Mc/s)]?</td>
<td>I am going to send on this frequency [or on ... kc/s (or Mc/s)].</td>
</tr>
<tr>
<td>QSX</td>
<td>Will you listen to (call sign) on ... kc/s (or Mc/s)?</td>
<td>I am listening to ... (call sign) on ... kc/s (or Mc/s).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Traffic</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>QRU</td>
<td>Have you anything for me?</td>
<td>I have nothing for you.</td>
</tr>
<tr>
<td>QSL</td>
<td>Can you acknowledge receipt?</td>
<td>I am acknowledging receipt.</td>
</tr>
<tr>
<td>QTC</td>
<td>How many radiotelegrams have you to send?</td>
<td>I have ... radiotelegrams for you.</td>
</tr>
<tr>
<td>QTD</td>
<td>How many radiotelephone calls have you to book?</td>
<td>I have ... radiotelephone calls to book.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Charges</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>QRC</td>
<td>By what enterprise are the accounts for charges for your station settled?</td>
<td>The accounts for charges of my stations are settled by ...</td>
</tr>
<tr>
<td>QST</td>
<td>What is the charge (land station charge plus telegraph or line charge) to be collected?</td>
<td>The charge (land station charge plus telegraph or line charge) to be collected is ...</td>
</tr>
</tbody>
</table>

### Miscellaneous

- **CQ** General call to all stations.
- **SC** What is the name of your vessel?
- **AS** Wait ... minutes.
- **K** Invitation to transmit (equivalent to English “over”).
- **OK** We agree (or “that is correct”).
- **VA** End of work (equivalent to English “end of message”).
- **RPT** Will you repeat (or I repeat) ... (if necessary, indicate the part to be repeated).
- **ADS** Abbreviation designating address of the addressee of the radiotelegram or the number of the called subscriber.
- **TXT** Abbreviation designating the text of the radiotelegram.
- **SIG** Abbreviation designating the signature of the radiotelegram.

*Note.* — The abbreviations QTD, QST and SC are new and do not therefore appear in Appendix 9 of the RR.
PART SIX

Table of Urgent Distress Signals

(To be posted up in a position from which it can be seen by the radio operator)

To indicate distress:

1. Transmit the **Alarm Signal** during 30 seconds.
2. Send the following **Distress Call**, repeating it three times:
3. Then send the **Distress Message** composed as follows:
   a) Position of the ship (see TABLE II);
   b) NATURE OF THE DISTRESS AND OF THE AID REQUIRED (see TABLE III);
   c) IF NECESSARY, ANY OTHER INFORMATION FACILITATING AID (see RADIOTELEPHONE CODE).

Note. — SPELL OUT LETTERS AND FIGURES IN ACCORDANCE WITH TABLE I.
— NUMBERS ARE TO BE ENOUNCED FIGURE BY FIGURE, e.g. 1959 — Wun — Nona — Penta — Nona

<table>
<thead>
<tr>
<th><strong>Table I. Spelling out of Letters and Figures</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>A - ALFA G - GOLF M - MIKE S - SIERRA Y - YANKEE</td>
</tr>
<tr>
<td>B - BRAVO H - HOTEL N - NOVEMBER T - TANGO Z - ZULU</td>
</tr>
<tr>
<td>C - CHARLIE I - INDIA O - OSCAR V - VICTOR</td>
</tr>
<tr>
<td>D - DELTA J - JULIETTE P - PAPA W - WHISKEY</td>
</tr>
<tr>
<td>E - ECHO K - KILO Q - QUEBEC X - X-RAY</td>
</tr>
<tr>
<td>F - FOX L - LIMA R - ROMEO</td>
</tr>
<tr>
<td>TROT</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Table II — POSITION</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. By Latitude - Longitude</strong></td>
</tr>
<tr>
<td>A. Latitude: Letter L followed by 2 figures for degrees and NORTH or SOUTH if necessary. e.g.: LIMA PENTA BIS TER BIS NORTH = Latitude 52° 32' North.</td>
</tr>
<tr>
<td>B. Longitude: Letter G followed by 3 figures for degrees and EAST or WEST if necessary. e.g.: GOLF ZERO ZERO NONA BIS PENTA WEST = Longitude 009° 25' West</td>
</tr>
<tr>
<td><strong>2. By Bearing and Distance counted from Landmark</strong></td>
</tr>
<tr>
<td>a) the name of the Landmark; b) the letter X; c) 3 figures for the bearing counted from the Landmark; d) 1 or more figures distance in MILES. e.g.: BARFLEUR-EKS-RAY - ZERO QUARTO PENTA TER EXO = 36 miles from BARFLEUR at 45°.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Table III — NATURE of DISTRESS and AID REQUIRED</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PHRASE or EXPRESSION to be INSERTED in DISTRESS MESSAGE</strong></td>
</tr>
<tr>
<td>Vessel indicated) has been in Collision</td>
</tr>
<tr>
<td>Accident has occurred. I require a Doctor</td>
</tr>
<tr>
<td>My Steering Gear is Disabled</td>
</tr>
<tr>
<td>Propeller Shaft is Broken</td>
</tr>
<tr>
<td>I am Drifting and require assistance</td>
</tr>
<tr>
<td>I am Aground and require immediate assistance</td>
</tr>
<tr>
<td>I am on Fire and require immediate assistance</td>
</tr>
<tr>
<td>I have Lost my Propeller</td>
</tr>
<tr>
<td>My Engines are Disabled</td>
</tr>
<tr>
<td>I am in distress for Want of Fuel</td>
</tr>
<tr>
<td>I have Sprung a Leak and require immediate assistance</td>
</tr>
</tbody>
</table>

**Answer to a Ship in Distress**

| Your, Signals are Understood, Assistance is coming out to you | VICTOR - CHARLIE |
| I am Coming to your Assistance | DELTA - NOVEMBER |
Examples of distress messages

CAP LIHOU/TKZH in distress latitude 54° 25' longitude 006° 33' - I am on fire and require immediate assistance.

CAP LIHOU/TKZH in distress at 318° and 190 miles from OUESSANT. I have lost my propellor.

Present Provisions

APPENDIX 10

(See Article 33)

APPENDIX 10

<table>
<thead>
<tr>
<th>Assignable Working Frequencies</th>
<th>Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 355</td>
<td>4 364,5</td>
</tr>
<tr>
<td>4 490</td>
<td>4 500,5</td>
</tr>
<tr>
<td>6 000</td>
<td>6 090,5</td>
</tr>
<tr>
<td>6 189,5</td>
<td>6 198,5</td>
</tr>
<tr>
<td>8 000</td>
<td>8 090,5</td>
</tr>
<tr>
<td>8 189,5</td>
<td>8 198,5</td>
</tr>
</tbody>
</table>

Passenger Ships

<table>
<thead>
<tr>
<th>Assignable Working Frequencies</th>
<th>Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 355</td>
<td>4 364,5</td>
</tr>
<tr>
<td>4 490</td>
<td>4 500,5</td>
</tr>
<tr>
<td>6 000</td>
<td>6 090,5</td>
</tr>
<tr>
<td>6 189,5</td>
<td>6 198,5</td>
</tr>
<tr>
<td>8 000</td>
<td>8 090,5</td>
</tr>
<tr>
<td>8 189,5</td>
<td>8 198,5</td>
</tr>
</tbody>
</table>

Carriers

<table>
<thead>
<tr>
<th>Assignable Working Frequencies</th>
<th>Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 355</td>
<td>4 364,5</td>
</tr>
<tr>
<td>4 490</td>
<td>4 500,5</td>
</tr>
<tr>
<td>6 000</td>
<td>6 090,5</td>
</tr>
<tr>
<td>6 189,5</td>
<td>6 198,5</td>
</tr>
<tr>
<td>8 000</td>
<td>8 090,5</td>
</tr>
<tr>
<td>8 189,5</td>
<td>8 198,5</td>
</tr>
</tbody>
</table>

Proposals

3004 Morocco

Delete the calling frequency 8 364 kc/s in the band next to the 8 Mc/s band.

Reasons

It has been proposed elsewhere to reserve this frequency for lifeboats, liferafts and other survival craft.
Replace the present table by the following:

### APPENDIX 10

<table>
<thead>
<tr>
<th>Limits</th>
<th>Assignable Working Frequencies</th>
<th>Assignable Working Frequencies</th>
<th>Assignable Working Frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Group A</td>
<td>Group B</td>
<td>Group C</td>
</tr>
<tr>
<td>4 375</td>
<td>4 157,5</td>
<td>4 162,5</td>
<td>4 167,5</td>
</tr>
<tr>
<td></td>
<td>4 162,5</td>
<td>4 167,5</td>
<td>4 172,5</td>
</tr>
<tr>
<td></td>
<td>4 172,5</td>
<td>4 177,5</td>
<td>4 182,5</td>
</tr>
<tr>
<td>4 375</td>
<td>4 157,5</td>
<td>4 162,5</td>
<td>4 167,5</td>
</tr>
<tr>
<td>4 405</td>
<td>4 157,5</td>
<td>4 162,5</td>
<td>4 167,5</td>
</tr>
<tr>
<td></td>
<td>4 162,5</td>
<td>4 167,5</td>
<td>4 172,5</td>
</tr>
<tr>
<td></td>
<td>4 172,5</td>
<td>4 177,5</td>
<td>4 182,5</td>
</tr>
<tr>
<td>4 405</td>
<td>4 157,5</td>
<td>4 162,5</td>
<td>4 167,5</td>
</tr>
<tr>
<td>4 435</td>
<td>4 157,5</td>
<td>4 162,5</td>
<td>4 167,5</td>
</tr>
<tr>
<td>4 465</td>
<td>4 157,5</td>
<td>4 162,5</td>
<td>4 167,5</td>
</tr>
<tr>
<td></td>
<td>4 162,5</td>
<td>4 167,5</td>
<td>4 172,5</td>
</tr>
<tr>
<td></td>
<td>4 172,5</td>
<td>4 177,5</td>
<td>4 182,5</td>
</tr>
</tbody>
</table>

**Reasons**

Changes consequential to Article 33 proposals.
Present Provisions

APPENDIX 11

Procedures in the Mobile Radiotelephone Service

(See article 34)

§ 1. The following procedure is given as an example for the transmission of a radiotelegram:

1. A calls:
   Hullo B, Hullo B, this is A, this is A, radiotelegram for you, radiotelegram for you, over.

2. B replies:
   Hullo A, Hullo A, this is B, this is B, send your radiotelegram, send your radiotelegram, over.

3. A replies:
   Hullo B, this is A, radiotelegram begins from ....
   number ....... number of words ....... date .......
   .... time ....... address ....... text .......
   signature ....... transmission of radiotelegram ends, I repeat, radiotelegram begins from ....
   number ....... number of words ....... date .......
   .... time ....... address ....... text .......
   signature ....... radiotelegram ends, over.

4. B replies:
   Hullo A, this is B, your radiotelegram begins, from ....... number ....... number of words
   ....... date ....... time ....... address .......
   text ....... signature ....... your radiotelegram ends, over.

5. A replies:
   Hullo B, this is A, correct, correct, switching off.

6. A then breaks the communication and both stations resume their normal watch.

Note: At the beginning of a communication, the calling formula is spoken twice by both the calling station and the station called. It is spoken once only when communication has been established.

§ 2. When the station receiving is certain that it has correctly received the radiotelegram, the repetition contemplated under § 1, 4 is unnecessary, except for a collated radiotelegram. If repetition is dispensed with, station B acknowledges the receipt of the radiotelegram in the following manner:

   Hullo A, this is B, your radiotelegram correctly received, over.
§ 3. (1) When it is necessary to spell out call signs, service abbreviations and words, the following table is used:

<table>
<thead>
<tr>
<th>Figure to be transmitted*</th>
<th>Letter to be transmitted</th>
<th>Word to be used</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>Amsterdam</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>Baltimore</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>Casablanca</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>Danemark</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>Edison</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>Florida</td>
</tr>
<tr>
<td>7</td>
<td>G</td>
<td>Gallipoli</td>
</tr>
<tr>
<td>8</td>
<td>H</td>
<td>Havana</td>
</tr>
<tr>
<td>9</td>
<td>I</td>
<td>Italia</td>
</tr>
<tr>
<td>0</td>
<td>J</td>
<td>Jerusalem</td>
</tr>
<tr>
<td>Comma</td>
<td>K</td>
<td>Kilogramme</td>
</tr>
<tr>
<td>Fraction bar</td>
<td>L</td>
<td>Liverpool</td>
</tr>
<tr>
<td>Break signal</td>
<td>M</td>
<td>Madagascar</td>
</tr>
<tr>
<td>Full stop (period)</td>
<td>N</td>
<td>New York</td>
</tr>
<tr>
<td></td>
<td>O</td>
<td>Oslo</td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>Paris</td>
</tr>
<tr>
<td></td>
<td>Q</td>
<td>Quebec</td>
</tr>
<tr>
<td></td>
<td>R</td>
<td>Roma</td>
</tr>
<tr>
<td></td>
<td>S</td>
<td>Santiago</td>
</tr>
<tr>
<td></td>
<td>T</td>
<td>Tripoli</td>
</tr>
<tr>
<td></td>
<td>U</td>
<td>Upsala</td>
</tr>
<tr>
<td></td>
<td>V</td>
<td>Valencia</td>
</tr>
<tr>
<td></td>
<td>W</td>
<td>Washington</td>
</tr>
<tr>
<td></td>
<td>X</td>
<td>Xantippe</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td>Yokohama</td>
</tr>
<tr>
<td></td>
<td>Z</td>
<td>Zurich</td>
</tr>
</tbody>
</table>

* Each transmission of figures is preceded and followed by the words “as a number” spoken twice.

(2) However, stations of the same country may use, when communicating between themselves, any other table recognized by their administration.

<table>
<thead>
<tr>
<th>Figure to be transmitted*</th>
<th>Letter to be transmitted</th>
<th>Word to be used</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>ZE-RO</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>WUN</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>TOO</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>TREE</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>FOW-er</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>FIFE</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>SIX</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>SEV-en</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>AIT</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>NIN-er</td>
</tr>
<tr>
<td>Decimal</td>
<td>V</td>
<td>Victor</td>
</tr>
<tr>
<td>Thousand</td>
<td>W</td>
<td>Whiskey</td>
</tr>
<tr>
<td></td>
<td>X</td>
<td>X-ray</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td>Yankee</td>
</tr>
<tr>
<td></td>
<td>Z</td>
<td>Zulu</td>
</tr>
</tbody>
</table>

* The syllables to be emphasised are underlined.

The existing I.C.A.O. alphabet is considered to be the most satisfactory of the phonetic alphabets known at present. It is proposed, therefore, that it replace the existing international alphabet with a view to standardization.
Present Provisions

Proposals

United States of America

3009 After the heading replace: article by: Article.

3010 In the third column of the table, replace the spelling alphabet:

"Amsterdam, Baltimore, etc." by the following alphabet: "Alfa, Bravo, etc. . . ."

Note by the S.G.: See proposal 3008.

Reasons

The proposed new phonetic alphabet is now in widespread use and is in agreement with I.C.A.O. recommendations.

3011 France, French O. P. T. A.

APPENDIX 11. Replace the present text by the following:

Procedure in the Mobile Radiotelephone Service

(See Articles 34 and 34 bis)

§ 1. When terms have to be spelt out (call signs, abbreviations, difficult words, etc. . . .) spelling analogy tables shall be used . . .

Reasons

The Administrative Radio Conference (Geneva, 1959) will have to specify these tables which could be:

for letters, one of the tables shown in Appendix 9bis (I.T.U. table or I.C.A.O. table),

for figures, the table given in Appendix 9bis.

(See proposal 3003)

§ 2. The following procedure is given, as an example¹), for the transmission of a radiotelegram or for the booking of a radiotelephone call:

The ship "CAP BLANC/TKLO" has a radiotelegram to be transmitted to SAINT-NAZAIRE RADIO (or requests a radiotelephone call with a subscriber on land, through this same station).

¹) To show how a code is used, the I.T.U. spelling-out table has been taken.
1st period. The operator of the CAP BLANC calls SAINT-NAZAIRE RADIO on 2 321 kc/s1):
   SAINT-NAZAIRE RADIO (3 times at most)
   THIS IS
   CAP BLANC/TKLO TRIPOLI KILOLGRAMME LIVERPOOL OSLO
   (3 times at most)2)
   I am listening on 1 687 kc/s3)
   Listen on 2 506 kc/s.4)

2nd period. SAINT-NAZAIRE RADIO replies on 1 687 kc/s:
   CAP BLANC (3 times at most)
   THIS IS
   SAINT-NAZAIRE RADIO (3 times at most)
   I am listening on 2 506 kc/s. Over.

3rd period. The ship transmits on 2 506 kc/s:
   SAINT-NAZAIRE RADIO THIS IS CAP BLANC
   How do you hear me on 2 506 kc/s? Over.

4th period. SAINT-NAZAIRE RADIO replies on 1 687 kc/s.
   CAP BLANC THIS IS SAINT-NAZAIRE RADIO.
   I hear you ... (loud and clear, strength 4, etc.) transmit your radiotelegram (or what number do you require?)

5th period. The ship transmits its radiotelegram (or books its radiotelephone calls).
   Assuming that the following radiotelegram is to be transmitted:
   = CAP BLANC/TKLO 3 14 9 1645 =
   RONCO NANTES =
   LANDING TOMORROW BRONX
   ACUFZ DIGHY FORTY 17.35 PRO-

---

1) 2 321 kc/s: frequency allocated by the French Administration for French ships calling French coast stations.
2) The call can be made by giving the name of the ship alone, without adding the call sign, or with the call sign alone, on condition that the specification be given subsequently (at the moment of the transmission of the radiotelegram or of the request for a radiotelephone call).
3) 1 687 kc/s: normal operating frequency of SAINT-NAZAIRE RADIO.
4) 2 506 kc/s: one of the operating frequencies of the CAP BLANC.
Proposals

France, French O.P.T.A. (cont'd)

POSAL 30119 JAKQO. AGREE = TRIMUY =

It may be transmitted as follows:

— Origin CAP BLANC fraction bar TRIPOLI KILOGRAMME LIVERPOOL OSLO —
  Number three — words one four —
  Date nine — Hour one six four five.

— Address — I will spell: ROMA OSLO NEWYORK CASABLANCA OSLO — Then further on: NANTES (or NEWYORK AMSTERDAM NEWYORK TRIPOLI EDISON SANTIAGO).

— Text — LANDING — TOMORROW — I will spell: BALTIMORE ROMA OSLO NEWYORK XANTIPPE — Then: AMSTERDAM CASABLANCA UPSALA FLORIDA ZURICH — Then: DANEMARK ITALIA GALLIPOLI HAVANA YOKOHAMA —
  All in letters: FORTY — In figures: one seven comma three five — I repeat: one seven comma three five —
  PROPOSAL — In figures: three zero one one nine — I repeat: three zero one one nine — I will spell: JERUSALEM AMSTERDAM KILOGRAMME QUEBEC OSLO — AGREE —

— Signature: I will spell TRIPOLI ROMA ITALIA MADAGASCAR UPSALA YOKOHAMA —

— END.

6th period. After checking, the SAINT-NAZAIRE RADIO operator asks for any repetitions required or himself repeats the radiotelegram or, if he is sure that he has received it correctly, immediately acknowledges receipt of the message as follows:

THIS IS SAINT-NAZAIRE RADIO

Received number three.

The ship will reply:

THIS IS CAP BLANC.

Finished.
<table>
<thead>
<tr>
<th>Present Provisions</th>
<th>Proposals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3012 India</strong></td>
<td><strong>India</strong></td>
</tr>
<tr>
<td>In Column 3 of the table replace the words of the present code (Amsterdam, Baltimore, etc.) by the words of the spelling code included in Annex 10 to the I.C.A.O. Convention (Alfa, Bravo, etc.).</td>
<td></td>
</tr>
<tr>
<td>Note by the S.G.: See proposal 3008.</td>
<td></td>
</tr>
<tr>
<td><strong>Reasons</strong></td>
<td></td>
</tr>
<tr>
<td>To extend to the different services the use of I.C.A.O. spelling code in radiotelephony.</td>
<td></td>
</tr>
</tbody>
</table>

| **3013 Morocco**   | **Morocco** |
| Replace the spelling analogy table in § 3 by the corresponding table used in I.C.A.O. procedure. |
| Note by the S.G.: See proposal 3008. |
| **Reasons**        |           |
| There should only be one spelling analogy table and the I.C.A.O table is the one most frequently used in practice. |

| **3014 Netherlands** | **Netherlands** |
| It is proposed to replace the present international spelling table "Amsterdam, Baltimore" by the "Alfa, Bravo" spelling table. |
| Note by the S.G.: See proposal 3008. |
| **Reasons**          |           |
| The latter table is the result of a long study by a scientific commission; it has already been adopted by the I.C.A.O. and the N.A.T.O. |
APPENDIX 12

Recommended Duplex Channeling of the Maritime Mobile Radiotelephone Bands 4 000—23 000 kc/s
(See article 34)

This table is a recommendation for the channels to be used by coast and ship stations in the bands allocated to the maritime mobile radiotelephone service between 4000 and 23000 kc/s. It is recommended to administrations for use as a guide in the choice of frequencies for their stations.

One or more series of frequencies are assigned to each coast station, which uses these frequencies associated, as far as possible, in pairs; each pair comprising a transmitting and a receiving frequency. The series shall be selected with due regard to the areas served and so as to avoid, as far as possible, harmful interference between the services of different coast stations.

If an administration assigns frequencies other than those indicated in the table, its radiotelephone service must not cause harmful interference to radiotelephone stations of the maritime mobile service which use frequencies assigned to them from this table in accordance with these Regulations.

France, French O. P. T. A.

3015 Heading. Read:

Recommendation for the Determination of Radiotelephone Channels in the Maritime Mobile Service Bands between 4 000 and 23 000 kc/s

Reasons
The title has been amended to take account of the definition appearing in proposal 281.

3016 Table: To be retained as revised by the E. A. R. C.

Note by the S. G.: This refers to the table which forms Annex 7 to the Final Acts of the E. A. R. C., and which is reproduced below.
(See proposal 3019).

Morocco

3017 Heading. Read:

Duplex Channelling of the Maritime Mobile Radiotelephone Bands between 4 and 23 Mc/s

3018 Replace the Table by the table given in Annex 7 of the Final Acts of the E. A. R. C.
(See proposal 3019.)
### Present Provisions

#### Table of Transmitting Frequencies (kc/s)

<table>
<thead>
<tr>
<th>Series No.</th>
<th>Band 4000 kc/s</th>
<th>Band 8000 kc/s</th>
<th>Band 12000 kc/s</th>
<th>Band 16000 kc/s</th>
<th>Band 22000 kc/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4 371.9</td>
<td>4 066.9</td>
<td>8 748.9</td>
<td>8 198.9</td>
<td>13 133.9</td>
</tr>
<tr>
<td>2</td>
<td>4 379.7</td>
<td>4 074.7</td>
<td>8 756.7</td>
<td>8 206.7</td>
<td>13 141.7</td>
</tr>
<tr>
<td>3</td>
<td>4 387.4</td>
<td>4 082.4</td>
<td>8 764.4</td>
<td>8 214.4</td>
<td>13 149.4</td>
</tr>
<tr>
<td>4</td>
<td>4 395.2</td>
<td>4 090.2</td>
<td>8 772.2</td>
<td>8 222.2</td>
<td>13 157.2</td>
</tr>
<tr>
<td>5</td>
<td>4 403.0</td>
<td>4 098.0</td>
<td>8 780.0</td>
<td>8 230.0</td>
<td>13 165.0</td>
</tr>
<tr>
<td>6</td>
<td>4 410.7</td>
<td>4 105.7</td>
<td>8 787.7</td>
<td>8 237.7</td>
<td>13 172.7</td>
</tr>
<tr>
<td>7</td>
<td>4 418.5</td>
<td>4 113.5</td>
<td>8 795.5</td>
<td>8 245.5</td>
<td>13 180.5</td>
</tr>
<tr>
<td>8</td>
<td>4 426.3</td>
<td>4 121.3</td>
<td>8 803.3</td>
<td>8 253.3</td>
<td>13 188.3</td>
</tr>
<tr>
<td>9</td>
<td>4 434.0</td>
<td>4 129.0</td>
<td>8 811.0</td>
<td>8 261.0</td>
<td>13 196.0</td>
</tr>
</tbody>
</table>

#### Proposals

**3019**

France, French O.P.T.A., Morocco

**Duplex Channelling of the Maritime Mobile Radiotelephone Bands 4 000-23 000 kc/s**

<table>
<thead>
<tr>
<th>Band</th>
<th>4 000 kc/s</th>
<th>8 000 kc/s</th>
<th>12 000 kc/s</th>
<th>16 000 kc/s</th>
<th>22 000 kc/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series No.</td>
<td>Coast</td>
<td>Ship</td>
<td>Coast</td>
<td>Ship</td>
<td>Coast</td>
</tr>
<tr>
<td>1</td>
<td>4 372.4</td>
<td>4 067</td>
<td>8 747.6</td>
<td>8 198.4</td>
<td>13 134.4</td>
</tr>
<tr>
<td>2</td>
<td>4 379.3</td>
<td>4 073.9</td>
<td>8 754.7</td>
<td>8 205.5</td>
<td>13 142.1</td>
</tr>
<tr>
<td>3</td>
<td>4 386.2</td>
<td>4 080.8</td>
<td>8 761.8</td>
<td>8 212.6</td>
<td>13 149.8</td>
</tr>
<tr>
<td>4</td>
<td>4 393.1</td>
<td>4 087.7</td>
<td>8 768.9</td>
<td>8 219.7</td>
<td>13 157.5</td>
</tr>
<tr>
<td>5</td>
<td>4 400</td>
<td>4 094.6</td>
<td>8 776</td>
<td>8 226.8</td>
<td>13 165.2</td>
</tr>
<tr>
<td>6</td>
<td>4 406.9</td>
<td>4 101.5</td>
<td>8 783.1</td>
<td>8 233.9</td>
<td>13 172.9</td>
</tr>
<tr>
<td>7</td>
<td>4 413.8</td>
<td>4 108.4</td>
<td>8 790.2</td>
<td>8 241</td>
<td>13 180.6</td>
</tr>
<tr>
<td>8</td>
<td>4 420.7</td>
<td>4 115.3</td>
<td>8 797.3</td>
<td>8 248.1</td>
<td>13 188.3</td>
</tr>
<tr>
<td>9</td>
<td>4 427.6</td>
<td>4 122.2</td>
<td>8 804.4</td>
<td>8 255.2</td>
<td>13 196</td>
</tr>
<tr>
<td>10</td>
<td>4 434.5</td>
<td>4 129.1</td>
<td>8 811.5</td>
<td>8 262.3</td>
<td></td>
</tr>
</tbody>
</table>

**Separation between the frequencies of the coast and ship stations**

- 305.4 kc/s
- 549.2 kc/s
- 800.2 kc/s
- 830.2 kc/s
- 650.2 kc/s
After Appendix 12 add the following new Appendix:

APPENDIX 12 bis

Frequency Assignment Table
for the Maritime Mobile Radiotelephone Service in the Bands 156–174 Mc/s

(See Articles 29 and 34)

<table>
<thead>
<tr>
<th>Channel Designators</th>
<th>Transmit Frequencies (Mc/s)</th>
<th>Intership</th>
<th>Port Operations</th>
<th>Public Correspondence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coast stations</td>
<td>Ship stations</td>
<td>Single Frequency</td>
<td>Two-Frequency</td>
</tr>
<tr>
<td>1</td>
<td>160.65</td>
<td>156.05 (^1)</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>160.70</td>
<td>156.10</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>160.75</td>
<td>156.15 (^2)</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>160.80</td>
<td>156.20</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>5</td>
<td>160.85</td>
<td>156.25</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>6</td>
<td>156.30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>160.95</td>
<td>156.35</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>8</td>
<td>156.45 (^3)</td>
<td>156.45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>156.55</td>
<td>156.55</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>156.60</td>
<td>156.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>156.65 (^4)</td>
<td>156.65</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>156.70</td>
<td>156.70</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>156.80</td>
<td>156.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>156.80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>156.85</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>161.50</td>
<td>156.90</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>161.55</td>
<td>156.95</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>161.60</td>
<td>157.00</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>21 or 156.05 (^5)</td>
<td>157.05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22 or 161.65</td>
<td>157.10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23 or 156.15 (^5)</td>
<td>157.15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>161.70</td>
<td>157.20</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>161.80</td>
<td>157.25</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>161.85</td>
<td>157.30</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>161.90</td>
<td>157.35</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>28 (^5)</td>
<td>162.00</td>
<td>157.40</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1) See note \(f\).
2) See note \(g\).
3) See note \(e\).
4) See note \(d\).
5) See note \(d\).

Note a) The figures in the column headed “Intership” indicate the normal sequence in which channels should be taken into use by a mobile station.

Note 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.
### Note c)
Administrations should, as far as possible, arrange that ship stations, fitted only with the channels corresponding to the figure underlined in the Table can obtain a reasonably adequate use of available services.

### Note d)
When an administration finds it necessary to introduce a two-frequency calling channel for public correspondence the channel marked 3) shall be used for this purpose. This channel shall also be used for selective calling if this method of calling is introduced for public correspondence.

### Note e)
The ship receive frequencies 156.05 and 156.15 Mc/s (marked 2) apply to the case of the special public correspondence systems using 1 Mc/s spacing between transmit and receive frequencies, used by Belgium and France and which other countries might use in the future.

### Note f)
The frequencies marked 3) are those used as ship receive frequencies in the special correspondence systems, referred to in Note e) above.

### Note g)
The frequencies marked 3) are assignable only to coast stations in the port operations service.

### Reasons
To incorporate Annex 1 of the The Hague agreement, 1957.

### U. S. S. R.

After Appendix 12, insert the following new appendix:

**APPENDIX 12 bis**

*Frequency Allocation Table for the International Maritime Mobile Radiotelephone Service*

<table>
<thead>
<tr>
<th>Channel Designators</th>
<th>Ship Frequencies</th>
<th>Intership</th>
<th>Port Operations</th>
<th>Public Correspondence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Transmit Mc/s</td>
<td>Receive Mc/s</td>
<td>Single-Frequency</td>
<td>Two-Frequency</td>
</tr>
<tr>
<td>1 156.05 *)</td>
<td>160.65</td>
<td></td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>2 156.10</td>
<td>160.70</td>
<td></td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>3 156.15 *)</td>
<td>160.75</td>
<td></td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>4 156.20</td>
<td>160.80</td>
<td></td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>5 156.25</td>
<td>160.85</td>
<td></td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>6 156.30</td>
<td>156.30</td>
<td>1</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>7 156.35</td>
<td>160.95</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 156.40</td>
<td>156.40</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 156.45</td>
<td>156.45</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>10 156.50</td>
<td>156.50</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 156.55</td>
<td>156.55</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 156.60</td>
<td>156.60</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>13 156.65</td>
<td>156.65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 156.70</td>
<td>156.70</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 156.75</td>
<td>Guard-band (156.725–156.775 Mc/s)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 156.80</td>
<td>156.80</td>
<td></td>
<td>Calling and safety</td>
<td></td>
</tr>
<tr>
<td>17 156.85</td>
<td>Guard-band (156.825–156.875 Mc/s)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 156.90</td>
<td>161.50</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>19 156.95</td>
<td>161.55</td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>20 157.00</td>
<td>161.60</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>21 157.05 { or 156.05 **)</td>
<td>161.65</td>
<td>5</td>
<td>see note 9</td>
<td></td>
</tr>
<tr>
<td>22 157.10</td>
<td>161.70</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>23 157.15 { or 156.15 **)</td>
<td>161.75</td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>24 157.20 ***)</td>
<td>161.80</td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>25 157.25</td>
<td>161.85</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>26 157.30</td>
<td>161.90</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>27 157.35</td>
<td>161.95</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>28 157.40</td>
<td>162.00</td>
<td></td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

**Note 1:** The method of working, that is, single-frequency or two-frequency, indicated for each channel should be adhered to for international services.

**Note 2:** The figures in the column headed "Intership" indicate the normal sequence in which channels should be taken into use by a mobile station.

**Note 3:** 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.

**Note 4:** In assigning frequencies to their coast stations, administrations should collaborate in cases where harmful interference could occur.

**Note 5:** The use of channels for maritime mobile purposes other than those indicated shall not cause harmful interference to services operating in accordance with the Allocation Table, and shall not prejudice the development of these services.

**Note 6:** During ice seasons, ship stations shall avoid harmful interference to communications between icebreakers and assisted ships on the frequency 156.30 Mc/s.

**Note 7:** Administrations should, as far as possible, arrange that ship stations, fitted only with the channels corresponding to the figures underlined in the Allocation Table, can obtain a reasonably adequate use of available services.

**Note 8:** When an administration finds it necessary to introduce a two-frequency calling channel for public correspondence the channel marked ***) shall be used for this purpose. This channel shall also be used for selective calling if this method of calling is introduced for public correspondence.

**Note 9:** The ship receive frequencies 156.05 Mc/s and 156.15 Mc/s marked **) apply to the case of the special semi-duplex public correspondence systems using 1 Mc/s spacing between transmit and receive frequencies, used by Belgium and France and which other countries might use in the future.

**Note 10:** The frequencies marked *) are those used as ship receive frequencies in the special semi-duplex correspondence systems, referred to in note 9 above.

**Note 11:** Messages on port operation channels must be restricted to those related to the movement and the safety of ships, and, in emergency, to the safety of persons.

### Present Provisions

**APPENDIX 13**

**Hours of Service for Ships in the Second Category**

*(See articles 20 and 35)*

**SECTION I. TABLE**

<table>
<thead>
<tr>
<th>Zones</th>
<th>Western Limits</th>
<th>Eastern Limits</th>
<th>Hours of Service (Greenwich mean time)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>8 hours (H8)</td>
</tr>
<tr>
<td><strong>A</strong></td>
<td>Eastern Atlantic Ocean, Mediterranean, North Sea, Baltic.</td>
<td>Meridian of 30° W. to the South of the Coast of Africa, Eastern limits of the Mediterranean, of the Black Sea, and of the Baltic, 30° E. to the North of Norway.</td>
<td>from 8h. to 10h. from 12h. to 14h. from 16h. to 18h. from 20h. to 22h.</td>
</tr>
<tr>
<td><strong>B</strong></td>
<td>Western Indian Ocean, Eastern Arctic Sea.</td>
<td>Meridian of 80° E., Western Coast of Ceylon to Adam's Bridge, thence Westward round the coast of India.</td>
<td>from 4h. to 6h. from 8h. to 10h. from 12h. to 14h. from 16h. to 18h.</td>
</tr>
<tr>
<td><strong>C</strong></td>
<td>Eastern Indian Ocean, China Sea, Western Pacific Ocean.</td>
<td>Meridian of 160° E.</td>
<td>from 0h. to 2h. from 4h. to 6h. from 8h. to 10h. from 12h. to 14h.</td>
</tr>
</tbody>
</table>
### Present Provisions (cont’d)

<table>
<thead>
<tr>
<th>Zones</th>
<th>Western Limits</th>
<th>Eastern Limits</th>
<th>Hours of Service (Greenwich mean time) (G.M.T.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>D Central Pacific Ocean</td>
<td>Eastern Limit of Zone C.</td>
<td>Meridian of 140° W.</td>
<td>from 0h. to 2h. from 4h. to 6h. from 8h. to 10h. from 20h. to 22h.</td>
</tr>
<tr>
<td>E Eastern Pacific Ocean</td>
<td>Eastern Limit of Zone D.</td>
<td>Meridian of 90° W. as far as the Coast of Central America, then the West Coast of Central America and North America</td>
<td>from 0h. to 2h. from 4h. to 6h. from 16h. to 18h. from 20h. to 22h.</td>
</tr>
<tr>
<td>F Western Atlantic Ocean and Gulf of Mexico</td>
<td>Meridian of 90° W., Gulf of Mexico, East Coast of North America.</td>
<td>Meridian of 30° W., Coast of Greenland.</td>
<td>from 0h. to 2h. from 12h. to 14h. from 16h. to 18h. from 20h. to 22h.</td>
</tr>
</tbody>
</table>

#### SECTION II. DIAGRAM

[Diagram showing time zones and hours of service]

[Map showing the distribution of time zones across the world]
Proposals

3022 France, French O. P. T. A., Morocco

Sections I and II:
Replace: (Greenwich mean time) (G.M.T.) by: (universal time) (U.T.).

United Kingdom

3023 Heading. Read:
Hours of Service for Ships in the Second, Third and Fifth Categories.
(See Articles 20 and 35)

3024 In Section I (Table), replace the heading of the fourth column, by the following:

<table>
<thead>
<tr>
<th>Hours of Service</th>
<th>(Greenwich mean time) (G.M.T.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second Category</td>
<td>Third and Fifth Categories</td>
</tr>
<tr>
<td>16 Hours</td>
<td>8 Hours</td>
</tr>
<tr>
<td>(H16)</td>
<td>(H8)</td>
</tr>
</tbody>
</table>

Reasons
Consequential on amendments proposed to Article 35, section IV.

U. S. S. R.

Appendix 13. Modify this appendix as follows:

3025 Zone B, Eastern Limits:
Meridian of 80° E., West coast of Ceylon to Adam’s Bridge, thence westward round the coasts of India, Meridian of 80° E. towards the North off the coast of the U. S. S. R.

Reasons
To define the eastern limits of Zone B in the Arctic Ocean.

3026 Zone C, Description of Zone
Eastern Indian Ocean, China Sea, Western Pacific Ocean, Eastern part of the Arctic Ocean.

Reasons
To define the boundaries of Zone C to the North of the U. S. S. R.

3027 Zone C, Eastern Limits:
Meridian of 160° E. to the coast of Kamchatka, thence westwards along the Kamchatkan coast, Meridian of 160° E. northwards from the coast of U. S. S. R.

Reasons
To define the eastern limits of Zone C in the Kamchatka area and the Arctic Ocean.
### Specimen Form of Statement for Radiotelegram Accounting

(See Article 41)

Account of radiotelegrams routed between ........ and ........ (names of the countries) through the medium
- of the coast station of ........
- or of coast stations ........ (nationality)
during the month of ........

<table>
<thead>
<tr>
<th>Date</th>
<th>Office of Origin</th>
<th>Office of Destination</th>
<th>Number of Words</th>
<th>The Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Remarks

**Credits**

<table>
<thead>
<tr>
<th></th>
<th>fr.</th>
<th>cts.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Debits**

<table>
<thead>
<tr>
<th></th>
<th>fr.</th>
<th>cts.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

### Present Provisions

#### APPENDIX 14

#### Specimen Form of Statement for Radiotelegram Accounting

(See Article 41)

Account of radiotelegrams routed between ........ and ........ (names of the countries) through the medium
- of the coast station of ........
- or of coast stations ........ (nationality)
during the month of ........

<table>
<thead>
<tr>
<th>Date</th>
<th>Office of Origin</th>
<th>Office of Destination</th>
<th>Number of Words</th>
<th>The Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Remarks

**Credits**

<table>
<thead>
<tr>
<th></th>
<th>fr.</th>
<th>cts.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Debits**

<table>
<thead>
<tr>
<th></th>
<th>fr.</th>
<th>cts.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

### Proposals

**3028**

**France, French O.P.T.A., Morocco**

Replace the present text by the following:

Specimen Form of Statement for Radiotelegram and Radiotelephone Accounting

(See Article 41)

Account of (radiotelegrams¹)
(radius telephone calls¹)

and ........ (names of countries) through the medium:
- (of the coast station of ........
- (or of coast stations ........ (nationality)
during the month of ........

<table>
<thead>
<tr>
<th>Date</th>
<th>Office of Origin</th>
<th>Office of Destination</th>
<th>Number:</th>
<th>The Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Remarks

- Delete what is inapplicable.

#### Reasons

French, French O.P.T.A.:

To cover radiotelephone calls too.
Italy

3029 After the second column, add another column bearing the following heading: Coast station.

Reasons

To facilitate accounting.

3030 At the end of Appendix 14 add the following example of a statement of balance:

<table>
<thead>
<tr>
<th>Credit</th>
<th>Debit</th>
<th>Reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>balance of the Administration of</td>
<td></td>
</tr>
<tr>
<td>Gold francs</td>
<td></td>
<td>Consequence of proposal 2649.</td>
</tr>
</tbody>
</table>

United Kingdom

3031 Heading. Read:

Specimen Form of Statement of Accounts for Radiotelegrams and Radiotelephone Calls.

(See article 41)

3032 At the beginning, read:

Account of \{ radiotelegrams routed \}
\{ radiotelephone calls \} between .

3033 Replace the headings of the first four columns of the form by:

<table>
<thead>
<tr>
<th>Date</th>
<th>Origin</th>
<th>Destination</th>
<th>Number of words or minutes</th>
</tr>
</thead>
</table>

Reasons

To cater for radiotelephone calls.
Present Provisions

APPENDIX 15

Procedure for Obtaining Radio Direction-Finding Bearings and Positions

(See article 44)

Section I. General Instructions

§ 1. Before calling one or more direction-finding stations for the purpose of asking for a bearing or position, a mobile station must ascertain from the List of Radiolocation Stations:

a) the call signs of the stations to be called to obtain the desired bearings or position;

b) the frequency on which the radio direction-finding stations keep watch, and the frequency or frequencies on which they take bearings;

c) the radio direction-finding stations which, being linked by special circuits, can be grouped with the radio direction-finding station to be called.

§ 2. The procedure to be followed by the mobile station depends on varying circumstances. Generally, the following must be taken into account:

a) If the radio direction-finding stations do not keep watch on the same frequency (whether it be the frequency on which bearings are taken or another frequency), a separate request for the bearings must be made to each station or group of stations using a given frequency.

b) If all the radio direction-finding stations concerned keep watch on the same frequency, and if they are able to take bearings on a common frequency (which may be different from the listening frequency), the mobile station must call all of them at the same time, in order that these stations may take simultaneous bearings on the same transmission.

c) If several radio direction-finding stations are grouped by means of special circuits, only one of them, the radio direction-finding control station, must be called even if all are furnished with transmitting apparatus. In that case, however, the mobile...
Present Provisions

station must, if appropriate, specify in the call, by means of call signs, the radio direction-finding stations from which it wishes to obtain bearings.

§ 3. The List of Radiolocation Stations contains information relating to:

a) the type of signal and class of emission to be used for obtaining the bearings;

b) the duration of the transmission to be made by the mobile station; and

c) the time used by the radio direction-finding station in question, if different from Greenwich mean time (G.M.T.).

Section II. Rules of Procedure

§ 4. The following rules of procedure are based on the use of radiotelegraphy. For radiotelephony, appropriate phrases may replace the service abbreviations.

§ 5. To obtain a bearing or course.

(1) The mobile station calls the radio direction-finding station or the radio direction-finding control station on the listening frequency indicated in the List of Radiolocation Stations. Depending on the type of information desired, the calling station transmits the appropriate service abbreviation followed, if the radio direction-finding station is a mobile station, by the service abbreviation QTH? It indicates, if necessary, the frequency on which it is going to transmit to enable its bearing to be taken, and then awaits instructions.

(2) The radio direction-finding station called requests the calling station, by means of the appropriate service abbreviation, to transmit for the bearing. If necessary, it indicates the frequency to be used for this purpose and the number of times the transmission is to be repeated.

(3) After having changed, if necessary, to its new transmitting frequency, the calling station transmits two dashes of approximately ten seconds each, followed by its call sign. It repeats this signal as often as the radio direction-finding station requires.

(4) The radio direction-finding station determines the direction and, if possible, the sense of the bearing, and its classification [see (9)].

Proposals

3036 United States of America

§ 3. Delete the whole paragraph.

Reasons

To be consistent with the proposal for deletion of List of Radiolocation Stations (Article 20).

3037 France, French O. P. T. A.

§ 3. Replace sub-paragraph c) by:

c) the time used by the radio direction-finding station in question, if it does not use universal time (U.T.).

3038 United States of America

§ 5. (1) At the end of the first sentence, replace: in the List of Radiolocation Stations by: in the List of Coast and Ship Stations or other appropriate publications.

Reasons

To be consistent with the proposal for deletion of List of Radiolocation Stations (Article 20).
(5) If the radio direction-finding station is not satisfied with the operation, it requests the calling station to repeat the transmission described under (3).

(6) The radio direction-finding station transmits the information to the calling station in the following order:

a) the appropriate service abbreviation;
b) three digits indicating the true bearing or the true course from the radio direction-finding station;
c) class of bearing;
d) time of observation;
e) if the radio direction-finding station is mobile, its own position in latitude and longitude, preceded by the service abbreviation QTH.

(7) As soon as the calling station has received the result of the observation, if it is considered necessary to obtain confirmation, it repeats back the message. The radio direction-finding station then confirms that the repetition is correct or, if necessary, corrects it by repeating the message. When the radio direction-finding station is sure that the calling station has received the message correctly, it transmits the signal "end of work." The calling station repeats this signal as an indication that the operation is finished.

(8) In the absence of information to the contrary, the calling station assumes that the sense of the bearing was determined. If the radio direction-finding station has not determined the sense, it indicates this in the information transmitted, or reports the bearing and its reciprocal.

(9) According to its estimate of the accuracy of the observation, the radio direction-finding station classifies the bearing in one of the following classes:

Class A: bearings which the operator may reasonably consider to be accurate to within $\pm 2^\circ$ (two degrees);

Class B: bearings which the operator may reasonably consider to be accurate to within $\pm 5^\circ$ (five degrees);

Class C: bearings which the operator may reasonably consider to be accurate to within $\pm 10^\circ$ (ten degrees).

§ 5. (9) Replace this sub-paragraph by the following:

(9) According to its estimate of the accuracy of the observation, the radio direction-finding station classifies the bearing in one of the four following classes:

Class A: bearings which the operator may reasonably consider to be accurate to within $\pm 2^\circ$ (two degrees) based upon a probability of less than 1 in 20 that the error exceeds that amount as determined from a statistical evaluation from a knowledge of the five component variances which make up the total variance of the bearing, namely; instrumental, site, propagation, random-sampling and observational components; or,
lacking the means or time to make such a statistical evaluation, based upon the observation of characteristics which indicate that the bearing appears GOOD and meets the following requirements:

a) strong signal;
b) definite indication (sharp null);
c) negligible fading;
d) negligible interference;
e) less than 3 degrees of arc of bearing swing;
f) observed repeatedly for an adequate period of time.

Class B: bearings which the operator may reasonably consider to be accurate to within \( \pm 5^\circ \) (five degrees) based either upon an evaluated probability of less than 1 in 20 that the error exceeds that amount or upon observations, both determined as above for Class A bearings except that, if the observational method is used, the following shall apply: bearing appears FAIR being degraded by one or more of the following factors:

a) marginal signal strength;
b) blur (blunting) of indication;
c) severe fading and/or audio distortion;
d) light interference;
e) more than 3 but less than 5 degrees of arc of bearing swing;
f) short observation time.

Class C: bearings which the operator may reasonably consider to be accurate to within \( \pm 10^\circ \) (ten degrees) based either upon a probability of less than 1 in 20 that the error exceeds that amount or upon observations, both determined as above for Class A and B bearings, except that, if the observational method is used, the following shall apply: bearing appears POOR being degraded by one or more of the following factors:

a) inadequate signal strength;
b) severe blur (blunting) of indication;
c) severe fading and/or audio distortion;
d) strong interference;
e) more than 5 degrees of arc of bearing swing;
f) insufficient observation time.

Class D: bearings which the operator may consider to be less accurate than Class C bearings, based either upon a statistical evaluation, as for Class A, B and C bearings, or upon observations that the bearing is de-
Present Provisions

§ 6. To obtain a position determined by two or more radio direction-finding stations organized as a group.

(1) If the calling station wishes to be informed of its position by a group of radio direction-finding stations, it calls the control station as is indicated in § 5 (1) above, and requests a position by means of the appropriate service abbreviation.

(2) The control station replies to the call and, when the radio direction-finding stations are ready, requests, by means of the appropriate service abbreviation, the calling station to transmit. When the position has been determined, it is transmitted by the control station to the calling station in the form indicated in § 5 (6).

(3) According to its estimate of the accuracy of the observation, the control station classifies the position in one of the three following classes:

Class A: positions which the operator may reasonably expect to be accurate to within 5 nautical miles;

Class B: positions which the operator may reasonably expect to be accurate to within 20 nautical miles;

Class C: positions which the operator may reasonably expect to be accurate to within 50 nautical miles.

Class D: positions for which no degree of accuracy is claimed but which may be of value to the operator for the purpose of indicating a general fix area.

Proposals

United States of America (cont'd)

graded to a greater extent than permitted for a Class C bearing, particularly regarding the degree of arc of bearing swing and the observation time.

Reasons

The present Appendix 15 bearing and position classification standards were apparently intended to apply to marine direction-finding in the 500 kc/s range. They do not fit HF, VHF and UHF direction-finding. It has thus been found necessary by some direction-finder nets in the USA to prepare their own standards for other than the 500 kc/s range. There is a need for international standardization of HF, VHF and UHF bearing and position classifications. The method of determining the probability error of bearings, and the fix-position in terms of the size, position and orientation of the ellipse is described in C.C.I.R. Doc. 232 (Warsaw).

§ 6. (3) Replace this sub-paragraph by the following:

(3) According to its estimate of the accuracy of the position, the control station classifies it as follows, according to the frequency used:

Below 2 000 kc/s

Class A: positions which the operator may reasonably expect to be accurate to within 5 nautical miles;

Class B: positions which the operator may reasonably expect to be accurate to within 20 nautical miles;

Class C: positions which the operator may reasonably expect to be accurate to within 50 nautical miles;

Class D: positions for which no degree of accuracy is claimed but which may be of value to the operator for the purpose of indicating a general fix area.

2 000 to 30 000 kc/s

Class A: positions which the operator may reasonably expect to be accurate to within 20 nautical miles;

Class B: positions which the operator may reasonably expect to be accurate to within 40 nautical miles;
Present Provisions

Proposals

United States of America (cont'd)

Class C: positions which the operator may reasonably expect to be accurate to within 60 nautical miles;
Class D: positions for which no degree of accuracy is claimed but which may be of value to the operator for the purpose of indicating a general fix area.

Above 30 000 kc/s

Class A: positions which the operator may reasonably expect to be accurate to within 2.5 nautical miles;
Class B: positions which the operator may reasonably expect to be accurate to within 5 nautical miles;
Class C: positions which the operator may reasonably expect to be accurate to within 7.5 nautical miles;
Class D: positions for which no degree of accuracy is claimed but which may be of value to the operator for the purpose of indicating a general fix area. However, the class designation may be followed by a numeral, more than 7.5 to indicate the probable error limit in nautical miles.

Reasons

See proposal 3041.

3043 § 6. Add the following new sub-paragraph:

(3bis) Control stations may, wherever available facilities and time permit, describe the fix-position in terms of the size, position and orientation of the ellipse in which the transmitting station lies with a given probability.

Reasons

See proposals 3041 and 3042.

§ 7. To obtain simultaneous bearings from two or more radio direction-finding stations organized as a group.

On a request for bearings, the control station of a group of radio direction-finding stations proceeds as indicated in § 6 above. It finally transmits the bearings as observed by each station of the group, each bearing being preceded by the call sign of the station which observed it.
Recognizing the dependence of efficient assignment and utilization of radio frequencies upon full use of radio propagation data, the countries, members of the Union, shall endeavour to promote the establishment and operation of a world-wide system of observation stations to obtain data on ionospheric, radio noise, and other phenomena affecting radio propagation, and also to provide for the study, coordination and dissemination of radio propagation data and predictions.
Present Provisions

phenomena affecting radio propagation and on
natural radio noise;

b) adopt, wherever appropriate, uniform measuring
technique in accordance with C.C.I.R. Recom-
mendations at all these stations so that the data
can be compared directly without the use of
questionable conversion factors;

c) provide for the study, coordination and dissemi-
nation of radio propaganda data and natural
radio noise data employing standard forms and
scales of presentation according to the most recent
recommendations of C.C.I.R.; and

d) present the propagation data in standardized
form of field strength curves; when appropriate,
for guidance to engineering practice in planning
of various types of radiocommunication services
over the complete radio frequency spectrum.

2. Meanwhile, the countries, members of the Union,
will use such data and methods for the purpose of effi-
cient assignment and utilization of radio frequencies
and planning of radiocommunication services as are
recommended by the C.C.I.R.

Reasons

To refer to the latest C.C.I.R. recommendations on these
subjects, amendment to the present text is considered necessary.

India (cont'd)

Proposals

Studies and Predictions of Radio Propagation:

The International Radio Conference of Geneva
(1959),

recognizing:

a) that the full use of knowledge of radio propagation
is very important in the allocation and efficient uti-
лизation of radio frequencies;

b) that therefore an urgent requirement of administra-
tions and of the International Frequency Registra-
tion Board (I.F.R.B) exists for the most reliable
radio propagation data;

3045 Federal German Republic

Replace the existing Appendix A by the following
Recommendation:

Studies and Predictions of Radio Propagation:

The International Radio Conference of Geneva
(1959),

recognizing:

a) that the full use of knowledge of radio propagation
is very important in the allocation and efficient uti-
лизation of radio frequencies;

b) that therefore an urgent requirement of administra-
tions and of the International Frequency Registra-
tion Board (I.F.R.B) exists for the most reliable
radio propagation data;
Present Provisions

Proposals

Federal German Republic (cont’d)

c) that it is especially necessary to have a more simple method to facilitate the rational use of frequencies instead of the actual system based on long-term median values, as this latter system is often unsatisfactory on account of ionospheric disturbances;

d) that it is important to give to administrations and operating services (navigation and other services) using waves propagated by means of the ionosphere the earliest possible warning of the beginning of disturbances of ionospheric propagation conditions, so that they may arrange their traffic schedules accordingly;

e) that the prediction techniques so far developed have proved useful in many cases in the operation of radio telecommunications;

f) that, nevertheless, further studies are necessary with the aim to improve the prediction techniques;

g) that for the performance of these studies and for the preparation of predictions, a world-wide exchange of basic information concerning ionospheric propagation is necessary;

h) that information required for the preparation of short-term forecasts have to be interchanged with the minimum possible time loss;

i) that collaboration is necessary between administrations or operating services and the organizations studying the characteristics of the ionosphere and deducing forecasts therefrom, with a view to checking periodically the accuracy of forecasts.

recommends:

1. that the countries, members of the Union, should endeavour to promote the establishment, operation and completion of a world-wide system of observation stations to obtain data on ionospheric, radio noise and other phenomena affecting radio propagation;

2. that the countries should endeavour to provide for the study, improvement, coordination and dissemination of radio propagation data and predictions, taking into consideration the pertinent recommendations of the International Radio Consultative Committee (C.C.I.R.) and the International Radio Scientific Union (U.R.S.I);
Present Provisions

Proposals

Federal German Republic (cont'd)

3. that each country should maintain an official agency, which is responsible for the reception, coordination and exchange of radio propagation data and predictions and for liaison with corresponding agencies in other countries, and inform the Secretary General of the name and address of this agency;

4. that all measures to facilitate the interchange of data should be taken;

5. that the information required for the preparation of short-term forecasts should be centralized and interchanged by the agencies mentioned in § 3) in accordance with the U.R.S.I. recommendations, as far as possible by the most direct means of telecommunication;

6. that other data interesting for the preparation of long-term predictions, for the improvement of forecasting technique in general or related subjects should be interchanged by ordinary post or airmail;

7. that all data, predictions and reports on radio propagation should be given as far as possible in whatever standard form the C.C.I.R. may recommend, and that for the interchange mentioned in § 5) as far as possible use should be made of uniform codes, preferably those in use by the U.R.S.I.

Reasons

C.C.I.R. Recommendation No. 59.

United Kingdom

3046 Appendix A. Replace: endeavour by: continue.

Reasons

To bring the text up to date.

3047 and after: ionospheric add: tropospheric.

Reasons

To widen the scope in the light of recent developments.

3048 Further on, before: phenomena add: geophysical.

Reasons

To exclude man-made phenomena.
Present Provisions

APPENDIX B
Standard Frequency and Time Broadcasts

1. The countries, members of the International Telecommunications Union, recognize that a standard frequency broadcast service available to all parts of the world is essential for maximum economy in the use of the radio frequency spectrum, the efficient operation of the telecommunication services and for the functioning of several activities of the I.T.U.

2. To this end, administrations will endeavour to provide on an international basis a coordinated system of standard frequency broadcasts. As regards time signals, recognizing the work already in hand by various countries aiming at the common distribution by radio of time signals and standard frequencies, the countries, members of the I.T.U. recognize that contact is to be established as soon as possible with the International Committee of Time to promote coordination on an international basis.

APPENDIX C
International Monitoring

The International Radio Conference at Atlantic City (1947),

recognizing:

1. the desirability of a coordinated service of monitoring on a world-wide basis for the purpose of undertaking such measurements of frequencies, field strengths, band widths of emissions, and other characteristics as may be required by the International Frequency Registration Board (I.F.R.B.) for the efficient conduct of its duties;

2. the desirability of the adoption of uniform standards of measurement technique at all monitoring stations participating in such a service;

3049 Appendix B. Replace the text of sub-paragraph 2 by the following:

2. To this end, administrations will continue on an international basis to co-ordinate the system of standard-frequency and time broadcasts, to extend the service to those areas of the world not adequately served and to co-operate in reducing mutual interference between stations whose service areas overlap. This work will be co-ordinated by the C.C.I.R., which should seek the advice and co-operation of B.I.H. (Bureau International de l'Heure) and U.R.S.I.

Reasons
The alteration brings § 2 into line with the current situation and directs attention to the C.C.I.R. as the study body.

3050 France, French O.P.T.A., Morocco

Appendix C. Delete.

Reasons
France, French O.P.T.A.:
Duplicates Article 18. This appendix is a recommendation that international monitoring should be extended. This is already done in accordance with Article 18, 403 of which has been amended to draw the attention of administrations to the importance of international monitoring.

Morocco:
Duplicates Article 18.
Present Provisions

3. the desirability that, except for monitoring under private arrangements, all monitoring stations of one country, which participate in such an international monitoring service, should report and transmit their results through one national centralizing office;

4. the desirability that this office should receive all requests for monitoring originating in the I.F.R.B., or in similar offices of other countries or international organizations concerned, and should forward the results to the I.F.R.B. as well as to the administrations or organizations which have requested the monitoring;

5. the desirability that the I.F.R.B. should be aware of the standards used in each monitoring station, so that it may usefully compare the results furnished by different monitoring stations and determine whether these results meet the needs of the I.F.R.B.;

6. the desirability of establishing monitoring stations in such special locations as may be required to provide the I.F.R.B. with comprehensive information;

7. the possibility that individual monitoring stations, in conformity with the desires of the administration concerned, may not participate in the whole field of monitoring, but may operate only within a limited part of the field;

8. the possibility that administrations may not be able to undertake, through the monitoring stations under their control, all monitoring requested by the I.F.R.B. or by other administrations;

Proposals

recommends:

a) that, until a coordinated service of monitoring, on a worldwide basis, with generally agreed technical standards of measurements, can be better organized, administrations and organizations should endeavour, as far as they consider practicable, to undertake such monitoring as may be requested by the I.F.R.B., or by administrations of countries, members of the I.T.U., or by other international organizations operating within the framework of the I.T.U., taking into careful consideration points mentioned in paragraphs 1 to 8 above;
b) that administrations and organizations which are able to undertake such monitoring should inform the Secretary General of the names and locations of the stations under their control which may participate, and the addresses to which requests for monitoring should be sent.

D. Recommendations adopted by the International Radio Conference (Atlantic City, 1947)

**Recommendation No. 1 to the C.C.I.R.**

**Relating to International Coordination of Studies of Radio Propagation**

A. The International Radio Conference of Atlantic City (1947) invites the C.C.I.R. to initiate, and thereafter to continue on a permanent basis, the study of measures for the coordination of observations on propagation carried out by different countries, in order to provide, on a world-wide basis, coordinated data immediately applicable by the telecommunications services and, in a more general way, to ensure the speediest possible progress in scientific knowledge and corresponding techniques.

B. In this respect, the Conference invites the C.C.I.R. to study, in particular, the following questions:

1. Standardization of symbols and of the presentation of the results of ionospheric sounding and, if appropriate, of certain methods of measurement, in order to ensure that measurements from different sources may be directly comparable.

2. Suitability of the geographical locations of existing ionospheric sounding and other observation stations and requirements for future observations at new locations.

3. Coordination of investigations on absorption carried out by means of measurements at vertical and oblique incidence, by recording of field strengths of existing radio stations, or by any other method.

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**India**

**3051 Recommendation No. 1 to the C.C.I.R.**

**Heading. Read:**

Recommendation No. 1 to the C.C.I.R. relating to International Coordination of Studies of Radio Propagation and Natural Radio Noise.

**3052 Section A. Replace the beginning by:**

The International Radio Conference of Geneva (1959) invites the C.C.I.R. to continue further, the study of measures, etc. . . .

**3053 After: propagation add: and natural radio noise, etc. . . .**

**3054 Section B. Replace the first sub-paragraph by:**

B. In this respect, the Conference invites the C.C.I.R. to continue further to study, in particular, the following questions:

**3055 Paragraph 1. After: ionospheric soundings add: and natural radio noise observations.**

**3056 Paragraph 2. Delete this paragraph.**

**3057 Paragraphs 3, 4 and 5. Become respectively paragraphs 2, 3 and 4 (otherwise unchanged).**

**3058 New paragraph 4. Read in fine:** relating to propagation and material radio noise.
Present Provisions

4. Coordination of investigations of natural radio noise.

5. Determination of the best practical means for a rapid exchange, on an international basis, of information of all kinds relating to propagation.

6. Determination of the best practical means for the publication of scientific and technical investigations submitted by participating administrations and, in addition, periodical publication of results such as propagation forecasts having immediate application to radio services.

7. Review of the value and importance of various phases of propagation work and of publications relating thereto, and the publication of regular recommendations accordingly.

8. Any other new matter of general interest.

C. In order to attain the maximum possible degree of cooperation with organizations concerned with propagation work such as the International Scientific Radio Union, the Conference invites the C.C.I.R. to consult regularly with such organizations.

Proposals

India (cont'd)

3059 Paragraphs 6, 7 and 8. Become respectively paragraphs 5, 6 and 7 (otherwise unchanged).

3060 Section C. (Remains unchanged.)

Reasons

To refer to the latest C.C.I.R. recommendations on these subjects, amendment to the present text is considered necessary.

Recommendation No. 2 to the C.C.I.R.
Relating to Standard Frequency Broadcasts and Time Signals

With a view to determining the technical means appropriate for the realization of the objective specified in appendix B annexed to the Radio Regulations, the International Radio Conference of Atlantic City (1947) invites the C.C.I.R. to:

1. Examine in cooperation with the International Committee of Time and other competent international organizations having a direct and substantial interest in this subject, suitable methods of assuring the coordination of the various standard frequency and time signal transmissions.

2. a) Recommend to administrative conferences of the Union such action as is necessary to attain the objective specified in appendix B.

b) Study the operation and functioning of the coordinated services of standard frequency and time signal transmissions.

c) Recommend further improvements to make these services more generally useful.

3061 Recommendation No. 2 to the C.C.I.R.

In the first sub-paragraph, replace: the International Radio Conference of Atlantic City (1947) invites the C.C.I.R. to by: the International Radio Conference of Geneva (1959) invites the C.C.I.R. to continue to: . . .

Reasons

Study by the C.C.I.R. on standard frequency broadcasts and time signals should continue.
Recommendation No. 3 to the C.C.I.R. on International Monitoring

The International Radio Conference of Atlantic City (1947) invites the C.C.I.R. to make an urgent study of the following questions:

a) technical recommendations for a coordinated world-wide service of monitoring to fulfil the requirements stated in appendix C and the provisions of article 18 of the Radio Regulations;

b) the technical standards and procedures of measurement to be adopted by stations participating in the service, taking into consideration the requirements of the International Frequency Registration Board (such recommendations should indicate the field of activity of each class of station and the technical standards required for each type of measurement undertaken);

c) to recommend the form in which results of observations and measurements should be presented.

Recommendation No. 4 to the C.C.I.R. Relating to the Review of Appendices 3, 4 and 5 of the International Radio Regulations

The C.C.I.R. is invited to study as soon as possible the following questions, arranged according to their urgency.

1. In respect of the various classes of emission in use, determination of:
   — the bandwidth strictly necessary to ensure a service of the appropriate quality;
   — practical methods of measuring the bandwidth actually occupied by each particular emission.

2. Determination of:
   — the bandwidth which should be accepted by the various types of apparatus used for the reception of different classes of emission in the different services;
   — the filter characteristics and especially their effectiveness in eliminating interference outside the nominal acceptance band;
   — the practical methods of obtaining the necessary characteristics;
   — the corresponding methods of measurement.


India

Recommendation No. 4 to the C.C.I.R.

Replace the present text by the following:

The C.C.I.R. is invited to carry on permanently the study of the following questions:

1. A. In respect of the various classes of emission in use, determination of:

   a) the bandwidth strictly necessary to ensure a service of the appropriate quality, practical methods of measuring the bandwidth actually occupied by each emission;

   b) (i) the level of radio-frequency harmonics radiated by the stations of the different services;

          (ii) the level to which it is practicable to reduce such harmonics;

          (iii) the methods of achieving this result;

          (iv) the corresponding methods of measurement.

1. B. Study of improved methods of obtaining frequency stability in transmitters.
Present Provisions

3. Determination of:
   — the level of radio-frequency harmonics radiated by the stations of the different services;
   — the level to which it is practicable to reduce such harmonics;
   — the methods of achieving this result;
   — the corresponding methods of measurement.

4. Consideration of the desirable conditions to be fulfilled by the complete systems employed by the different services in order to determine the required technical performance of the equipment (including the station terminal apparatus and the antennas) and of the measuring apparatus used to ascertain whether the equipment satisfies the recommendations of the C.C.I.R.

The C.C.I.R. is further invited to carry on permanently the study of the above mentioned questions and to publish its recommendations and possible revisions as soon as practicable.

Proposals

India (cont'd)

2. Consideration of the desirable conditions to be fulfilled by the complete systems employed by the different services in order to determine the required technical performance of the equipment (including the station terminal apparatus and the antennas) and of the measuring apparatus used, to ascertain whether the equipment satisfies the recommendations of the C.C.I.R.

3. Consideration of the field-strength intensity necessary for the reception of different classes of emission in the different services.

4. Consideration of the effect of frequency stability of transmitters on the minimum practicable spacing between stations.

5. Consideration of the minimum practicable spacing between the frequencies of stations operating in adjacent channels for different classes of emission in the different services.

The C.C.I.R. is further invited to study the above questions simultaneously and with the same urgency and to publish its recommendations and possible revisions as soon as practicable.

Reasons

To increase the scope of Recommendation 4 to C.C.I.R. in accordance with Questions 1 (I) and 3 (III) of the C.C.I.R.
PART II

ADDITIONAL RADIO REGULATIONS
A. Proposals or general considerations relating to all or to a large number of the provisions of the Additional Radio Regulations

Note by the S. G.

3063  *Bringing the Additional Radio Regulations into line with the Telegraph Regulations:*

See Part I, A, proposal 1.

As regards the Additional Radio Regulations more particularly, there does seem to be a case for amending 2024, 2035, 2039, 2053 to 2056, 2057, 2058, 2081, 2085, 2087, 2093 and 2097.

The nature of these amendments is shown opposite these provisions in Section B, under: Circ. 624/1950.

3064  **Denmark, Finland, Iceland, Norway, Sweden**

2001 to 2139. *See the general proposal concerning an editorial revision of Chapters XIII, XIV and XV (proposal 13).*

3065  **Japan**

With respect to the RA, see the general remarks concerning the Radio Regulations in Part I, under A. (*See proposal 15*).
B. Various proposals concerning the Additional Radio Regulations

Present Provisions

ADDITIONAL RADIO REGULATIONS

ARTICLE 1

Application of the Telegraph and Telephone Regulations to Radiocommunications

2001 § 1. The provisions of the Telegraph and Telephone Regulations and the Protocols annexed thereto are applicable to radiocommunications insofar as the provisions of the Radio Regulations do not provide otherwise.

2002 § 2. (1) With the exceptions mentioned in the following articles, radiotelegrams are drawn up and treated in accordance with the provisions of the Telegraph Regulations for telegrams.

2003 (2) The use of groups of letters from the International Code of Signals is permitted in radiotelegrams in the maritime mobile service.

2004 § 3. Since the word RADIO or AERADIO, as the case may be, is always included in the list of stations and in the address of a radiogram, as part of the name of the land station, this word must not be given as a service indication at the beginning of the preamble in the transmission of a radiogram.

ARTICLE 2

Address of Radiotelegrams

2005 § 1. (1) The address of radiotelegrams destined for mobile stations must be as complete as possible and must include:

2006 a) name or designation of the addressee, with supplementary particulars, if necessary;

2007 b) name of the ship station or, in the case of aircraft stations, its call sign, as shown in the appropriate list of stations;

3066 Netherlands

2007 After: ship station, add: followed by its call sign, the latter separated from the name of the station by a fraction bar.

Reasons

To avoid confusion between similar or nearly similar names.
3067 **Italy**

2007. *After this No. add the following new sub-paragraph:*

*b bis* If the ship is a new one and does not yet appear in the appropriate list, the sender should if possible indicate the nationality and route followed by the ship.

**Reasons**

Necessary to facilitate the routing of radiotelegrams to ships which are not yet included in the list.

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2008 *c*) name of the land station through which the message is to be forwarded, as it appears in the appropriate list of stations.

2009 (2) However, the name and call sign required under 2007 may be replaced, at the risk of the sender, by particulars of the passage made by such mobile station, indicated by the names of the ports or airports of departure and of destination, or by any equivalent indication.

2010 (3) In the address, the name of the mobile station and that of the land station, written as they appear in the appropriate lists of stations are, in all cases and irrespective of their length, each counted as one word.

2011 § 2. (1) Mobile stations not supplied with the International List of Telegraph Offices may add to the name of the telegraph office of destination,

— the name of the territorial subdivision, or

— the country of destination, or

— both of the above,

if it is doubtful whether, without such addition, the message could be correctly routed without difficulty.

2012 (2) In that case the name of the telegraph office and the supplementary particulars are counted and charged for as a single word. The land station operator receiving the radiotelegram retains or deletes these particulars, or further amends the name of the office of destination as is necessary or sufficient for forwarding the radiotelegram to its proper destination.
ARTICLE 3

Time of Handing-in of Radiotelegrams

§ 1. In the transmission of radiotelegrams originating in a mobile station, the date and time of handing-in at this station are given in the preamble.

§ 2. The time of handing-in is indicated in Greenwich mean time (G.M.T.) from 0 to 24 h. beginning at midnight, and is always expressed and transmitted by means of four figures (0000 to 2400).

Replace:

Greenwich mean time (G. M. T.)

by:

universal time (U. T.).

Reasons

Alignment with the RTg (Geneva Revision, 1958), 393.

§ 3. Administrations of countries situated outside zone A (appendix 13 to the Radio Regulations) may, however, authorize ship stations passing along the coasts of their countries to use zone time for giving, in a group of four figures, the time of handing-in. In that case the group must be followed by the letter F.

ARTICLE 4

Charges for Radiotelegrams

Section I. General. Full-rate Radiotelegrams

§ 1. The charge for a radiotelegram originating in and/or intended for a mobile station comprises, according to circumstances:

a) the ship or aircraft charge or charges accruing to the mobile station of origin or destination, or to both of these stations;

Reasons

To be consistent with proposal 3076.
Present Provisions

2018  b) the land station charge (see 2026) accruing to the land station or stations which participate in the transmission;

2019  c) the charge for transmission over the general telecommunication network, reckoned in accordance with the ordinary rules;

2020  d) the charges for accessory services requested by the sender.

2021  § 2. (1) The land station charge and the ship or aircraft charge are fixed on the basis of a word rate, pure and simple, with no minimum charge, except in the case provided for in article 5 of these Regulations.

Proposals

3071  Italy

2021. Replace the present text by the following:

§ 2. (1) A minimum charge corresponding to the charge for seven words shall be collected for every radiotelegram, whether for radiotelegraph transmission or for transmission over the general telecommunication network; for press radiotelegrams this minimum shall be equivalent to the charge for fourteen words and for letter-radiotelegrams to the charge for twenty-two words.

Reasons

Same as for proposal 2607.

3072  Japan


Reasons

See proposal 3082.

3073  Netherlands

2021. Replace the present text by the following:

§ 2. (1) The land station charge and the ship or aircraft charge, as well as the charge for transmission over the general telecommunication network are fixed on the basis of a word rate, pure and simple; for each radiotelegram a minimum charge for five words shall be made. For SLT and ALT radiotelegrams, however, see Article 5.

Reasons

To eliminate a superfluous complication while handing-in radiotelegrams by applying the already existing minimum for the landline charge also to the coast and ship charge.

3074  Italy

2021. After this No. add the following new sub-paragraph:

(1 bis) In accordance with Article 40 of the Convention, rates shall be given in gold francs. They shall be
Present Provisions

the same between offices of any two countries of the Union following the same route and in either direction of transmission.

The rates for radiotelegrams shall be the same when following the same route and in either direction of transmission.

Reasons

This general principle is laid down in the Convention and is reproduced in the RTg.

2022 (2) The maximum land station charge is sixty centimes (0 fr. 60) per word; the maximum ship or aircraft charge is forty centimes (0 fr. 40) per word. Administrations shall notify to the Secretary General of the Union the rates fixed by them.

3075 Japan

2022. Replace: sixty centimes (0 fr. 60) by: fifty centimes (0 fr. 50) and: forty centimes (0 fr. 40) by: thirty centimes (0 fr. 30).

Reasons

Tariffs of general telegrams have been revised on many occasions in the past resulting in the reduction of telegraph rates. This being the case, we should like to suggest that this conference should review the present maximum charges in question with a view to their reduction.

3076 Netherlands

2022. In the first sentence replace: the maximum ship or aircraft charge is by: the ship or aircraft charge, if any, is...

Reasons

At present there is a great variety in ship charges, such as 40, 30, 28, 25, 20, 15, 10, 5 and 0 centimes per word. In order to simplify handing-in and accounting for international radiotelegrams it is proposed to reduce the number of possibilities to 2, viz. 40 centimes or 0 centimes per word.

3077 Switzerland

2022. Second sentence, read: Administrations must provide the General Secretariat of the Union with particulars of the charges they have decided on for their own land and ship stations.

Reasons

To show that charges for land and ship stations can be decided on by the administration responsible for them, and by it alone.
(3) Each administration, however, reserves to itself the right to fix and authorize land station or aircraft station charges higher than the maximum charges indicated in 2022 in the case of land or aircraft stations which are exceptionally costly on account of their installation or working.

Italy

Delete.

Reasons

Must be deleted if proposal 3074 is accepted.

(3) Each administration, however, reserves to itself the right to fix a land station charge higher than the maximum charge indicated in 2022 in the case of land stations which are exceptionally costly on account of their installation or working.

Reasons

To be consistent with proposal 3076.

Further to amendments made in the Telegraph Regulations by the Paris Telegraph and Telephone Conference (1949), the S.G. told administrations that 2024 should be worded as follows:

(4) The minimum charge as for five words for ordinary telegrams, and as for ten words for press telegrams, mentioned in 169 of the Telegraph Regulations (Paris Revision, 1949) are not applicable to the radiotelegraph portion of the route over which a radiotelegram is transmitted.

Further to the Geneva Telegraph and Telephone Conference (1958), this paragraph should now be worded as follows:

(4) The minimum charge, which for ordinary telegrams is equivalent to that for seven words, and for press telegrams to that for fourteen words (Telegraph Regulations, Geneva, 1958, 35), shall not apply to the radiotelegraph portion of the route over which a radiotelegram is transmitted.
Present Provisions

3081 France, French O. P. T. A., Morocco

2024. *Replace the present text by the following:*

(4) The minimum charge as for seven words in ordinary telegrams and for fourteen words in press telegrams, mentioned in 35 of the Telegraph Regulations (Geneva Revision, 1958), shall not be applicable to the radiotelegraph portion of the route over which a radiotelegram is transmitted.

*Reasons*

In accordance with the RTg.

3082 Japan

2024. *Replace the present text by the following:*

(4) For each radio telegram, a minimum charge shall be made which corresponds to the charge for seven words. However, for press radiotelegrams, this minimum shall be fixed at 14 words and for radio maritime letters and radio air letters, at 22 words. (See 35 of the Telegraph Regulations — Geneva Revision, 1958).

3083 Netherlands

2024, 2028, 2029. *Delete.*

*Reasons*

To be consistent with proposal 3073.

3084 United Kingdom

2024. *Replace the present text by the following:*

(4) The minimum charge as for seven words for ordinary telegrams, mentioned in 35 of the Telegraph Regulations (Geneva Revision, 1958) is not applicable to the radiotelegraph portion of the route over which a radiotelegram is transmitted.

*Reasons*

To bring into line with the RTg, Geneva Revision, 1958.
charge in the appropriate list of stations, following the indication of the rate per word. In the absence of such note, the charge to be applied is the word rate pure and simple, without a minimum.

Italy

3085. 2025. Delete the second sentence (remainder unchanged).

Reasons
A consequence of proposal 3074.

3086

2026. Add, at the beginning, after the words:

When, at the request of the sender, the words: drawn up in accordance with 957 (remainder unchanged).

Reasons
A consequence of proposal 2578.

3087

2028. In the middle, read:

... country is, in principle, reckoned on the basis of the general charging rules. This rate ... (remainder unchanged).

Reasons
A consequence of proposal 2607.

3088 Japan

2028. In the first sentence delete: in principle, and: without collection of a minimum charge.

Reasons
See proposal 3082.

3089 Italy

2029. Delete.

Reasons
A consequence of proposal 2607.
836

Present Provisions

Proposals

3090 Japan

2029. Delete.

Reasons

See proposals 3082 and 3088.

3091 Italy

2030. Add at the beginning, after the words: collected by the words: offices of origin or (remainder unchanged).

Reasons

A consequence of proposal 3074.

3092 Japan

2030. In fine delete: maximum.

Reasons

Alignment with the RTg.

2031 § 7. The country on whose territory is established a land station serving as intermediary for the exchange of radiotelegrams between a mobile station and another country, is considered, as far as the application of telegraph charges is concerned, as the country of origin or destination of the radiotelegrams, and not as a transit country.

2032 § 8. (1) For the purpose both of transmission and of international accounting, the word count of the office of origin is decisive in the case of radiotelegrams destined for mobile stations, and that of the mobile station of origin is decisive in the case of radiotelegrams originating in mobile stations.

3093 Denmark, Finland, Iceland, Norway, Sweden

2032. Replace the present text by the following two sub-paragraphs:

§ 8. (1) For the purpose both of transmission and of international accounting, the word count of the office of origin is decisive in the case of radiotelegrams destined for mobile stations.
Present Provisions

§ 8. (1 bis) In the case of radiotelegrams originating in mobile stations, the word count of the land station shall be decisive, and if no supplementary charge can be collected from the sender on board, the provisions of 2033 shall be applicable.

Reasons
1. Land stations are generally better acquainted with word counting rules.
2. Extension of the general principle laid down in 2037.

Italy

3094 2033. Replace the present text by the following:
(2) Nevertheless, the transit office or the mobile station or the office of destination shall be entitled to draw the attention of the mobile station or the office of origin to any counting errors noted in radiotelegrams it is transmitting. The office or mobile station of origin shall examine these complaints. If it considers them justified, it must try to collect the rest of the charge. If this missing amount is collected, the respective shares thereof shall be due to the various administrations and private operating agencies concerned.

3095 2033. After this No. add the following new Nos.:

(2 bis) When a radiotelegram contains combinations or alterations of words of a language, other than the language or languages of the country of origin, contrary to the usage of that language, administrations and recognized private operating agencies shall be entitled to direct the delivery office or mobile station to collect the amount undercharged from the addressee. When this right is exercised, the delivery office may decline to deliver the radiotelegram if the addressee refuses to pay. For the purposes of this paragraph, a ship shall be considered as being part of the territory of the government to which it belongs.

3096 2033. (2 ter) Administrations and recognized private operating agencies availing themselves of the foregoing provision shall so inform the other administrations and recognized private operating agencies through the General Secretariat.
When the office or mobile station of destination observes that the letter-radiogram, worded in a language other than the language or languages of the country of origin, does not comply with the conditions laid down, or that a letter-radiogram contains one or more words in secret language, it may collect a supplementary charge from the addressee corresponding to the difference between the cost of an ordinary radiogram and that of a letter-radiogram.

When the office or mobile station of destination observes that a press radiogram does not comply with the conditions laid down it may collect a supplementary charge from the addressee equal to the difference between the cost of an urgent or ordinary radiogram at the full rate and that of a press radiogram of the same category.

If the addressee refuses to pay the charges referred to in (2 quater) and (2 quinquies), the provisions of subparagraph (2 bis) shall be applied.

A transit office may not suspend transmission of a radiogram because of irregularities noted in the language employed or in the counting of words, and except in the specific cases referred to above, a delivery office may not suspend delivery.

The principles given in the new subparagraphs above are included in the RTg (Geneva Revision, 1958) with a view to laying down the procedure to be followed when irregularities are noted in the counting of words. Moreover, technical progress now permits the exchange of some service radiograms of an administrative nature.

Provision should as far as possible be made to collect the amount undercharged from the sender who is generally interested in having his message delivered.

The total charge for radiograms is collected from the sender, with the exception of:

- express charges to be collected on delivery (see 542 of the Telegraph Regulations, Cairo Revision, 1938);

Further to amendments made in the Telegraph Regulations by the Paris Telegraph and Telephone Conference (1949), the S.G. told administrations that in his opinion 2035 should be worded as follows:

- express charges to be collected on delivery (see 567 of the Telegraph Regulations, Paris Revision, 1949)

Note by the S.G.:

Circ. 624/1950

2035. Further to amendments made in the Telegraph Regulations by the Paris Telegraph and Telephone Conference (1949), the S.G. told administrations that in his opinion 2035 should be worded as follows:

a) express charges to be collected on delivery (see 567 of the Telegraph Regulations, Paris Revision, 1949)

1) At present (see 576 of the RTg, Geneva Revision, 1958).
Present Provisions  

3101  Italy, United Kingdom  

2035. Replace the present text by the following:

a) express charges to be collected on delivery [see 576 of the Telegraph Regulations (Geneva Revision, 1958)];

Reasons

United Kingdom:

To bring the references up to date.

3102  Japan  

2035. Replace: (see 542 of the Telegraph Regulations, Cairo Revision, 1938) by: (see 576 of the Telegraph Regulations, Geneva Revision, 1958).

Reasons

Alignment with the RTg (Geneva Revision, 1958).

Italy  

3103  2035. After this No. add the following new sub-paragraph:

a bis) charges applicable to radiotelegrams to be re-routed at the request of the addressee as provided under 2098 (see Article 57 of the Telegraph Regulations, Geneva Revision, 1958).

3104  2036. Replace the present text by the following:

b) charges relative to irregularities in the counting of words which must be collected from the addressee in accordance with the provisions of § 8. (2), [2bis], [2ter], [2quater], [2quinquies] and [2sexies].

Reasons

A consequence of proposals 3095 et seq.
Present Provisions

2037 § 10. Mobile stations must be acquainted with the tariffs necessary for charging for radiograms. However, they are authorized, where necessary, to obtain such information from land stations; rates furnished by land stations are expressed in gold francs.

2038 § 11. The land station or ship or aircraft charges for radiograms concerning stations not yet included in the appropriate list of stations are fixed, as part of its duties, by the office which collects the charge. The ship or aircraft charges pertaining to radiograms intended for mobile stations the names or call signs of which are replaced by the indication of the route followed or by any other equivalent indication (see 2009), are also fixed, as part of its duties, by the office which collects the charge. They are the normal rates notified by the administration in question or, in the absence of such notification, they are the maximum charges prescribed in 2022.

2039 § 12. (1) No new rate, and no modification either general or of detail relative to tariffs shall become effective until 15 days after its notification by the Secretary General of the Union (excluding the day of despatch) and shall not be applied until the 1st or 16th of the month, whichever date next follows the expiration of this period.

Note by the S.G.

Circ. 624/1950

3105 2039. Further to amendments made in the Telegraph Regulations by the Paris Telegraph and Telephone Conference (1949), the S.G. told Administrations that in his opinion 2039 should be worded as follows:

§ 12. (1) No new rate, and no modification either general or in detail relative to tariffs shall become effective for countries other than those responsible for the new rate or the modification in rates until fifteen days after its notification1) by the Secretary-General of the Union (excluding the day of despatch) and shall not be applied until the first of the month following the expiration of this delay (see the Telegraph Regulations, Paris Revision, 199).

1) If there are several notifications, only the date of the first will be taken into account when computing the period.

Further to the Geneva Telegraph and Telephone Conference (1958), this paragraph, to be in line with 60 in the new Geneva Telegraph Regulations, should be worded thus:

§ 12. (1) No new rate, and no modification, either general or of detail, relative to the tariff, shall be effective for countries other than those which establish the new rate or rate modification until fifteen days after its notification1) by the General Secretariat, excluding the day of despatch, and it shall not be applied until the first of the month following the expiration of this period.

1) (Same as above.)
§ 12. (1) No new rates, or changes in rates, either in general or in detail shall become effective in countries other than those introducing the new rates or changes in rates until 15 days after their notification by the Secretary-General of the Union (excluding the day of despatch), nor shall they be applied until the first day of the month following the expiration of this period.

3107 1) If there be more than one notification, the date of the first only shall be taken into account in reckoning the expiration date.

Reasons
In accordance with the RTg (Geneva Revision).

United Kingdom

3108 2039. Replace the present text by the following:

§ 12. (1) No new rate, and no modification, either general or of detail, relative to tariff shall become effective for countries other than those which establish the new rate or the rate modification until 15 days after its notification by the Secretary General of the Union, excluding the day of despatch, and it shall not be applied until the first of the month following the expiration of this period.

3109 2039. After this No. add the following new sub-paragraph:

(1 bis) If there are several notifications, the date of the first only is to be considered in reckoning the period.

Reasons
See proposal 3084.

Italy

3110 2039. After this number, add the following new sub-paragraph:

(1 bis) If the aim of a modification is to equalize charges with the charges of competing routes which have already been notified, the period of fifteen days shall be reduced to ten.

Reasons
See RTg (Geneva, 1958).
2040. (2) Nevertheless, for radiotelegrams originating in mobile stations, modifications of tariffs are not applicable until a month after the periods laid down in 2039.

2041. (3) The provisions of 2039 and 2040 admit of no exception.

Section II. Reduced-rate Radiotelegrams

A. Radiotelegrams of Immediate General Interest

2042. § 13. No charge for radio transmission in the mobile service is made for radiotelegrams of immediate general interest, which fall within the following classes:

2043 a) distress messages and replies thereto;

2044 b) messages originating in mobile stations notifying the presence of icebergs, derelicts and mines, or announcing cyclones and storms;

2045 c) messages announcing unexpected phenomena threatening air navigation or the sudden occurrence of obstacles at airports;

2046 d) messages originating in mobile stations notifying sudden changes in the position of buoys, the working of lighthouses, devices connected with buoyage, etc.;

2047 e) service messages relating to the mobile service.

B. Meteorological Radiotelegrams

2048. § 14. (1) The term "meteorological radiotelegram" denotes a radiotelegram consisting solely of meteorological observations or meteorological forecasts, which is sent by an official meteorological service or by a station in official relation with such a service, and addressed to such a service or to such a station.

2049. (2) Meteorological radiotelegrams must bear the paid service indication = OBS = before the address. This paid service indication is the only one admitted.

3111 United Kingdom

2044. Replace: derelicts and mines by: derelicts, mines and other dangers to navigation.

Reasons:
It is considered that all dangers to navigation should be included.

3112 Italy

2048–2052. Replace the text of these provisions by the following.

§ 14. (1) The term "meteorological radiotelegram" denotes a radiotelegram sent by an official meteorological service or by a station in official relationship with such a service, addressed to such a service or such a station, and containing weather observations or forecasts only. A radiotelegram of this type shall always be considered as being worded in plain language.
(3) If requested, the sender must affirm that the text of his radiotelegram complies with the above conditions.

§ 15. (1) Land station and ship or aircraft charges applicable to meteorological radiotelegrams are reduced by at least 50 per cent in all relations.

(2) For land stations, the date on which this provision is put into force is fixed by agreement between the administrations and operating companies on the one hand, and the official meteorological services concerned on the other hand.

These radiotelegrams must bear the paid service indication = OBS =.

(3) The terminal and transit charges applicable to meteorological radiotelegrams shall be based on the charges for ordinary private radiotelegrams reduced by at least 50% in all relations.

(4) The sender may be required by the counter clerk to declare that the text of his radiotelegram is in accordance with the conditions mentioned in § 14 (1) above.

(5) No paid service indication other than = OBS = shall be admitted in meteorological radiotelegrams.

Greater clarity. See RTg (Geneva, 1958).

Land station and ship or aircraft charges and telegraph charges applicable ... (remainder unchanged).

Alignment with the RTg (Geneva Revision, 1958).

After this No. add the following new sub-paragraph:

(2 bis) Meteorological radiotelegrams from mobile stations containing especially meteorological observations, sent to an official meteorological service via a coast station, shall be free of charge.

Greater clarity. See RTg (Geneva, 1958).

C. CDE Radiotelegrams

Radiotelegrams in secret language which pass over the telecommunication channels of countries belonging to the extra-European system are called CDE radiotelegrams.

The radiotelegraph charge for CDE radiotelegrams is reduced in the same proportion as the telegraph charge for such radiotelegrams.

In traffic between ship stations, direct or through the intermediary of a single coast station of a country of the extra-European system, radiotelegrams in secret language are considered as CDE

The Telegraph and Telephone Conference (Paris, 1949) decided (Resolution No. 2) to do away with CDE telegrams, and hence considered that these paragraphs were superfluous.

In the same Resolution, the Conference decreed that the coefficient of 75% for the unification of rates for telegrams in plain language, cypher, or code, should not apply to land station charges or ship or aircraft charges for radiotelegrams.
radiotelegrams, and the rate to be charged shall be reduced in the same proportions as apply to CDE radiotelegrams in the extra-European system.

2056 (3) The reduction granted is always applicable to the charges, if any, for radiotelegraphic retransmission.

Belgium, France, French O. P. T. A., Italy, Japan, Morocco, United Kingdom

Proposals

3116 2053 to 2056. Delete.

Reasons

CDE telegrams are no longer admitted.
In accordance with RTg.

Italy

Add the following new Section:


3117 bis § 17 bis. The following radiotelegrams shall bear the paid service indication — RCT — placed before the address:

a) radiotelegrams addressed to prisoners of war, civilian internees, or their representatives (prisoners' representatives, internnee committees) by recognized relief societies assisting war victims 1);

b) radiotelegrams which prisoners of war, and civilian internees are permitted to send or those sent by their representatives (prisoners' representatives, internnee committees) in the course of their duties under the Convention 1);

c) radiotelegrams sent in the course of their duties under the Conventions by the National Information Bureau or Central Information Agency, for which provision is made in the Geneva Conventions, or by delegations of such Bureau or Agency, concerning prisoners of war, civilians who are interned or whose liberty is restricted, or the death of military personnel or civilians in the course of hostilities 2).

1) Art. 71, sub-paragraph 2; Art. 74, sub-paragraph 5 and Art. 81, sub-paragraph 4 of the Geneva Convention of August 12, 1949, relative to the Treatment of Prisoners of War; Art. 104, sub-paragraph 5 of the Geneva Convention of August 12, 1949, relative to the Protection of Civilians in Time of War.

Present Provisions

§ 17 ter. (1) In radiotelegrams bearing the paid service indication = RCT = (see Article 6. Special Radiotelegrams), the only special services admitted shall be the following: urgent radiotelegrams, prepaid reply, and notification of delivery (if such services are recognized by the countries of origin and destination).

(2) The corresponding paid service indications (= Urgent =), (= RPx =), (= PC =), shall be charged for at the same rate as the radiotelegrams to which they refer.

§ 17 quater. (1) The terminal rates and transit rates applicable to ordinary radiotelegrams bearing the paid service indication = RCT = shall be those of ordinary private telegrams reduced by 75 per cent.

(2) The charge per word to be collected for a radiotelegram bearing the paid service indications = Urgent =, = RCT = shall be the same as that for an ordinary private radiotelegram over the same route.

§ 17 quingues. The minimum number of chargeable words for radiotelegrams bearing the paid service indication = RCT = shall be the same as for private radiotelegrams (ordinary or urgent as the case may be).

§ 17 sexies. According to their category (ordinary or urgent), radiotelegrams bearing the paid service indication = RCT = shall take rank with ordinary or urgent private radiotelegrams for purposes of transmission and delivery.

§ 17 septies. (1) Radiotelegrams sent by prisoners of war, civilian internees or their representatives shall bear the official stamp of the camp or the signature of the camp commander or one of his deputies.

(2) Radiotelegrams sent by the National Information Bureau and the Central Information Agency for which provision is made in the Geneva Conventions, or by delegations thereof, as well as radiotelegrams sent by recognized relief societies assisting war victims, shall bear the official stamp of the Bureau, Agency, Delegation or Society which sends them.

Reasons

The new category of = RCT = telegrams was introduced by the Administrative Telegraph and Telephone Conference, Geneva, 1958, and provision should also be made for it in the RA.
Present Provisions

D. Press Radiotelegrams

2057 § 18. (1) The land station and ship or aircraft charges are reduced by 50 per cent for press radiotelegrams originating in a ship or aircraft station and destined for places on land. These radiotelegrams are subject to the conditions of acceptance laid down in articles 77 and 78 of the International Telegraph Regulations (Cairo Revision, 1938). For those which are addressed to a destination in the country of the land station, the telegraph charge to be collected is one-half of the telegraph charge applicable to an ordinary radiotelegram.

Proposals

3122bis Belgium

Heading D. After 2052, read:
C. Press Radiotelegrams.

Note by the S.G.

Circ. 624/1950

3123 2057. Further to amendments made in the Telegraph Regulations by the Paris Telegraph and Telephone Conference (1949), the S.G. told administrations that in his opinion 2057 should be amended as follows:

Instead of: ... in Articles 77 and 78 of the International Telegraph Regulations (Cairo Revision, 1938).

Read: ... in Articles 75 and 76 of the International Telegraph Regulations (Paris Revision, 1949). 1)

3124 France, French O. P. T. A., Japan, Morocco, United Kingdom

2057. Replace the second sentence by the following:

... These radiotelegrams shall be subject to the conditions of acceptance laid down in Articles 65 and 66 of the Telegraph Regulations (Geneva Revision, 1958) ...

Reasons

In accordance with the RTg.

3125 Italy

2057. Replace the references to articles by the following:

65, 66, 67, 68 and 69 of the Telegraph Regulations (Geneva Revision, 1958).

3126 United Kingdom

2057. After this No. add the following new subparagraph:

(1bis) The minimum charge as for fourteen words for press telegrams, mentioned in 673 of the Tele-

1) Now Articles 65 and 66 of the Telegraph Regulations (Geneva Revision, 1958).
Present Provisions

Proposals

2058. (2) Press radiotelegrams destined for a country other than that of the land station are subject to the press rate in force between the country of the land station and the country of destination.

graph Regulations (Geneva Revision, 1958), is not applicable to the radiotelegraph portion of the route over which a press radiotelegram is transmitted.

Reasons

See proposal 3084.

3127 Japan

2058. After this No. insert the following new section:

D bis. Medical Radiotelegrams

§ 18 bis. (1) The medical radiotelegram is a radiotelegram which is exchanged between ships and hospitals or land stations designated by administrations for receiving or giving the medical instructions for the sick and wounded at sea.

(2) The indication “Medical” must be written, as a category of telegram, in the preamble of the medical radiotelegram.

(3) The method of writing and transmission, and charges of the medical radiotelegram are fixed by the administrations of countries which give the medical instructions.

(4) The administrations dealing with the medical radiotelegram shall notify the Secretary General of the I.T.U. of the matters prescribed in (1) (2) and (3).

Reasons

To establish the basic provisions which prescribe the medical advice service. These provisions are not found in either the Radio Regulations or the Additional Radio Regulations.

United Kingdom

2058. After this No. add the following new section:

3128 D bis. Radiotelephone Calls

3129 § 18 bis. The charge for a radiotelephone call originating in or destined for a mobile station comprises:

a) the ship or aircraft charge
b) the land station charge
c) the charge for transmission over the telephone system.
Present Provisions

**Proposals**

**United Kingdom (cont'd)**

3130 § 18ter. The charge for a radiotelephone call is fixed on a time basis. Calls of a duration of three minutes or less are charged as for three minutes. In the case of calls whose duration exceeds three minutes, a charge per minute is made for the period in excess of three minutes, any fraction of a minute being charged as for one minute. The charge per minute is one-third of the charge for three minutes.

3131 § 18quater. Mobile stations must be acquainted with the tariffs necessary for charging for radiotelephone calls. However, they are authorized, where necessary, to obtain such information from the land stations. Rates furnished by land stations are expressed in gold francs.

**Reasons**

To cater for radiotelephone calls.

**Italy**

 Replace the text of Article 5 by the following:

**Letter-Radiotelegrams**

3132 § 1. (1) Administrations shall be free to organize a letter-radiotelegram service. The charge per word for a letter-radiotelegram shall be 50 per cent of that for ordinary radiotelegrams, and the chargeable minimum shall be twenty-two words. This correspondence shall be transmitted by radio between ships or aircraft and land stations. Over land, it shall be transmitted by telegraph.

3133 (2) Administrations or recognized private operating agencies which do not admit outgoing or incoming letter-radiotelegrams shall admit them in transit. The transit charge due to such administrations or private recognized operating agencies shall be reduced by 50 per cent.

If so, any intermediate ship or land stations shall be considered as transit stations and shall receive a reduced charge of 50 per cent.

3134 § 2. Letter-radiotelegrams shall be distinguished by the service indication =RLT=.

3135 § 3. (1) Letter-radiotelegrams from one of the authorities mentioned in Article 62 § 13 of the Telegraph Regulations (Geneva Revision, 1958) or replies to radiotelegrams sent by these same authorities may bear the paid service indication =RLTF=. 

**ARTICLE 5**

**Radiomaritime Letters and Radio Air Letters**

2059 § 1. Each administration may organize a service of radiomaritime letters between ships at sea and its coast stations, and radio air letters between aircraft in flight and its land stations. Such correspondence is transmitted by radio between the ships or aircraft and the land stations. They may be forwarded on the land section:

2060 a) wholly or partly by post (ordinary or airmail);

2061 b) exceptionally by telegraph, in which case delivery is subject to the periods of delay fixed for letter telegrams of the European or extra-European systems.

2062 § 2. Radiomaritime letters and radio air letters do not admit of any radio retransmission in the mobile service.

2063 § 3. Radiomaritime letters and radio air letters must be exchanged only with places in the country in which the land station is situated, unless other arrangements have been made with the administrations concerned. In that event, an additional charge may be collected in accordance with the agreement between these administrations.
Present Provisions

§ 4. Radiomaritime letters bear the paid service indication = SLT = and radio air letters the paid service indication = ALT =. These indications precede the address.

§ 5. (1) Other paid service indications which may be admitted are:
= RPx = = PR = = GP = = GPR = = PAV =

(2) Where the transmission over the land section is exceptionally performed by telegraph, the only paid service indications which may be admitted are:
= RPx = = GP = = TR = = LX = = Redirected from x =

§ 6. The address must enable delivery to be effected without enquiry or requests for information. Registered or abbreviated addresses are admitted when, exceptionally, radiomaritime letters and radio air letters are forwarded telegraphically on the land section.

§ 7. As a general rule, the text is subject to the regulations applicable to letter telegrams, namely:

a) When asked to do so by the office of origin, the sender must sign a declaration that the text is expressed in plain language in one and the same language, and that it bears no meaning other than that which appears on the face of it. The declaration must indicate the language used.

b) Exceptionally, proper names, names of firms, and expressions denoting goods or brands of goods are admitted in a language other than that in which the radiomaritime letter or radio air letter is written.

c) The usual signs of punctuation of the Morse code are admitted.

Proposals

The provisions of Article 62, §§ 2 and 3, of the Telegraph Regulations (Geneva Revision, 1958) shall apply to letter-radiotelegrams bearing these indications.

(2) Letter-radiotelegrams bearing the paid service indication = RLTF = shall be charged for at the same rate and shall be subject to the same conditions governing acceptance, transmission and delivery as letter-radiotelegrams bearing the paid service indication = RLT =.

(3) Nevertheless, Article 29 of the Convention (stoppage of private telegrams) shall not apply to = RLTF = letter-radiotelegrams.

§ 4. The acceptance, transmission and delivery of letter radiotelegrams shall be subject to the restrictions arising out of §§ 5 et seq. hereinafter.

§ 5. Registered addresses shall be allowed in letter-radiotelegrams.

§ 6. The text of letter-radiotelegrams must be in plain language throughout [Articles 19 and 29 § 1 a), § 2 (1) a) of the Telegraph Regulations (Geneva Revision, 1958)].

§ 7. The sender may be required by the office or mobile station of origin to sign a declaration on the radiotelegram form formally stating that the text is in plain language throughout and bears no occult meaning. The declaration shall indicate the language or languages in which the radiotelegram is drafted.

§ 8. The only special services admitted for letter-radiotelegrams shall be the following:
Prepaid reply 1), redirection to any address 2), X addresses, communicate all addresses, post 3), registered post 4), poste restante 5), poste restante registered 6), telegraph restant 7), delivery by telephone 8), delivery by telex 9), de luxe telegrams and, subject to the provisions of §§ 9 and 10 above, delivery on a specified date. The corresponding paid service indications (= RPx =,

1) in accordance with 2088;
2) in accordance with 2098;
3) in the direction ship to land.
If numbers written in figures, commercial marks or abbreviated expressions are used in the text, the number of these words or groups reckoned in accordance with the normal rules of charging must not exceed one-third of the total number of chargeable words in the text, including the signature. For this evaluation a radiomaritime letter or radio air letter is always considered as comprising at least 20 words, even if the actual number is less than 20.

The ship or aircraft charge for radiomaritime letters and radio air letters is fixed at 2 fr. 50 up to 20 words. For each word in excess of twenty: 0 fr. 125.

The land station charge up to 20 words and the charge per word in excess shall be determined by the administrations concerned subject to a maximum of 4 francs for the first and 0 fr. 20 for the second. The land station charge must include the postal charge (by ordinary letter) due for routing in the country to which the land station is subject.

The following charges are added where applicable:

- charges due for authorized accessory services and, if necessary, the further charge mentioned in 2063;

- the telegram charge when, exceptionally, transmission on the land section is by telegraph.

Letter-radiotelegrams shall be redirected by telegraph after striking out or changing, if necessary, the indication = RL T = or = RL TF = and in accordance with the rates in force and the types of service admitted in the relations between the redirecting country and the country of destination. The provisions of Article 57 § 7 (1) (2) of the Telegraph Regulations (Geneva Revision, 1958) shall apply.

Letter-radiotelegrams shall be delivered on the morning following the day of handing-in, after 8 o'clock a. m. (local time).

If, in certain relations, the application of these regulations means that letter-radiotelegrams are handled as speedily as ordinary radiotelegrams, the administrations or recognized private operating agencies concerned of the country of destination may arrange for them to be delivered after 2 o'clock p. m. (local time) on the day following the day of handing-in or after 8 o'clock a. m. on the day following that.

If, in certain relations, the application of § 9 causes delivery of letter-radiotelegrams to be delayed by more than twenty-four hours, the administrations or recognized private operating agencies concerned of the country of destination may deliver on the day of handing-in after 2 o'clock p. m. (local time).

In the direction ship to land letter-radiotelegrams may be delivered by post, by special messenger, by telephone, by telex or by any other means, as the administration or recognized private operating agency responsible for the office of destination may decide.

The provisions of Art. 4 of the RA, § 8 (2 quater) and (2 quinquies) and of Article 38, of the RR, 950-13, together with those of Article 75 of the Telegraph Regulations (Geneva Revision, 1958), shall apply to letter-radiotelegrams.

Accounting for letter-radiotelegrams shall be subject to these Regulations, the minimum charge being as set forth in § 1 above.
The artificial delaying of letter-radiotelegrams provided for above shall be done by the telegraph office of destination, when messages are exchanged in the direction ship-to-land, and by coast stations when messages are exchanged in the direction land-to-ship.

Reasons

We propose that letter-radiotelegrams be introduced and radiomaritime letters be done away with for the following reasons:

a) Radiomaritime letters have several disadvantages. Some radiomaritime letters, for which the user frequently pays fairly heavily, are transmitted overland, and either do not reach their destination or reach it only after considerable delay. There are also many examples of radiomaritime letters addressed to owners of ships or persons resident in a town which has a coast station, which take as long to deliver as an ordinary radiogram, for which the user pays three times as much. The result is grave dissatisfaction among users and, inevitably, irregularities. Indeed, radiomaritime letters may sometimes be delivered by telephone.

b) The organization of the radiomaritime service allows of considerable increases in traffic, while the expansion of telegraph networks makes it possible easily to absorb the increase in traffic due to the obligation to transmit letter-radiotelegrams by telegraph. Use of the post for telegraph correspondence must surely be regarded as an anachronism.

c) The economic considerations put forward with regard to the expediency of laying down minimum charges for radiotelegrams are also valid in connection with the proposal to introduce letter-radiotelegrams. One of the factors which have a decisive influence on the cost of a message is the transmission of the preamble, together with the preliminary radio operations necessary to make contact between the land station and its mobile correspondent. Once contact has been made and the preamble transmitted, the transmission of a number of additional words costs little more. On the other hand, the possible additional charges (even if small) could be a rich source of profit for administrations.

d) As regards the delivery of letter-radiotelegrams addressed to places which have no telegraph, the general rule in force in the telegraph service (RTg, Art. 59), by which telegrams addressed to places not served by telegraph may be delivered by express, post or airmail, might be applied.

Japan

2059. Between the first and the second sentences, insert the following sentence:

This service shall be admitted only for the radiotelegrams originating in mobile stations and destined for the land.

Reasons

It is understood that this service should be admitted only for the radiotelegrams destined to land from a mobile station.
Present Provisions

3152 France, French O. P. T. A., Morocco

2061. Does not affect the English text

3153 Finland

2062. Delete.

Reasons

We cannot find any motives which would support maintaining of this number or which would explain why this number is needed.

Note by the S. G.
Circ. 624/1950

3154 2068. Further to amendments made in the Telegraph Regulations by the Paris Telegraph and Telephone Conference (1949), the S.G. drew attention to the fact that: It is laid down in § 7 that as a general rule the text of radiomaritime letters and radio air letters is subject to the regulations applicable to letter-telegrams. Since radiomaritime and radio air letters do not normally use the general telecommunication network, we (i. e., the S.G.) simply refer to Article 82 (letter-telegrams) of the Paris Telegraph Regulations¹), without giving an opinion as to how far the new provisions of these Regulations are applicable to radiomaritime and radio air letters.

¹) Now Article 70 in the R.Tg (Geneva Revision, 1958).

3155 France, French O. P. T. A., Morocco

2068. Does not affect the English text.
§ 7. As a general rule, the text is subject to the regulations applicable to letter telegrams (see Article 70 of the Telegraph Regulations, Geneva Revision, 1958).

a) radiomaritime letters and radio air letters must be drafted entirely in plain language.

Reasons
In accordance with the RTg.

b) when asked to do so by the office of origin, the sender must sign a declaration, on the radiomaritime or radio air letter form, formally stating that the text is drafted entirely in plain language and that it bears no occult meaning. The declaration shall indicate the language or languages used.

Reasons
In accordance with the RTg.
Present Provisions

Proposals

3160  France, French O. P. T. A., Morocco

2071 and 2072. Delete.

Reasons
In accordance with the RTg.

3161  Japan

2072. Replace the present text by the following:

d) The minimum number of chargeable words for
radiomaritime letters and radio air letters shall be
22.

Reasons
1. The first sentence is not necessary. (See proposal 3156.)
2. It is desirable that the minimum number of chargeable words
for radiomaritime letters and radio air letters is aligned with that
of letter-telegrams.

3162  France, French O. P. T. A., Morocco

2073. Replace the present text by the following:

§ 8. (1) The ship or aircraft charge which may be
payable for radiomaritime letters and radio air letters
shall be 2 fr. 50 up to 20 words. For each word in excess
of 20: 0 fr. 125.

Reasons
The collection of ship and aircraft charges should not be
compulsory.

Japan

3163  Japan

2073. Replace the present text by the following:

§ 8. (1) The land station charge and the ship or air-
craft charge for radiomaritime letters and for radio air
letters are fixed at a charge per word of 50 per cent of
that applicable to ordinary radiotelegrams.

Reasons
Alignment with the coefficient of reduction applicable to letter
telegrams.
§ 9. Radiomaritime letters and radio air letters rank for radio transmission after ordinary radiotelegrams on hand. Those which have not been transmitted within 24 hours of handing-in are sent concurrently with ordinary radiotelegrams.

§ 10. The normal rules of accounting as regards radiocommunications are applicable to radiomaritime letters and to radio air letters, in accordance with the provisions of § 2073 and § 2074.

§ 11. (1) When a radiomaritime letter or a radio air letter fails to reach its destination due to the failure of the postal service, only the charges in respect of the services not carried out are refunded.

(2) Reimbursement of charges is admitted in the cases provided for in § 2081 and § 2084 of the Telegraph Regulations (Paris Revision, 1949).
856

Present Provisions

Proposals

3168 Japan, United Kingdom

2081. Replace the present text by the following:

(2) Reimbursement of charges is admitted in the cases provided for in 885, 911, 912 and 913 of the Telegraph Regulations (Geneva Revision, 1958).

ARTICLE 6

Special Radiotelegrams. Paid Service Indications

2082 § 1. The following special radiotelegrams are admitted provided the administrations concerned accept them:

2083 1st Press radiotelegrams originating in mobile stations and destined for the land.

2084 2nd Meteorological radiotelegrams (= OBS =).

2085 3rd Greetings radiotelegrams (subject to the conditions laid down in article 86 of the Telegraph Regulations, Cairo Revision, 1938).

Note by the S. G.

Circ. 619/624/1950

3169 2085. Greetings telegrams were abolished by the Telegraph and Telephone Conference, Paris, 1949 (Resolution No. 2); hence this No. becomes superfluous.

3170 France, French O. P. T. A., Italy, Japan, Morocco, United Kingdom

2085. Delete,

Reasons

Alignment with the RTg (Geneva Revision, 1958).
<table>
<thead>
<tr>
<th>Present Provisions</th>
<th>Proposals</th>
</tr>
</thead>
<tbody>
<tr>
<td>telegram) they bear the indication “dévié” and particulars of the route followed by the original radiotelegram. All paid service advices are admitted over the general telecommunication network.</td>
<td>Note by the S.G.</td>
</tr>
<tr>
<td><strong>2087</strong></td>
<td>5th Urgent radiotelegrams and deferred radiotelegrams but only over the general telecommunication network.</td>
</tr>
<tr>
<td><strong>Circ. 619/624/1950</strong></td>
<td><strong>3171</strong> 2087. <em>The Telegraph and Telephone Conference (Paris, 1949)</em> decided (Resolution No. 2) that deferred telegrams should be done away with. Hence the words “... and deferred radiotelegrams” in this No. should be deleted.</td>
</tr>
<tr>
<td><strong>3172</strong> France, French O. P. T. A., Italy, Japan, Morocco, United Kingdom</td>
<td><strong>2087.</strong> Delete the words: and deferred radiotelegrams.</td>
</tr>
<tr>
<td><strong>Reasons</strong></td>
<td>In accordance with the RTg (Geneva Revision, 1958). No longer applicable.</td>
</tr>
<tr>
<td><strong>2088</strong></td>
<td>6th Radiotelegrams with prepaid reply. The reply voucher issued on board a mobile station gives the right to send a radiotelegram to any destination, but only from the mobile station which issued the voucher, and only up to the value of the voucher.</td>
</tr>
<tr>
<td><strong>2089</strong></td>
<td>7th Collated radiotelegrams.</td>
</tr>
<tr>
<td><strong>2090</strong></td>
<td>8th Radiotelegrams with notification of delivery destined for mobile stations, but only as far as concerns the notification to the telegraph office of origin of the date and time at which the land station has transmitted the radiotelegram to the mobile station of destination.</td>
</tr>
<tr>
<td><strong>2091</strong></td>
<td>9th Multiple radiotelegrams.</td>
</tr>
<tr>
<td><strong>2092</strong></td>
<td>10th Radiotelegrams to be delivered by express or by post (direction ship or aircraft to land).</td>
</tr>
</tbody>
</table>
Present Provisions

2093 11th De luxe radiograms (subject to the conditions laid down in Article 63 of the Telegraph Regulations, Cairo Revision, 1938).

Proposals

Note by the S.G.
Circ. 624/1950

3173 2093. Further to amendments made in the Telegraph Regulations by the Telegraph and Telephone Conference (Paris, 1949), the S.G. told administrations that in his opinion this No. should be worded as follows:

11th: De luxe radiograms (subject to the conditions laid down in Article 61 of the Telegraph Regulations Paris Revision, 1949). 1)

1) Now Article 60 in the Telegraph Regulations (Geneva Revision, 1958).

3174 France, French O. P. T. A., Italy, Japan, Morocco, United Kingdom

2093. Replace the present text by the following:
De luxe radiograms (subject to the conditions laid down in Article 60 of the Telegraph Regulations (Geneva Revision, 1958).

Reasons
In accordance with the RTg (Geneva Revision, 1958).

3175 Italy

2095. Replace the present text by the following:
13th: Letter-radiograms.

Reasons
Consequence of proposals 3132 et seq.

Note by the S.G.
Circ. 624/1950

3176 2097. This particular way of delivery having been done away with by the Telegraph and Telephone Conference (Paris, 1949), this No. becomes superfluous.

3177 France, French O. P. T. A., Italy, Japan, Morocco, United Kingdom

2097. Delete.

Reasons
In accordance with the RTg (Geneva Revision, 1958).
No longer applicable.
Present Provisions

Proposals

§ 1 bis. Radiotelegrams to be forwarded as letter telegrams (=ELT=, =LT=, ELTF=, =LTF=), exclusively in the direction from ship or aircraft to land and on the conditions fixed in Article 82 of the Telegraph Regulations (Paris Revision, 1949). The reduction of 50% is only applicable to the charges for the transmission over the general telecommunication network.

Reasons
To meet practical needs. The radio contact between ship and coast station has in many cases not an urgent character. Very often a radiotelegram is sent, because correspondence by letter is not possible. This proposal can be seen as a logical extension of the SLT-service.

§ 2. In addition the following paid service indications are admitted in radiotelegrams:

- GP, = GPR, = TR, = TFx = (direction ship or aircraft to land), = Jx = (direction land to ship or aircraft), = Redirected from x = (only when the charge for forwarding can be collected), = Day =, = Night =.

§ 3. Radiotelegrams are not admitted as letter telegrams. Radiotelegrams to follow the addressee at the request of the sender are not admitted.

Add the following paid service indication:

=TLXx = (direction ship-to-land).

In view of the development of the telex service, it is preferable to admit the service of =TLXx=. With regard to the deletion of =Jx=, see proposal 3183.

Delete the first sentence.

Italy:
Consequence of proposals 3132 et seq.

Netherlands:
Editorial in relation with proposal 3178.
§ 3 bis. (1) The paid service indications = Urgent = and = PC = contained in the radiogram originating in the land and destined for the mobile station are not transmitted on the mobile service section.

(2) With regard to these service indications, land station charge and ship or aircraft charge are not collected.

Reasons

Such special services are performed exclusively over the general telecommunication network and it is not necessary to transmit these service indications on the mobile service section. Therefore, in the mobile service, the charges for not only these special services but also their paid service indications should not be collected. These points should be clearly provided for in the Regulations.

§ 1. (1) The sender of a radiogram destined for a ship at sea may specify the number of days during which the coast station may hold the radiogram.

(2) In that case, the sender writes before the address the paid service indication = Jx = (x days) specifying the number of days (ten at the most) exclusive of day of handing-in of the radiogram.

§ 2. (1) When it has not been possible to transmit within the prescribed period a radiogram bearing the paid service indication = Jx =, the coast station informs the office of origin, which notifies the sender. The latter may ask, by paid service advice telegraphic or postal, addressed to the coast station, that his radiogram be cancelled as regards the section between the coast station and the ship station, or kept for a further period of not more than seven days to be transmitted to the ship station. Failing such a request, the radiogram is treated as undelivered three days after the despatch of the advice of non-transmission. The office of origin is immediately advised if the coast station transmits the radiogram during the above mentioned three days. The same applies when the coast station transmits the radiogram during the above mentioned three days.
Present Provisions

861

Proposals

the coast station informs the office of origin, which notifies the sender. The sender of the radiotelegram may then ask, by paid service advice, addressed to the coast station, either that his radiotelegram be cancelled as regards the section between the coast station and the ship station or that further attempts at transmitting it to the ship station be made during a period of another seven days at the most.

Failing such a request, the radiotelegram is treated as undelivered by the coast station three days after the dispatch of the advice of non-transmission. The office of origin shall be immediately advised, if the coast station transmits the radiotelegram during the last-mentioned period of three days. The same shall apply, if the coast station transmits the radiotelegram during the additional period which may have been requested by the sender.

In order to simplify the regulations now in force.

3185

Italy

2103. Replace the present text by the following:

(2) When a coast station has not succeeded in making contact with the ship station to which a radiotelegram is addressed by the morning of the third day following the date of handing-in, it shall inform the office of origin, which then informs the sender. The latter may request, by paid service advice, telegraphic or postal, addressed to the coast station, that his radiotelegram be cancelled as regards the section between the coast station and the ship station, or held until the end of the seventh day, counting from the day following the day of handing-in. If the radiotelegram is transmitted between the third and seventh days, the coast station shall inform the office of origin as soon as possible.

Reasons

See proposal 3189.

3186

Japan

2103. At the beginning delete not bearing the paid service indication =Jx=.

Reasons

See proposal 3183.
§ 3. On the morning of the day following that on which a radiotelegram is treated as undelivered by the coast station, this station advises the office of origin which notifies the sender, to whom the coast station and ship station charges may then be refunded.

Reasons
See proposal 3184.

§ 4. The periods mentioned in 2102 and 2103 shall be ignored if the coast station is sure that the ship station will soon come within its range.

Reasons
Article 7 of the existing Regulations has remained unchanged for many years, and should be adapted to technical progress made in the field of radiomaritime communications.
§ 5. (1) On the other hand, the lapse of those periods is not awaited when the coast station is sure that the ship station being in course of a voyage either has definitely left its range of action or will not enter it. If it believes that no other coast station of the administration or of the private enterprise to which it is subject is or will be in touch with it, the coast station cancels the radiotelegram as far as concerns the section between itself and the ship station and informs the office of origin which notifies the sender. In the contrary case, the coast station forwards the radiotelegram to the coast station believed to be in touch with the ship station, provided, however, that no additional charge results therefrom.

(2) The coast station which carries out the redirection by wire, alters the address of the radiotelegram by placing after the name of the ship station that of the new coast station charged with the transmission and inserting at the end of the preamble the service instruction “redirected from x Radio” which must be transmitted throughout the course of the radiotelegram.

(3) If, within the limits of the requisite period of retention of radiotelegrams, the coast station which has redirected a radiotelegram to another coast station is subsequently in a position to transmit the radiotelegram direct to the mobile station of destination, it does so by inserting the service instruction “ampliation” before the preamble. It shall then transmit to the coast station to which the radiotelegram had been redirected a service notice informing the latter of the transmission of the said radiotelegram.

§ 6. When a radiotelegram cannot be transmitted to a ship station owing to the arrival of the latter in a port near the coast station, the latter station may, according to circumstances, forward the radiotelegram to the ship station by other means of communication, at the same time informing the office of origin by service advice of the delivery. In this case the coast station charge is retained by the administration to which the coast station is subject and the ship charge is refunded to the sender by the administration to which the office of origin is subject.

Section II. Radiotelegrams Destined for Aircraft Stations in Flight

§ 7. (1) Radiotelegrams intended for aircraft in flight must be sent by land stations with the least
Present Provisions

possible delay. When the land station is certain that the aircraft station cannot be reached, it immediately informs the office of origin by service advice, so that the land station and aircraft charges, and any charges for special services not performed, may be refunded to the sender.

2111 (2) When, however, a radiotelegram cannot be transmitted to an aircraft station due to the latter's arrival at an airport (other than that where the land station happens to be situated) and if the stay of the aircraft is prolonged, the land station may, if necessary, forward the radiotelegram to the aircraft station by other means of communication, and advise the office of origin of this transmission by a service message. In this case, the land station charge is retained by the administration to which the land station belongs, and the aircraft charge is refunded to the sender by the administration to which the office of origin is subject.

2112 (3) The radiotelegram may be delivered to the aircraft station at the airport where the land station, which should have made the transmission, happens to be situated.

2113 (4) In this case, the land station notifies the office of origin of this delivery by service advice, and the office of origin refunds the land station and aircraft charges to the sender.

ARTICLE 8

Doubtful Reception. Transmission by "Ampliation"
Long-distance Radiocommunications

2114 § 1. (1) In the mobile service, when communication becomes difficult, the two stations in communication make every effort to complete the radiotelegram in course of transmission. The receiving station may request not more than two repetitions of a radiotelegram of which the reception is doubtful. If this triple transmission is ineffective, the radiotelegram is kept on hand in case a favourable opportunity for completing its transmission occurs.

2115 (2) If the transmitting station considers that it will not be possible to re-establish communication with the receiving station within twenty-four hours, it proceeds as follows:
a) If the transmitting station is a mobile station, it immediately informs the sender of the reason for the non-transmission of his radiotelegram. The sender may then request:

- that the radiotelegram be transmitted through another land station or through other mobile stations; or

- that the radiotelegram be held until it can be transmitted without additional charge; or

- that the radiotelegram be cancelled.

b) If the transmitting station is a land station, it applies the provisions of article 7 to the radiotelegram.

§ 2. When a mobile station subsequently transmits a radiotelegram thus held to the land station which incompletely received it, this new transmission must bear the service instruction “ampliation” in the preamble of the radiotelegram. If the radiotelegram is transmitted to another land station subject to the same administration or the same private enterprise, the new transmission must bear the service instruction “ampliation via...” (insert here the call sign of the land station to which the radiotelegram was transmitted in the first instance) and the administration or private enterprise in question may claim only the charges relating to a single transmission. The “other land station” which thus forwards the radiotelegram may claim from the mobile station of origin any additional charges resulting from the transmission of the radiotelegram over the general communication network between itself and the office of destination.

§ 3. When the land station designated in the address as the station by which the radiotelegram is to be forwarded cannot reach the mobile station of destination, and has reason to believe that such mobile station is within range of another land station of the administration or private enterprise to which it is itself subject, it may, if no additional charge is incurred thereby, forward the radiotelegram to this other land station.

§ 3. Replace the present text by the following:

§ 3. When a mobile station subsequently transmits a radiotelegram thus held to the land station which incompletely received it, this new transmission shall bear the service instruction “ampliation” in the preamble of the radiotelegram. The administration responsible for this land station can claim only the charge for a single transmission. Should the radiotelegram be transmitted to another land station, this new transmission too shall bear the service instruction “ampliation” and the charge claimed from the mobile station by the administration responsible for the last land station for transmission of the radiotelegram on channels of the general network, together with that for the route between this land station and the office of destination. The mobile transmitting station shall arrange, by service advice to the land station to which the radiotelegram had originally been transmitted, for the original radiotelegram no longer to appear in accounts. If the land station has already transmitted the radiotelegram over the telecommunication channels of the general network, it shall forward the notice of cancellation for accounting purposes.

Reasons

To avoid a state of affairs in which the mobile station is debited with land station charges as well as telegraph ones.
Present Provisions

2123 § 4. (1) A station of the mobile service which has received a radiotelegram and has been unable to acknowledge its receipt in the usual way, must take the first favourable opportunity to give such acknowledgment.

2124 (2) When the acknowledgment of receipt of a radiotelegram transmitted between a mobile station and a land station cannot be given direct, it is forwarded through another mobile or land station, if the latter is able to communicate with the station which has transmitted the radiotelegram in question. In any case no additional charge must result.

2125 § 5. (1) Administrations reserve the right to organize a long-distance radiocommunication service between land stations and mobile stations, with deferred acknowledgment of receipt or without any acknowledgment of receipt.

2126 (2) When there is doubt about the accuracy of any part of a radiotelegram transmitted under either of these systems, the indication “doubtful reception” is entered on the copy delivered to the addressee, and the doubtful words or groups of words are underlined. If words are missing, blanks are left in the places where these words should be.

2127 (3) In the long-distance radiocommunication service with deferred acknowledgment of receipt, when the transmitting land station has not, within a period of 5 days, received the acknowledgment of receipt of a radiotelegram sent by it, the station notifies the office of origin. The reimbursement of the land station and ship or aircraft charges must be postponed until the office of origin has ascertained from the land station in question that an acknowledgment of receipt has not been received subsequently, within a period not exceeding one month.

2128 (4) Each administration designates the long-distance land station or stations for which its mobile stations keep watch.

Proposals

Japan

3193 2124. 1. After: through another mobile or land station add: by the service advice.

3194 2. Delete the last sentence.

Reasons

It is preferable to stipulate clearly that the acknowledgment of receipt is forwarded by a service advice. Consequently the last sentence becomes unnecessary.
Present Provisions

ARTICLE 9

Retransmission by Stations of the Mobile Service

Section I. Retransmission at the Request of the Sender

2129 § 1. Stations of the mobile service must, if the sender so requests, serve as intermediaries for the exchange of radiotelegrams originating in or destined for other stations of the mobile service; the number of intermediary stations of the mobile service, is, however, limited to two.

2130 § 2. Radiotelegrams forwarded as described in 2129 above must bear, before the address, the paid service indication = RM = (retransmission).

2131 § 3. The transit charge, whether two intermediary stations are concerned or only one, is fixed uniformly at forty centimes (0 fr. 40) per word pure and simple, without the collection of a minimum charge. When two stations of the mobile service have participated this charge is divided equally between them.

Section II. Routine Retransmission

2132 § 4. (1) When a land station cannot reach the mobile station for which a radiotelegram is destined and no payment for retransmission of the radiotelegram has been deposited by the sender, the land station may, in order to forward the radiotelegram to its destination, have recourse to the help of another mobile station provided that the latter consents. The radiotelegram is then transmitted to this other mobile station. The help of the latter is given free of charge.
Present Provisions

2133. (2) The same provision is also applicable to traffic from mobile stations to land stations, when necessary.

2134. (3) The station assisting in the free retransmission in accordance with the provisions of 2132 and 2133 must enter the service abbreviation QSP . . . (name of the mobile station) in the preamble of the radiotelegram.

2135. (4) In order that a radiotelegram thus forwarded may be considered as having reached its destination, the station which has made use of this indirect route must have obtained the regular acknowledgment of receipt, either direct or by an indirect route, from the mobile station for which the radiotelegram was destined or from the land station to which it was to be forwarded, as the case may be.

ARTICLE 10

Advice of non-delivery

2136  § 1. When, for any reason, a radiotelegram originating in a mobile station and destined for a place on land cannot be delivered to the addressee, an advice of non-delivery is addressed to the land station which received the radiotelegram. After checking the address, the land station forwards the advice, when possible, to the mobile station, if necessary, by way of another land station of these same countries or of a neighbouring country, as far as existing conditions or special agreements permit.

2137  § 2. When a radiotelegram received at a mobile station cannot be delivered, that station so informs the office or mobile station of origin by a service advice. In the case of a radiotelegram originating on land, this service advice is sent, whenever possible, to the land station through which the radiotelegram passed or, if necessary, to another land station of the same country or of a neighbouring country, as far as existing conditions or special agreements permit.

ARTICLE 11

Radiotelegrams Originating in or Destined for Aircraft

2138  In the absence of special arrangements the provisions of the Additional Radio Regulations are applicable generally to public correspondence radiotelegrams originating in or destined for aircraft.
ARTICLE 12

Radiocommunications for Multiple Destinations

Radiocommunications for multiple destinations shall be carried on in accordance with the provisions of the Telegraph Regulations.

ARTICLE 13

Effective Date of the Additional Radio Regulations

These Additional Radio Regulations shall come into force on January 1, 1949.

In witness whereof the delegates of the following countries, represented at the International Radio Conference of Atlantic City (1947), have signed in the names of their respective countries the present Regulations in a single copy which will remain in the archives of the Government of the United States of America and of which a certified copy will be delivered to every country member of the Union.

Done at Atlantic City, the 2nd of October 1947.

The Signatures follow