

INTERNATIONAL RADIOTELEGRAPH CONVENTION AND GENERAL AND SUPPLEMENTARY REGULATIONS

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This publication contains the text of the International Radiotelegraph Convention of Washington (1927) in English and in French.

The strict regulations laid down by this Convention may in many points be of interest to the Hydrographic Offices, particularly when drafting certain parts of their Sailing Directions.

Among the most interesting articles of General Regulations Annexed to the International Radiotelegraph Convention, we may cite the following:

Art. 4. — CLASSIFICATION AND USE OF RADIOELECTRIC EMISSIONS.

The adopted classification is the following:

- A) Continuous waves.
- B) Damped waves.

defined as follows:

- Class A. Waves of which the successive oscillations are identical as a permanent condition.
- Class B. Waves consisting of successive trains in which the amplitude of the oscillations, after reaching a maximum, decreases gradually.

Waves of Class A comprise the types given below, which are defined as follows:

- Type A1. Unmodulated continuous waves. Continuous waves of which the amplitude or frequency is varied by the operation of telegraphic keying.
- Type A2. Continuous waves modulated at audible frequency. Continuous waves, of which the amplitude or frequency is varied in a periodic manner at audible frequency, combined with telegraphic keying.
- Type A3. Continuous waves modulated by speech or by music. Continuous waves of which the amplitude or frequency is varied according to the characteristic vibrations of speech or music.

Art. 5. — DISTRIBUTION AND USE OF FREQUENCIES (WAVE LENGTHS) AND TYPES OF EMISSION.

One table shows the distribution of frequencies (approximate wave lengths) among the various services: fixed services, mobile services, maritime services, aerial services, broadcasting, radio beacons, radio direction finding, distress, calling amateurs, etc...

It has been provided for that no new type B transmitting installation shall henceforth be fitted in a land or fixed station. Waves of this type shall be forbidden in all land stations as from the 1st January, 1935.

The Governments concerned agree together when necessary in regard to the determination of the waves to be assigned to the stations, so as to avoid as far as possible interference with international services effected by the stations.

Articles 9, 10, 11 refer to the general procedure relating to the mobile service, general calling, interference; article 17 concerns the calling and listening waves.

Article 14 gives for each country a table of Distribution of International Call signs.

Article 28 enumerates the Measures for reducing interference.

Appendix 1 gives the list of abbreviations to be used in radioelectric transmissions.

Articles 19 and 27 refer to distress, alarm, urgency, and safety signals.

Article 20 and Appendices 5 and 6 relate to the hours of service of the stations in the mobile service according to their category.

Article 31 regulates the working of the special services, the text reproduced hereafter:

Art. 31. — SPECIAL SERVICES.

- A) Meteorological Services. Time Signals. Notices to Navigators.
- § 1. Meteorological synoptic messages and messages containing forecasts and or a survey of the general meteorological situation, and time signals must, in principle, be transmitted in conformity with a fixed time-table. Radiotelegrams of this class intended for mobile stations must be sent, so far as possible, at times when they can be received by stations having only one operator (see Appendix 5); the speed of transmission must be such that the signals can be read by an operator possessing only a second-class certificate.
- § 2. During transmissions "to all stations" of time signals and of meteorological messages intended for stations of the mobile service, all stations in that service, of which the transmissions might interfere with the reception of the signals and messages in question, must keep silent in order to permit all stations which desire to do so to receive these signals and messages.
- § 3. Meteorological warning messages and notices concerning the safety of navigation which are of urgent interest to the mobile services are transmitted immediately and must be repeated at the end of the first silence period which follows (see Article 17, section 2). These messages and notices must be sent on the frequencies assigned to the mobile service for which they are destined; their transmission is preceded by the safety signal TTT.
- § 4. In addition to the regular information services contemplated in the preceding sections, Administrations will take the necessary measures to ensure that certain stations shall, upon request, communicate meteorological messages to stations in the mobile service.
- § 5. In the interests of brevity and of their proper use by mobile stations, meteorological observations transmitted by stations in the mobile service must, in principle, be drawn up according to an international meteorological code.
 - B) Service of Direction-Finding Stations.
- § 6. The Administrations to which direction-finding stations are subject accept no responsibility for the consequences of an inaccurate bearing.
- § 7. These Administrations notify, for insertion in the List of Radiotelegraph Stations, the characteristics of each direction-finding station, indicating, for each one, the sectors in which bearings are normally accurate. All changes in these details must be published without delay; if the change is of a permanent nature it must be communicated to the International Bureau.
- § 8. (1) In normal service, coast direction-finding stations must be capable of taking and furnishing bearings to ship stations either on the frequency of 500 ke/s (600 m.) only, or on the frequency of 375 ke/s (800 m.) only, or on both of these two frequencies.

An aircraft station desiring to obtain a bearing must, in order to ask for it, call on the wave of 333 kc/s (900 m.) or on a wave assigned to the aerial route on which it is flying. In all cases where an aircraft station, being near coast stations, applies to them for a bearing, it must use the frequency of such coast stations.

- § 9. The procedure to be followed in the direction-finding service is given in Appendix 8.
- C) Radiobeacon Service.
- § 10. (1) When an Administration thinks it desirable, in the interests of maritime and air navigation, to organise a radiobeacon service, it may use for this purpose:
- (a) Radiobeacons properly so called, established on land or on ships permanently moored; their emissions may be either circular or directional.
- (b) Fixed stations, coast stations or aeronautical stations deputed to act also as radiobeacons, at the request of mobile stations.
- (2) Radiobeacons properly so-called use waves from 285 to 315 kc/s (1050-950 m.) of Types A1 and A2 exclusively.

- (3) Other stations notified as radiobeacons use their normal transmitting frequency and their normal type of emission.
- § 11. The signals sent by radiobeacons must permit of a good bearing being taken with the direction-finder; they must be selected in such a way as to avoid all uncertainty, when there is need to distinguish between two or more radiobeacons.
- § 12. Administrations which have organised a radiobeacon service accept no responsibilility for the consequences of inaccurate bearings obtained by means of the radiobeacons of such service.
- § 13. (1) Administrations notify, for insertion in the List of Radiotelegraph Stations, the characteristics of each radiobeacon properly so-called, and of each station deputed to act as a radiobeacon, including, if necessary, particulars of the sectors in which bearings are normally trustworthy.
- (2) Any modification or irregularity in working which occurs in the radiobeacon service must be published without delay; if the modification or the irregularity of working is of a permanent kind, it must be notified to the International Bureau.

Appendix 7 indicates the documents with which Ship Stations must be provided:

The Radioelectric Licence.

List of Ship Stations.

List of Land and Fixed Stations.

List of Aircraft Stations.

The Convention and the Regulations annexed thereto.

The telegraph tariffs of the countries for which the station most frequently accepts radio-telegrams.

Certificate of operators.

It is the International Bureau of the Telegraph Union which is charged with the duty of collecting and publishing information of every kind relative to radioelectric services and of undertaking any administrative tasks which may be assigned to it in the interests of international radioelectric services.

Article 13 of the General regulations annexed to the International Radiotelegraph Convention specifies that the International Bureau publishes an alphabetical list of call signs of all fixed, land, and mobile stations to which a call sign from the international series has been allotted, lists of all fixed, land, and mobile stations having a call sign from the international series, whether or not open to public correspondence, and a List of broadcasting stations.

The List relating to each class of station is published in separate parts as follows:

I. Fixed and Land Stations.

The word "Radio" is printed separately after the name of each coast station.

II. Stations performing Special Services.

The words "Gonio" and "Phare", respectively, are shown after the name of direction-finding stations and radiobeacon stations.

III. Ship Stations.

IV. Aircraft Stations.

V. Broadcasting Stations.

The supplements to the list of call signs and to the respective lists of stations contain additions, modifications and deletions arranged in alphabetical order. These supplements are issued monthly, and are recapitulatory.

For the keeping up-to-date of these service documents, uniform methods are provided for in Article 13 of the Regulations and in Appendix 3 thereof.

The general form to be taken by the various Lists of Stations is shown in Appendix 3. Administrations or private enterprises must adopt forms identical with these for the particulars which they send to the International Bureau.

The following symbols are used in service documents published by the International Bureau of the Telegraphic Union to indicate the nature of the station service;

- PG Station open for public correspondence;
- PR Station open for restricted public correspondence;
- N Station open always, day and night;
- Y Station open from sunrise to sunset;
- X Station not having fixed hours of service;
- Z1 Ship station of the second class, with 8 hours of service;
- Z2 Ship station of the second class, with 16 hours of service;
- FA Aeronautical station;
- FC Coast station:
- FS Land station established solely for life-saving purposes;
- FX Station performing a communication service between fixed points;
- RF Fixed radiobeacon station;
- RG Direction-finding station;
- RS Receiving station only, connected with the general communication system;
- RW Rotating radiobeacon station.

