

**DIGEST OF RADIO REGULATIONS AND INSTRUCTIONS
FOR RESTRICTED RADIOTELEPHONE OPERATORS**

The following is a brief digest of some of the most essential provisions of treaty, law, and regulation which pertain to the operation of radio stations by holders of Restricted Radiotelephone Operator Permits. With certain exceptions copies of the publications from which this summary is compiled may be obtained from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., at the prices indicated below.

Reference Publications

	Price
Communications Act of 1934, revised to May 15, 1954	\$0.70
International Telecommunication Convention and Annexed Radio Regulations (Atlantic City, 1947) obtainable from Secretary General, International Telecommunication Union, Geneva, Switzerland, as follows:	
International Telecommunication Convention	(Swiss francs) 1.50
Radio Regulations	(Swiss francs) 6.75
Rules and Regulations of the Federal Communications Commission:	
Part 13. Rules Governing Commercial Radio Operators.10
Rules governing the particular service in which the Restricted Radiotelephone Operator Permit holder is to be employed. If not obtainable from the Superintendent of Documents, copies may be requested from the Federal Communications Commission, Washington 25, D. C.	

Key to Abbreviations

- C. A. Refers to a section number of the Communications Act of 1934, as amended.
R. & R. Refers to a section number of the Rules and Regulations of the Federal Communications
Commission. (Example R. & R. 13.61 refers to Section 13.61 in Part 13.)
Art Refers to an article number of the Radio Regulations annexed to the International Telecommunication
Convention (Atlantic City, 1947).

Station License

A radio station, other than one owned and operated by the Federal Government, shall not be operated unless it is properly licensed by the Federal Communications Commission and the station license is posted or kept available as specified by the rules governing the particular service and/or class of station. (C. A. 301.)

Operator License

Except as may be provided otherwise by special order of the Commission or by the rules governing a particular service, and/or class of station, a radio station required to be licensed by the Commission shall be operated only by a properly licensed radio operator who has his license or verification card or his permit in his possession or posted in accordance with the Commission's rules governing the particular service in which he is employed. (C. A. 318 and R. & R. 13.73, and 13.74) If the license or permit has been sent in to the Commission for replacement, duplicate, etc., a copy of the application for such replacement, duplicate, etc., shall be exhibited in lieu of the license. (R. & R. 13.71 and 13.72)

The holder of a Restricted Radiotelephone Operator Permit may operate any station in the fixed and mobile services while using radiotelephony, except:

1. Coast stations other than in the Territory of Alaska, while using a frequency below 30 Mc; or
2. Ship stations licensed to use telephony for communication with Class I coast stations on frequencies between 4000 kc and 30 Mc.

3. Radio stations provided on board vessels for safety purposes pursuant to statute or treaty.

Coast stations in the above categories which this grade of operator may operate are limited to those at which the antenna power is not authorized to exceed 250 watts. The transmitting equipment of any station must be so designed that the stability of the operating frequencies is maintained by the transmitter itself within the limits of tolerance specified by the Commission and adjustments to the radio transmitter which may cause off-frequency operation or result in improper transmitter operation shall be made only by or in the presence of a person holding a first- or second-class operator license, either radiotelephone or radiotelegraph, who shall be responsible for the proper operation of the equipment. (R. & R. 13.61(h).)

For license requirements for operation of stations in the broadcast and other services see R. & R. 13.61 and 13.62.

Nature of Communications

Only such communications as are authorized by the rules governing the radio station operated may be transmitted.

False calls, false or fraudulent distress signals, superfluous and unidentified communications, and obscene and profane language are specifically prohibited. (C. A. 303(m), C. A. 325, and Art. 13, par. 372.)

Priority of Communications

Distress calls and messages shall have absolute priority over all other communications. Distress calls may be made without regard to interference to other stations, with due consideration, however, being given to any other distress calls or messages which may be transmitted at the same time. (Art. 37, C. A. 321.) Routine operation shall not be resumed until the distress signals and messages have been cleared. (R. & R. 2.404.)

Priority shall be given radio communications, as follows:

1. Distress calls, distress messages, and distress traffic.
2. Communications preceded by the urgency signal.
3. Communications preceded by the safety signal.
4. Communications relative to the navigation movements and needs of ships, including weather observation messages.
5. Government communications for which priority has been claimed.
6. All other communications.

R. & R. 8.177

Secrecy of Radio Communications

The contents of a radio communication shall not be divulged to any person or party other than to whom it is addressed, except as specifically provided in section 605 of the Communications Act. (C. A. 605.)

Identification of Communications

When not required to identify itself by some other provisions of the Rules and Regulations, every radio station shall identify itself by its regularly designated call signal or other approved method at the time of each transmission, and as frequently as is practicable during tests or during an exchange of long communications. (Art. 13, pars. 383, 384, and 385.)

Prevention of Interference

Inasmuch as most radio transmissions are conducted on radio channels which are shared among many stations, as on a "party line," it is necessary that precautions be observed to avoid congestion and interference.

In order to avoid interference with communications in progress, an operator shall listen on the frequencies in which he intends to receive for a sufficient period to ascertain that he will be able to hear the station he is calling and that his transmission will not cause harmful interference. He shall not attempt to call if interference is likely to result. (Art. 29, par. 610.)

Attempts to establish communication beyond the normal range of the equipment installed usually results in unnecessary occupation of the calling frequency. Except in emergencies, such calling should be avoided.

In order to eliminate the need for undue repetition of communications, voice transmission should be made with maximum articulation. It is well to remember that speech is generally rendered almost unintelligible by speaking too close to the microphone and is often lost in extraneous noise when the microphone is held at too great a distance.

Radio Log

Radio logs are required to be kept in certain radio services. These logs must be kept by a person having actual knowledge of the facts to be entered, and who shall also sign the log as prescribed by the Commission. Logs shall be available upon request by authorized Commission representatives. No log or portion thereof shall be erased, obliterated, or willfully destroyed within the period of retention required by the Rules and Regulations. Any necessary correction may be made only by the person originating the entry who shall strike out the erroneous portion, initial the correction made, and indicate the date of correction.

Notice of Violations

Any licensee who appears to have violated any provision of the Communications Act of 1934, or of the Rules and Regulations of the Federal Communications Commission, shall be served with a notice calling the facts to his attention and requesting a statement concerning the matter. Within 3 days from receipt of such notice, or such period as may be specified, the licensee shall send a written answer to the Commission field office or monitoring station originating the official notice. If an answer cannot be sent nor an acknowledgment made within such 3-day period by reason of illness or other unavoidable circumstances, acknowledgment and answer shall be made at the earliest practicable date, shall be complete in itself, and shall not be abbreviated by reference to other communications or answers to other notices. If the notice of violation relates to lack of attention to or improper operation of the transmitter, the name and license number of the operator shall be given. (R. & R. 1.401.)

Penalties

The general penalty for violation of the Communications Act (first offense) consists of a fine of not more than \$10,000 or imprisonment for a term of not more than one year, or both. (C. A. 501.)

The penalty for violation of the Commission's regulations or the international radio regulations consists of a fine of not more than \$500 for each and every day during which such offense occurs. (C. A. 502.)

The Commission has authority, as public convenience, interest, or necessity requires, to suspend the license of any operator upon proof sufficient to satisfy the Commission that the licensee:

- (a) Has violated any provision of any Act, treaty, or convention binding on the United States, which the Commission is authorized to administer, or any regulation made by the Commission under any such Act, treaty, or convention; or
- (b) Has failed to carry out a lawful order of the master or person lawfully in charge of the ship or aircraft on which he is employed; or
- (c) Has willfully damaged or permitted radio apparatus or installations to be damaged; or
- (d) Has transmitted superfluous radio communications or signals or communications containing profane or obscene words, language, or meaning, or has knowingly transmitted:
 1. False or deceptive signals or communications; or
 2. A call signal or letter which has not been assigned by proper authority to the station he is operating; or
- (e) Has willfully or maliciously interfered with any other radio communications or signals; or
- (f) Has obtained or attempted to obtain, or has assisted another to obtain or attempt to obtain, an operator's license by fraudulent means. (C. A. 303(m)(1).)

Distress Procedure

The international radiotelephone distress signal consists of the spoken expression "MAYDAY." This signal shall be used to announce that the ship, aircraft, or any other vehicle which sends the distress signal is threatened by serious and imminent danger and requests immediate assistance. The distress signal shall be followed by the distress messages containing the identity of the station in distress, its position, the nature of the distress, and the nature of the assistance requested. (Art. 37, secs. III, IV, and V.)

The international radiotelephone urgency signal consists of the word "PAN", spoken three times, and is to be used when the calling station has a very urgent message to transmit concerning the safety of the ship, aircraft, or other vehicle or concerning the safety of some person on board or sighted from on board. (Art. 37, sec. X.)

The international radiotelephone safety signal consists of the word "SECURITY" spoken three times, and announces that the station is about to transmit a message concerning the safety of navigation, or giving important meteorological warnings. (Art. 37, sec. XI.)

The distress call sent by radiotelephony comprises:

1. The distress signal MAYDAY spoken three times;
2. The words THIS IS, followed by the identification of the mobile station in distress, the whole repeated three times. (Art. 37, par. 880.)

The distress call should be followed as soon as possible by the distress message, which comprises:

1. The distress call;
2. The name of the ship, aircraft, or vehicle in distress;
3. Particulars of its position, the nature of the distress, and the kind of assistance desired;
4. Any other information which might facilitate the rescue.

As a general rule, a ship in distress should signal its position in latitude and longitude, or by giving its direction and distance in nautical miles from some known geographical point.

As a general rule, an aircraft in distress, flying over land shall signal its position by the name of the nearest locality, its approximate distance to that locality, accompanied, according to the case, by one of the words North, South, East, or West, or, in some cases words indicating intermediate direction. When in distress, flying over the sea, as a general rule, an aircraft shall signal its position in latitude and longitude, or by giving its direction and distance in nautical miles from some known geographical point. (Art. 37, sec. V.)

After the transmission of its distress message, the mobile station should transmit two dashes of approximately 10 seconds duration each, followed by its call sign, to permit direction-finding stations to determine its position. This transmission may be repeated at frequent intervals in case of necessity. (Art. 37, sec. V.) In radiotelephony, the above dash is made by holding the transmitter on the air for the specified period of time, without speaking into the microphone other than to identify the station.

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. (Art. 37, sec. V.)

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