

MINIMUM OPERATOR LICENSE—Continued

Below 30 MHz .....	RP.
Ship earth station .....	RP.

<sup>1</sup> RP required for compulsory ships and international voyages.

[76 FR 67611, Nov. 2, 2011, as amended at 78 FR 23155, Apr. 18, 2013]

GENERAL OPERATOR REQUIREMENTS

**§ 80.167 Limitations on operators.**

The operator of maritime radio equipment other than T-1, T-2, T, or G licensees must not:

- (a) Make equipment adjustments which may affect transmitter operation;
- (b) Operate any transmitter which requires more than the use of simple external switches or manual frequency selection or transmitters whose frequency stability is not maintained by the transmitter itself.

[51 FR 31213, Sept. 2, 1986, as amended at 78 FR 23155, Apr. 18, 2013]

**§ 80.169 Operators required to adjust transmitters or radar.**

- (a) All adjustments of radio transmitters in any radiotelephone station or coincident with the installation, servicing, or maintenance of such equipment which may affect the proper operation of the station, must be performed by or under the immediate supervision and responsibility of a person holding a First Class Radiotelegraph Operator's Certificate, Second Class Radiotelegraph Operator's Certificate, Radiotelegraph Operator License, or General Radiotelephone Operator License.
- (b) Only persons holding a First Class Radiotelegraph Operator's Certificate, Second Class Radiotelegraph Operator's Certificate, or Radiotelegraph Operator License must perform such functions at radiotelegraph stations transmitting Morse code.
- (c) Only persons holding an operator certificate containing a ship radar endorsement must perform such functions on radar equipment.

[51 FR 31213, Sept. 2, 1986, as amended at 54 FR 40058, Sept. 29, 1989; 78 FR 23155, Apr. 18, 2013]

**§ 80.175 Availability of operator licenses.**

All operator licenses required by this subpart must be readily available for inspection.

**§ 80.177 When operator license is not required.**

- (a) No radio operator authorization is required to operate:
  - (1) A shore radar, a shore radio-location, maritime support or shore radionavigation station;
  - (2) A survival craft station or an emergency position indicating radio beacon;
  - (3) A ship radar station if:
    - (i) The radar frequency is determined by a nontunable, pulse type magnetron or other fixed tuned device, and
    - (ii) The radar is capable of being operated exclusively by external controls;
  - (4) An on board station; or
  - (5) A ship station operating in the VHF band on board a ship voluntarily equipped with radio and sailing on a domestic voyage.
- (b) No radio operator license is required to install a VHF transmitter in a ship station if the installation is made by, or under the supervision of, the licensee of the ship station and if modifications to the transmitter other than front panel controls are not made.
- (c) No operator license is required to operate coast telephone stations or marine utility stations.
- (d) No radio operator license is required to install a radar station on a voluntarily equipped ship when a manual is included with the equipment that provides step-by-step instructions for the installation, calibration, and operation of the radar. The installation must be made by, or under the supervision of, the licensee of that ship station and no modifications or adjustments other than to the front panel

## § 80.179

controls are to be made to the equipment.

[51 FR 31213, Sept. 2, 1986, as amended at 53 FR 41434, Oct. 28, 1987; 62 FR 40305, July 28, 1997]

### § 80.179 Unattended operation.

The following unattended transmitter operations are authorized:

(a) EPIRB operations when emergency conditions preclude attendance of the EPIRB transmitter by a person.

(b) Automatic use of a transmitter during narrow-band direct-printing (NB-DP) operations in accordance with § 80.219.

(c) Automatic use of a transmitter during selective calling operations in accordance with § 80.225.

(d) Automatic use of a transmitter when operating as part of the Automated Maritime Telecommunications System (AMTS), an automated multi-station system for which provisions are contained in this part, or an automated public coast station.

(e) Automatic use of a VHF transmitter to send brief digital communications relating to the condition or safety of vessels while moored when all of the following conditions are met:

(1) The equipment must be using DSC in accordance with ITU-R M.493-13 and ITU-R M.541-9 (both incorporated by reference, see § 80.7), as modified by this section.

(2) Sensors must automatically activate the transmitter only under one or more of the following conditions:

- (i) Fire, explosion;
- (ii) Flooding;
- (iii) Collision;
- (iv) Grounding;
- (v) Listing, in danger of capsizing;
- (vi) Sinking;
- (vii) Disabled and adrift; and
- (viii) Undesignated condition related to ship safety.

(3) The "ROUTINE" DSC category must be used.

(4) Communications must be selectively addressed to an individual station.

(5) Transmitter output power must not exceed one watt.

(6) The call must employ a fixed format and must be in conformity with Recommendation 493 as follows:

## 47 CFR Ch. I (10-1-20 Edition)

Format specifier: Individual call—symbol 120 sent twice.

Address: 9 digit maritime mobile service identity of called station.

Category: Routine—symbol 100.

Self-identification: 9 digit ship station identity.

Message 1: Telecommand symbol 126 sent twice.

Message 2: Telecommand symbol 126 sent 6 times.

End of sequence: Symbol 127.

Error-check character: Check sum.

(7) Such transmissions are permitted only on channel 70 and the transmitter must be inhibited automatically whenever there is another call in progress on Channel 70.

(8) The call sequence for any one alarm must not be repeated until after an interval of at least five seconds. Further repetition is permitted only after intervals of at least fifteen minutes each. Repetitions following fifteen-minute waiting intervals must not exceed three.

[54 FR 10008, Mar. 9, 1989, as amended at 62 FR 40305, July 28, 1997; 68 FR 46962, Aug. 7, 2003; 73 FR 4481, Jan. 25, 2008; 76 FR 67611, Nov. 2, 2011]

## Subpart E—General Technical Standards

### § 80.201 Scope.

This subpart gives the general technical requirements for the use of frequencies and equipment in the maritime services. These requirements include standards for equipment authorization, frequency tolerance, modulation, emission, power and bandwidth.

### § 80.203 Authorization of transmitters for licensing.

(a) Each transmitter authorized in a station in the maritime services after September 30, 1986, except as indicated in paragraphs (g), (h) and (i) of this section, must be certified by the Commission for part 80 operations. The procedures for certification are contained in part 2 of this chapter. Transmitters of a model that have received equipment authorization before October 1, 1986 will be considered acceptable for use in ship or coast stations as appropriate.

(b) The external controls, of maritime station transmitters capable of operation in the 156-162 MHz band and