

§ 80.874

carrier power to a value between 0.1 and 1.0 watts.

(d) The transmitter complies with the power output requirements specified in paragraph (c) of this section when:

(1) The transmitter is capable of being adjusted for efficient use with an actual ship station transmitting antenna meeting the requirements of § 80.876; and

(2) The transmitter has been demonstrated capable, with normal operating voltages applied, of delivering not less than 8 watts of carrier power into 50 ohms effective resistance over the frequency band specified in § 80.871(d). An individual demonstration of the power output capability of the transmitter, with the radiotelephone installation normally installed on board ship, may be required; and

(3) It is certificated as required by subpart F of this part.

[51 FR 31213, Sept. 2, 1986, as amended at 63 FR 36607, July 7, 1998]

§ 80.874 VHF radiotelephone receiver.

(a) The receiver used for providing the watch for navigational safety required by § 80.313 must be certificated by the Commission and capable of effective reception of G3E emission on the frequencies required by § 80.871(d) when connected to the antenna specified in § 80.876.

(b) The receiver must have a usable sensitivity of 0.5 microvolts.

(c) The receiver must deliver adequate audio output power to be heard in the ambient noise level likely to be expected on board ships with a loudspeaker and/or a telephone handset.

(d) In the simplex mode when the transmitter is activated the receiver output must be muted.

[51 FR 31213, Sept. 2, 1986, as amended at 63 FR 36607, July 7, 1998]

§ 80.875 VHF radiotelephone power supply.

(a) There must be readily available for use under normal load conditions a power supply sufficient to simultaneously energize the VHF transmitter at its required antenna power, and the VHF receiver. Under this load condition the voltage of the source of energy

47 CFR Ch. I (10–1–12 Edition)

at the power input terminals of the VHF radiotelephone installation must not deviate from its rated value by more than 10 percent on ships completed on or after March 1, 1957, nor by more than 15 percent on ships completed before that date.

(b) When the power supply for the VHF radiotelephone installation consists of batteries, they must be installed in the upper part of the ship, secured against shifting with motion of the ship, capable of operating the installation for 6 hours, and accessible with not less than 26 cm (10 in.) head room.

(c) Means must be provided for charging any rechargeable batteries used in the ship's VHF radiotelephone installation. There must be provided a device which, during charging of the batteries, will give a continuous indication of the charging current.

(d) The VHF radiotelephone installation may be connected to the reserve power supply of a compulsorily fitted radiotelephone or radiotelegraph installation.

[51 FR 31213, Sept. 2, 1986, as amended at 58 FR 44953, Aug. 25, 1993]

§ 80.876 VHF radiotelephone antenna system.

A vertically polarized nondirectional antenna must be provided for VHF radiotelephone installations. The construction and installation of this antenna must insure proper operation in an emergency.

§ 80.877 Controls and indicators required for VHF radiotelephone installation.

The controls and indicators used on equipment of the VHF radiotelephone installation must meet the following standards:

(a) The size of controls must easily permit normal adjustment. The function and the setting of the controls must be clearly indicated.

(b) Controls must be illuminated to permit satisfactory operation of the equipment.

(c) Means must be provided to reduce to extinction any light output from the equipment which could affect safety of navigation.

(d) An on/off switch must be provided for the entire installation with a visual indication that the installation is switched on.

(e) The equipment must indicate the channel number, as given in the Radio Regulations, to which it is tuned. It must allow the determination of the channel number under all conditions of external lighting. Channel 16 must be distinctively marked.

(f) The receiver must have a manual volume control and a squelch control.

(g) If the external controls are on a separate control unit and more than one such control unit is provided, the one on the bridge must have priority over the others. When there is more than one control unit, indication must be given to the other(s) that the transmitter is in operation.

§ 80.880 Vessel radio equipment.

(a) Vessels operated solely within twenty nautical miles of shore must be equipped with a VHF radiotelephone installation as described in this subpart, and maintain a continuous watch on Channel 16.

(b) Vessels operated solely within one hundred nautical miles of shore must be equipped with a medium frequency transmitter capable of transmitting J3E emission and a receiver capable of reception of J3E emission within the band 1710 to 2850 kHz, in addition to the VHF radiotelephone installation required by paragraph (a) of this section, and must maintain a continuous watch on 2182 kHz. Additionally, such vessels must be equipped with either:

(1) A single sideband radiotelephone capable of operating on all distress and safety frequencies in the medium frequency and high frequency bands listed in § 80.369(a) and (b), on all the ship-to-shore calling frequencies in the high frequency bands listed in § 80.369(d), and on at least four of the automated mutual-assistance vessel rescue (AMVER) system HF duplex channels (this requirement may be met by the addition of such frequencies to the radiotelephone installation required by paragraph (b) of this section); or

(2) If operated in an area within the coverage of an INMARSAT maritime mobile geostationary satellite in which continuous alerting is available, an

INMARSAT ship earth station meeting the equipment authorization rules of parts 2 and 80 of this chapter.

[68 FR 46973, Aug. 7, 2003]

§ 80.881 Equipment requirements for ship stations.

Vessels subject to subpart R of this part must be equipped as follows:

(a) A category 1, 406.0-406.1 MHz EPIRB meeting the requirements of § 80.1061;

(b) A NAVTEX receiver meeting the requirements of § 80.1101(c)(1);

(c) A Search and Rescue Transponder meeting the requirements of § 80.1101(c)(6); and

(d) A two-way VHF radiotelephone meeting the requirements of § 80.1101(c)(7).

[68 FR 46973, Aug. 7, 2003]

§ 80.882 2182 kHz watch.

Ships subject to this subpart must maintain a watch on the frequency 2182 kHz pursuant to § 80.305.

[73 FR 4487, Jan. 25, 2008]

Subpart S—Compulsory Radiotelephone Installations for Small Passenger Boats

§ 80.901 Applicability.

The provisions of Part III of Title III of the Communication Act require United States vessels which transport more than six passengers for hire while such vessels are being navigated on any tidewater within the jurisdiction of the United States adjacent or contiguous to the open sea, or in the open sea to carry a radiotelephone installation complying with this subpart. The provisions of Part III do not apply to vessels which are equipped with a radio installation for compliance with Part II of Title III of the Act, or for compliance with the Safety Convention, or to vessels navigating on the Great Lakes.

§ 80.903 Inspection of radiotelephone installation.

Every vessel subject to Part III of Title III of the Communications Act must have a detailed inspection of the radio installation by an FCC-licensed technician in accordance with § 80.59