

## § 80.905

the technician will issue a Communications Act Safety Radiotelephony Certificate. Communications Act Radiotelephony Certificates may be obtained from the Commission's National Call Center—(888) 225-5322—or from its forms contractor.

[63 FR 29660, June 1, 1998]

### § 80.905 Vessel radio equipment.

(a) Vessels subject to part III of title III of the Communications Act that operate in the waters described in § 80.901 must, at a minimum, be equipped as follows:

(1) Vessels operated solely within the communications range of a VHF public coast station or U.S. Coast Guard station that maintains a watch on 156.800 MHz while the vessel is navigated must be equipped with a VHF-DSC radiotelephone installation, except that a VHF radiotelephone installation without DSC capability is permitted until one year after the Coast Guard notifies the Commission that shore-based sea area A1 coverage is established. Vessels in this category must not operate more than 20 nautical miles from land.

(2) Vessels operated beyond the 20 nautical mile limitation specified in paragraph (a)(1) of this section, but not more than 100 nautical miles from the nearest land, must be equipped with a MF-DSC 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-DSC radiotelephone installation required by paragraph (a)(1) of this section, except that a MF radiotelephone installation without DSC capability is permitted until one year after the Coast Guard notifies the Commission that shore-based sea area A2 coverage is established. The MF or MF-DSC transmitter and receiver must be capable of operation on 2670 kHz.

(3) Vessels operated more than 100 nautical miles but not more than 200 nautical miles from the nearest land must:

(i) Be equipped with a VHF-DSC radiotelephone installation, except that a VHF radiotelephone installation without DSC capability is permitted until one year after the Coast Guard notifies the Commission that shore-

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based sea area A1 coverage is established;

(ii) Be equipped with an MF-DSC radiotelephone transmitter and receiver meeting the requirements of paragraph (a)(2) of this section, except that a MF radiotelephone installation without DSC capability is permitted until one year after the Coast Guard notifies the Commission that shore-based sea area A2 coverage is established; and

(iii) Be equipped with either:

(A) A DSC-capable single sideband radiotelephone that complies with ITU-R Rec. (series) M.493 Class A, B or E, and is 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 of 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 (a)(2) of this section); or

(B) If operated in an area within the coverage of an INMARSAT maritime mobile geostationary satellite in which continuous alerting is available, an INMARSAT B, C, or M ship earth station, or an INMARSAT A ship earth station if installed prior to February 12, 2004.

(iv) Be equipped with a reserve power supply meeting the requirements of §§ 80.917(b), 80.919 and 80.921, and capable of powering the single sideband radiotelephone or the ship earth station (including associated peripheral equipment) required by paragraph (a)(3)(iii) of this section, including the navigation receiver referred to in § 80.905(a)(5);

(v) Be equipped with a NAVTEX receiver conforming to the following performance standards: IMO Resolution A.525(13) and ITU-R Recommendation 540;

(vi) Be equipped with a Category I 406-406.1 MHz satellite emergency position-indicating radiobeacon (EPIRB) meeting the requirements of § 80.1061 or, if the ship is not operating in sea area A4, as defined in § 80.1069(a)(4), an automatic float-free INMARSAT-E

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EPIRB meeting the requirements of §80.1063; and

(vii) Participate in the AMVER system while engaged on any voyage where the vessel is navigated in the open sea for more than 24 hours. Copies of the AMVER Bulletin are available at: AMVER Maritime Relations, USCG Battery Park Building, Room 201, New York, NY 10004-1499. Phone 212-668-7764; Fax 212-668-7684.

(4) Vessels operated more than 200 nautical miles from the nearest land must:

(i) Be equipped with two VHF-DSC radiotelephone installations, except that VHF radiotelephone installations without DSC capability are permitted until one year after the Coast Guard notifies the Commission that shore-based sea area A1 coverage is established;

(ii) Be equipped with an MF-DSC radiotelephone transmitter and receiver meeting the requirements of paragraph (a)(2) of this section, except that a MF radiotelephone installation without DSC capability is permitted until one year after the Coast Guard notifies the Commission that shore-based sea area A2 coverage is established;

(iii) Be equipped with either:

(A) A DSC-capable independent single sideband radiotelephone that complies with ITU-R Rec. (series) M.493 Class A, B or E, and is 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 of 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; or

(B) If operated in an area within the coverage of an INMARSAT maritime mobile geostationary satellite in which continuous alerting is available, an INMARSAT B, C, or M ship earth station, or an INMARSAT A ship earth station if installed prior to February 12, 2004.

(iv) Be equipped with a reserve power supply meeting the requirements of §§80.917(b), 80.919 and 80.921, and capable of powering the single sideband radiotelephone or the ship earth station (including associated peripheral equip-

ment) required by paragraph (a)(4)(iii) of this section, including the navigation receiver referred to in §80.905(a)(5);

(v) Be equipped with a NAVTEX receiver conforming to the following performance standards: IMO Resolution A.525(13) and ITU-R Recommendation 540;

(vi) Be equipped with a Category I 406-406.1 MHz satellite emergency position-indicating radiobeacon (EPIRB) meeting the requirements of §80.1061 or, if the ship is not operating in sea area A4, as defined in §80.1069(a)(4), an automatic float-free INMARSAT-E EPIRB meeting the requirements of §80.1063;

(vii) Be equipped with a radiotelephone distress frequency watch receiver meeting the requirements of §80.269;

(viii) Be equipped with an automatic radiotelephone alarm signal generator meeting the requirements of §80.221; and

(ix) Participate in the AMVER system while engaged on any voyage where the vessel is navigated in the open sea for more than 24 hours. Copies of the AMVER Bulletin are available at: AMVER Maritime Relations, USCG Battery Park Building, Room 201, New York, NY 10004-1499. Phone 212-668-7764; Fax 212-668-7684.

(5) Vessels must comply with the requirements for a navigation receiver or manual updating of position information contained in §80.1085(c).

(b) For a vessel that is navigated within the communication range of a VHF public coast station or U.S. Coast Guard station, but beyond the 20-nautical mile limitation specified in paragraph (a)(1) of this section, an exemption from the band 1605 to 2850 kHz installation requirements may be granted if the vessel is equipped with a VHF transmitter and receiver. An application for exemption must include a chart showing the route of the voyage or the area of operation of the vessel, and the receiving service area of the VHF public coast or U.S. Coast Guard station. The coverage area of the U.S. Coast Guard station must be based on written information from the District Commander, U.S. Coast Guard, a copy of which must be furnished with the application. The coverage area of a

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public coast station must be computed by the method specified in subpart P of this part.

(c) The radiotelephone installation must be installed to insure safe operation of the equipment and to facilitate repair. It must be protected against the vibration, moisture, temperature, and excessive currents and voltages.

(d) A VHF-DSC radiotelephone installation or a remote unit must be located at each steering station except those auxiliary steering stations which are used only during brief periods for docking or for close-in maneuvering. A single portable VHF-DSC radiotelephone set meets the requirements of this paragraph if adequate permanent mounting arrangements with suitable power provision and antenna feed are installed at each operator steering station. Additionally, for vessels of more than 100 gross tons, the radiotelephone installation must be located at the level of the main wheelhouse or at least one deck above the vessel's main deck.

[51 FR 31213, Sept. 2, 1986, as amended at 56 FR 19301, Apr. 26, 1991; 57 FR 34262, Aug. 4, 1992; 68 FR 46973, Aug. 7, 2003; 69 FR 64677, Nov. 8, 2004]

### § 80.907 Principal operating position.

The principal operating position of the radiotelephone installation on vessels over 100 gross tons must be in the room from which the vessel is normally steered while at sea. If the station can be operated from any location other than the principal operating position, a positive means must be provided at the principal operating position to take full control of the station.

### § 80.909 Radiotelephone transmitter.

(a) The medium frequency transmitter must have a peak envelope output power of at least 60 watts for J3E emission on 2182 kHz and at least one ship-to-shore working frequency within the band 1605 to 2850 kHz enabling communication with a public coast station if the region in which the vessel is navigated is served by a public coast station operating in this band.

(b) The single sideband radiotelephone must be capable of operating on maritime frequencies in the band

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1710 to 27500 kHz with a peak envelope output power of at least 120 watts for J3E emission on 2182 kHz and J3E emission on the distress and safety frequencies listed in § 80.369(b).

(c) The transmitter complies with the power output requirements specified in paragraphs (a) or (b) of this section when:

(1) The transmitter can be adjusted for efficient use with an actual ship station transmitting antenna meeting the requirements of § 80.923 of this part; and

(2) The transmitter, with normal operating voltages applied, has been demonstrated to deliver its required output power on the frequencies specified in paragraphs (a) or (b) of this section into either an artificial antenna consisting of a series network of 10 ohms effective resistance and 200 picofarads capacitance or an artificial antenna of 50 ohms nominal impedance. An individual demonstration of power output capability of the transmitter, with the radiotelephone installation normally installed on board ship, may be required.

(d) The single sideband radiotelephone must be capable of transmitting clearly perceptible signals from ship to shore. The transmitter complies with this requirement if it is capable of enabling communication with a public coast station on working frequencies in the 4000 to 27500 kHz band specified in § 80.371(b) of this part under normal daytime operating conditions.

[56 FR 19302, Apr. 26, 1991, as amended at 57 FR 34262, Aug. 4, 1992; 68 FR 46974, Aug. 7, 2003]

### § 80.911 VHF transmitter.

(a) The transmitter must be capable of transmission of G3E emission on 156.800 MHz, 156.300 MHz, and on the ship-to-shore working frequencies necessary to communicate with public coast stations serving the area in which the vessel is navigated.

(b) The transmitter must be adjusted so that the transmission of speech normally produces peak modulation within the limits 75 percent and 100 percent.

(c) The transmitter must be certificated to transmit between 20 watts and 25 watts, on each of the frequencies 156.300 MHz, 156.800 MHz and on ship-to-