

³Frequency 2187.5 kHz can be used for ship-to-ship alerting and, if within sea area A2, for ship-to-shore alerting.

⁴Frequency 156.8 MHz may also be used by aircraft for safety purposes only.

⁵Frequency 121.5 MHz may be used by ships for aeronautical distress and urgency purposes.

⁶The priority of use for ship-aircraft communications is 4125 kHz, then 3023 kHz. Additionally, frequencies 123.1 MHz, 3023 kHz and 5680 kHz can be used by land stations engaged in coordinated search and rescue operations.

⁷The international NAVTEX frequency 518 kHz is the primary frequency for receiving maritime safety information. The other frequencies are used only to augment the coverage or information provided on 518 kHz.

⁸[Reserved]

⁹[Reserved]

¹⁰In addition to EPIRBs, 1544–1545 MHz can be used for narrowband distress and safety operations and 1645.5–1646.5 MHz can be used for relay of distress alerts between satellites. Feeder links for satellite communications are assigned from the fixed satellite service, see 47 CFR §2.106.

¹¹[Reserved]

¹²Service to INMARSAT-E EPIRB stations terminated on December 1, 2006, so distress signals from INMARSAT-E EPIRB stations will not be received by any Rescue Coordination Center.

[69 FR 64678, Nov. 8, 2004, as amended at 73 FR 4489, Jan. 25, 2008]

EQUIPMENT REQUIREMENTS FOR SHIP STATIONS

§ 80.1081 **Functional requirements.**

Ships, while at sea, must be capable:

- (a) Except as provided in §§80.1087(a)(1) and 80.1091(a)(4)(iii), of transmitting ship-to-shore distress alerts by at least two separate and independent means, each using a different radiocommunication service;
- (b) Of receiving shore-to-ship distress alerts;
- (c) Of transmitting and receiving ship-to-ship distress alerts;
- (d) Of transmitting and receiving search and rescue co-ordinating communications;
- (e) Of transmitting and receiving on-scene communications;
- (f) Of transmitting and receiving signals for locating;
- (g) Of transmitting and receiving maritime safety information;
- (h) Of transmitting and receiving general radiocommunications to and from shore-based radio systems or networks; and
- (i) Of transmitting and receiving bridge-to-bridge communications.

§ 80.1083 **Ship radio installations.**

(a) Ships must be provided with radio installations capable of complying with the functional requirements prescribed by §80.1081 throughout its intended voyage and, unless exempted under §80.1071, complying with the requirements of §80.1085 and, as appropriate for the sea area of areas through which it will pass during its intended voyage, the requirements of either §80.1087, §80.1089, §80.1091, or §80.1093.

(b) The radio installation must:

- (1) Be so located that no harmful interference of mechanical, electrical or other origin affects its proper use, and so as to ensure electromagnetic compatibility and avoidance of harmful interaction with other equipment and systems;
 - (2) Be so located as to ensure the greatest possible degree of safety and operational availability;
 - (3) Be protected against harmful effects of water, extremes of temperature and other adverse environmental conditions;
 - (4) Be provided with reliable, permanently arranged electrical lighting, independent of the main and emergency sources of electrical power, for the adequate illumination of the radio controls for operating the radio installation; and
 - (5) Be clearly marked with the call sign, the ship station identity and other codes as applicable for the use of the radio installation.
- (c) Control of the VHF radiotelephone channels required for navigational safety must be immediately available on the navigating bridge convenient to the conning position and, where necessary, facilities should be available to permit radiocommunications from the wings of the navigating bridge. Portable VHF equipment may be used to meet the latter provision.
- (d) Shipborne Integrated Radiocommunication System (IRCS) may be utilized to integrate all GMDSS equipment into a standard operator's console. Such installation must be certified in accordance with

Federal Communications Commission

§ 80.1085

§80.1103 and meet the requirements of IMO Assembly Resolution A.811(19), "Performance Standards for a Shipborne Integrated Radiocommunication System (IRCS) When Used in the GMDSS," with Annex, adopted 23 November 1995. IMO Assembly Resolution A.811(19) with Annex is incorporated by reference. The Director of the Federal Register approves this incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of this standard can be inspected at the Federal Communications Commission, 445 12th Street, SW., Washington, DC (Reference Information Center) or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html. The IMO standards can be purchased from Publications, International Maritime Organization, 4 Albert Embankment, London SE1 7SR, United Kingdom.

(e) In passenger ships, a distress panel shall be installed at the conning position. This panel shall contain either one single button which, when pressed, initiates a distress alert using all radiocommunications installations required on board for that purpose or one button for each individual installation. The panel shall clearly and visually indicate whenever any button or buttons have been pressed. Means shall be provided to prevent inadvertent activation of the button or buttons. If the satellite EPIRB is used as the secondary means of distress alerting and is not remotely activated, it shall be acceptable to have an additional EPIRB installed in the wheelhouse near the conning position.

(f) In passenger ships, information on the ship's position shall be continuously and automatically provided to all relevant radiocommunications equipment to be included in the initial distress alert when the button or buttons on the distress panel is pressed.

(g) In passenger ships, a distress alarm panel shall be installed at the conning position. The distress alarm panel shall provide visual and aural indication of any distress alert or alerts received on board and shall also indi-

cate through which radiocommunication service the distress alerts have been received.

[57 FR 9065, Mar. 16, 1992, as amended at 68 FR 46976, Aug. 7, 2003; 69 FR 64679, Nov. 8, 2004; 73 FR 4489, Jan. 25, 2008]

§ 80.1085 Ship radio equipment—General.

This section contains the general equipment requirements for all ships subject to this subpart.

(a) Ships must be provided with:

(1) A VHF radio installation capable of transmitting and receiving:

(i) DSC on the frequency 156.525 MHz (channel 70), and it must be able to initiate the transmission of distress alerts on channel 70 from the position from which the ship is normally navigated; and

(ii) Radiotelephony on the frequencies 156.300 MHz (channel 6), 156.650 MHz (channel 13), and 156.800 MHz (channel 16);

(2) A dedicated, non-scanning radio installation capable of maintaining a continuous DSC watch on VHF channel 70 which may be separate from, or combined with, that required by paragraph (a)(1)(i) of this section;

(3) A radar transponder capable of operating in the 9 GHz band, which must be stowed so that it is easily utilized (this transponder may be one of those required by §80.1095(b) for a survival craft);

(4) A receiver capable of receiving international NAVTEX service broadcasts;

(5) If the ship is engaged on voyages in any area of INMARSAT coverage in which an international NAVTEX service is not provided, a radio facility for reception of maritime safety information by the INMARSAT enhanced group calling system, *i.e.*, SafetyNet, (this requirement does not apply to ships engaged exclusively on voyages in areas where an HF direct-printing telegraphy maritime safety information service, as identified by the IMO GMDSS Master Plan Publication, is provided and the ship is fitted with equipment capable of receiving such service); and

(6) A satellite emergency position-indicating radio beacon (satellite EPIRB) which must be: