Maritime safety information (MSI):	
International NAVTEX	518 kHz. ⁷
Warnings	490 kHz, 4209.5 kHz.
NBDP	
1,221	kHz. 16806.5 kHz. 19680.5 kHz. 22376
	kHz, 26100.5 kHz.
Catallita	
Satellite	1030-1040 MHz. 10
General distress and safety communica-	
tions and calling:	
Satellite	1530–1544 MHz (space-to-Earth) and
	$1626.5-1645.5 \text{ MHz}$ (Earth-to-space). 10
Radiotelephony	2182 kHz, 4125 kHz, 6215 kHz, 8291 kHz,
	12290 kHz, 16420 kHz, and 156.8 MHz.
NBDP	2174.5 kHz, 4177.5 kHz, 6268 kHz, 8376.5
	kHz, 12520 kHz, and 16695 kHz.
DSC	2187.5 kHz, 4207.5 kHz, 6312 kHz, 8414.5
200	kHz. 12577 kHz. 16804.5 kHz. and
	156.525 MHz.
Survival craft:	100.020 11112.
	156.8 MHz and one other 156-174 MHz
VHF radiotelephony	frequency
9 GHz radar transponders	9200–9500 MHz.
¹ Frequency 156.525 MHz can be used for ship-to-ship alerting and, if within sea area A1, for ship-to-shore	
alerting.	
² For ships equipped with MF/HF equipment, there is a watch requirement on 2187.5 kHz, 8414.5 kHz, and one other frequency.	
³ Frequency ² 187.5 kHz can be used for ship-to-ship alerting and, if within sea area A2, for ship-to-shore	
alerting. ⁴ Frequency 156.8 MHz may also be used by aircraft for safety purposes only.	
*Frequency 190.5 MHz may also be used by aircraft for safety purposes only. Frequency 121.5 MHz may be used by ships for aeronautical distress and urgency purposes.	
⁶ The priority of use for ship-aircraft communications is 4125 kHz, then 3023 kHz. Additionally, fre-	
quencies 123.1 MHz, 3023 kHz and 5680 kHz can be used by land stations engaged in coordinated search and rescue operations.	
⁷ The 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	

[69 FR 64678, Nov. 8, 2004, as amended at 73 FR 4489, Jan. 25, 2008; 76 FR 67616, Nov. 2, 2011]

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]

EQUIPMENT REQUIREMENTS FOR SHIP STATIONS

§ 80.1081 Functional requirements.

8[Reserved]

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 onscene 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 sytsems or networks: and
- $\left(i \right)$ 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

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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 §80.1103 and meet the requirements of IMO Resolution A.811(19) (incorporated by reference, see §80.7).
- (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 indicate 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; 76 FR 67616, Nov. 2, 2011]

§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