

**Federal Communications Commission**

**§ 80.1077**

purposes of this subpart, no order is intended by this listing or the alphanumeric designator.

(1) GM: GMDSS Maintainer's License;

(2) GB: GMDSS Operator's/Maintainer's License.

(c) While at sea, all adjustments of radio installations, servicing, or maintenance of such installations that may affect the proper operation of the GMDSS station must be performed by, or under the immediate supervision and responsibility of, a qualified GMDSS radio maintainer as specified in paragraph (b) of this section.

(d) The GMDSS radio maintainer must possess the knowledge covering

the requirements set forth in IMO Assembly on Training for Radio Personnel (GMDSS), Annex 5 and IMO Assembly on Radio Maintenance Guidelines for the Global Maritime Distress and Safety System related to Sea Areas A3 and A4.

[51 FR 31213, Sept. 2, 1986, as amended at 63 FR 49872, Sept. 18, 1998; 68 FR 46976, Aug. 7, 2003]

**§ 80.1075 Radio records.**

A record must be kept, as required by the Radio Regulations and § 80.409 (a), (b) and (e), of all incidents connected with the radiocommunication service which appear to be of importance to safety of life at sea.

**§ 80.1077 Frequencies.**

The following table describes the frequencies used in the Global Maritime Distress and Safety System:

**Alerting:**

406.0-406.1 EPIRBs .....	406.0-406.1 MHz (Earth-to-space). 1544-1545 MHz (space-to-Earth).
INMARSAT Ship Earth Stations capable of voice and/or direct printing.	1626.5-1645.5 MHz (Earth-to-space).
VHF DSC Ch. 70 .....	156.525 MHz <sup>1</sup> .
MF/HF DSC <sup>2 11</sup> .....	2187.5 kHz <sup>3</sup> , 4207.5 kHz, 6312 kHz, 8414.5 kHz, 12577 kHz, and 16804.5 kHz.

**On-scene communications:**

VHF Ch. 16 .....	156.8 MHz.
MF Radiotelephony .....	2182 kHz.
NBDP .....	2174.5 kHz.

**Communications involving aircraft:**

On-scene, including search and rescue.	156.8 MHz <sup>4</sup> , 121.5 MHz <sup>5</sup> , 123.1 MHz 156.3 MHz, 2182 kHz, 3023 kHz, 4125 kHz, and 5680 kHz <sup>6</sup> .
--	--

**Locating signals:**

406-406.1 EPIRB Beacons .....	121.5 MHz.
9 GHz radar transponders .....	9200-9500 MHz.

**Maritime safety information (MSI):**

International NAVTEX .....	518 kHz <sup>7</sup>
Warnings .....	490 kHz, 4209.5 kHz.
NBDP .....	4210 kHz, 6314 kHz, 8416.5 kHz, 12579 kHz, 16806.5 kHz, 19680.5 kHz, 22376 kHz, 26100.5 kHz.
Satellite .....	1530-1545 MHz <sup>10</sup> .

**General distress and safety communications and calling:**

Satellite .....	1530-1544 MHz (space-to-Earth) and 1626.5-1645.5 MHz (Earth-to-space) <sup>10</sup> .
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.

§ 80.1081

47 CFR Ch. I (10-1-04 Edition)

DSC ..... 2187.5 kHz, 4207.5 kHz, 6312 kHz, 8414.5 kHz, 12577 kHz, 16804.5 kHz, and 156.525 MHz.

Survival craft:

VHF radiotelephony ..... 156.8 MHz and one other 156-174 MHz frequency.

9 GHz radar transponders ..... 9200-9500 MHz.

1Frequency 156.525 MHz can be used for ship-to-ship alerting and, if within sea area A1, for ship-to-shore alerting.
2For ships equipped with MF/HF equipment, there is a watch requirement on 2187.5 kHz, 8414.5 kHz, and one other frequency.
3Frequency 2187.5 kHz can be used for ship-to-ship alerting and, if within sea areas 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.
11Routine calling is not permitted on MF and HF DSC frequencies.

[68 FR 46976, Aug. 7, 2003]

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 pre-

scribed 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.