§ 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.