

---

STATUTORY INSTRUMENTS

---

**1992 No. 3**

**MERCHANT SHIPPING**

**The Merchant Shipping (Radio Installations) Regulations 1992**

<i>Made</i>	- - - -	<i>6th January 1992</i>
<i>Laid before Parliament</i>		<i>10th January 1992</i>
<i>Coming into force</i>	- -	<i>1st February 1992</i>

The Secretary of State, after consultation with the persons referred to in section 22(2) of the Merchant Shipping Act 1979(1), in exercise of the powers conferred on him by subsections (1)(a) and (b), (3), (4), (5) and (6) of section 21 and subsections (1) and (3) of section 22 of that Act and of all other powers enabling him in that behalf hereby makes the following Regulations:

**PART I**  
**GENERAL**

**Citation, commencement and revocation**

1.—(1) These Regulations may be cited as the Merchant Shipping (Radio Installations) Regulations 1992 and shall come into force on 1st February 1992.

(2) The Merchant Shipping (Radio Installations) Regulations 1980(2), the Merchant Shipping (Radio Installations) (Amendment) Regulations 1981(3), the Merchant Shipping (Radio Installations) (Amendment) Regulations 1984(4), the Merchant Shipping (Radio Installations) (Amendment No. 2) Regulations 1984(5), the Merchant Shipping (Radio Installations) (Amendment) Regulations 1985(6) and the Merchant Shipping (Radio Installations) (Amendment) Regulations 1986(7) are hereby revoked.

(3) In these Regulations the following expressions have the following meanings—  
“1949 Act” means the Merchant Shipping (Safety Convention) Act 1949(8);

- 
- (1) 1979 c. 39.  
(2) S.I. 1980/529.  
(3) S.I. 1981/582.  
(4) S.I. 1984/346.  
(5) S.I. 1984/1223.  
(6) S.I. 1985/1216.  
(7) S.I. 1986/1075.  
(8) 1949 c. 43.

“cargo ship” means a ship other than a passenger ship;

“certificated radio operator” means a person qualified as specified in regulation 16(2), as a VHF radiotelephone operator, radiotelephone operator or radio officer;

“fishing vessel” means a vessel which is for the time being employed in sea fishing, but does not include a vessel used otherwise than for profit;

“GMDSS” means the Global Maritime Distress and Safety System;

“GMDSS ship” means a ship to which Part II of these Regulations applies;

“interference” has the same meaning as in the Wireless Telegraphy Act 1949(9);

“non-GMDSS ship” means any ship other than a GMDSS ship;

“Organisation” means the International Maritime Organisation;

“passenger ship” means a ship carrying more than 12 passengers;

“pleasure craft” means a vessel (other than a passenger ship) primarily used for sport or recreation;

“radio installation” means any radio installation provided on board a ship in compliance with these Regulations, including its associated antennas, inter-connecting circuits and, where appropriate, sources of electrical energy;

“Radio Regulations” means the Radio Regulations annexed to, or regarded as being annexed to, the International Telecommunication Convention 1973 and includes any amendment thereto which the Secretary of State considers relevant from time to time and specifies in a Merchant Shipping Notice;

“Safety Convention” means the International Convention for the Safety of Life at Sea 1974(10);

“tons” means gross tons and shall be—

- (a) for a ship having alternative gross tonnage under paragraph 13 of Schedule 5 of the Merchant Shipping (Tonnage) Regulations 1982(11), the larger of those tonnages and
- (b) for a ship having its tonnage determined both under Part II and regulation 16 of those Regulations its gross tonnage as determined under regulation 16.

(4) Any reference to a Merchant Shipping Notice includes a reference to that Merchant Shipping Notice as amended or replaced from time to time by a subsequent Merchant Shipping Notice.

## Application

2.—(1) These Regulations apply to sea-going United Kingdom ships and to other sea-going ships while they are within the United Kingdom or the territorial waters thereof—

Provided that these Regulations shall not apply to United Kingdom ships while they are within the Great Lakes of North America and their connecting and tributary waters as far east as the lower exit of the St Lambert Lock at Montreal in the Province of Quebec, Canada.

(2) These Regulations shall not apply to—

- (a) troopships not registered in the United Kingdom;
- (b) ships not propelled by mechanical means;
- (c) pleasure craft;
- (d) fishing vessels;

---

(9) 1949 c. 54.

(10) Cmnd. 7874.

(11) S.I. 1982/841.

- (e) cargo ships of less than 300 tons.
- (3) Every ship constructed before 1st February 1995 shall—
  - (a) during the period 1st February 1992 to 31st January 1999 inclusive comply with either—
    - (i) the requirements of Part II of these Regulations, or
    - (ii) the requirements of Part III of these Regulations and in addition on and after 1st August 1993 with the requirements of regulations 8(1)(d) (NAVTEX) and 8(1)(f) (satellite EPIRB); and on and after 1st February 1995 with the requirements of the Merchant Shipping (Life-Saving Appliances) (Amendment) Regulations 1991(12) relating to the carriage of radar transponders;
  - (b) on or after 1st February 1999 comply with the requirements of Part II of these Regulations.
- (4) Every ship constructed on or after 1st February 1995 shall comply with the requirements of Part II of these Regulations.
- (5) For the purpose of this regulation the expression “ships constructed” means “ships the keels of which are laid or which are at a similar stage of construction” and the expression “a similar stage of construction” means the stage at which—
  - (a) construction identifiable with a specific ship begins; and
  - (b) assembly of that ship has commenced comprising at least 50 tons of 1% of the estimated mass of all structural material, whichever is less.

### **Ships and persons in distress**

3. Nothing in these Regulations shall prohibit any ship, survival craft or person in distress from using any means at their disposal to attract attention, make known their position and obtain help.

### **Equivalents and exemptions**

4.—(1) Where these Regulations require that a particular fitting, material, appliance or apparatus, or type thereof, shall be fitted or carried in a ship, or that any particular provision shall be made, the Secretary of State may permit any other fitting, material, appliance or apparatus or type thereof to be fitted or carried, or any other provision to be made in that ship if he is satisfied by trial thereof or otherwise that such other fitting, material, appliance or apparatus, or type thereof, or provision, is at least as effective as that required by these Regulations.

(2) For the purpose of these Regulations, the results of verifications and tests carried out by the bodies and laboratories of other European member States offering suitable and satisfactory guarantees of technical and professional competence shall be accepted.

(3) The Secretary of State may exempt any individual ship or class or description of ships from any of the provisions of Part II or Part III of these Regulations, subject to such conditions as he may think fit.

### **Performance standards**

5. Equipment required to be provided under these Regulations—

(1) shall conform to performance standards adopted by the Organisation and specified in Merchant Shipping Notice No. M 1474 as having been so adopted;

(2) in the case of equipment provided on United Kingdom ships, shall in addition conform to appropriate performance specifications issued by the Department of Trade and Industry or by the Department of Transport and specified in Merchant Shipping Notice No. M 928, any document

amending the same which is considered by the Secretary of State to be relevant from time to time and is specified in a Merchant Shipping Notice.

## PART II

### GMDSS SHIP REQUIREMENTS

#### Interpretation of Part II

6. In this Part, the following expressions shall have the following meanings—

“Admiralty List of Radio Signals” means the document so entitled published by the Hydrographer of the Navy and any subsequent List containing the like information which the Hydrographer of the Navy considers relevant from time to time which replaces the Admiralty List of Radio Signals or replaces any subsequent List containing the like information; and a reference to any such List includes a reference to any Admiralty Notice to Mariners amending the same which the Hydrographer of the Navy considers relevant from time to time;

“area A1 ship” means a ship which goes to sea in sea area A1 only;

“area A2 ship” means a ship which goes to sea in sea area A2 only, or in sea areas A1 and A2;

“area A3 ship” means a ship which goes to sea in sea area A3 only, or in sea area A3 and also in sea area A1 or A2 or both those sea areas;

“area A4 ship” means a ship which goes to sea in sea area A4 only, or in sea area A4 and also in one or more of sea areas A1, A2 and A3;

“bridge-to-bridge communications” means safety communications between ships from the position from which the ships are normally navigated;

“continuous watch” means a radio watch which is not interrupted other than for brief intervals when the ship’s receiving capability is impaired or blocked by its own communications or when the facilities are under periodical maintenance or checks;

“direct-printing telegraphy” means an automated telegraphy technique which complies with the relevant recommendations specified in a Department of Transport Merchant Shipping Notice;

“DSC” means Digital Selective Calling being a technique using digital codes which enables a radio station to establish contact with, and transfer information to, another station or group of stations, and complying with the relevant recommendations as specified in Department of Transport Merchant Shipping Notices;

“EPIRB” (emergency position-indicating radiobeacon) means a station in the mobile service the emissions of which are intended to facilitate search and rescue operations;

“general radio communications” means operational and public correspondence traffic, other than distress, urgency and safety messages, conducted by radio;

“GMDSS general operator’s certificate” and “GMDSS restricted operator’s certificate” mean the certificates respectively so called in the Radio Regulations, issued in accordance with those regulations, and in relation to a United Kingdom ship, associated with an authority from the Secretary of State issued under section 7(2) of the Wireless Telegraphy Act 1949<sup>(13)</sup> ;

“HF” means the frequency spectrum between 3000 kHz and 30 MHz;

“INMARSAT” means the Organisation established by the Convention on the International Maritime Satellite Organisation (INMARSAT) adopted on 3rd September 1976;

---

(13) 1949 c. 54.

“International NAVTEX service” means the co-ordinated broadcast and automatic reception on 518 kHz of maritime safety information by means of narrow-band direct-printing telegraphy using the English language;

“locating” means the finding of ships, aircraft, units or persons in distress;

“maritime safety information” means navigational and meteorological warnings, meteorological forecasts and other urgent safety related messages broadcast to ships;

“MF” means the frequency spectrum between 300 kHz and 3000 kHz;

“polar orbiting satellite service” means a service which is based on polar orbiting satellites which receive and relay distress alerts from satellite EPIRBs and which provides their position;

“radar transponder” means a survival craft radar transponder for search and rescue between ships or aircraft and survival craft;

“radio communication” means telecommunication by means of radio waves;

“radio communication service” means a service as defined in the Radio Regulations involving the transmission, emission and/or reception of radio waves for specific telecommunication purposes;

“radio log” means the record required to be kept by regulation 17;

“satellite EPIRB” means an EPIRB which is in the mobile-satellite service;

“sea area A1” means an area specified as sea area A1 in the Admiralty List of Radio Signals;

“sea area A2” means an area specified as sea area A2 in the Admiralty List of Radio Signals;

“sea area A3” means an area, excluding sea areas A1 and A2, within the coverage of an INMARSAT geostationary satellite in which continuous alerting is available;

“sea area A4” means any area of the sea which is not sea area A1, A2 or A3;

“service”: — a reference to any particular type of radio service is a reference to that service as defined in the Radio Regulations;

“ship earth station” means a mobile earth station in the maritime mobile-satellite service located on board ship;

“ship station” means a mobile station in the maritime mobile service located onboard a vessel which is not permanently moored, other than a survival craft station;

“survival craft station” means a mobile station in the maritime mobile service intended solely for survival purposes and located on any lifeboat, life-raft or other survival equipment;

“VHF” means the frequency spectrum between 30 MHz and 300 MHz.

### **Installation, location and control of radio equipment**

7.—(1) Every radio installation shall—

- (a) 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;
- (b) be so located as to ensure the greatest possible degree of safety and operational availability;
- (c) be protected against harmful effects of water, extremes of temperature and other adverse environmental conditions;
- (d) 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

- (e) be clearly marked with the call sign, the ship station identity and other codes as applicable for the use of the radio installation.
- (2) Control of the VHF radiotelephone channels shall be immediately available on the navigating bridge convenient to the position from which the ship is normally navigated; where appropriate, facilities shall be available to permit radiocommunications from the wings of the navigating bridge; portable VHF equipment may be used to meet the latter provision.
- (3) Each radio transmitter and receiver fitted in accordance with these Regulations shall be provided with a suitable antenna or antennas. The antennas shall be so constructed and sited as to enable each transmitter and receiver to perform its intended communication function effectively.
- (a) (4) (a) Where wire antennas are provided as part of a radio installation they shall be fitted with suitable insulators and, if suspended between supports liable to whipping, be protected against breakage. In addition, a spare wire antenna completely assembled for rapid replacement shall be carried.
- (b) Where MF and MF/HF radio installations are provided with an antenna which is not a supported wire antenna, a spare antenna of similar electrical characteristics shall be carried.

#### **Radio equipment to be provided for all sea areas**

- 8.—(1) Every ship shall be provided with—
- (a) a VHF radio installation capable of transmitting and receiving—
- (i) DSC on the frequency 156.525 MHz (channel 70). Means shall be provided 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);
- (b) a VHF radio installation capable of maintaining a continuous DSC watch on channel 70 which may be separate from, or combined with, that required by paragraph (a)(i) of this regulation;
- (c) a radar transponder capable of operating in the 9 GHz band, which—
- (i) shall be so stowed that it can be easily utilized; and
  - (ii) may be one of those required for a survival craft in accordance with the Merchant Shipping (Life-Saving Appliances) (Amendment) Regulations 1991(14) ;
- (d) if the ship is at sea in any area in which an international NAVTEX service is provided a receiver capable of receiving International NAVTEX service broadcasts;
- (e) a radio facility for reception of maritime safety information by the INMARSAT enhanced group calling system if the ship is at sea in any area of INMARSAT coverage but in which an international NAVTEX service is not provided;
- (f) subject to the provision of regulation 9(3) a satellite EPIRB complying with the requirements of Schedule I.
- (2) During the period 1st February 1992 to 31st January 1999 inclusive every ship shall, in addition, be fitted with a radio installation consisting of a radiotelephone distress frequency watch receiver capable of operating on 2,182 kHz.
- (3) During the period of 1st February 1992 to 31st January 1999 inclusive every ship shall, unless it is an A1 area ship, be fitted with a device for generating the radiotelephone alarm signal on the frequency 2,182 kHz.

---

(14) S.I. 1991/1300.

### **Additional radio equipment to be provided for area A1 ships**

**9.**—(1) In addition to meeting the requirements of regulation 8, every A1 area ship shall be provided with a radio installation capable of initiating the transmission of ship-to-shore distress alerts by operation from the position from which the ship is normally navigated, operating either—

- (a) on VHF using DSC; this requirement may be fulfilled by the VHF EPIRB required by paragraph (3) of this regulation if it is installed close to, or capable of remote activation from, the position from which the ship is normally navigated; or
- (b) through the polar orbiting satellite service on 406 MHz; this requirement may be fulfilled by the satellite EPIRB, required by regulation 8(1)(f) if it is installed close to, or capable of remote activation from, the position from which the ship is normally navigated; or
- (c) if the ship is at sea within coverage of MF coast stations equipped with DSC, on MF using DSC; or
- (d) on HF using DSC; or
- (e) through the INMARSAT geostationary satellite service; this requirement may be fulfilled by—
  - (i) an INMARSAT ship earth station; or
  - (ii) the satellite EPIRB, required by regulation 8(1)(f) if it is installed close to, or capable of remote activation from, the position from which the ship is normally navigated.

(2) The VHF radio installation, required by regulation 8(1)(a) shall also be capable of transmitting and receiving general radio communications using radiotelephony.

(3) Area A1 ships may, in lieu of being provided with the satellite EPIRB required by regulation 8(1)(f), be provided with an EPIRB which is—

- (a) capable of transmitting a distress alert using DSC on VHF channel 70 and providing for locating by means of a radar transponder operating in the 9 GHz band;
- (b) installed in an easily accessible position;
- (c) ready to be manually released and capable of being carried by one person into a survival craft;
- (d) capable of floating free if the ship sinks and being automatically activated when afloat; and
- (e) capable of being activated manually.

### **Additional radio equipment to be provided for area A1/A2 ships**

**10.**—(1) In addition to meeting the requirements of regulation 8, every area A1/A2 ship shall be provided with—

- (a) an MF radio installation capable of transmitting and receiving, for distress and safety purposes, on the frequencies—
  - (i) 2,187.5 kHz using DSC; and
  - (ii) 2,182 kHz using radiotelephony;
- (b) a radio installation capable of maintaining a continuous DSC watch on the frequency 2,187.5 kHz; such installation may be separate from, or combined with, that required by paragraph (a)(i) of this regulation; and
- (c) means of initiating the transmission of ship-to-shore distress alerts by a radio service other than MF operating either—
  - (i) through the polar orbiting satellite service on 406 MHz; this requirement may be fulfilled by the satellite EPIRB, required by regulation 8(1)(f) if it is installed close

to, or capable of remote activation from, the position from which the ship is normally navigated; or

- (ii) on HF using DSC; or
- (iii) through the INMARSAT geostationary satellite service; this requirement may be fulfilled by—
  - (A) the equipment specified in paragraph (3)(b) of this regulation; or
  - (B) the satellite EPIRB, required by regulation 8(1)(f) if it is installed close to, or capable of remote activation from, the position from which the ship is normally navigated.

(2) Means shall be provided to initiate transmission of distress alerts by the radio installations specified in paragraphs (1)(a) and (1)(c) of this regulation from the position from which the ship is normally navigated.

(3) The ship shall, in addition, be capable of transmitting and receiving general radiocommunications using radiotelephony or direct-printing telegraphy by either—

- (a) a radio installation operating on working frequencies in the bands between 1,605 kHz and 4,000 kHz or between 4,000 kHz and 27,500 kHz. This requirement may be fulfilled by the addition of this capability in the equipment required by paragraph (1)(a) of this regulation; or
- (b) an INMARSAT ship earth station.

#### **Additional radio equipment to be provided for area A1/A2/A3 ships**

**11.—(1)** In addition to meeting the requirements of regulation 8, every area A1/A2/A3 ship shall be provided with either the following equipment—**ALTERNATIVE A**

- (a) an INMARSAT ship earth station capable of—
  - (i) transmitting and receiving distress and safety communications using direct-printing telegraphy;
  - (ii) initiating and receiving distress priority calls;
  - (iii) maintaining watch for shore-to-ship distress alerts, including those directed to specifically defined geographical areas;
  - (iv) transmitting and receiving general radiocommunications, using either radiotelephony or direct-printing telegraphy; and
- (b) an MF radio installation capable of transmitting and receiving, for distress and safety purposes, on the frequencies—
  - (i) 2,187.5 kHz using DSC; and
  - (ii) 2,182 kHz using radiotelephony; and
- (c) a radio installation capable of maintaining a continuous DSC watch on the frequency 2,187.5 kHz which may be separate from or combined with that required by paragraph (b) (i) of this regulation; and
- (d) means of initiating the transmission of ship-to-shore distress alerts by a radio service operating either—
  - (i) through the polar orbiting satellite service on 406 MHz; this requirement may be fulfilled by the satellite EPIRB, required by regulation 8(1)(f) if it is installed close to, or capable of remote activation from, the position from which the ship is normally navigated; or
  - (ii) on HF using DSC; or



- (iii) through the INMARSAT geostationary satellite service, either by an additional ship earth station or by the satellite EPIRB required by regulation 8(1)(f) if it is installed close to, or capable of remote activation from the position from which the ship is normally navigated;**ALTERNATIVE B**
  - (a) an MF/HF radio installation capable of transmitting and receiving, for distress and safety purposes, on all distress and safety frequencies in the bands between 1,605 kHz and 4,000 kHz and between 4,000 kHz and 27,500 kHz—
    - (i) using DSC;
    - (ii) using radiotelephony; and
    - (iii) using direct-printing telegraphy; and
  - (b) equipment capable of maintaining DSC watch on 2,187.5 kHz, 8,414.5 kHz and on at least one of the distress and safety DSC frequencies 4,207.5 kHz, 6312 kHz, 12,577 kHz or 16,804.5 kHz; the equipment shall be such that it shall be possible at any time to select any of these DSC distress and safety frequencies; this equipment may be separate from, or combined with, the equipment required by paragraph (a) above; and
  - (c) means of initiating the transmission of ship-to-shore distress alerts by a radiocommunication service other than HF operating either—
    - (i) through the polar orbiting satellite service on 406 MHz; this requirement may be fulfilled by the satellite EPIRB, required by regulation 8(1)(f) if it is installed close to, or capable of remote activation from, the position from which the ship is normally navigated; or
    - (ii) through the INMARSAT geostationary satellite service; this requirement may be fulfilled by—
      - (A) an INMARSAT ship earth station; or
      - (B) the satellite EPIRB, required by regulation 8(1)(f) if it is installed close to, or capable of remote activation from, the position from which the ship is normally navigated; and
  - (d) in addition, means of transmitting and receiving general radiocommunications using radiotelephony or direct-printing telegraphy shall be provided by an MF/HF radio installation operating on working frequencies in the bands between 1,605 kHz and 4,000 kHz and between 4,000 kHz and 27,500 kHz; this requirement may be fulfilled by the addition of this capability in the equipment required by paragraph (a) above.
- (2) Means shall be provided to initiate transmission of distress alerts from the position from which the ship is normally navigated by the radio installations specified in paragraphs (a), (b) and (d) of ALTERNATIVE A and (a) and (c) of ALTERNATIVE B of this regulation.

#### **Additional radio equipment to be provided for area A1/A2/A3/A4 ships**

**12.** In addition to meeting the requirements of regulation 8, area A1/A2/A3/A4 ships shall be provided with the radio installations and equipment specified in ALTERNATIVE B in regulation 11(1), except that the equipment required by (c)(ii) of ALTERNATIVE B shall not be accepted as an alternative to that required by regulation (c)(i) of ALTERNATIVE B, which shall always be provided. Such ships shall in addition comply with the requirements of regulation 11(2).

#### **Radio watches**

**13.—(1)** Every ship while at sea shall maintain a continuous watch—

- (a) on VHF DSC channel 70, if the ship, in accordance with the requirements of regulation 8(1)(b), is fitted with a VHF radio installation;
  - (b) on the distress and safety DSC frequency 2,187.5 kHz, if the ship, in accordance with the requirements of regulation 10(1)(b) or paragraph (c) of ALTERNATIVE A in regulation 11, is fitted with an MF radio installation;
  - (c) on the distress and safety DSC frequencies 2,187.5 kHz and 8,414.5 kHz and also on at least one of the distress and safety DSC frequencies 4,207.5 kHz, 6,312 kHz, 12,577 kHz or 16,804.5 kHz, appropriate to the time of day and the geographical position of the ship, if the ship, in accordance with the requirements of paragraph (b) of ALTERNATIVE B in regulation 11 or 12, is fitted with an MF/HF radio installation; this watch may be kept by means of a scanning receiver;
  - (d) for satellite shore-to-ship distress alerts, if the ship, in accordance with the requirements of paragraph (a) of ALTERNATIVE A in regulation 11, is fitted with an INMARSAT ship earth station.
- (2) Every ship while at sea shall maintain a radio watch for broadcasts of maritime safety information on the appropriate frequency or frequencies on which such information is broadcast for the area in which the ship is navigating.
- (3) During the period 1st February 1992 to 31st January 1999 inclusive every ship while at sea shall maintain, when practicable, a continuous listening watch on VHF channel 16; such watch shall be kept at the position from which the ship is normally navigated.
- (4) During the period 1st February 1992 to 31st January 1999 inclusive every ship required to carry a radiotelephone watch receiver shall maintain while at sea a continuous watch on the radiotelephone distress frequency 2,182 kHz; such watch shall be kept at the position from which the ship is normally navigated.

### Sources of energy

**14.**—(1) There shall be available at all times while the ship is at sea a supply of electrical energy sufficient to operate the radio installations and to charge any batteries used as part of a reserve source or sources of energy for the radio installations.

(2) A reserve source or sources of energy shall be provided on every ship, to supply radio installations, used for the purpose of conducting distress and safety radiocommunications, in the event of failure of the ship's main and emergency sources of electrical power. The reserve source or sources of energy shall be capable of simultaneously operating the VHF radio installation required by regulation 8(1)(a) and, as appropriate for the sea area or sea areas for which the ship is equipped, either the MF radio installation required by regulation 10(1)(a), the MF/HF radio installation required by subparagraph (a) of ALTERNATIVE B in regulation 11 or regulation 12, or the INMARSAT ship earth station required by subparagraph (a) of ALTERNATIVE A in regulation 11 and any of the additional loads mentioned in paragraphs (5), (6) and (9) of this regulation for a period of at least—

- (a) one hour, on ships constructed on or after 1st February 1995;
- (b) one hour, on ships constructed before 1st February 1995, if the emergency source of electrical power complies fully with all relevant requirements of the Merchant Shipping (Passenger Ship Construction and Survey) Regulations 1984<sup>(15)</sup> and the Merchant Shipping (Cargo Ship Construction and Survey) Regulations 1984<sup>(16)</sup> including the requirements to supply the radio installations; and
- (c) six hours, on ships constructed before 1st February 1995, if the emergency source of electrical power is not provided or does not comply fully with all relevant requirements of

---

<sup>(15)</sup> S.I. 1984/1216.

<sup>(16)</sup> S.I. 1984/1217.

the Merchant Shipping (Passenger Ship Construction and Survey) Regulations 1984<sup>(17)</sup> and the Merchant Shipping (Cargo Ship Construction and Survey) Regulations 1984<sup>(16)</sup> including the requirements to supply the radio installations.

(3) The reserve source or sources of energy need not be capable of supplying independent HF and MF radio installations simultaneously.

(4) The reserve source or sources of energy shall be independent of the propelling power of the ship and the ship's electrical system.

(5) Where, in addition to the VHF installation, two or more of the other radio installations, referred to in paragraph (2) of this regulation, can be connected to the reserve source or sources of energy, such sources shall be capable of simultaneously supplying, for the period specified, as appropriate, in subparagraphs (2)(a), (2)(b) or (2)(c) of this regulation the VHF radio installation and either—

- (a) all other radio installations which can be connected to the reserve source or sources of energy at the same time; or
- (b) if only one of the other radio installations can be connected to the reserve source or sources of energy at the same time as the VHF radio installation, whichever of the other radio installation will consume the most power.

(6) The reserve source or sources of energy may be used to supply the electrical lighting required by regulation 7(1)(d).

(7) Where a reserve source of energy consists of a rechargeable accumulator battery or batteries—

- (a) a means of automatically charging such batteries shall be provided which shall be capable of recharging them to minimum capacity requirements within 10 hours; and
- (b) the capacity of the battery or batteries shall be checked when the ship is not at sea and, using an appropriate method, at intervals not exceeding 12 months.

(8) The siting and installation of accumulator batteries which provide a reserve source of energy shall be such as to ensure—

- (a) the highest degree of service;
- (b) a reasonable lifetime;
- (c) reasonable safety;
- (d) that battery temperatures remain within the manufacturer's specifications whether under charge or idle; and
- (e) that when fully charged, the batteries will provide at least the minimum required hours of operation under all weather conditions.

(9) If an uninterrupted input of information from the ship's navigational or other equipment to a radio installation required by this Part is needed to ensure its proper performance, means shall be provided to ensure the continuous supply of such information in the event of failure of the ship's main or emergency source of electrical power.

(10) For the purpose of calculating the required capacity of the reserve source of energy, the total current used in calculations shall be equal to the highest sum of all the radio installations which simultaneously can be connected to the source of energy, based on the following—

- (a) the current consumption of the VHF receiver;
- (b) one fifth of the current consumption of the VHF transmitter;

---

<sup>(17)</sup> S.I. 1984/1216.

<sup>(16)</sup> S.I. 1984/1217.

- (c) the current consumption of a MF or MF/HF receiver and of the transmitter when it is in a condition that operation of the “press to transmit” switch will make it ready for immediate transmission;
- (d) one third of the current which may be drawn by a MF or MF/HF transmitter for speech transmission on the frequency at which the current consumption of the transmitter is at a maximum;
- (e) the current consumption of an INMARSAT ship earth station when it is receiving transmissions;
- (f) one quarter of the current which may be drawn by an INMARSAT ship earth station when it is transmitting in the mode at which the current consumption is at a maximum; and
- (g) the total current consumption of all additional loads to which the reserve source may supply energy in times of distress or emergency.

### **Serviceability and maintenance requirements**

15.—(1) Equipment shall be so designed that the main units can be replaced readily, without elaborate recalibration or readjustment.

(2) Where appropriate, equipment shall be so constructed and installed that it is readily accessible for inspection and on-board maintenance purposes.

(3) Adequate information shall be provided on board the ship to enable the equipment to be properly operated and maintained.

(4) Adequate tools and spares shall be provided on board the ship to enable the equipment to be maintained.

(5) Radio equipment required by this Part shall be maintained to meet the recommended performance standards of such equipment.

(6) On ships while at sea the availability of equipment shall be ensured, as required in Merchant Shipping Notice No. M 1475.

(7) In all United Kingdom ships to which these Regulations apply a person nominated by the Master, normally the person qualified under regulation 16(1), shall, while the ship is at sea, carry out the appropriate tests and checks specified in Schedule 2 to these Regulations. If any of the radio installations required by these Regulations are not in working order, the nominated person shall inform the Master and record details of the deficiencies in the Radio Log.

### **Radio personnel**

16.—(1) Every ship shall carry a person or persons qualified for distress and safety radio communication purposes as specified in paragraph (2) of this regulation. Such person or persons shall be holders of certificates specified in the Radio Regulations as appropriate. One such person shall be designated by the Master to have primary responsibility for radio communications during distress incidents.

(2) On area A1 ships the person qualified as mentioned in paragraph (1) above shall hold at least a GMDSS restricted operator’s certificate issued in accordance with sub-section D of Section IIIA of Article 55 of the Radio Regulations. On area A1/A2, A1/A2/A3 and A1/A2/A3/A4 ships the person qualified as mentioned in paragraph (1) above shall hold a GMDSS general operator’s certificate issued in accordance with sub-section C of Section IIIA of Article 55 of the Radio Regulations.

### **Radio records**

17.—(1) A record shall be kept of the matters specified in Schedule 3.

- (2) The Master shall inspect and sign each day's entries in the Radio Log.
- (3) A record ("the Radio Log") shall be available for inspection by officers authorised by the Secretary of State to make such inspection.
- (4) Regulation 9 of the Merchant Shipping (Official Log Books) Regulations 1981(18) shall apply to the Radio Log as it applies to the official log book.

## PART III

### NON-GMDSS SHIP REQUIREMENTS

#### Interpretation

18. In this Part the following expressions shall have the following meanings—

"connected" means electrically connected;

"existing installation" means—

- (a) an installation wholly installed before 25th May 1980; and
- (b) an installation part of which was installed before the said date and the rest of which consists of parts installed in replacement of indential parts or parts which comply with the relative requirements of this Part;

"maintenance" means any activity intended to keep a radio installation in satisfactory working condition and includes tests, measurements, replacements, adjustments and repair;

"mile" means the international nautical mile of 1,852 metres;

"new installation" means any installation which is not an existing installation;

"new ship" means a ship the keel of which is laid or which is at a similar stage of construction on or after 25th May 1980;

"operating position" in relation to any equipment means the position normally occupied by a person when operating that equipment;

"radio officer" means a person holding a valid maritime radio communication general certificate, first class radiotelegraph operator's certificate or second class radiotelegraph operator's certificate issued in each case in accordance with the Radio Regulations who is employed in the radiotelegraph station of a ship which is provided with such a station in accordance with this Part;

"radio operator" means a person who has had experience at sea as an operator of radiotelegraph apparatus on board a fishing vessel or a ship to which this Part does not apply;

"radiotelegraph ship" means a ship, being a passenger ship or a cargo ship of 300 tons and upwards to which this Part applies, which is provided with a radiotelegraph installation in compliance with this Part;

"radiotelephone operator" means a person holding a valid appropriate certificate issued in accordance with the Radio Regulations;

"radiotelephone ship" means a cargo ship, being a ship to which this Part applies, of not less than 300 tons but less than 1,600 tons, which is provided with a radiotelephone installation in compliance with this Part;

"radiotelephone station" and "radiotelephone installation" relate to the equipment operating within the frequency band 1605—3800 kHz;

---

(18) S.I. 1981/569, to which there is an amendment not relevant to these Regulations.

“radio watch”, in the case of radiotelegraph ships, means listening on the international distress frequencies of 500 kHz and 2182 kHz and in the case of radiotelephone ships means listening on the international distress frequency of 2182 kHz;

“silence period” means the period of 3 minutes beginning at 15 minutes and at 45 minutes past each hour, on the frequency of 500 kHz, and at each hour and at 30 minutes past each hour, on the frequency of 2182 kHz;

“VHF radiotelephone station” and “VHF radiotelephone installation” relate to the equipment operating within the frequency band 156.025—162.025 MHz.

### **Provision of radio installations**

**19.**—(1) Subject to the provisions set out below, every cargo ship of 300 tons or more but less than 1,600 tons shall be provided with—

- (a) a radiotelephone installation which shall include a transmitter, receiver, radiotelephone distress frequency watch receiver or radiotelephone auto alarm, and radiotelephone alarm signal generating device, or
- (b) a radiotelegraph installation which shall include—
  - (i) a main installation comprising a main transmitter, main receiver, radiotelegraph automatic alarm signal keying device, radiotelephone distress frequency watch receiver or radiotelephone auto alarm, radiotelephone distress frequency transmitter, radiotelephone alarm signal generating device and when provided, a radiotelegraph auto alarm; and
  - (ii) a reserve installation comprising a reserve transmitter and a reserve receiver: provided that in cargo ships of less than 1,600 tons, where a radiotelegraphy installation is provided as an alternative to a radiotelephone installation, it shall not be necessary for a reserve transmitter to be provided.

(2) Subject to the provisions set out below every cargo ship of 1,600 tons or more and every passenger ship shall be provided with a radiotelegraph installation which shall include—

- (a) a main installation comprising a main transmitter, main receiver, radiotelegraph automatic alarm signal keying device, radiotelephone distress frequency watch receiver or radiotelephone auto alarm, radiotelephone distress frequency transmitter, radiotelephone alarm signal generating device and, when provided, a radiotelegraph autoalarm; and
- (b) a reserve installation comprising a reserve transmitter and reserve receiver.

(3) Every cargo ship of 300 tons or more and every passenger ship shall, in addition, be provided with a VHF radiotelephone installation which shall include a transmitter and receiver.

### **Interference with reception and with other installations**

**20.**—(1) At no time while the ship is at sea shall any interference or mechanical noise produced by any radio installation required by this Part be such as to prevent the efficient operation of any other equipment installed on the ship.

(2) At no time while the ship is—

- (a) at sea; or
- (b) in port when a watch is required by the master equipment in the ship be sufficient to prevent the effective reception of radio signals by means of the radio installation.

(3) Any ship to which this Part applies in respect of which it is impracticable to erect efficient and properly installed antennas for broadcast receivers which do not interfere with the efficiency of the radio installation shall be provided with a communal antenna system for broadcast receivers.

### **Testing of equipment**

**21.**—(1) In all ships to which this Part applies, a radio officer in the case of radiotelegraph ship, or a radiotelephone operator in the case of a radiotelephone ship shall, while at sea, carry out the appropriate equipment tests and battery and reserve power checks specified in Schedule 4 to these Regulations. Where more than one radio officer or more than one radiotelephone operator is carried on a ship, the Master shall designate an officer or operator as the case may be to carry out those checks and the duty shall be upon the officer or operator so designated.

(2) If any of the radio equipment required by this Part is not in working order, the radio officer or radiotelephone operator discovering the deficiency shall report that fact to the Master and record the details in the radio log.

### **Charging of batteries**

**22.**—(1) If batteries are provided as a source of electrical energy for any part of the equipment required by this Part, means shall be provided on board every ship to which this Part applies, for the charging of such batteries from the ship's main source of electrical energy. The charging facilities shall be adequate to ensure that the batteries can be fully charged within a period of not more than 16 hours;

Provided that where more than one battery is provided and each has sufficient capacity to comply with regulation 33(1) or 41(3) of this Part, as the case may be, the charging facilities shall be adequate to ensure that each battery can be fully charged within a period of 16 hours but it shall not be necessary for both batteries to be charged simultaneously.

(2) Where practicable, the batteries shall be fully charged on every occasion immediately before the ship leaves port.

(3) When the ship is at sea—

(a) the batteries forming part of—

(i) the main radiotelegraph installation, radiotelephone installation or VHF radiotelephone installation, and

(ii) in the case of a radiotelegraph ship, the reserve radiotelegraph installation and

(b) the batteries forming part of—

(i) the motor life-boat fixed radio equipment and

(ii) the survival craft portable radio equipment if of a type which requires charging

(c) the batteries forming part of the survival craft two-way radiotelephone apparatus, if of a type which require charging, shall be brought up to the normal fully-charged condition whenever necessary and at least at intervals not exceeding one week.

### **Spare parts, tools and testing equipment**

**23.** Sufficient spare parts, tools and testing equipment appropriate to the ship to enable the radio installation to be maintained in an efficient working condition while at sea, shall be provided.

### **Serviceability and maintenance of radio installation**

**24.**—(1) Each radio installation shall be in a satisfactory working condition whenever the ship goes to sea;

Provided that where any additional radio equipment which is not required by this Part is provided, that equipment shall be of such design that any malfunction of any part of it shall not adversely affect the operation of the radio installation required by this Part.

(2) Each radio installation shall be in a satisfactory working condition at all times when the ship is at sea, unless there is a defect in the radio installation and maintenance is being carried out or is not practicable.

(3) All equipment forming part of each radio installation shall be reliable and shall be so constructed and installed that it is readily accessible for maintenance purposes.

(4) Adequate information and instructions in English as to the use and maintenance of each installation shall be provided and shall be available for use when the radio installation is being operated, tested or serviced.

(5) In all United Kingdom ships to which this Part applies there shall be available on board and, on radiotelegraph ships, in a radiotelegraph operating room—

- (a) a rigging plan of the fitted antennas showing—
  - (i) elevation and plan views of the antennas and on radiotelegraph ships their disposition on the ship relative to the radiotelegraph operating room;
  - (ii) the dimensions of transmitting antennas; and
  - (iii) the vertical distance from the load line indicating the greatest depth to which the ship may at any time or any place be submerged to the base of each radiotelegraph and radiotelephone transmitting antenna;
- (b) complete information on the wiring of the radio installation, except for existing installations on radiotelephone ships, showing all cable interconnections and terminations.

### **VHF radiotelephone station**

**25.**—(1) The VHF radiotelephone installation shall be in the upper part of the ship and control of the VHF channels shall be immediately available on the bridge convenient to the place from which the ship is normally navigated.

(2) A card of instructions giving a clear summary of the distress, urgency and safety procedures shall be displayed at each VHF operating position.

(3) On United Kingdom radiotelegraph ships, means shall be provided in new installations to enable reception by the VHF radiotelephone installation to be monitored in the radio room during distress incidents.

### **Provision of antennas**

**26.** Every ship to which this Part applies shall be provided with antennas suitable for the efficient radiation and reception of signals in the band 156.025—162.025 MHz. The antennas shall be vertically polarised and, so far as practicable, have an unobstructed view in all directions.

### **Supply of electrical energy**

**27.**—(1) At all times while a ship to which this Part applies is at sea and at all reasonable times when she is in port, there shall be available a source of energy sufficient to operate the VHF radiotelephone installation at its nominal rated output power. If batteries are provided they shall have sufficient capacity and shall be maintained at all times while at sea in such condition as to be able to supply continuously for at least six hours a total current equal to the sum of—

- (a) the current consumption of the VHF radiotelephone receiver and;
  - (b) one fifth of the current consumption of the VHF radiotelephone transmitter.
- (2) In respect of—
- (a) new installations in all cargo ships of 300 tons and more but less than 500 tons, and



- (b) new and existing installations in all cargo ships of 500 tons or more and passenger ships, installation from an alternative source of electrical energy situated in the upper part of the ship unless the source of energy required by paragraph (1) of this regulation is situated there. The source of energy in the upper part of the ship may be the reserve source of energy required by regulation 33(2) or 41(2) of these Regulations, in which case the VHF usage of such reserve source of energy shall be limited to distress, urgency and safety communications.

(3) Where provision is made for operating the VHF radiotelephone installation from alternative sources of electrical energy, means shall be provided for rapidly changing from one source of energy to the other.

### **Radiotelephone operators using the VHF radiotelephone installation**

**28.** Every radiotelephone operator using the VHF radiotelephone installation shall have practical knowledge of operating the VHF equipment and general knowledge of the Radio Regulations applying to VHF radiotelephone communications and specifically of that part of those Regulations relating to distress signals and traffic, alarm, urgency and safety signals.

### **VHF radio watch**

**29.—**(1) Each ship which is fitted with a VHF radiotelephone installation in accordance with this Part shall, while at sea, maintain a continuous listening watch on the navigating bridge on 156.8 MHz (VHF Channel 16).

(2) This listening watch may be discontinued—

- (a) when the receiver is being used for traffic on a frequency other than 156.8 MHz;
- (b) when the vessel is maintaining a watch on a frequency other than 156.8 MHz for the purpose of a port operation, ship movement or safety of navigation service;
- (c) when, on the direction of the Master, the watch is being maintained elsewhere in the ship;
- (d) when, in the opinion of the Master, the watch is prejudicial to the safety of the ship.

(3) Where the listening watch is discontinued pursuant to paragraph (2)(c) or (d), entries shall be made in the ship's official log book of the times and duration for which the listening watch on the navigating bridge was discontinued and of the circumstances in which the watch was transferred elsewhere or in which the safety of the ship was prejudiced as the case may be.

(4) A written summary shall be maintained of all communications relating to distress, urgency and safety traffic received or transmitted on the VHF radiotelephone installation during the watch.

### **Radiotelephone station**

**30.—**(1) The radiotelephone station shall be in the upper part of the ship and so sited that it is protected to the greatest possible extent from interference and noise which might impair the correct reception of messages and signals.

(2) There shall be an efficient means of two-way communication, independent of the ship's main communication system and the main source of electrical energy, between the place at which the radiotelephone installation is fitted and any other place from which the ship is normally navigated.

(3) A reliable clock shall be securely mounted in such a position that the entire dial can be easily observed from the radiotelephone operating position. The marking of the silence periods shall be clearly visible.

(4) A reliable emergency light shall be provided, independent of the system which supplies the normal lighting of the radiotelephone installation, and permanently arranged so as to be capable of providing adequate illumination of the operating controls of the radiotelephone installation, of

the clock required by paragraph (3) of this regulation and of the card of instructions required by paragraph (6) of this regulation. The emergency light shall be controlled by two-way switches placed respectively near an entrance to the room in which the radiotelephone installation is fitted and at the operating position in that room: provided that where the radiotelephone installation is fitted on the bridge, only the switch at the operating position need to be provided. The switches shall be clearly labelled to indicate their purpose.

(5) Where a source of energy consists of a battery or batteries, the radiotelephone station shall be provided with a means of indicating continuously whether the battery voltage is adequate to supply energy for the radiotelephone installation.

(6) A card of instructions in English giving a clear summary of the radiotelephone distress, urgency and safety procedures shall be displayed at each radiotelephone operating position.

(7) Means shall be provided at the radiotelephone station for checking the proper functioning of—

- (a) the radiotelephone alarm signal generating device, by ensuring that the device can modulate satisfactorily the radiotelephone transmitter. The radiotelephone transmitter shall not radiate signals during such checking; and
- (b) the muting circuits of the radiotelephone distress frequency watch receiver or the radiotelephone auto alarm.

#### **Provision of antennas**

**31.**—(1) Every radiotelephone ship to which this Part applies shall be provided and fitted with suitable antennas and insulators. Where wire antennas are suspended between supports liable to whipping, they shall be protected against breakage. In addition, every such ship shall carry—

- (a) if the radiotelephone antenna is a supported wire antenna, a spare antenna completely assembled for rapid replacement of the radiotelephone antenna; or
- (b) if the radiotelephone antenna is not a supported wire antenna, a spare antenna of similar electrical characteristics;
- (c) the necessary means to erect an antenna.

(2) A suitable antenna shall be provided for, and shall normally be connected to, the radiotelephone distress frequency watch receiver or the radiotelephone auto alarm.

#### **Range of radiotelephone transmitter**

**32.** The normal range of the radiotelephone transmitter provided in accordance with this Part shall not be less than 150 miles. The range of a radiotelephone transmitter for the purpose of this Part shall normally be determined by calculation of the metre-amperes. Where an antenna arrangement causes difficulties in determining the range of a transmitter by calculation, the range shall be determined by test.

#### **Supply of electrical energy**

**33.**—(1) At all times while a radiotelephone ship is at sea, and at all reasonable times while she is in port, there shall be available a main source of energy sufficient to operate the installation over the normal range of not less than 150 miles. If batteries are provided they shall have sufficient capacity and shall be maintained at all times while at sea in such condition as to be able to supply continuously for at least six hours a total current equal to the sum of—

- (a) the current consumption of the radiotelephone receiver and of the transmitter when it is in a condition that operation of the “press to transmit” switch will make it ready for the immediate transmission of speech;

- (b) one third of the current which may be drawn by the radiotelephone transmitter for speech transmission on the frequency at which the current consumption of the transmitter is at a maximum;
- (c) the current consumption of all additional loads to which the battery may supply energy in time of distress or emergency; and
- (d) where the source of energy is also used by the VHF radiotelephone installation, the current consumption of the VHF radiotelephone receiver and one fifth of the current consumption of the VHF radiotelephone transmitter.

(2) In respect of installations in United Kingdom cargo ships of 300 tons or more, and other cargo ships of 500 tons or more but in any case less than 1,600 tons, made on or after 19th November 1952, a reserve source of energy shall be provided in the upper part of the ship unless the main source of energy is situated there.

(3) The reserve source of energy, if provided, may be used only to supply—

- (a) the radiotelephone installation;
- (b) the emergency light specified in regulation 29(4) of this Part;
- (c) the device for generating the radiotelephone alarm signal by automatic means;
- (d) the VHF installation;
- (e) the direction-finder (if fitted); and
- (f) reasonable number of low-power emergency circuits which are wholly confined to the upper part of the ship, such as emergency lighting on the boat deck. Such reasonable number of circuits shall be adequately fused and capable of being readily disconnected from the reserve source of energy.

### **Radiotelephone operators**

**34.**—(1) Every radiotelephone ship which is fitted with a radiotelephone station in accordance with this Part shall carry the number of radiotelephone operators specified in paragraph (2) of this regulation. If he is the holder for the time being of a valid certificate for radiotelephony, the master, an officer or a member of the crew may be a radiotelephone operator.

(2) The specified number of radiotelephone operators shall be—

- (a) ships of 300 tons and more, but less than 500 tons — at least one operator;
- (b) ships of 500 tons and more, but less than 1,600 tons — at least two operators; provided that if a ship carries one radiotelephone operator exclusively employed for duties related to radiotelephony, it shall not be necessary to carry a second radiotelephone operator.

(3) For the purposes of these Regulations no person shall be qualified to be a radiotelephone operator on board a United Kingdom ship unless he is the holder of—

- (a) a valid certificate of competency in radiotelephony or radiotelegraphy issued by the Secretary of State or by an authority empowered in that behalf by the laws of some part of the Commonwealth or a member State and recognised by the Secretary of State as the equivalent of such a certificate; and
- (b) authority granted by the Secretary of State under section 7 of the Wireless Telegraphy Act 1949(19) to operate a radiotelegraph station or a radiotelephone station established in a ship under a licence issued by him sub-paragraph (a) issued on or after 28th April 1984 shall not be so qualified unless he is in addition the holder of a valid certificate issued by the Secretary of State or a person authorised by him stating that the holder has satisfied the additional knowledge and training requirements set out in Schedule 7 to these

Regulations or a document recognised by the Secretary of State as the equivalent of such a certificate and issued by an authority empowered in that behalf by the laws in some part of the Commonwealth or a member State.

(4) For the purposes of this Part no person shall be deemed to be a radiotelephone operator onboard a ship registered in a country other than the United Kingdom unless he holds a valid certificate of competency in radiotelephony or radiotelegraphy issued by an authority empowered or recognised in that behalf by the law of the country in which the ship is registered and issued in accordance with the Radio Regulations.

### **Radio watch**

**35.** Every radiotelephone ship which is fitted with a radiotelephone station in accordance with this Part shall, while at sea, maintain continuous watch on the radiotelephone distress frequency at the place on board from which the ship is normally navigated, by use of a radiotelephone distress frequency watch receiver or radiotelephone autoalarm.

### **Radio log — radiotelephone ship**

**36.—**(1) The radio log (diary of the radio service) required by the Radio Regulations for a ship which is fitted with a radiotelephone installation in accordance with this Part shall be kept at the place where listening watch is maintained during the voyage.

(2) Every radiotelephone operator and every master, officer or crew member when carrying out a listening watch in accordance with regulation 35 of these Regulations shall enter in the radio log information specified in Schedule 5 Part A and in the form specified in Part B of Schedule 5 to these Regulations.

(3) The radiotelephone operator or, if there is more than one, the one designated by the Master, shall inspect and sign each day the entries for that day in the radio log, confirming that the requirements of this Part have been met.

(4) The Master of the ship shall inspect and sign each day's entries in the radio log.

(5) The radio logs shall be available for inspection by officers authorised by the Secretary of State to make such an inspection.

(6) Regulation 9 of the Merchant Shipping (Official Log Books) Regulations 1981(20) shall apply to the Radio Log as applies to the official log book.

### **Radiotelegraph station**

**37.—**(1) The radiotelegraph installation shall be installed in such a manner that it will be protected against the harmful effects of water and extremes of temperature and shall be readily accessible both for immediate use in case of distress and for repair.

(2) Every radiotelegraph ship shall be provided with a radiotelegraph operating room. Means shall be provided to operate the main and the reserve radiotelegraph apparatus from the radiotelegraph operating room.

(3) The main and reserve radiotelegraph apparatus provided on board a radiotelegraph ship shall be electrically separate and electrically independent of each other.

(4) Calibration tables or calibration curves shall be available in the radiotelegraph operating room for each transmitter and receiver forming part of the radiotelegraph installation except for those transmitters and receivers which are directly calibrated.

---

(20) S.I. 1981/569, to which there is an amendment not relevant to these Regulations.

(5) The sleeping accommodation of at least one radio officer shall be situated as near as practicable to the radiotelegraph operating room.

### **Radiotelegraph operating rooms**

**38.** Radiotelegraph operating rooms shall—

- (a) be in such positions that no interference from extraneous mechanical or other noise will be caused to the proper reception of radio signals;
- (b) be placed as high in the ship as is practicable;
- (c) be of sufficient size and of adequate ventilation to enable the main and reserve radiotelegraph installations to be operated efficiently;
- (d) not be used for any purpose which would interfere with the operation of the installation;
- (e) be provided with an efficient two-way system for calling and voice communication with the bridge and any other place from which the ship is normally navigated. Such means of communication shall be independent of the main communication system on the ship and of the ship's main source of electrical energy;
- (df) be provided with a reliable clock, the face of which shall be marked to indicate the silence periods, and with a dial of not less than 125 millimetres (5 inches) in diameter and a concentric seconds hand. It shall be securely mounted in the radiotelegraph operating room in such a position that the entire dial can be easily and accurately observed by the radio officer from the radiotelegraph operating position and from the position for testing the radiotelegraph auto alarm equipment;
- (g) be provided with a reliable emergency light consisting of an electric lamp, operated from the reserve source of electrical energy, permanently arranged so as to provide satisfactory illumination of the operating controls of the main and reserve radiotelegraph installation and of the clock required by subparagraph (f) of this regulation and controlled by two-way switches placed near the main entrance to the radiotelegraph operating room and at the radiotelegraph operating position. These switches shall be clearly labelled to indicate their purpose;
- (h) be provided with an electric inspection lamp complete with a flexible lead of adequate length and operated from the reserve source of electrical energy. A serviceable flashlight shall also be provided and kept in the radiotelegraph operating room;
- (di) be provided with a chair capable of being fixed at the radiotelegraph operating position;
- (dj) on new United Kingdom ships, be provided with alternative means of exit and be of sufficient size to enable the equipment installed in the room to be properly maintained.

### **Provision of antennas**

**39.**—(1) Every radiotelegraph ship to which this Part applies shall be provided and fitted with suitable transmitting and receiving antennas and insulators. Where wire antennas are suspended between supports liable to whipping, they shall be protected against breakage.

(2) The performance of the radiotelegraph installation required by this Part shall not be adversely affected by the connection of any other equipment to the antennas.

(3) The main transmitting antenna and a reserve transmitting antenna shall be fitted, provided that the Secretary of State may exempt any ship from the provision of a reserve transmitting antenna if he is satisfied that the fitting of such an antenna is impracticable or unreasonable. Any ship so exempted shall carry—

- (a) if the main transmitting antenna is a supported wire antenna, a spare antenna completely assembled for rapid replacement of the main antenna;

- (b) if the main transmitting antenna is not a supported wire antenna, a spare antenna of similar electrical characteristics, complete with the necessary materials and other means to enable it to be rapidly erected while the ship is at sea.
- (4) Every radiotelegraph ship shall also be provided with sufficient antenna wire, insulators and other means necessary to enable a suitable transmitting antenna to be erected.
- (5) The main transmitting antenna and the reserve transmitting antenna (if any) shall where practicable, be so rigged that damage to the one will not affect the efficiency of the other.
- (6) Means shall be provided for quickly connecting—
- (a) the main transmitting antenna and the reserve transmitting antenna (if any) to the main transmitter and, separately, to the reserve transmitter; and
  - (b) the main and reserve receivers to any antenna with which they may need to be used.
- (7) Suitable antennas shall be provided for, and shall normally be connected to, the radiotelegraph auto alarm and the radiotelephone distress frequency watch receiver or the radiotelephone auto alarm.

#### **Range of radiotelegraph transmitter**

**40.**—(1) The main and reserve transmitter shall, when connected to the main antenna, have a minimum normal range as specified in the Table below, that is to say, they must be capable of transmitting clearly perceptible signals from ship to ship by day and under normal conditions and circumstances over the ranges there specified—

TABLE

Minimum normal range in miles	Main transmitter	Reserve transmitter
All passenger ships, and cargo ships of 1,600 tons and upwards	150	100
Cargo ships below 1,600 tons	100	75

(2) The range of a radiotelegraph transmitter for the purposes of this Part shall normally be determined by calculation of the metre-amperes. Where an antenna arrangement causes difficulty in determining the range of a transmitter by calculation, the range shall be determined by test.

#### **Supply of electrical energy**

**41.**—(1) While a radiotelegraph ship is at sea and at all reasonable times when she is in port there shall be available a supply of electrical energy sufficient to operate the main installation over the normal range required by regulation 40 of these Regulations as well as for the purpose of charging any batteries forming part of the radiotelegraph installation.

(2) The reserve installation shall be provided with a source of energy independent of the propelling power of the ship and of the ship's main electrical system. Means for bringing the reserve source of energy into immediate operation shall be provided and shall be situated in a radiotelegraph operating room or, if this is not possible, close thereto, and be provided with an electric lamp for illumination.

(3) The reserve source of energy—

- (a) shall where possible consist of batteries, provided that such batteries shall not be fitted in the same space as the means for bringing the reserve source of energy into immediate operation;
  - (b) shall under all circumstances be capable of being put into operation rapidly;
  - (c) shall be of such capacity and shall be maintained at all times when at sea in such condition as to be able to supply continuously for at least six hours a total current equal to the sum of—
    - (i) one-half of the reserve transmitter current consumption with the key down (mark);
    - (ii) one-half of the reserve transmitter current consumption with the key up (space);
    - (iii) the current required to operate the reserve receiver; and
    - (iv) the current consumption of the additional circuits connected to the reserve source of energy specified in paragraphs (4) and (5) of this regulation;
  - (d) shall, where the VHF radio installation is capable of being connected to the reserve source of energy, be of sufficient capacity to operate simultaneously the reserve radiotelegraph transmitter and the VHF radio installation unless means are provided to ensure that such simultaneous operation is not possible. For the purposes of this Part, the current consumption of the VHF radio installation shall be a total current equal to the sum of the current consumption of the VHF radiotelephone receiver and one fifth of the current consumption of the VHF radiotelephone transmitter;
  - (e) shall be placed as high in the ship as is practicable and readily accessible to the radio officer.
- (4) The reserve source of energy shall be used to supply the reserve installation and the automatic alarm signal keying device if it is electrically operated and, subject to the provisions of paragraph (5) of this regulation, the reserve source of energy shall not be used other than for the purposes specified below, that is to say, to supply—
- (a) the radiotelegraph auto alarm;
  - (b) the emergency light specified in regulation 38(g) of these Regulations;
  - (c) the direction-finder;
  - (d) the VHF installation;
  - (e) the device for generating the radiotelephone alarm signal by automatic means;
  - (f) any device specified in the Radio Regulations to permit changeover from transmission to reception or from reception to transmission.
- (5) Notwithstanding the provisions of paragraph (4) of this regulation, in cargo ships the reserve source of energy may be used to provide energy for a number of low-power emergency circuits which are wholly confined to the upper part of the ship, such as emergency lighting on the boat deck, on condition that such circuits are adequately fused and can be readily disconnected and that the source of energy is of sufficient capacity to carry the additional load.

### **Radio officers**

- 42.**—(1) Every radiotelegraph ship which is provided with a radiotelegraph auto-alarm shall, upon proceeding to sea, be provided with radio officers as follows—
- (a) two radio officers on each passenger ship carrying or certificated to carry more than 250 passengers and engaged on a voyage exceeding 16 hours' duration;
  - (b) one radio officer on all other radiotelegraph ships.
- (2) Every United Kingdom radiotelegraph ship which is not provided with a radiotelegraph auto-alarm shall, upon proceeding to sea, be provided with radio officers as follows—

- (a) three radio officers if at sea for more than 48 hours between consecutive ports;
  - (b) two radio officers if at sea for more than 12 hours but not more than 48 hours between consecutive ports;
  - (c) one radio officer if at sea for not more than 12 hours between consecutive ports.
- (3) The chief radio officer on board a United Kingdom radio telegraphship shall be a person who has had experience at sea as a radio officer for a total of not less than—
- (a) two years in the case of a United Kingdom passenger ship in respect of which there is in force a certificate to the effect that it is fit to carry more than 250 passengers;
  - (b) one year in the case of any other passenger ship; and
  - (c) six months in the case of a cargo ship.
- (4) For the purpose of this Part no person shall be qualified to be a radio officer on board a United Kingdom ship unless he is the holder of—
- (a) a valid certificate of competency issued by the Secretary of State in the form of—
    - (i) a Maritime Radiocommunication General Certificate, or
    - (ii) a First or Second Class Certificate of Competency in Radiotelegraphy; or
    - (iii) a valid Certificate of Competency granted by an authority empowered in that behalf by the laws of a Commonwealth country or a member State and recognised by the Secretary of State as the equivalent of a certificate specified in subparagraph (i) or (ii) above:

Provided that in the case of the chief radio officer on board a United Kingdom passenger ship the Certificate required undersub-paragraph (a) of this paragraph shall be either a Maritime Radiocommunication General Certificate, or a First Class Certificate of Competency in Radiotelegraphy or certificate equivalent thereto granted in accordance with subparagraph (a)(iii); and

- (b) an authority granted by the Secretary of State under section 7 of the Wireless Telegraphy Act 1949(21) to operate a wireless telegraphy station established on a United Kingdom ship under a licence issued by the Secretary of State.

Provided that the holder of a certificate specified in subparagraph (a) issued on or after 28th April 1984 shall not be so qualified unless she is in addition the holder of a valid certificate issued by the Secretary of State or a person authorised by him stating that the holder has satisfied the additional knowledge and training requirements set out in Schedule 7 to these Regulations or a document recognised by the Secretary of State as the equivalent of such a certificate and issued by an authority empowered in that behalf by the laws of some part of the Commonwealth or a member State.

- (5) For the purposes of paragraph (4) above no certificate of competency shall be deemed to be valid on any date if granted more than 2 years before that date and either—
- (a) the holder's period, or aggregate of periods, of experience on that date is less than three months, or
  - (b) the holder last had experience at a time earlier than 2 years before that date, unless he can satisfy the Secretary of State by re-examination or otherwise that he still possesses all the qualifications described in his certificate and that his experience with modern equipment is adequate.

For the purpose of this paragraph the expression "experience" means experience as the operator of radiotelegraph apparatus—

- (i) at sea, as a radio officer or a radiotelegraph operator, or

---

(21) 1949 c. 54.



(ii) on land, as an operator at a radiotelegraph station maintained on land by the Post Office or British Telecommunications for communication with ships.

(6) For the purposes of this Part no person shall be deemed to be a radio officer on board a ship registered outside the United Kingdom unless he holds a valid Certificate of Competency in radiotelegraphy granted by an authority empowered or recognised in that behalf by the laws of the country in which the ship is registered and issued in accordance with the Radio Regulations.

### **Radio watch**

**43.**—(1) Each ship which in accordance with this Part is fitted with a radiotelegraph installation shall, while at sea, maintain continuous watch on—

- (a) the radiotelephone distress frequency at the place on board from which the ship is normally navigated by use of a radiotelephone distress frequency watch receiver; and
- (b) the radiotelegraph distress frequency by means of a radio officer using headphones or a loudspeaker:

Provided that if the ship is provided with a radiotelegraph auto alarm and the means to cause an audible warning to be given in the radiotelegraph operating room, in the radio officer's sleeping accommodation and on the bridge when the radiotelegraph auto alarm is activated by a radiotelegraph alarm signal, such watch may be kept by the radiotelegraph auto alarm—

- (i) at all times except during the working hours specified in the Radio Regulations to be maintained by the appropriate category of ship station; and
- (ii) on all occasions during the working hours specified in the Radio Regulations to be maintained by the appropriate category of ship station when the radio officer is performing other duties in accordance with the provisions of paragraph (3) of this regulation and it is impracticable to listen by headphones or loudspeaker; but the listening watch shall always be maintained during working hours by a radio officer using headphones or loudspeaker during the silence periods on the frequency of 500 kHz.

(2) Each radiotelegraph ship shall while at sea maintain the working hours specified in the Radio Regulations for ship stations—

- (a) of the first category in respect of ships not provided with a radiotelegraph auto alarm;
- (b) of the second category in respect of passenger ships provided with a radiotelegraph auto alarm and carrying or certificated to carry more than 250 passengers and engaged on a voyage exceeding 16 hours' duration between consecutive ports; or
- (c) of the third category in respect of all other radiotelegraph ships provided with a radiotelegraph auto alarm.

(a) (3) (a) During the period when a radio officer is required by this regulation to listen on the radiotelegraph distress frequency, the radio officer may discontinue such listening during the time when he is handling traffic on other frequencies or performing other essential radio duties, but only if it is impracticable to listen by split headphones or loudspeaker. The term “essential radio duties” in this paragraph includes urgent repairs of—

- (i) equipment for radiocommunication used for safety;
- (ii) radio navigational equipment by order of the Master.

(b) In addition to the provisions of sub-paragraph (a) of the paragraph, on ships other than multi-radio officer passenger ships, the radio officer may, in exceptional cases, that is to say, when it is impracticable to listen by split headphones or loudspeaker, discontinue listening by order of the Master in order to carry out maintenance required to prevent imminent malfunction of—

equipment for radiocommunication used for safety;  
radio navigational equipment;  
other electronic navigational equipment including its repair:

Provided that—

- (i) the radio officer is appropriately qualified to perform these duties; and
- (ii) the ship is fitted with a receiving selector which complies with the requirements of the Radio Regulations.

(4) In all ships fitted with a radiotelephone auto alarm, that alarm shall, while the ship is at sea, be in operation whenever there is no listening watch being kept on the radiotelegraph distress frequency by a radio officer using headphones or a loudspeaker.

#### **Radio log — radiotelegraph ship**

**44.**—(1) The radio log required by the Radio Regulations for a ship which is fitted with a radiotelegraph station in accordance with this Part shall be kept in the radiotelegraph operating room during the voyage.

(2) Every radio officer on board such a ship shall, when on duty, enter in the radio log the information specified in Schedule 6 Part A in the form specified in Schedule 6 Part B to these Regulations.

(3) The radio officer, or if there is more than one, the chief radio officer, shall inspect and sign each day the entries for that day in the radio log confirming that the requirements of this Part have been met.

(4) The Master of the ship shall inspect and sign each day's entries in the radio log.

(5) The radio log shall be available for inspection by officers authorised by the Secretary of State to make such an inspection.

(6) Regulations made under section 68 of the Merchant Shipping Act 1970<sup>(22)</sup> (requiring production of the official log book to the Registrar General of Shipping and Seamen, a superintendent, a proper officer or an officer of customs and excise and delivery of the official log book to the appropriate superintendent or proper officer) shall apply to the radio log as they apply to the official log book.

#### **Radio equipment for lifeboats and survival craft**

**45.**—(1) The motor life-boat fixed radiotelegraph installation, the portable radio equipment for survival craft, the two-way radiotelephone apparatus for survival craft and the survival craft emergency position-indicating radio beacons required to be provided in pursuance of regulations as to life-saving appliances made under section 21 of the Merchant Shipping Act 1979<sup>(23)</sup> shall comply with the appropriate performance specifications and shall be tested in accordance with regulation 21(1), 22(3)(b) and 22(3)(c) of these Regulations.

(2) The battery included in motor life-boat fixed radio equipment shall not be used for any purpose other than the operation of such equipment and the searchlight provided in compliance with the Regulations as to life-saving appliances.

---

<sup>(22)</sup> 1970 c. 36.

<sup>(23)</sup> 1979 c. 39.

## PART IV

### ENFORCEMENT

#### **Power to detain**

46. In any case where a ship to which these Regulations apply, does not comply with the requirements of these Regulations, the ship shall be liable to be detained and section 692 of the Merchant Shipping Act 1894(24) (which relates to the detention of a ship) shall have effect in relation to the ship, subject to the modification that for the words “this Act” wherever they appear, there shall be substituted “the Merchant Shipping (Radio Installations) Regulations 1992”: provided that a ship shall not be detained in a port where repair facilities are not readily available by reason of malfunction of the equipment for providing general radiocommunications, provided the ship is capable of performing all distress and safety functions.

#### **Prohibition on proceeding to sea without appropriate certificates**

47.—(1) No United Kingdom ship, being a cargo ship to which Part II of these Regulations applies, shall proceed to sea or otherwise enter or be at sea in any sea area unless there is in force in respect of the ship an appropriate radio certificate issued under section 9 of the 1949 Act, showing that the ship complies with (or as the case may be, is exempt from) such of the requirements of the Safety Convention to which Part II of these Regulations gives effect as are applicable to a ship which goes to sea in that sea area or in that sea area and others.

(2) No United Kingdom ship, being a cargo ship to which Part III of these Regulations applies, shall proceed to sea unless there is in force in respect of the ship an appropriate radio certificate issued under section 9 of the 1949 Act, showing that the ship complies with (or as the case may be, is exempt from) such of the requirements of the Safety Convention to which Part III of these Regulations gives effect as are applicable to the ship, having regard to the voyage on which it is about to proceed.

(3) The Master of every United Kingdom ship, being a cargo ship to which these Regulations apply, shall produce to the officer of customs from whom a clearance is demanded for an international voyage an appropriate radio certificate; and a clearance shall not be granted, until the certificate is so produced.

(4) In this regulation “appropriate radio certificate” means a radio certificate issued under subsection (1) of section 9 of the 1949 Act, an exemption certificate and qualified radio certificate issued under subsection (2) of that section, or an exemption certificate issued under subsection (3) of that section.

#### **Penalties**

48.—(1) If a radiotelephone operator or radio officer or a person nominated under regulation 15(7) of these Regulations contravenes any provision of these Regulations imposing a duty on him, he shall be guilty of an offence and liable on summary conviction to a fine not exceeding level 2 on the standard scale; and if any person, being the owner or Master of the ship, permits such a contravention, he shall be guilty of an offence and liable on summary conviction to a fine not exceeding the statutory maximum or, on conviction on indictment, to imprisonment for a term not exceeding 2 years and a fine.

(2) If these Regulations are contravened in any other respect in relation to any ship, the owner and Master of the ship shall each be guilty of an offence and liable on summary conviction to a fine

---

(24) 1894 c. 60.

---

**Status:** This is the original version (as it was originally made). This item of legislation is currently only available in its original format.

---

not exceeding the statutory maximum or, on conviction on indictment, to imprisonment for a term not exceeding 2 years and a fine.

**Defence**

**49.** It shall be a defence for a person charged under these Regulations to show that he took all reasonable precautions to avoid the commission of the offence.

**Repeal**

**50.** In subparagraph (1)(b) of section 12 of the 1949 Act the word “both”, subparagraph (ii) and the word “and” immediately preceding that subparagraph are hereby repealed.

Signed by authority of the Secretary of State for Transport

6th January 1992

*Brabazon of Tara*  
Minister of State,  
Department of Transport

## SCHEDULE 1

Regulation 8(f)

### SATELLITE EPIRBs

Every satellite EPIRB provided pursuant to these Regulations shall be—

(1) capable of transmitting a distress alert either through the polar orbiting satellite service operating in the 406 MHz band which may be the float-free satellite EPIRB carried in accordance with the Merchant Shipping (Life-Saving Appliances) (Amendment) Regulations 1991(25) or, alternatively, in sea areas A1, A2 and A3 only, through the INMARSAT geostationary satellite service operating in the 1.6 GHz band;

- (2) installed in an easily accessible position;
- (3) ready to be manually released and capable of being carried by one person into a survival craft;
- (4) capable of floating free if the ship sinks and of being automatically activated when afloat; and
- (5) capable of being activated manually.

## SCHEDULE 2

Regulation 15(7)

### EQUIPMENT TESTS AND RESERVE POWER CHECKS

#### 1. Daily

- (a) The proper functioning of the DSC facilities shall be tested at least once each day, without radiation of signals, by use of the means provided on the equipment.
- (b) Batteries providing a source of energy for any part of the radio installations shall be tested daily and, where necessary, brought up to the fully charged condition.

#### 2. Weekly

- (a) The proper operation of the DSC facilities shall be tested at least once a week by means of a test call, when within communication range of a coast station fitted with DSC equipment. Where a ship has been out of communication range of a coast station fitted with DSC equipment for a period of longer than one week, a test call shall be made on the first opportunity that the ship is within communication range of such a coast station.
- (b) Where the reserve source of energy is not a battery (for example, a motor generator), the reserve source of energy shall be tested weekly.

#### 3. Monthly

- (a) Each EPIRB and satellite EPIRB shall be tested at least once a month to determine its capability to operate properly using the means provided on the device and without using the satellite system.
- (b) Each search and rescue radar transponder shall be checked at least once a month for security and signs of damage.
- (c) Each survival craft two-way VHF equipment shall be tested at least once a month on a frequency other than 156.8 MHz (VHF Channel 16).
- (d) A check shall be made at least once a month on the security and condition of all batteries providing a source of energy for any part of a radio installation. The battery connections and compartment shall also be checked.

*Status: This is the original version (as it was originally made). This item of legislation is currently only available in its original format.*

### SCHEDULE 3

Regulation 17(1)

#### RADIO LOG

The following shall be recorded in the Radio Log as they occur, together with the time of their occurrence—

- (a) a summary of communications relating to distress, urgency and safety traffic;
- (b) a record of important incidents connected with the radio service;
- (c) where appropriate, the position of the ship at least once a day.

### SCHEDULE 4

Regulation 21(1)

#### EQUIPMENT TESTS AND BATTERY AND RESERVE POWER CHECKS

##### 1. Daily

- (a) Every radio officer who finds any radiotelegraph auto-alarm equipment in operation when going on duty shall test the efficiency of the audible alarm system in the radiotelegraph operating room.
- (b) Every radio officer who leaves any radiotelegraph auto-alarm equipment in operation when going off duty shall test the efficiency of the audible alarm system in the radiotelegraph operating room.
- (c) The proper functioning of the radiotelegraph auto-alarm installation shall be tested at least once each day by listening to signals and comparing them with similar signals received on the radiotelegraph distress frequency on another receiver, and by operating the complete audible alarm system.
- (d) The reserve radiotelegraph transmitter, if not used for communications, shall be tested at least once each day using a suitable artificial antenna.
- (e) The radiotelephone distress frequency watch receiver shall be tested at least once each day using the means provided in accordance with regulation 30(7)(b), and by listening to signals and, where practicable, comparing them with similar signals received on the radiotelephone distress frequency on another receiver.
- (f) Batteries providing a source of energy for any part of the radio installation shall be tested daily and, where necessary, brought up to the fully charged condition.
- (g) Where the reserve source of energy is not a battery (for example, a motor generator), the reserve source of energy shall be tested daily.

##### 2. Weekly

- (a) The reserve radiotelegraph transmitter shall be tested at least once every seven days using the main antenna and, if provided, the reserve antenna.
- (b) The radiotelegraph alarm signal keying device shall be tested at least once every seven days using a transmitter set to low power, tuned to a frequency other than the radiotelegraph distress frequency and connected to a suitable artificial antenna.
- (c) The radiotelephone alarm signal generating device shall be tested at least once every seven days using the means provided in accordance with regulation 30(7)(a).
- (d) Motor life-boat fixed radiotelegraph installations and portable radio equipment for survival craft shall be tested at least once every seven days using suitable artificial antennas.

- (e) Batteries forming part of a motor life-boat fixed radiotelegraph installation and survival craft portable radio equipment shall be tested weekly and, where appropriate, brought up to the fully charged condition. Where non-rechargeable batteries are provided in survival craft portable radio equipment as a source of energy, the expiry date of the batteries shall be checked and the batteries replaced when necessary.
- (f) Batteries forming part of a two-way radiotelephone apparatus for survival craft shall be tested weekly and, where appropriate, brought up to the fully charged condition. Where non-rechargeable batteries are provided as a source of energy the batteries shall be checked and replaced if necessary.

### **3. Monthly**

- (a) Motor life-boat fixed radiotelegraph installations and portable radio equipment for survival craft shall be tested at least once a month using an antenna provided with the installations or equipment. In the case of motor life-boat fixed radiotelegraph installations, the test shall, where practicable, be carried out with the life-boat floating in the sea.
- (b) Batteries providing a source of energy for any part of the radio installation shall be tested at least once a month by means of a hydrometer where practicable, or where a hydrometer cannot be used, by a suitable load test. A check shall also be made of the security of the battery and its connections and the condition of the battery and its compartment.

### **4. Annually**

Survival craft emergency position-indicating radio beacons shall be inspected, tested and, if necessary, have their source of energy replaced at least once every twelve months; provided that, the interval may be extended to a maximum of seventeen months to permit the inspection to take place concurrently with a radio survey.

## SCHEDULE 5

Regulation 36(2)

### RADIO LOG — RADIOTELEPHONE SHIP

#### PART A

The radio log book, the form of which is at Part B below, is compiled in two sections which shall be completed in accordance with the following—

Section A — Particulars of the radiotelephone operators on board.

Section B — Diary of the radio service.

- (a) the name of the radiotelephone operator and the times at which the watch commences and ends;
- (b) the times at which radio watch is for any reason discontinued, together with the reason and the time at which radio watch is resumed;
- (c) a summary of communications exchanged between the ship station and coast stations or other ship stations, including the serial numbers and the dates of any messages passed;
- (d) a summary of all communications relating to distress, urgency and safety traffic;
- (e) a record of all incidents connected with the radio service, including the radiotelephone installation and the VHF radiotelephone installations, which occur during the watch and appear to be of importance to safety of life at sea;
- (f) details of the tests and checks required by regulation 21(1);

**Status:** This is the original version (as it was originally made). This item of legislation is currently only available in its original format.

(g) if the ship's rules permit, the position of the ship at least once a day.

## PART B

### FORM OF RADIOTELEPHONE LOG-BOOK RADIOTELEPHONE LOG



**Status:** This is the original version (as it was originally made). This item of legislation is currently only available in its original format.

<i>Name of Ship and Official Number</i>	<i>Maritime Mobile Service Identity and International Call Sign</i>	<i>Port of Registry</i>	<i>Gross Tonnage</i>

Traffic Accounting Authority .....

Period covered by Log-From ..... to .....

Delivered to the Superintendent of the Mercantile Marine Office at the Port of .....

..... on the ..... day of ..... 19.....

Countersigned ..... Master

..... Superintendent ..... Address

**SECTION A — PARTICULARS OF RADIOTELEPHONE OPERATORS**

<i>Name</i>	<i>Home Address</i>	<i>Certificate Number and Class</i>

S.S. ....

M.V. ....

**SECTION B — DIARY OF THE RADIOTELEPHONE SERVICE**

<i>Date and Time (G.M.T.)</i>	<i>Station From</i>	<i>Station to</i>	<i>Frequency used</i>	<i>Record of Working</i>

*Status: This is the original version (as it was originally made). This item of legislation is currently only available in its original format.*

SCHEDULE 6

Regulation 44(2)

RADIO LOG — RADIOTELEGRAPH SHIP

PART A

The radio log book, the form of which is at Part B below, is compiled in two parts which shall be completed in accordance with the following—

PART I

- (a) Section A Particulars of the radio officers on board;
- (b) Section B Particulars of all batteries on board used as a source of energy for any part of the radio installation;
- (c) Section C A daily record of the off-load and on-load voltage condition of each battery listed in Section B and details of charging and maintenance, including replacement, of each such battery;
- (d) Section D A monthly record of a full examination of each battery listed in Section B, including where appropriate, the condition of each cell.

PART II

Every radio officer shall, when keeping radio watch, enter in the radio log—

- (a) The name of the radio officer and the times at which the watch commences and ends;
- (b) the times at which radio watch is for any reason discontinued, together with the reason and the time at which radio watch is resumed;
- (c) details of the watch kept on the international radiotelegraph distress frequency during silence periods;
- (d) all communications relating to distress traffic in full;
- (e) details of urgency and safety communications;
- (df) a summary of communications exchanged between the ship station and coast stations or other ship stations, including the serial numbers and the dates of any messages passed;
- (g) a record of all incidents connected with the radio service, including the radiotelegraph installation and the VHF radiotelephone installation which may appear to be of importance to safety of life at sea;
- (h) details of the tests and checks required by regulation 21(1);
- (di) at least once a day when the station is open, a record of the time shown by the clock in each radiotelegraph room in comparison with Greenwich Mean Time and any correction made in respect of that clock. In addition the local time in use by the ship shall be recorded daily;
- (dj) if the ship's rules permit, the position of the ship at least once a day and preferably at midday.

PART B

FORM OF RADIOTELEGRAPH LOG-BOOK RADIOTELEGRAPH LOG

**Status:** This is the original version (as it was originally made). This item of legislation is currently only available in its original format.

**PART I**

<i>Name of Ship and Official Number</i>	<i>Maritime Mobile Service Identity and International Call Sign</i>	<i>Port of Registry</i>	<i>Gross Tonnage</i>

Traffic Accounting Authority .....

<i>Port at which and date when voyage commenced</i>	<i>Nature of the voyage or employment</i>	<i>Port at which and date when voyage terminated</i>
Date ..... Port .....		Date ..... Port .....

Delivered to the Superintendent of the Mercantile Marine Office at the Port of ..... on the ..... day of ..... 19..... together with Radiotelgraph Log Part II, serial numbers ..... to .....

Countersigned ..... Master  
 ..... Superintendent ..... Address

**SECTION A — PARTICULARS OF RADIO STAFF**

<i>Name</i>	<i>Home Address</i>	<i>Certificate Number and Class</i>

*Status: This is the original version (as it was originally made). This item of legislation is currently only available in its original format.*

**SECTION B — PARTICULARS OF BATTERIES ON BOARD**

<i>Battery Number</i>	<i>Number of Cells</i>	<i>Type</i>	<i>Date Supplied</i>	<i>Voltage and Ampere-hour Capacity</i>	<i>Purpose for which used</i>

**SECTION C — DAILY EXAMINATION OF BATTERIES**

<i>Date</i>	<i>Battery Number</i>	<i>Voltage off Load</i>	<i>Voltage on Load</i>	<i>Remarks</i>

**SECTION D — MONTHLY REPORT OF BATTERIES**

<i>Date</i>	<i>Battery Number and Cell Number</i>	<i>Results of load test or Specific Gravity as measured</i>		<i>Re- marks</i>	<i>Date</i>	<i>Battery Number and Cell Number</i>	<i>Results of load test or Specific Gravity as measured</i>		<i>Re- marks</i>
		<i>Before charge</i>	<i>After charge</i>				<i>Before charge</i>	<i>After charge</i>	

**Status:** This is the original version (as it was originally made). This item of legislation is currently only available in its original format.

## RADIOTELEGRAPH LOG

### PART II

<i>Name of Ship and Official Number</i>	<i>Maritime Mobile Service Identity and International Call Sign</i>	<i>Port of Registry</i>	<i>Gross Tonnage</i>

Serial No. .... from ..... to .....

Traffic Accounting Authority .....

S.S. ....

M.V. ....

### DIARY OF THE RADIOTELEGRAPH SERVICE

<i>Date and Time (G. M. T.)</i>	<i>Station From</i>	<i>Station To</i>	<i>Full Details of Calls Signals and Distress Working</i>	<i>Frequency</i>

### SCHEDULE 7

Regulations 34(3) and 42(4)

#### ADDITIONAL KNOWLEDGE AND TRAINING REQUIREMENTS FOR RADIOTELEPHONE OPERATORS AND RADIO OFFICERS

- (a) The provision of radio services in emergencies including—
  - (i) abandon ship;
  - (ii) fire aboard ship;
  - (iii) partial or full breakdown of the radio station.

*Status: This is the original version (as it was originally made). This item of legislation is currently only available in its original format.*

- (b) The operation of lifeboats, liferafts, buoyant apparatus and their equipment, with special reference to portable and fixed lifeboat radio apparatus and emergency position-indicating radio beacons.
  - (c) Survival at sea.
  - (d) First aid.
  - (e) Fire prevention and fire-fighting with particular reference to the radio installation.
  - (df) Preventive measures for the safety of ship and personnel in connection with hazards related to radio equipment including electrical, radiation, chemical and mechanical hazards.
  - (g) The use of the Organisation's Merchant Ship Search and Rescue Manual (MERSAR) published in January 1981 (including any document amending the Manual which is considered by the Secretary of State to be relevant from time to time and is specified in a Merchant Shipping Notice) with particular reference to radiocommunications.
  - (h) Ship position-reporting systems and procedures.
  - (i) The use of the International Code of Signals and the Standard Marine Navigational Vocabulary.
  - (j) Radio medical systems and procedures.
- 

## **EXPLANATORY NOTE**

*(This note is not part of the Regulations)*

1. These Regulations give effect to amendments to Chapter IV of the International Convention for the Safety of Life at Sea 1974 which were adopted by states party to that Convention at a Conference on the Global Maritime Distress and Safety Systems (GMDSS) on 11th November 1988. GMDSS is the International Maritime Organisation's worldwide network of automated emergency communications for vessels at sea.

2. The amendments come into force internationally on 1st February 1992. They apply to all ships constructed after 1st February 1995 (new ships) and from 1st February 1999 to ships constructed before 1st February 1995, with some phasing in (see paragraph 5 below) during the interim period.

3. Part I of these Regulations contains definitions, application provisions, and provisions for exemptions, equivalents and performance standards.

4. Part II contains the GMDSS provisions. It requires new ships to carry new types of radio equipment including equipment for satellite communication, emergency radio beacons (EPIRBs) and other items. The carriage requirements depend on the ship's area of operations. For this purpose the world is divided up under the GMDSS into four sea areas: area A1 which is within range of VHF coastal radio; area A2 which is within range of MF coastal radio; area A3 which is within coverage of geostationary satellites; and area A4 which covers the remainder of the world. The requirements for maintenance of the equipment carried permit some flexibility: maintenance may be achieved by duplication of equipment, by shore-based maintenance or by an at-sea maintenance capability.

5. Part III of the Regulations applies to existing ships and re-enacts the provisions of the Merchant Shipping (Radio Installations) Regulations 1980 as amended. Those re-enacted provisions will continue to apply to existing ships (ie those that were operating under the 1980 regulations) until 31st January 1999, after which date all ships will be required to comply fully with Part II. However,

**Status:** *This is the original version (as it was originally made). This item of legislation is currently only available in its original format.*

existing ships may at any time before that date, if their owners so choose, comply with Part II instead of Part III. Those that continue to comply with Part III are required, as part of the phasing in process referred to above, to fit certain items of equipment required under Part II, namely from 1st August 1993 with NAVTEX and satellite EPIRBs.

6. The 1980 regulations are revoked by these Regulations.