Government Circular 273/91

THESE REGULATIONS NOW ONLY APPLY TO CARGO SHIPS UNDER 500GT CONSTRUCTED BEFORE 1 JULY 1986

MERCHANT SHIPPING ACT 1985

MERCHANT SHIPPING (LIFE-SAVING APPLIANCES) (SHIPS BUILT BEFORE 1st. JULY 1986) REGULATIONS 1991

Coming into operation : 1st September, 1991

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SD 37/97 Merchant Shipping (Safety Provisions) (Amendment and Revocation) Regulations 1997
SD396/03 Merchant Shipping (Pleasure Vessel) Regulations 2003
SD2014/0238 Merchant Shipping (Manning and STCW) Regulations 2014
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PRICE : £7.50

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MERCHANT SHIPPING ACT 1985

MERCHANT SHIPPING (LIFE-SAVING APPLIANCES) (SHIPS BUILT BEFORE 1st. JULY 1986) REGULATIONS 1991

Coming into operation: 1st September, 1991

In exercise of the powers conferred on the Department of Highways, Ports and Properties [(a)], by sections 1 and 2 of the Merchant Shipping Act 1985 [(b)] and of all other powers enabling it in that behalf, after consultation with the Secretary of State and those persons referred to in section 2(2) of that Act, the following Regulations are hereby made-

PART 1 - PRELIMINARY

Citation, commencement, interpretation, application and revocation

1. (1) These Regulations may be cited as the Merchant Shipping (Life-Saving Appliances) (Ships Built Before 1st. July 1986) Regulations 1991 and shall come into operation on 1st. September 1991.

(2) In these Regulations -

"buoyant apparatus" means flotation equipment (other than lifebuoys and lifejackets) designed to support persons who are in the water;

"certificated person" ***definition omitted by SD2014/0238***

"certified" means certified by a certificate issued under section 6 of the Merchant Shipping (Passenger Ships Survey) Act 1979 (An Act of Tynwald) [(d)];

"Class C boat" means a boat complying with the requirements of Regulation 28;

"date of expiry" in relation to any product referred to in Schedules 12, 14, 15, 20 and 21 means a date within three years from the date of manufacture of that product;

"Department" means the ***Department of Trade and Industry***;

"EPIRB" means an emergency position-indicating radio beacon, the emissions of which are intended to facilitate search and rescue operations;

(a) Functions transferred to the Department of Trade and Industry by the Transfer of Functions (Marine Administration) Order 1997 (SD 51/97)
(b) 1985 c.3
(c) S.I. 1984/97 as applied to the Island by GC 38/85. Superseded by SD 723/99
(d) 1979 C.11 superseded by SD 352/99

"fishing vessel" *means a vessel used for catching fish, whales, seals, walrus or other living resources of the sea;*

"free-fall launching" means that method of launching a survival craft whereby the craft with its complement of persons and equipment on board is released and allowed to fall into the sea without any restraining apparatus;

"foreign ship" *means any ship that is not a Manx ship**;***

"GMDSS" means the Global Maritime Distress and Safety System;

"high-speed craft" has the meaning given by regulation 1.3 of SOLAS Chapter X;

"immersion suit" means a protective suit which reduces the body heat-loss of a person wearing it in cold water and complies with the requirements of Part I of Schedule 11 to the Merchant Shipping (Life-Saving Appliances) (Ships built on or after 1st. July 1986) Regulations 1991[(e)];

"I.M.O. Resolution" means a resolution adopted by the International Maritime Organisation or any I.M.O. resolution amending or replacing it which is considered by the Department to be relevant.

"inflatable boat" means a boat complying with the requirements of Regulation 29;

"instructions for on-board maintenance" means the instructions complying with the requirements of Part II of Schedule 22;

"launching appliance" means an appliance complying with the provisions of Regulation 44(2);

"length" in relation to a registered ship means registered length, and in relation to an unregistered ship means the length from the fore part of the stem to the aft side of the head of the stern post or, if no stern post is fitted to take the rudder, to the fore side of the rudder stock at the point where the rudder passes out of the hull;

"lifeboat" means a boat complying with the requirements of Regulation 24

"lifeboat radiotelegraph installation" means a fixed lifeboat radio installation complying with the relevant requirements of Part V of the Merchant Shipping (Radio Installation) Regulations 1986 [(f)];

"lifejacket" means a lifejacket complying with the requirements of Part I or Part II of Schedule 13 of these regulations or Part I or Part II of Schedule 10 to the Merchant Shipping (Life-Saving Appliances) (Ships Built on or after 1st. July 1986) Regulations 1991;

(e) GC 274/91. Superseded by SD 431/99
(f) GC 235/86. Superseded by SD 50/99

"lifejacket light" means a light complying with the requirements of Part III of Schedule 10 to the Merchant Shipping (Life-Saving Appliances) (Ships Built on or after 1st. July 1986) Regulations 1991;

"liferaft" means a liferaft complying with the provisions of Regulation 30;

"limited European Area" means the area defined in Schedule 2 to the Merchant Shipping (Certification of Deck and Marine Engineer Officers and Licensing of Marine Engine Operators) (Isle of Man) Regulations 1987 [(g)];

"Manx ship" *has the meaning given by section 1 of the Merchant Shipping Registration Act 1991 and includes a ship registered under Part IV of that Act (the Demise Charter Register);*

"Manx Shipping Notice" means a notice described as such issued by the Department;

"marine escape system" means a system complying with the requirements of Schedule 5 to the Merchant Shipping (Life-saving Appliances) (Ships Built on or after 1st. July 1986) Regulations 1991;

"mechanically propelled lifeboat" means a lifeboat complying with the requirements of Regulation 27;

"mile" means a nautical mile of 1852 metres;

"MODU" means a ship which complies with the MODU Code;

"MODU Code" means —

(a) for a ship constructed on or after 1 January 2012, the Code for the Construction and Equipment of Mobile Offshore Drilling Units 2009 (2009 MODU Code) and includes all amendments made to that Code up to and including those adopted by IMO resolution MSC.359(92) on 21 June 2013;

(b) for a ship constructed on or after 1 May 1991 up to and including 31 December 2001, the Code for the Construction and Equipment of Mobile Offshore Drilling Units 1989 (1989 MODU Code) and includes all amendments made to that Code up to and including those adopted by IMO resolution MSC.358(92) on 21 June 2013; and

(c) for a ship constructed on or before 30 April 1991, the Code for the Construction and Equipment of Mobile Offshore Drilling Units 1979 (1979 MODU Code) and includes all amendments made to that Code up to and including those adopted by IMO resolution MSC.357(92) on 21 June 2013;

"motor lifeboat" means a lifeboat complying with the requirements of Regulation 26;

(g) GC 301/87. Superseded by SD 723/97

"passenger ship" means a ship carrying more than 12 passengers;

"passenger ship's certificate" has the meaning assigned to it by section 6 of the Merchant Shipping (Passenger Ships' Survey) Act 1979;

"person" means a person over the age of one year;

Definition of Pleasure Vessel as amended by SD 396/03 MS (Pleasure Vessel) Regulations 2003

"Pleasure Vessel" means any vessel which at the time it is being used:

(a) is wholly owned by an individual or individuals, and is used only for the sport or pleasure of the owner or the immediate family or friends of the owner; or

(b) is owned by a body corporate, and is carrying only such persons as are the employees or officers of the body corporate, or their immediate family or friends; and

(c) is on a voyage or excursion which is one for which the owner does not receive money or money's worth for or in connection with the operation of the vessel or the carrying of any person other than as a contribution to the direct expenses of the operation of the vessel incurred during the voyage or excursion, and no other payments are made by, on behalf of, or for the benefit of users of the vessel, other than by the owner; or

(d) is owned by a body corporate but pursuant to a long term lease agreement, is used only for the sport or pleasure of the lessee, and the immediate friends or family of the lessee, if an individual, or the employees or officers and their immediate friends and family, if a corporate lessee.

Such lease agreement must specify that:

(i) the vessel may only be used for private purposes and must not be used for commercial purposes;

(ii) the vessel must not be sub-leased or chartered, and

(iii) no other payments are made by, on behalf of, or for the benefit of users of the vessel, other than by the lessee.

(e) is wholly owned by or on behalf of a members' club formed for the purpose of sport or pleasure, and at the time it is being used, is used only for the sport or pleasure of members of that club or their immediate family, and any charges levied in respect of that use are paid into club funds and applied for the general use of the club, and no other payments are made by, on behalf of, or for the benefit of users of the vessel, other than by the club.

"portable radio equipment" means a portable radio installation, for use in survival craft, complying with the relevant requirements of Part V of the Merchant Shipping (Radio Installation) Regulations 1986;

"radar transponder" means a radar transponder for use in survival craft, the emissions of which are intended to facilitate location of a survival craft in search and rescue operations, and complying with the performance standards adopted by I.M.O. Resolution A.604(15).

"retro-reflective material" means a material which reflects in the opposite direction a beam of light directed on it and complying with the Technical Specification for Retro-reflective Material for use on life-saving appliances adopted by I.M.O. Resolution A.658(16);

"sailing ship" includes a ship provided with sufficient sail area for navigation under sails alone whether or not fitted with mechanical means of propulsion;

"satellite EPIRB" means an EPIRB, being an earth station in the mobile-satellite service, capable of being carried by one person and complying with the performance standards adopted by I.M.O. Resolution A.611(15).

"ship constructed" means a ship the keel of which is laid or which is at a similar stage of construction;

"SOLAS Convention" means the International Convention for the Safety of Life at Sea 1974, as amended by the 1988 Protocol;

"SOLAS Chapter X" means Chapter X of the SOLAS Convention including all amendments made to that Chapter up to and including those adopted by IMO Resolution MSC.352(92) on 21 June 2013 which came in to force on 1 January 2015;

"survival craft" means a craft capable of sustaining the lives of persons in distress from the time of abandoning the ship;

"survival craft EPIRB" means an EPIRB, being a station in the mobile service, for carriage in survival craft;

"tanker" means a cargo ship constructed or adapted for the carriage in bulk of liquid cargoes of a inflammable nature;

"territorial waters of the Island" ***means —***

(a) the territorial sea adjacent to the Island; and

(b) any waters within the area that extend landward from the baselines from which the breadth of the territorial sea is measured as far as the mean high water mark of ordinary spring tides.

"thermal protective aid" means a bag or suit complying with the requirements of Part II of Schedule 11 to the Merchant Shipping (Life-Saving Appliances) (Ships built on or after 1st. July 1986) Regulations 1991; made of waterproof material with low thermal conductivity;

"tons"*or* ***"gt" in relation to any ship means the gross tonnage indicated in the ship's International Tonnage Certificate;***

"training manual" means a manual complying with the requirements of Part I of Schedule 22:

"two-way radiotelephone set" means a portable two-way VHF radiotelephone apparatus or a fixed VHF installation in survival craft for communication between survival craft, between survival craft and ship, and between ship and rescue boat;

"waterproofed" means protected as far as practicable from the ingress of water.

(3) These Regulations apply to a ship constructed before 1 July 1986 of Class VII, VIIT, VIII, VIIIT, VIIIA, VIIIAT or IX which is a —

(a) Manx cargo ship of less than 500gt wherever it may be; and

(b) foreign cargo ship of less than 500gt whilst it is within the territorial waters of the Island.

(4) To avoid doubt, these Regulations do not apply to a —

(d) passenger ship;

(e) high-speed craft;

(f) MODU;

(g) pleasure vessel;

(h) fishing vessel;

(i) ship of war or troopship;

(j) ship not propelled by mechanical means; and

(k) wooden ship of primitive build.

(5) omitted SD2017/0185

(6) omitted SD2017/0185

(7) The public documents mentioned in Schedule 23 are revoked to the extent specified in the third column of that Schedule.

(i) GC 234/84. Superseded by SD 513/99

Classification of ships

2. (1) For the purposes of these Regulations ships shall be arranged in the following classes:-

Passenger Ships

Class I. Passenger Ships engaged on voyages (not being short international voyages) any of which are long international voyages.

Class II. Passenger ships engaged on voyages (not being long international voyages) any of which are short international voyages.

Class II(A). Passenger Ships in respect of which there is or should be in force a certificate entitled "Passenger Certificate Class II(A)", being a certificate for ships engaged on voyages of any kind other than international voyages.

Class III. Passenger Ships in respect of which there is or should be in force a certificate entitled "Passenger Certificate Class III", being a certificate for ships engaged only on voyages in the course of which they are at no time more than 70 miles by sea from their port of departure and not more than 18 miles from the coast of the Island and which are at sea only in favourable weather and during restricted periods.

Class IV. Passenger Ships in respect of which there is or should be in force a certificate entitled "Passenger Certificate Class IV", being a certificate for ships engaged only on voyages in partially smooth waters, or in smooth and partially smooth waters.

Class V. Passenger Ships in respect of which there is or should be in force a certificate entitled "Passenger Certificate Class V", being a certificate for ships engaged only on voyages in smooth waters.

Class VI. Passenger Ships in respect of which there is or should be in force a certificate entitled "Passenger Certificate Class VI", being a certificate for ships engaged only on voyages with not more than 250 passengers on board, to sea, in smooth or in partially smooth waters, in all cases in favourable weather and during restricted periods, in the course of which the ships are at no time more than 15 miles, exclusive of any smooth or partially smooth waters, from their point of departure nor more than 3 miles from land.

Class VI(A). Passenger ships carrying not more than 50 passengers for a distance of not more than 6 miles on voyages to or from the Calf of Man, or on the coast of the Island and which do not proceed for a distance of more than 3 miles from land; subject to any conditions which the Department may impose.

Class VII. Ships (other than ships of Classes I, VII(A), VII(T), X, XI and XII) engaged on voyages any of which are long international voyages.

Class VII(A). Ships engaged in the whaling industry or employed as fish processing or canning factory ships, and ships engaged in the carriage of persons employed in the whaling, fish processing or canning industries.

Class VII(T). Tankers engaged on voyages any of which are long inter-national voyages.

Class VIII. Ships (other than ships of Classes II, VIII(T). IX, XI and XII) engaged on voyages (not being long international voyages) any of which are short international voyages.

Class VIII(T). Tankers engaged on voyages (not being long international voyages) any of which are short international voyages.

Class VIII(A). Ships (other than ships of Classes II(A) to VI(A) inclusive, VIII(A)(T), IX, IX(A), IX(A)(T), XI and XII) engaged only on voyages which are not international voyages.

Class VIII(A)(T). Tankers engaged only on voyages which are not inter-national voyages.

Class IX. Tugs and tenders (other than ships of Classes II, II(A), III, VI and VI(A)) which proceed to sea but are not engaged on long international voyages.

Class IX(A). Ships (other than ships of Classes IV to VI inclusive) which do not proceed to sea.

Class IX(A)(T). Tankers which do not proceed to sea.

Class X. Fishing vessels other than ships of Classes 1 to VI(A) inclusive.

Class XI. Sailing ships (other than ships of Class XII) which proceed to sea.

Class XII. Pleasure craft of 13.7 metres in length or over.

(2) For the purposes of this regulation;

"Favourable weather" means fine, clear settled weather with a sea state such as to cause only moderate rolling and/or pitching.

"International voyage" means a voyage from a country to which the International Convention for the Safety of Life at Sea 1974 applies, to a port outside that country or conversely;

"Long international voyage" means an international voyage which is not a short international voyage;

"Partially smooth waters" means, as respects any period specified in the Schedule to the Merchant Shipping (Smooth and Partially Smooth Waters) Regulations 1987 [(j)], the waters of the areas specified in column 3 of that Schedule in relation to that period;

(j) S.I. 1987/1591
"Restricted period" means a period falling wholly within the following limits:

(a) from 1st. April to 31st. October, both dates inclusive; and

(b) between one hour before sunrise and one hour after sunset in the case of ships fitted with navigation lights conforming to the collision regulations, and between sunrise and sunset in the case of any other ship;

"Sea" does not include any partially smooth waters;

"Short international voyage" means an international voyage in the course of which a ship is not more than 200 miles from a port or place in which the passengers and crew could be placed in safety. Neither the distance between the last port of call in the country in which the voyage begins and the final port of destination nor the return voyage shall exceed 600 miles. The final port of destination is the last port of call in the scheduled voyage at which the ship commences its return voyage to the country in which the voyage began.

"Smooth waters" means any waters not being the sea or partially smooth waters and in particular means waters of any areas specified in column 2 of the Schedule to the Merchant Shipping (Smooth and Partially Smooth Waters) Regulations 1987;

"Voyage" includes an excursion.

PART II - PASSENGER SHIPS

Ships of Class 1

3 (1) This regulation applies to ships of Class I.

(2) Every ship to which this regulation applies shall carry:-

(a) on each side of the ship lifeboats of sufficient aggregate capacity to accommodate one half of the total number of persons which the ship is certified to carry; or

(b) lifeboats and liferafts together providing sufficient aggregate capacity to accommodate the total number of persons which the ship is certified to carry, provided that there shall never be less than sufficient lifeboats on each side of the ship to accommodate 37.5 per cent of the total number of persons which the ship is certified to carry, and provided that in the case of any ship, the keel of which was laid before 25th May 1980, these provisions shall apply only if the total number of persons on board shall not be increased as a result of the provision of liferafts.

(3) On every ship to which this regulation applies two of the lifeboats required by paragraph (2) of this regulation shall be kept ready, one on each side of the ship, for immediate use in an emergency while the ship is at sea. These lifeboats shall be not more than 8.5 metres in length and each of them may be a motor lifeboat and may be counted for the purpose of compliance with paragraph (4) of this regulation.

Notwithstanding the provisions of regulation 43(14) of these Regulations, skates or other suitable appliances are not required to be fitted to these lifeboats.

(4) Every ship to which this regulation applies shall carry on each side of the ship at least one motor lifeboat:

Provided that in ships which are certified to carry not more than 30 persons only one such motor lifeboat shall be required.

(5) (a) Every ship to which the regulation applies shall be provided with either:-

(i) survival craft radio equipment determined in accordance with

the following table:-

No. of persons ship certified to carry	Portable Radio Equipment	Radiotelegraph Installation for motor lifeboats
13 - 199	1	-
200 - 1499	1	1
1500 or more	-	2 (1 on each side)

(ii) at least three waterproofed two-way radiotelephone sets of which at least one shall be portable; and

(iii) on each side of the ship, a survival craft EPIRB so stowed that it can be rapidly placed in any survival craft.

(b) Alternatively, every such ship may, in lieu of the equipment prescribed in sub-paragraphs (a)(i) and (a)(iii), be provided with:

(i) a satellite EPIRB; and

(ii) on each side of the ship, at least one radar transponder stowed in such a location that it can be rapidly placed in any survival craft or, alternatively, one radar transponder shall be stowed
in each survival craft;

(c) Notwithstanding (a) or (b) above and to comply with GMDSS every ship to which this regulation applies shall be provided with:-

(i) the satellite EPIRB as prescribed in sub-paragraph (b)(i) not later than 1st. August 1993;

(ii) the radar transponders prescribed in sub-paragraph (b)(ii) not later than 1st. February 1995;

(iii) two-way radiotelephone sets as prescribed in sub- paragraph (a)(ii) and complying fully with the performance standards adopted by I.M.O. Resolution A.605(15) by not later than 1st. February 1999.

(6) Every motor lifeboat carried in compliance with these Regulations shal be provided with the equipment specified in Regulation 39(2) of these Regulations.

(7) The lifeboats carried in compliance with this regulation shall be not less than 7.3 metres in length.

(8) In every ship to which this regulation applies each lifeboat shall be attached to a separate set of davits which shall be of the gravity type, except that luffing type davits may be fitted for operating lifeboats weighing not more than 2300 kilogrammes in their turning out condition.

(9) The liferafts carried in compliance with sub-paragraph (b) of paragraph (2) of this regulation shall be served by launching appliances. There shall never be less than one such appliance on each side of the ship and the difference in the number of appliances fitted on each side shall not exceed one.

(10) Every ship to which this regulation applies shall carry liferafts, which need not be served by launching appliances, of sufficient capacity to accommodate 25 per cent of the total number of persons the ship is certified to carry together with buoyant apparatus for 3 per cent of that number provided that:

(a) if liferafts are also carried in compliance with sub-paragraph (b) of paragraph (2) of this regulation all liferafts carried shall be of a type capable of being launched by the appliances fitted in compliance with paragraph (9) of this regulation; and

(b) ships which have a factor of subdivision of 0.33 or less may carry, in lieu of liferafts for 25 per cent of the total number of persons which the ship is certified to carry and buoyant apparatus for 3 per cent of that number, buoyant apparatus for 25 per cent of that number.

(11) Every ship to which this regulation applies shall carry at least the number of lifebuoys determined in accordance with the following table:-

Length of ship in metres	Minimum number of lifebuoys
Under 61	8
61 and under 122	12
122 and under 183	18
183 and under 244	24
244 and over	30

(12) (a) Every ship to which this regulation applies shall carry:-

(i) a lifejacket suitable for a person weighing 32 kg. or more for each person on board;

(ii) a lifejacket suitable for a person weighing less than 32 kg.

for each such person on board;

(b) In addition to lifejackets carried in compliance with the preceding sub-paragraph, every such ship shall carry a lifejacket suitable for a person weighing 32 kg. or more for at least 5 per cent of the number of persons which the ship is certified to carry and such lifejackets shall be stowed on deck in a suitable place which shall be conspicuously marked.

(c) Each lifejacket required to be carried by this regulation shall be fitted with a lifejacket light.

(13) Every ship to which this regulation applies shall carry a line-throwing appliance, complying with the requirements of Schedule 14.

(14) Every ship to which this regulation applies shall carry for each lifeboat on the ship at least 3 immersion suits and, in addition, a thermal protective aid for every person to be accommodated in the lifeboats and not provided with an immersion suit. Immersion suits and thermal protective aids need not be carried for persons to be accommodated in totally or partially enclosed lifeboats or on a ship which is constantly engaged on voyages between the parallels of latitude of 20° north and south.

Ships of Class II

4. (1) This regulation applies to ships of Class II.

(2) Every ship to which this regulation applies shall, subject to the provisions of paragraph (8) of this regulation and of regulation 59, be fitted, in accordance with its length, with the number of sets of davits specified in Column A of the table set out in Schedule 1:

Provided that no ship shall be required to be fitted with a number of sets of davits greater than the number of lifeboats required to accommodate the total number of persons which the ship is certified to carry.

(3) A lifeboat shall be attached to every such set of davits and the lifeboats so attached shall, subject to the provisions of paragraph (8) of this regulation together provide at least the capacity specified in Column C of the table set out in Schedule 1 or the capacity required to accommodate the total number of persons which the ship is certified to carry if this is less.

(4) On every ship to which this regulation applies two of the lifeboats required by paragraph (3) of this regulation shall be kept ready, one on each side of the ship, for immediate use in an emergency while the ship is at sea. These lifeboats shall be not more than 8.5 metres in length and each of them may be a motor lifeboat and may be counted for the purpose of compliance with paragraph (5) of this regulation.

Notwithstanding the provisions of regulation 43(14), skates or other suitable appliances are not required to be fitted to these lifeboats.

(5) Every ship to which this regulation applies shall carry on each side of the ship at least one motor lifeboat which shall be provided with the equipment specified in regulation 39(2):

Provided that in ships which are certified to carry not more than 30 persons only one such motor lifeboat shall be required.

(6) Subject to the provisions of paragraphs (7) and (8) of this regulation when the lifeboats carried in compliance with the foregoing provisions of this regulation will not accommodate the total number of persons which the ship is certified to carry, additional sets of davits with a lifeboat attached to each shall be fitted to make up the deficiency in such accommodation.

(7) If in the opinion of the Department the volume of traffic so requires, the Department may permit any ship to which this regulation applies, being a ship which is subdivided in accordance with the requirements of Part III of Schedule 1 to the Merchant Shipping (Passenger Ship Construction) Regulations 1980 [(k)] to carry persons in excess of the lifeboat capacity provided on board that ship in compliance with paragraph (3) of this regulation:

Provided that-

(a) if such a ship is permitted by the Department in pursuance of Section 12(5) of the Merchant Shipping (Safety Convention) Act 1949 (An Act of Parliament) [(l)] to proceed to sea from a port in the Island on a long international voyage, such a ship shall carry lifeboats attached to davits affording accommodation for at least 75 per cent of the persons on board;

(b) in all cases liferafts shall be carried so that the total number of lifeboats together with such liferafts shall be sufficient to accommodate the total number of persons which the ship is certified to carry; and

(c) in any such ship in which a two-compartment standard of subdivision is not achieved throughout by virtue of the application of the provisions of paragraph (9) of Schedule 1 of the Merchant Shipping (Passenger Ship Construction) Regulations 1980 there shall be provided liferafts of sufficient aggregate capacity to accommodate 10 per cent of the total number of persons which the ship is certified to carry, such liferafts being additional to those required to be provided in compliance with sub-paragraph (b) of this paragraph or with sub-paragraph (b) of paragraph (8) and with paragraph (12) of this regulation.

(k) S.I. 1980/535 as applied to the Island by GC 38/85

(l) 1949 C. 43 as applied to the Island by GC 156/85

(8) Where it is shown to the satisfaction of the Department that it is impracticable in a ship engaged on a voyage which is not a long international voyage to stow satisfactorily the liferafts carried in that ship in pursuance of paragraph (7) of this regulation without reducing the number of lifeboats, the Department may permit the number of sets of davits required to be fitted under paragraph (2) of this regulation and regulation 59(2) and the number of lifeboats attached to davits required under paragraph (3) of this regulation to be reduced:

Provided that

(a) the number of lifeboats shall, in the case of ships of 58 metres in length or over, never be less than four, two of which shall be carried on each side of the ship, and in the case of ships of less than 58 metres in length shall never be less than two, one of which shall be carried on each side of the ship;

(b) the number of lifeboats and liferafts shall always be sufficient to accommodate the total number of persons which the ship is certified to carry; and

(c) where the capacity of the lifeboats together provide less than that specified in Column C of the table set out in Schedule 1 there shall be provided liferafts of a type capable of being launched by the appliances referred to in regulation 44(2). The total carrying capacity of such liferafts shall be at least the number obtained by dividing by 0.283 the difference between the aggregate cubic capacity of the lifeboats and that specified in the said Column C provided that such liferafts shall together be sufficient for at least forty persons and that at least one launching appliance shall be provided on each side of the ship and that the difference in the number of such appliances fitted on each side shall not exceed one.

(9) The lifeboats carried in compliance with this regulation shall not be less than 7.3 metres in length.

(10) In every ship to which this regulation applies the lifeboat davits required to be carried in compliance with this regulation shall be of the gravity type, except that luffing type davits may be fitted for operating lifeboats weighing not more than 2300 kilogrammes in their turning out condition.

(11) (a) Every ship to which this regulation applies shall be provided with either:-

(i) portable radio equipment; this equipment shall not be required if a lifeboat radiotelegraph installation is fitted in a lifeboat on each side of the ship or if the ship is engaged on voyages of such duration that in the opinion of the Department portable radio equipment is unnecessary;

(ii) at least three waterproofed two-way radiotelephone sets of which at least one shall be portable; and

(iii) on each side of the ship, a survival craft EPIRB so stowed that it can be rapidly placed in any survival craft; or

(b) Alternatively, every such ship may, in lieu of the equipment

prescribed in sub-paragraphs (a)(i) and (a)(iii), be provided with:

(i) a satellite EPIRB; and

(ii) on each side of the ship, at least one radar transponder stowed in such a location that it can be rapidly placed in any survival craft or, alternatively, one radar transponder shall be stowed
in each survival craft;

(c) Notwithstanding (a) or (b) above and to comply with GMDSS every ship to which this regulation applies shall be provided with:-

(i) the satellite EPIRB as prescribed in sub-paragraph (b)(i) not later than 1st. August 1993;

(ii) the radar transponders as prescribed in sub-paragraph (b)(ii) not later than 1st. February 1995;

(iii) two-way radiotelephone sets as prescribed in sub- paragraph (a)(ii) and complying fully with the performance standards adopted by I.M.O. Resolution A.605(15) by not later than 1st. February 1999.

(12) Every ship to which this regulation applies shall carry in addition to any liferafts that may be carried in pursuance of paragraphs (7) and (8) of this regulation liferafts sufficient to accommodate 10 per cent of the total number of persons for whom there is accommodation in lifeboats.

(13) Every ship to which this regulation applies shall carry buoyant apparatus sufficient to support 5 per cent of the total number of persons which the ship is certified to carry.

(14) Every ship to which this regulation applies shall carry at least the number of lifebuoys determined in accordance with the following table:-

Length of ship in metres	Minimum number of lifebuoys
Under 61	8
61 and under 122	12
122 and under 183	18
183 and under 244	24
244 and over	30.

(15) (a) Every ship to which this regulation applies shall carry:-

(i) a lifejacket suitable for a person weighing 32 kg. or more for each person on board;

(ii) a lifejacket suitable for a person weighing less than 32 kg.for each such person on board;

(b) In addition to lifejackets carried in compliance with the preceding sub-paragraph, every such ship shall carry a lifejacket suitable for a person weighing 32 kg. or more for at least 5 per cent of the number of persons which the ship is certified to carry and such lifejackets

shall be stowed on deck in a suitable place which shall be conspicuously marked.

(16) Every ship to which this regulation applies shall carry a line-throwing appliance, complying with the requirements of Schedule 14.

(17) Every ship to which this regulation applies shall carry for each lifeboat on the ship at least 3 immersion suits and, in addition, a thermal protective aid for every person to be accommodated in the lifeboat and not provided with an immersion suit. Immersion suits and thermal protective aids need not be carried for persons to be accommodated in totally or partially enclosed lifeboats.

Ships of Class II(A)

5. Regulation 4 shall apply to ships of Class II(A) as it applies to ships of Class II.

Ships of Class III

6. (1) This regulation applies to ships of Class III.

(2) Every ship to which this regulation applies shall, subject to the provisions of regulation 59, be fitted with the number of sets of davits specified in the table set out in
Schedule 2.

Provided that no ship shall be required to be fitted with a number of sets of davits greater than the number of lifeboats required to accommodate the total number of persons which the ship is certified to carry.

(3) A lifeboat shall be attached to every such set of davits.

(4) Such additional lifeboats, liferafts or buoyant apparatus shall be carried as shall be sufficient, together with the lifeboats required by paragraph (3) of this regulation,
for the total number of persons which the ship is certified to carry:

Provided that lifeboats and liferafts shall be carried to accommodate not less than 25 per cent of that number.

(5) The lifeboats carried in compliance with this regulation shall, where reasonable and practicable, be not less than 6.1 metres in length.

(6) Lifeboat davits required to be carried in compliance with this regulation shall be of the gravity type, except that luffing type davits may be fitted for operating lifeboats weighing not more than 2300 kilogrammes in their turning out condition.

(7) Every ship to which this regulation applies shall carry at least eight lifebuoys, two of which shall have self-activating smoke signals attached complying with the requirements of Schedule 12.

(8) Every ship to which this regulation applies shall carry:-

(a) a lifejacket suitable for a person weighing 32 kg. or more for each person on board;

(b) a lifejacket suitable for a person weighing less than 32 kg. for each such person on board.

(9) Every ship to which this regulation applies shall carry a line-throwing appliance complying with the requirements of Schedule 14.

Ships of Class IV

7. (1) This regulation applies to ships of Class IV.

(2) Every ship to which this regulation applies shall, subject to the provisions of regulation 59 be fitted with the number of sets of davits specified in the table set out in Schedule 2;

Provided that no ship shall be required to be fitted with a number of sets of davits greater than the number of lifeboats required to accommodate the total number of persons which the ship is certified to carry.

(3) A lifeboat shall be attached to every such set of davits.

(4) Lifeboat davits required to be carried in compliance with this regulation shall be of the gravity type, except that luffing type davits may be fitted for operating lifeboats weighing not more than 2300 kilogrammes in their turning out condition.

(5) Such additional lifeboats, liferafts or buoyant apparatus shall be carried as shall be sufficient, together with the lifeboats required by paragraph (3) of this regulation, for 60 per cent of the total number of persons which the ship is certified to carry.

(6) Every ship to which this regulation applies of 61 metres in length or over shall carry at least eight lifebuoys, and every such ship of less than 61 metres in length shall carry at least four lifebuoys.

(7) Every ship to which this regulation applies shall carry:-

(a) a lifejacket suitable for a person weighing 32 kg. or more for each person on board;

(b) a lifejacket suitable for a person weighing less than 32 kg. for each such person on board;

(8) Every ship to which this regulation applies shall carry a line-throwing appliance complying with the requirements of Schedule 14.

Ships of Class V

8. (1) This regulation applies to ships of Class V.

(2) Every ship to which this regulation applies of 45.7 metres in length or over shall carry at least two boats, and every ship of 21.3 metres in length or over and of less than 45.7 metres in length shall carry at least one boat.

(3) Every ship to which this regulation applies of 45.7 metres in length or over shall carry at least six lifebuoys, and every such ship of less than 45.7 metres in length shall carry at least four lifebuoys.

(4) Every ship to which this regulation applies, being a ship which is subdivided in accordance with the requirements of Part IV of Schedule 1 to the Merchant Shipping (Passenger Ship Construction) Regulations 1980 shall carry subject to the requirements of paragraphs (2) and (3) of this regulation:

(a) such boats, liferafts or buoyant apparatus as shall be sufficient for 40 per cent of the total number of persons which the ship is certified to carry, and in addition for every person on board weighing 32 kilogrammes or more a lifejacket complying with the requirements of Part I of Schedule 13 and for every person on board weighing less than 32 kilogrammes a lifejacket complying with the requirements of Part II of the said Schedule; or

(b) such boats, liferafts, buoyant apparatus and lifebuoys as shall be sufficient for the total number of persons which the ship is certified to carry, provided that lifebuoys in excess of 60 per cent of this
number shall be discounted.

For the purposes of this paragraph, a lifebuoy shall be deemed sufficient to support two persons.

(5) Every ship to which this regulation applies other than a ship to which paragraph (4) of this regulation applies shall carry, subject to the requirements of paragraphs (2) and (3) of this regulation the equipment specified in sub-paragraph (b) of paragraph (4) of this regulation.

(6) In every ship to which this regulation applies each boat shall be attached to separate davits.

(7) Davits serving lifeboats carried in compliance with this regulation shall be of the gravity type, except that luffing type davits may be fitted for operating lifeboats weighing not more than 2300 kilogrammes in their turning out condition.

Provided that, in the case of any ship to which this regunation applies of less than 45.7 metres in length, the Department may permit other types of davit if it is satisfied that the fitting of gravity or luffing type davits is impracticable.

Ships of Class VI

9. (1) This Regulation applies to ships of Class VI.

(2) Regulation 8 shall apply to ships of Class VI, being ships of 21.3 metres in length or over, as it applies to ships of Class V.

(3) Every ship to which this regulation applies of less than 21.3 metres in length and plying more than three miles from its starting point in any direction shall be provided with liferafts or buoyant apparatus sufficient for at least 60 per cent of the total number of persons which the ship is certified to carry, together with lifebuoys not less in number than is specified in paragraph (5) of this regulation so, however, that the liferafts or buoyant apparatus, together with the lifebuoys, shall in all cases be sufficient for the total number of persons which the ship is certified to carry.

(4) Every ship to which this regulation applies of less than 21.3 metres in length and plying not more than three miles from its starting point in any direction shall be provided with liferafts or buoyant apparatus sufficient for at least 40 per cent of the total number of persons which the ship is certified to carry, together with lifebuoys not less in number than is specified in paragraph (5) of this regulation so, however, that the liferafts or buoyant apparatus, together with the lifebuoys, shall in all cases be sufficient for the total number of persons which the ship is certified to carry.

(5) Every ship to which this regulation applies shall carry at least the number of lifebuoys determined by the following table:-

Length of ship in metres	Minimum number of lifebuoys
Not over 9	2
Over 9 and not over 11	4
Over 11 and not over 12	6
Over 12 and not over 15	8
Over 15 and not over 21	10

(6) In the case of ships to which this regulation applies not exceeding 9.1 metres in length the Department may permit lifebuoys to be carried in lieu of part or all of the liferafts or buoyant apparatus required to be carried in compliance with paragraphs (3) and (4) of this regulation.

(7) For the purposes of this regulation a lifebuoy shall be deemed sufficient to support two persons.

Ships of Class VI(A)

10. (1) This regulation applies to ships of Class VI(A).

(2) Regulation 7 of these Regulations shall apply to ships of Class VI(A), being ships 21.3 metres length or over, as it applies to ships of Class IV.

(3) Every ship to which this regulation applies of less than 21.3 metres in length shall carry such liferafts or buoyant apparatus as shall be sufficient for at least 60 per cent of the total number of persons which the ship is certified to carry during the period between 1st. April and 31st. October inclusive, together with lifebuoys not less in number than is specified in regulation 9(5) so, however, that the liferafts or buoyant apparatus, together with the lifebuoys, shall at all times be sufficient for the total number of persons which the ship is certified to carry during the aforesaid period.

(4) In the case of ships not exceeding 9.1 metres in length to which this regulation applies the Department may permit lifebuoys to be carried in lieu of part or all of the liferafts or buoyant apparatus required to be carried in compliance with paragraph (3) of this regulation.

(5) For the purposes of this regulation a lifebuoy shall be deemed sufficient to support two persons.

PART III - SHIPS OTHER THAN PASSENGER SHIPS

Ships of Class VII

11. (1) This regulation applies to ships of Class VII.

(2) Every ship to which this regulation applies of 500 tons or over shall carry on each side of the ship one or more lifeboats of sufficient aggregate capacity to accommodate all persons on board.

(3) In every ship to which this regulation applies of 1,600 tons or over the lifeboats shall be not less than 7.3 metres in length.

(4) Every ship to which this regulation applies of 500 tons or over shall carry liferafts of sufficient aggregate capacity to accommodate at least the total number of persons on board. Ships with 16 os more persons on board shal, carry at least 2 liferafts of approximately equal capacity.

(5) Every ship to which this regulation applies of 500 tons or over but under 1600 tons, shall carry either-

(a) the lifeboats prescribed in paragraph (2) of this regulation for ships of 500 tons or over together with the liferafts prescribed in paragraph (4) of this regulation; or

(b) (i) liferafts on each side of the ship of sufficient aggregate capacity to accommodate the total number of persons on board, the liferafts on each side being of approximately equal
capacity:

Provided that when these liferafts can be readily launched on each side of the ship, the following requirements of sub-paragraph (ii) below need not be complied with; and

(ii) the liferafts prescribed in paragraph (4) of this regulation stowed as described in paragraph (9) of this regulation; and

(iii) (1) a lifeboat fitted with a motor and complying with the requirements of regulation 26 and Schedule 5 Part I; or

(2) a class C boat fitted with a motor complying :

(aa) with Schedule 5 Part I if over 4.3 metres in length; or

(bb) with Schedule 5 Part II if under 4.3 metres in length; or

(3) an inflatable boat fitted with a motor complying with Schedule 5 Part II; and

(iv) the boat prescribed in paragraph (b)(iii) shall be capable of being launched on one side of the ship with its equipment and a launching crew of two persons when the ship is upright or listed up to 15° towards the side on which the boat is fitted and shall be launched and recovered by a davit complying with the requirements of Schedule 16 or Schedule 17; where a winch is provided, it shall comply with Schedule 16.

(6) In every ship provided with the liferafts prescribed in paragraph (5)(b)(i) of this regulation where the distance from the embarkation position to the water in the lightest sea going condition exceeds 4.5 metres, the rafts shall be of a type designed for use with a launching appliance. The launching appliances shall comply with the requirements of regulation 44 and Schedule 19; at least one launching appliance shall be provided on each side of the ship and not more than two liferafts shall be allocated to each launching appliance.

(7) Every ship to which this regulation applies of under 500 tons shall carry either-

(a) the lifeboats prescribed in paragraph (2) of this regulation for ships of 500 tons or over and liferafts of sufficient aggregate capacity to accommodate all persons on board. Such ships with 16 persons or more on board shall carry at least two liferafts; or

(b) a lifeboat or Class C boat or inflatable boat which shall be capable of being launched on one side of the ship and at least two liferafts of sufficient aggregate capacity to accommodate twice the total number of persons on board.

(8) Every such ship where survival craft are stowed in a position which is more than 100 metres from the stem or stern shall carry, in addition to the liferafts required by paragraph (4) of this regulation, a liferaft capable of accommodating at least six persons stowed as far forward or aft as is reasonable and practicable.

(9) Liferafts carried under this regulation, except those liferafts fitted in compliance with paragraph (5)(b)(i) of this regulation shall be so stowed that they can be readily transferred to the water on either side of the ship.

(10) In every ship to which paragraph (2) of this regulation applies each lifeboat shall be attached to a separate set of davits which shall be of the gravity type except that luffing davits may be fitted for operating lifeboats weighing not more than 2300 kilogrammes in their turning out condition.

(11) In every ship to which this regulation applies of 1,600 tons or over one of the lifeboats carried in compliance with paragraph (2) of this regulation shall be a motor lifeboat.

(12) (a) Every ship to which this regulation applies shall carry either:-

(i) portable radio equipment; this equipment shall not be required if a lifeboat radiotelegraph installation is fitted in a lifeboat on each side of the ship or if the ship is engaged on voyages of such duration that in the opinion of the Department portable radio equipment is unnecessary;

(ii) at least 3 waterproofed two-way radiotelephone sets of which at least one shall be portable; and

(iii) on each side of the ship, a survival craft EPIRB so stowed that it can be rapidly placed in any survival craft other than that required by paragraph (8); or

(b) Alternatively, every such ship may, in lieu of the equipment prescribed in sub-paragraph (a) be provided with:

(i) a satellite EPIRB; and

(ii) in the case of a ship of 500 tons or over, on each side of the ship at least one radar transponder, and in the case of a ship under 500 tons at least one radar transponder. Each radar transponder shall be stowed in such a location that it can be rapidly placed in any survival craft other than that required by paragraph (8) or, alternatively, one radar transponder shall be stowed in each survival craft other than that required by
paragraph (8);

(iii) in the case of a ship of 500 tons or over at least 3 waterproofed two-way radiotelephone sets of which at least one shall be portable, and in the case of a ship of under 500 tons at least 2 waterproofed two-way radiotelephone sets of
which at least one shall be portable;

(c) Notwithstanding paragraphs (a) and (b) above and to comply with GMDSS every ship to which this regulation applies shall be provided
with:-

(i) the satellite EPIRB as prescribed in sub-paragraph (b)(i) not later than 1st. August 1993;

(ii) the radar transponder or transponders as prescribed in sub-paragraph (b)(ii) not later than 1st. February 1995;

(iii) two-way radiotelephone sets as prescribed in sub- paragraph (b)(iii) and complying fully with the performance standards adopted by I.M.O. Resolution A.605(15) by not later than 1st. February 1999.

(13) Every ship to which this regulation applies of 500 tons or over shall carry at least 8 lifebuoys.

(14) Every ship to which this regulation applies of under 500 tons shall carry at least 4 lifebuoys.

(15) Every ship to which this regulation applies shall carry:-

(a) a lifejacket suitable for a person weighing 32 kg. or more for each person on board;

(b) a lifejacket suitable for a person weighing less than 32 kg. for each such person on board.

(16) Each lifejacket required to be carried by this regulation shall be fitted with a lifejacket light.

(17) Every ship to which this regulation applies shall carry a line-throwing appliance complying with the requirements of Schedule 14.

(18) Every ship to which this regulation applies, except a ship which complies with either paragraph (5)(b) or (7)(b), shall carry for each lifeboat on the ship at least 3 immersion suits and, in addition, a thermal protective aid for every person on board not provided with an immersion suit. Immersion suits and thermal protective aids need not be carried if:-

(a) the lifeboats required under paragraphs (2) and (7)(a) of this regulation are totally enclosed;

(b) a totally enclosed lifeboat capable of free-fall launching is carried in lieu of the lifeboats required under paragraphs (2) and (7)(a) of this regulation; or

(c) the ship is constantly engaged on voyages between the parallels of latitude 20° north and south.

(19) In the case of a ship which complies with the requirements of paragraph (5)(b) or (7)(b) of this regulation an immersion suit shall be carried for every person on board unless the ship is provided with davit-launched liferafts or a marine escape system, or is constantly engaged on voyages between the parallels of latitude 20° north and south.

Ships of Class VII(A)

12. (1) Regulation 21 shall apply to ships of Class VII(A), other than those ships specified in paragraph (2) of this regulation, as it applies to ships of Class X.

(2) Every ship employed as a whale factory ship or as a fish processing or canning factory ship or in the carriage of persons employed in the whaling, fish processing or canning industries being a ship of 500 tons or over shall carry:-

(a) lifeboats on each side of the ship of sufficient aggregate capacity to accommodate one half of the total number of persons on board; or

(b) lifeboats and liferafts together providing sufficient aggregate capacity to accommodate the total number of persons on board, provided that there shall never be less than sufficient lifeboats on each side of the ship to accommodate 37.5 per cent of the total number of persons on board.

(3) On every ship to which paragraph (2) of this regulation applies two of the lifeboats shall be kept ready, one on each side of the ship, for immediate use in an emergency while the ship is at sea. These lifeboats shall not be more than 8.5 metres in length and each of them may be a motor lifeboat and may be counted for the purpose of compliance with paragraph (4) of this regulation.

Notwithstanding the provisions of regulation 43(14), skates or other suitable appliances are not required to be fitted to these lifeboats.

(4) Every ship to which paragraph (2) of this regulation applies shall carry on each side of the ship at least one motor lifeboat.

(5) (a) Every ship to which the regulation applies shall be provided with either:-

(i) survival craft radio equipment determined in accordance with the following table:-

No. of persons ship certified to carry	Portable Radio Equipment	Radiotelegraph Installation for motor lifeboats
13 - 199	1	-
200 - 1499	1	1
1500 or more	-	2 (1 each side)

(ii) at least 3 waterproofed two-way radiotelephone sets of which at least one shall be portable; and

(iii) on each side of the ship, a survival craft EPIRB so stowed that it can be rapidly placed in any survival craft.

(b) Alternatively, every such ship may, in lieu of the equipment prescribed in sub-paragraphs (a)(i) and (a)(iii), be provided with:

(i) a satellite EPIRB; and

(ii) on each side of the ship, at least one radar transponder stowed in such a location that it can be rapidly placed in any survival craft or, alternatively, one radar transponder shall be stowed in each survival craft;

(c) Notwithstanding (a) or (b) above and to comply with GMDSS every

ship to which this regulation applies shall be provided with:-

(i) the satellite EPIRB as prescribed in sub-paragraph (b)(i) not later than 1st. August 1993;

(ii) the radar transponder or radar transponders prescribed in sub-paragraph (b)(ii) not later than 1st. February 1995;

(iii) two-way radiotelephone sets as prescribed in sub- paragraph (a)(ii) and complying fully with the performance standards adopted by I.M.O. Resolution A.605(15) by not later than 1st. February 1999.

(6) Every motor lifeboat carried in compliance with these Regulations shall be provided with the equipment specified in Regulation 39(2).

(7) In every ship to which paragraph (2) of this regulation applies of 1,600 tons or over the lifeboats shall be not less than 7.3 metres in length.

(8) In every ship to which paragraph (2) of this regulation applies each lifeboat shall be attached to a separate set of davits which shall be of the gravity type.

(9) The liferafts carried in compliance with sub-paragraph (b) of paragraph (2) of this regulation shall be served by launching appliances. There shall never be less than one such appliance on each side of the ship and the difference in the number of appliances fitted on each side shall not exceed one.

(10) Every ship to which paragraph (2) of this regulation applies shall carry liferafts, which shall not be required to be served by launching devices, of sufficient
aggregate capacity to accommodate at least half the total number of persons on board:

Provided that if liferafts in addition to those carried in compliance with this paragraph are carried in compliance with sub-paragraph (b) of paragraph (2) of this regulation, all liferafts carried shall be of a type capable of being launched by the appliances fitted in compliance with paragraph (9) of this regulation.

(11) Every ship to which paragraph (2) of this regulation applies shall carry at least 8 lifebuoys.

(12) Every ship to which this regulation applies shall carry:-

(a) a lifejacket suitable for a person weighing 32 kg. or more for each person on board;

(b) a lifejacket suitable for a person weighing less than 32 kg. for each such person on board.

(13) Each lifejacket required to be carried by this regulation shall be fitted with a lifejacket light.

(14) Every ship to which paragraph (2) of this Rule applies shall carry a line-throwing appliance complying with the requirements of Schedule 14.

(15) Every ship to which this regulation applies shall carry for each lifeboat on the ship at least 3 immersion suits and, in addition, a thermal protective aid for every person on board not provided with an immersion suit. Immersion suits and thermal protective aids need not be carried for persons to be accommodated in totally or partially enclosed lifeboats or on a ship which is constantly engaged on voyages between the parallels of latitude of 20° north and south.

Ships of Class VII(T)

13. (1) Paragraphs (2), (3), (4), (7), (8), (9), (12), (13), (14), (15), (16), (17), (18) and (19) of regulation 11 shall apply to ships of Class VII(T) as they apply to ships of Class VII.

(2) Every ship to which this regulation applies of 3,000 tons or over shall carry on each side of the ship at least two lifeboats of sufficient aggregate capacity to accommodate the total number of persons on board. Two lifeboats shall be carried aft and two amidships, except that in ships which have no amidships superstructure all lifeboats shall be carried aft:

Provided that, if in the case of ships with no amidships superstructure it is impracticable to carry four lifeboats aft, the Department may permit instead the carriage aft of one lifeboat
on each side of the ship. In such a case the following provisions shall apply:-

(a) each lifeboat shall not exceed 8.5 metres in length;

(b) each lifeboat shall be stowed as far forward as practicable and at least so far forward that the after end of the lifeboat is one-and-a-half times the length of the lifeboat forward of the ship's propeller;

(c) each lifeboat shall be stowed as near the sea level as is safe and practicable.

(3) In every ship to which paragraph (2) of regulation 11 or paragraph (2) of this regulation applies each lifeboat shall be attached to a separate set of davits which shall be of the gravity type except that in ships of less than 1,600 tons luffing davits may be fitted for operating lifeboats weighing not more than 2300 kilogrammes in their turning out condition.

(4) In every ship to which this regulation applies of 1,600 tons or over at least one of the lifeboats carried on each side of the ship in compliance with paragraph (2) of regulation 11 or paragraph (2) of this regulation shall be a motor lifeboat.

Ships of Class VIII

14. Regulation 11 shall apply to ships of Class VIII as it applies to ships of Class VII.

Ships of Class VIII(T)

15. Regulation 13 shall apply to ships of Class VIII(T) as it applies to ships of Class VII(T).

Ships of Class VIII(A)

16. (1) Paragraphs (2), (3), (4), (8) and (9) of regulation 11 shall apply to ships of Class VIII(A) of 1,600 tons or over as they apply to ships of Class VII of 500 tons or over.

(2) Paragraphs (7) and (9) of regulation 11 shall apply to ships of Class VIII(A) of under 1,600 tons as they apply to ships of Class VII of under 500 tons.

(3) Paragraphs (12), (13), (14), (15), (16), (17), (18) and (19) of regulation 11 shall apply to ships of Class VIII(A) as they apply to ships of Class VII and paragraph (10) of regulation 11 shall apply to such ships which carry lifeboats as prescribed by paragraph (2) thereof.

Ships of Class VIII(A)(T)

17. (1) Paragraphs (2), (3), (4), (8) and (9) of regulation 11 shall apply to ships of Class VIII(A)(T) of 1,600 tons or over as they shall apply to ships of Class VII of 500 tons or over.

(2) Paragraphs (7) and (9) of regulation 11 shall apply to ships of Class VIII(A)(T) of under 1,600 tons as they apply to ships of Class VII of under 500 tons.

(3) Paragraphs (2), (3) and (4) of regulation 13 shall apply to ships of Class VIII(A)(T) as they apply to ships of Class VII(T).

(4) Paragraphs (12), (13), (14), (15), (16), (17), (18) and (19) of regulation 11 shall apply to ships of Class VIII(A)(T) as they apply to ships of Class VII.

Ships of Class IX

18. (1) This regulation applies to ships of Class IX.

(2) Paragraphs (2), (3), (4), (5), (6), (10), (11) and (12) of regulation 11 shall apply to ships to which this regulation applies of 500 tons or over engaged on an international voyage, as they apply to ships of Class VII of 500 tons or over.

(3) Every ship to which this regulation applies other than a ship of 500 tons or over engaged on an international voyage shall carry-

(a) a lifeboat or Class C boat or inflatable boat which shall be capable of being launched on one side of the ship;

(b) one or more liferafts of sufficient aggregate capacity to accommodate the total number of persons on board and any ship with 16 or more persons on board shall carry at least two liferafts; and

(c) buoyant apparatus sufficient to support the total number of persons on board.

(4) In every ship to which this regulation applies liferafts (other than those fitted in compliance with regulation 11(5)(b)(i)) shall be so stowed that they can be readily transferred to the water on either side of the ship.

(5) Paragraphs (12)(a), (13), (14), (15), (16), (17) , (18) and (19) of regulation 11 shall apply to every ship to which this regulation applies as they apply to ships of Class VII.

Ships of Class IX(A)

19. (1) This regulation applies to ships of Class IX(A).

(2) Every ship to which this regulation applies of 12.2 metres in length or over shall when in partially smooth waters carry the following equipment-

(a) a boat or liferaft in either case sufficient to accommodate the total number of persons on board; and

(b) in the case of ships of 21.3 metres in length or over at least 4 lifebuoys and in the case of ships of less than 21.3 metres in length but of not less than 12.2 metres in length at least 2 lifebuoys.

(3) Every ship to which this regulation applies of 12.2 metres in length or over when in smooth waters and every such ship of less than 12.2 metres in length shall carry lifebuoys at least equal in number to half the total number of persons on board provided that such ships of 21.3 metres in length or over shall carry at least 4 lifebuoys and ships of less than 21.3 metres in length shall carry at least 2 lifebuoys.

(4) Every tug and tender to which this regulation applies shall carry in addition to the equipment required by paragraphs (2) and (3) of this regulation, buoyant apparatus sufficient to support the total number of persons on board.

(5) Every ship to which this regulation applies of 12.2 metres in length or over shall carry:-

(a) a lifejacket suitable for a person weighing 32 kg. or more for each person on board;

(b) a lifejacket suitable for a person weighing less than 32 kg. for each such person on board;

(6) Liferafts carried in accordance with this regulation shall be so stowed that they can be readily transferred to the water on either side of the ship.

Ships of Class IX(A)(T)

20. (1) This regulation applies to ships of Class IX(A)(T)

(2) Regulation 19 shall apply to ships of Class IX(A)(T) as it applies to ships of Class IX(A).

Ships of Class X

21. (1) This regulation applies to ships of Class X.

(2) Every ship of Class X shall carry lifesaving equipment in accordance with the requirements appropriate to their length pursuant to Part IIIA of the Fishing Vessels (Safety Provisions) Rules 1975 [(m)].

Ships of Class XI

22. (1) This regulation applies to ships of Class XI.

(2) Every ship to which this regulation applies shall carry either:-

(a) at least 2 lifeboats, attached to davits, so arranged that there is at least one lifeboat on each side of the ship, the lifeboats on each side of the ship being of sufficient aggregate capacity to accommodate one half of the total number of persons on board the ship and liferafts
on the following scale-

Ships with 16 or more persons on board- at least two liferafts.

Ships with fewer than 16 persons on board- at least one liferaft, of sufficient aggregate capacity to accommodate the
total number of persons on board; or

(b) a lifeboat or Class C boat or inflatable boat which shall be capable of being launched on one side of the ship and at least two liferafts of sufficient aggregate capacity to accommodate twice the total number of persons on board.

(3) Liferafts carried in accordance with this regulation shall be so stowed that they can be readily transferred to the water on either side of the ship.

(4) In every ship to which this regulation applies which carries the equipment required by sub-paragraph (a) of paragraph (2) of this regulation, the lifeboat davits shall be of the gravity type except that in such ships davits which serve lifeboats weighing not more than 2,300 kilogrammes in their turning out condition may be of the luffing type.

(5) Every ship to which this regulation applies shall carry at least 4 lifebuoys.

(6) Every ship to which this regulation applies shall carry:-

(a) a lifejacket suitable for a person weighing 32 kg. or more for each person on board;

(b) a lifejacket suitable for a person weighing less than 32 kg. for each such person on board;

(m) S.I. 1975/330 as applied to the Island by GC 75/77

(7) Each lifejacket required to be carried by this regulation shall be fitted with a lifejacket light.

(8) Every ship to which this regulation applies shall carry a line-throwing appliance complying with the requirements of Schedule 14.

(9) (a) Every ship to which this regulation applies shall carry:-

(i) at least 3 waterproofed two-way radiotelephone sets of which at least one shall be portable; and

(ii) on each side of the ship, a survival craft EPIRB so stowed that it can be rapidly placed in any survival craft; or

(b) Alternatively, every such ship may, in lieu of the equipment prescribed in paragraph (a), be provided with:

(i) a satellite EPIRB;

(ii) in the case of a ship of 500 tons or over at least 3 waterproofed two-way radiotelephone sets of which at least one shall be portable and in the case of a ship under 500 tons at least 2 waterproofed two-way radiotelephone sets of which at least one shall be portable; and

(iii) in the case of a ship of 500 tons or over on each side of the ship at least one radar transponder, and in the case of a ship under 500 tons at least one radar transponder. Each radar transponder shall be stowed in such location that it can be rapidly placed in any survival craft or, alternatively, one radar transponder shall be stowed in each survival craft;

(c) Notwithstanding paragraphs (a) and (b) above and to comply with GMDSS every ship to which this regulation applies shall be provided with:-

(i) the satellite EPIRB as prescribed in sub-paragraph (b)(i) not later than 1st. August 1993;

(ii) radar transponder or radar transponders as prescribed in sub-paragraph (b)(iii) not later than 1st. February 1995;

(iii) two-way radiotelephone sets as prescribed in sub- paragraph (b)(ii) and complying fully with the performance standards adopted by I.M.O. Resolution A.605(15) by not later than 1st. February 1999.

(10) Every ship to which this regulation applies shall carry for each lifeboat on the ship at least 3 immersion suits and, in addition, a thermal protective aid for every person on board not provided with an immersion suit. In the case of a ship which complies with paragraph (2)(b) of this regulation an immersion suit shall be carried for every person on board. Immersion suits and thermal protective aids need not be carried if:-

(a) totally enclosed lifeboats are carried;

(b) davit-launched liferafts are carried; or,

(c) the ship is constantly engaged on voyages between the parallels of latitude 20° north and south.

Ships of Class XII

23. (1) This regulation applies to ships of Class XII.

(2) Every ship to which this regulation applies of 21.3 metres in length or over shall carry:-

(a) at least two liferafts of sufficient aggregate capacity to accommodate twice the total number of persons on board;

(b) at least 4 lifebuoys; and

(c) a line-throwing appliance;

and any ship to which this regulation applies of 25.9 metres in length or over shall carry in addition a lifeboat or Class C boat or inflatable boat which shall be capable of being launched on one side of the ship.

(3) Every ship to which this regulation applies of less than 21.3 metres in length which is engaged on either a voyage to sea in the course of which it is more than 3 miles from the coast of the Island or a voyage to sea during the months of November to March,
inclusive, shall carry:-

(a) one or more liferafts of sufficient aggregate capacity to accommodate the total number of persons on board; and

(b) at least 2 lifebuoys.

(4) Every ship to which this regulation applies of less than 21.3 metres in length which does not proceed to sea or which only proceeds to sea during the months of April to October, inclusive, on voyages in the course of which it is not more than 3 miles from the coast of the Islandshall carry lifebuoys at least equal in number to half the total number of persons on board provided that such ships shall carry at least two lifebuoys and that any such ship which operates only in smooth waters shall not be required to carry more than two lifebuoys.

(5) Every ship to which this regulation applies of less than 21.3 metres in length shall be provided with a buoyant line of at least 18 metres in length.

(6) Liferafts carried in accordance with this regulation shall be so stowed that they can be readily transferred to the water on either side of the ship.

(7) (a) Every ship to which this regulation applies shall carry:-

(i) a lifejacket suitable for a person weighing 32 kg. or more for each person on board; and

(ii) a lifejacket suitable for a person weighing less than 32 kg.

for

each such person on board;

(b) alternatively, every ship to which this regulation applies shall carry for every person on board, a lifejacket which shall comply with British Standard Specification BS 3595:1969, provided it does not depend wholly upon oral inflation. If such lifejacket is of the partially inherent buoyancy type, the buoyancy of the lifejacket in the uninflated state shall be not less than 89 newtons for a person weighing 32 kilogrammes or more.

(8) Lifejackets required by this regulation shall be fitted with a lifejacket light on every ship which proceeds to sea.

PART IV - GENERAL

REQUIREMENTS FOR LIFE-SAVING APPLIANCES

General requirements for lifeboats

24. Lifeboats shall comply with the requirements specified in Schedule 3 to these Regulations.

Carrying capacity of lifeboats

25. (1) Subject to the provisions of paragraphs (2), (3), (4) and (5) of this regulation, the number of persons which a lifeboat shall be permitted to accommodate shall be equal to the greatest whole number obtained by dividing the capacity in cubic metres
by:

In the case of a lifeboat of 7.3 metres in length or over	0.283
In the case of lifeboats of 3.7 metres in length	0.453
In the case of lifeboats of 3.7 metres in length or over but under 7.3 metres	a number between 0.453 and 0.283 to be obtained by interpolation.

The calculation of the cubic capacity of the lifeboat shall be determined in accordance with Schedule 4.

(2) The number of persons which a lifeboat shall be permitted to accommodate shall in no case exceed the number of adult persons wearing lifejackets which can be seated without in any way interfering with the use of oars or the operation of other propulsion equipment.

(3) No lifeboat shall be deemed fit to accommodate more than 150 persons.

(4) No lifeboat shall be deemed fit to accommodate more than 100 persons unless it is a motor lifeboat.

(5) No lifeboat shall be deemed fit to accommodate more than 60 persons unless it is a motor lifeboat or a mechanically propelled lifeboat.

Motor lifeboats

26. Every motor lifeboat shall in addition to complying with the requirements of Schedule 3, comply with the following requirements:-

(a) it shall be fitted with a compression ignition engine and such engine and its accessories shall comply with the requirements of Schedule 5 Part I and shall be kept so as to be at all times ready for use;

(b) it shall be provided with sufficient fuel for 24 hours continuous operation at the speed specified in sub-paragraphs (d) or (e) of this regulation;

(c) it shall be capable of going astern;

(d) if it is a lifeboat provided in accordance with regulation 3(4), regulation 4(5), regulation 12(4) or regulation 13(4) it shall be capable of going ahead in smooth water when loaded with its full complement of persons and equipment at a speed of 6 knots;

(e) if it is a lifeboat other than a lifeboat provided in accordance with the regulations referred to in the preceding sub-paragraph it shall be capable of going ahead under the conditions specified in the preceding sub-paragraph at a speed of 4 knots.

Mechanically propelled lifeboats

27. Mechanically propelled lifeboats shall, in addition to complying with the requirements of Schedule 3, be fitted with machinery which shall comply with the requirements of Schedule 6.

Class C boats

28. Class C boats shall comply with the requirements of Schedule 7.

Inflatable boats

29. (1) Inflatable boats shall comply with the requirements of Part I of Schedule 8.

(2) Where inflatable boats are permitted to be carried in these Regulations the boats shall be stowed in the inflated condition.

(3) Inflatable boats shall be surveyed at a servicing station approved by the Department or at the works of the manufacturers at intervals of not more than 12 months

provided that in any case where this is impracticable, such interval may be extended by a period not exceeding 5 months.

(4) Engines fitted to inflatable boats shall be of a type complying with the requirements of Part II of Schedule 5, and of such power as may be considered suitable by the Department.

(5) Engines shall be permanently attached to the boats they are intended to propel unless they weigh less than 40 kilogrammes and the total weight of engine, fuel tank and fuel does not exceed 60 kilogrammes.

(6) The lifting arrangements fitted on inflatable boats shall comply with the requirements of Part II of Schedule 8 to these Regulations.

Liferafts

30. Liferafts shall comply with the requirements of either Part I or Part II of Schedule 9.

Buoyant apparatus

31. (1) Buoyant apparatus shall comply with the requirements of Schedule 10.

(2) The number of persons which buoyant apparatus shall be deemed fit to
support shall be equal to:

(a) the greatest whole number obtained by dividing by 14.5 the number of kilogrammes of iron which the apparatus is capable of supporting from its grab lines in fresh water, or

(b) the greatest whole number obtained by dividing the perimeter in metres by 0.3, whichever number shall be the less.

Marking of lifeboats, Class C boats, inflatable boats, liferafts, and buoyant apparatus

32. (1) The dimensions of a lifeboat or Class C boat and the number of persons which each is deemed fit to accommodate shall be clearly marked on it in permanent characters. The name and port of registry of the ship to which the lifeboat or Class C boat belongs shall be painted on each side of the bow.

(2) The transom of an inflatable boat shall be marked with the number of persons the boat is deemed fit to accommodate, its date of manufacture, maker's name and trade mark, serial number and name and port of registry of the ship on which it is carried.

(3) The number of persons which a liferaft which complies with Part I of Schedule 9 is deemed fit to accommodate shall be clearly marked in permanent characters on the liferaft on the outside of the liferaft canopy and on the valise or other container in which the liferaft is contained when not in use. Every such liferaft shall also bear a serial number and the manufacturer's name. The name and port of registry of the ship on which the raft is for the time being carried or a serial number to enable that ship to be identified shall also be marked on the liferaft and its valise or other container.

(4) Every liferaft which complies with Part II of Schedule 9 shall be marked with the name and port of registry of the ship in which it is carried, and with the number of persons it is deemed fit to accommodate.

(5) The number of persons which buoyant apparatus is deemed fit to support shall be clearly marked on it in permanent characters.

Lifebuoys

33. (1) Lifebuoys carried in every vessel to which these Regulations apply shall comply with the requirements of Part I of Schedule 11, except in those vessels described in paragraph (2) below.

(2) Lifebuoys carried in ships of less than 16.8 metres in length, of Classes VIII(A), VIII(A)(T), IX, IX(A), IX(A)(T), XI and XII, to which these Regulations apply, shall comply with the requirements of either Part I or Part II of Schedule 11. The lifebuoys carried shall not be so mixed as to comprise at any one time lifebuoys complying with Part I and lifebuoys complying with Part II of the said Schedule.

(3) If a ship described in paragraph (2) of this regulation complies with Part II of Schedule 11 and is one to which the provisions of regulations 19(3), or 23(4) apply, then notwithstanding any provision therein to the contrary, lifebuoys shall be carried equal in number to the total number of persons on board, but at no time less than two lifebuoys.

(4) Lifebuoys carried in every vessel to which these Regulations apply shall weigh not less than 4.3 kilogrammes where the release of a self-igniting light depends upon the weight of the lifebuoy.

Lifebuoy lights, smoke signals and lines

34. (1) Lifebuoys carried in ships (except ships of Classes III and VI and ships of Classes IX(A) and IX(A)(T) of less than 12.2 metres in length, in accordance with these Regulations shall have attached to them self-igniting lights on the following scale:-

(a) in ships of Classes I, II and II(A), on at least half the lifebuoys and

in no case on less than six;

(b) in ships of Class IV, and in ships of Classes V and VI(A) of 9.1 metres in length or over (except ships which are engaged in daylight voyages only), on two lifebuoys;

(c) in ships of Classes VII, VII(T), VIII, VIII(T), VIII(A), VIII(A)(T), IX and XI and in ships of Class VII(A) of 21.3 metres in length or over, on at least half the lifebuoys and in no case on less than two;

(d) in ships of Classes IX(A), IX(A)(T) and XII of 21.3 metres in length or over, on two lifebuoys;

(e) in ships of Classes V and VI(A) of less than 9.1 metres in length (except ships which are engaged in daylight voyages only) and in ships of Classes VII(A), IX(A), IX(A)(T) and XII of less than 21.3 metres in length, on one lifebuoy.

(2) Self-igniting lights attached to lifebuoys carried in any vessel to which these Regulations apply shall be such that they cannot be extinguished in water. They shall be capable of burning for not less than 45 minutes and shall have a luminous intensity of not less than 2 candelas in all directions of the upper hemisphere and comply with the
following minimum ranges of light visibilities in the given atmospheric conditions:-

Atmospheric transmissivity factor	Meteorological range of visibility (miles)	Range of visibility of the light (miles)
0.3	2.4	0.96
0.4	3.3	1.05
0.5	4.3	1.15
0.6	5.8	1.24
0.7	8.4	1.34
0.8	13.4	1.45
0.9	28.9	1.57

(3) Self-igniting lights attached to lifebuoys carried in tankers shall be of an electric battery type.

(4) (a) In every ship to which these Regulations apply (except ships of Classes V and VI(A) of less than 9.1 metres in length, and ships of Classes VII(A), IX(A), IX(A)(T), and XII of less than 21.3 metres in length) one lifebuoy on each side of the ship shall have attached to it a buoyant line of at least 27.3 metres in length.

(b) In ships of Classes V and VI(A) of less than 9.1 metres in length and in ships of Classes VII(A), IX(A) and IX(A)(T) of less than 21.3 metres in length, one lifebuoy shall have attached to it a buoyant line of at least 18.3 metres in length.

(c) The lifebuoys having lines attached to them in compliance with this regulation shall not have self-igniting lights attached.

(5) Not less than two of the lifebuoys to which self-igniting lights are attached in accordance with sub-paragraphs (a),(b),(c) and (d) of paragraph (1) of this regulation and the lifebuoy to which a self-igniting light is attached in accordance with paragraph (1)(e) of this regulation shall be provided with a self-activating smoke signal complying with the requirements of Schedule 12 : provided that vessels of Class V under 15.2 metres in length need not comply with this paragraph.

(6) The lifebuoys provided with self-activating smoke signals in accordance with regulation 6(7) and two of the lifebuoys provided with self-igniting lights in accordance with sub-paragraphs (a), (b), (c) and (d) of paragraph (1) of this regulation and self-activating smoke signals in accordance with paragraph (5) of this regulation shall be carried on each side of the ship and be capable of quick release from the navigating bridge.

Line-throwing appliances

35. (1) Ships of less than 12 metres in length need not comply with the requirements for the carriage of line-throwing appliances contained in regulations 3(13), 4(16), 6(9), 7(8), 11(17), 12(14) and 22(8).

(2) Line-throwing appliances shall comply with the requirements of Schedule 14.

PROVISION OF EQUIPMENT AND RATIONS IN LIFEBOATS, BOATS AND LIFERAFTS

Equipment for lifeboats, Class C boats and other boats (other than inflatable boats)

36. (1) Subject to the provisions of paragraphs (2), (3), (4), (5) and (6) of this regulation the equipment of every lifeboat shall be as follows:-

(a) a single banked complement of buoyant oars, two spare buoyant oars, and a buoyant steering oar; one set and a half of crutches attached to the lifeboat by lanyard or chain; a boat hook;

(b) two plugs for each plug hole (except where proper automatic valves are fitted) attached to the lifeboat by lanyards or chains; a bailer and two buckets;

(c) a rudder attached to the lifeboat and a tiller;

(d) a lifeline becketed round the outside of the lifeboat; means to enable persons to cling to the lifeboat if upturned in the form of bilge keels or keel rails, together with grab lines secured from gunwale to gunwale under the keel;

(e) a locker conspicuously marked as such, suitable for the stowage of small items of equipment;

(f) two hatchets, one at each end of the lifeboat;

(g) a lamp with oil sufficient for 12 hours;

(h) a watertight box containing two boxes of matches not readily extinguished by wind;

(i) a mast or masts, with galvanised wire stays together with orange coloured sails which shall be marked for identification purposes with the first and last letter of the name of the ship to which the lifeboat belongs;

(j) a compass in binnacle complying with the requirements of Part I of Schedule 15;

(k) a sea anchor complying with the requirements of Part II of Schedule 15;

(l) two painters of sufficient length and size. One shall be secured to the forward end of the lifeboat with strop and toggle so that it can be released and the other shall be firmly secured to the stem of the lifeboat and be ready for use;

(m) a vessel containing 4.5 litres of vegetable, fish or animal oil. A means shall be provided to enable the oil to be easily distributed on the water, and shall be so arranged that it can be attached to the sea anchor;

(n) four parachute distress rocket signals complying with the requirements of Part III of Schedule 15 and six hand-held distress flare signals complying with the provisions of Part IV of Schedule 15 and packed in a watertight container;

(o) two buoyant smoke signals complying with the requirements of Part V of Schedule 15 and packed in a watertight container;

(p) (i) a first aid outfit complying with the requirements of Part VI of Schedule 15;

(ii) six anti-seasickness tablets for each person which the boat is deemed fit to accommodate;

(q) a waterproof electric torch suitable for morse-signalling together with one spare set of batteries and one spare bulb in a waterproof container;

(r) a daylight-signalling mirror;

(s) a jack-knife fitted with a tin opener to be kept attached to the lifeboat with a lanyard;

(t) two light buoyant heaving lines;

(u) a manual pump complying with the requirements of Part VII of Schedule 15;

(v) a whistle;

(w) a fishing line and six hooks;

(x) a cover of a highly visible colour capable of protecting the occupants

against injury by exposure;

(y) a copy of the Department of Transport Rescue Signal Table published by Her Majesty's Stationery Office;

(z) means to enable persons in the water to climb into the lifeboat;

(aa) thermal protective aids sufficient for 10% of the number of persons the lifeboat is permitted to accommodate or for two persons, whichever is the greater number;

Provided that-

(i) In ships of Classes II, II(A), VIII, VIII(T), VIII(A), VIII(A)(T) and IX, and ships of Class XI which do not proceed outside the Limited European trading area such lifeboats shall not be required to carry the equipment specified in sub-paragraphs (i),(r) and (w); and

(ii) In ships of Classes III,IV and VI(A) such lifeboats shall not be required to carry the equipment specified in sub-paragraphs (i), (j), (m), (o), (r), (v), (w), (x) and (y) nor the parachute distress rocket signals specified in sub-paragraph (n) of this paragraph.

(iii) In ships of Classes I, II, II(A), III, IV, and VI(A) such lifeboats shall not be required to carry the equipment specified in sub-paragraph (aa) of this paragraph.

(2) No motor lifeboat or mechanically propelled lifeboat shall be required to carry a mast or sails nor more than half the complement of oars. Every such lifeboat shall carry two boat hooks.

(3) Every motor lifeboat shall carry at least two portable fire extinguishers capable of discharging foam or other substance suitable for extinguishing oil fires, a receptable containing a sufficient quantity of sand and a scoop for distributing the sand. Such portable fire extinguishers shall be of a type complying with the requirements of regulation 69 of the Merchant Shipping (Fire Appliances) Regulations 1980 **(n)** except that the capacity of each extinguisher shall not be required to exceed 4.5 litres of fluid or its equivalent.

(4) The equipment of every boat carried in ships of Classes V, IX(A) and
IX(A)(T) shall be as follows:-

(a) a single banked complement of buoyant oars and a buoyant steering oar; one set of crutches attached to the boat by lanyard or chain; a
boat hook;

(b) two plugs for each plug hole;

(c) a bailer;

(d) a rudder attached to the boat and a tiller;

(e) a lifeline becketed round the outside of the boat; and

(f) a painter of sufficient length and size.

(5) The equipment of every boat carried in a ship of Class VI shall be as follows:-

(a) a single banked complement of buoyant oars and a buoyant steering oar; one set of crutches attached to the boat by lanyard or chain; a boat hook;

(b) two plugs for each plug hole;

(c) a bailer;

(d) a rudder attached to the boat and a tiller;

(e) a lifeline becketed round the outside of the boat;

(f) a painter of sufficient length and size;

(g) a sea anchor complying with the provisions of Part II of Schedule 15; and

(h) a hatchet.

(6) Every lifeboat or Class C boat which is carried in compliance with sub-paragraph 5(b)(iii) or 7(b) of regulation 11, sub-paragraph (a) of regulation 18(3), sub-paragraph (b) of regulation 22(2) or regulation 23(2) shall be equipped as follows:-

(a) a single banked complement of buoyant oars and one spare buoyant oar provided that there shall never be less than three oars; one set of crutches attached to the boat by lanyard or chain; a boat hook;

(b) two plugs for each plug hole (except where proper automatic valves are fitted) attached to the boat by lanyards or chains; a bailer and a bucket;

(c) a rudder attached to the boat and a tiller;

(d) a lifeline becketed round the outside of the boat;

(e) a locker, conspicuously marked as such, suitable for the stowage of small items of equipment;

(f) a painter of sufficient length and size secured to the forward end of the boat with strop and toggle so that it can be released;

(g) means to enable persons to cling to the boat if upturned in the form of bilge keels or keel rails;

(h) a waterproof electric torch suitable for morse signalling together with one spare set of batteries and one spare bulb in a waterproof container;

(i) two light buoyant heaving lines;

(j) a hatchet;

(n) S.I. 1980/544 as applied to the Island by GC 38/85

(k) 6 distress flares complying with the provisions of Part IV of Schedule 15; and

(l) 2 buoyant smoke signals complying with the requirements of Part V of Schedule 15.

(m) thermal protective aids sufficient for 10% of the number of persons the lifeboat is permitted to accommodate or for two persons, whichever is the greater number.

Equipment for inflatable boats

37. (1) The equipment of every inflatable boat carried in a ship of Class V, IX(A) and IX(A)(T) shall be as follows:-

(a) at least two buoyant oars and two buoyant paddles;

(b) a bailer and two sponges;

(c) a crutch or steering grommet on the transom;

(d) a grab line secured round the outside of the boat and a grab line fitted round the inside of the boat;

(e) a painter of adequate size and length;

(f) hand holds or straps for the purpose of righting the boat from the inverted position;

(g) an efficient manually operated bellows or pump;

(h) bridle slinging arrangements to allow the boat to be lowered into or raised from the water complying with the requirements of Part II of Schedule 8;

(i) a repair kit in a suitable container for repairing punctures in the buoyancy compartments.

(2) The equipment of every inflatable boat carried in a ship of Class VI shall be as follows:-

(a) at least two buoyant oars and two buoyant paddles;

(b) a bailer and two sponges;

(c) a crutch or steering grommet on the transom;

(d) a grab line secured round the outside of the boat and a grab line fitted round the inside of the boat;

(e) a painter of adequate size and length;

(f) hand holds or straps for the purpose of righting the boat from the inverted position;

(g) an efficient manually operated bellows or pump;

(h) bridle slinging arrangements to allow the boat to be lowered into or raised from the water complying with the requirements of Part II of Schedule 8;

(i) a repair kit in a suitable container for repairing punctures in the buoyancy compartments;

(j) a sea anchor capable of preventing the loaded boat drifting at more than one knot in a wind of force 5 or 6, attached to the boat by a line of adequate strength at least 9.0 metres in length;

(k) a safety knife;

(3) Every inflatable boat carried in compliance with sub-paragraph 5(b)(iii) or 7(b) of regulation 11, sub-paragraph (a) of regulation 18(3), sub-paragraph (b) of regulation 22(2) or regulation 23(2) shall be equipped as follows:-

(a) at least two buoyant oars and two buoyant paddles;

(b) a bailer and two sponges;

(c) a crutch or steering grommet on the transom;

(d) a grab line secured round the outside of the boat and a grab line fitted round the inside of the boat;

(e) a painter of adequate size and length;

(f) hand holds or straps for the purpose of righting the boat from the inverted position;

(g) an efficient manually operated bellows or pump;

(h) bridle slinging arrangements to allow the boat to be lowered into or raised from the water complying with the requirements of Part II of Schedule 8;

(i) a repair kit in a suitable container for repairing punctures in the buoyancy compartments;

(j) a sea anchor capable of preventing the loaded boat drifting at more than one knot in a wind of force 5 or 6, attached to the boat by a line of adequate strength at least 9.0 metres in length;

(k) a safety knife;

(l) two buoyant rescue quoits attached to 18.0 metres of light buoyant line;

(m) a waterproof electric torch suitable for morse signalling together with one spare set of batteries and one spare bulb in a waterproof container;

(n) a container or pocket for loose equipment.

Rations for lifeboats

38. (1) Every lifeboat carried in a ship of Class 1, every lifeboat carried in a ship of Classes VII , VII(A) and VII(T) in compliance with regulations 11(2), 12(2) and 13(2) respectively, and every lifeboat carried in a ship of Class XI in compliance with sub-paragraph (2)(a) of regulation 22 shall be provided with a food ration totalling not less than 10,000 kilojoules for each person it is deemed fit to accommodate. Such ration will not be required on ships which do not make voyages outside the Limited European Area.

(2) Such rations shall be kept in airtight packaging and be stowed in suitable watertight containers labelled to indicate the contents.

(3) Every lifeboat carried in a ship of Class I, II, II(A), III, IV, VII, VII(A), VII(T), VIII, VIII(T), VIII(A), VIII(A)(T), IX and XI shall be provided with at least 3 litres of fresh water for each person whom it is deemed fit to accommodate, or at least 2 litres of fresh water for each such person together with a de-salting apparatus capable of providing at least 1 litre of drinking water for each such person and in either case the total quantity of
water shall be increased as far as is practicable:

Provided that this paragraph shall not apply to any lifeboat which is carried as an alternative to a Class C boat in a ship of Class VII, VII(T), VII(A), VIII, VIII(T), VIII(A), VIII(A)(T), IX and XI.

(4) The water shall be kept in the lifeboat in suitable containers and there shall be provided at least one rust proof dipper, which shall be attached to the containers by a lanyard, and three rust-proof drinking vessels (one graduated in 10, 20 and 50 cubic centimetres), provided that a container of not more than 2 litre capacity shall not be required to be provided with a dipper. The water shall be frequently changed so as to ensure that it is always clean and fit for drinking.

Special equipment for certain motor lifeboats

39. (1) In every ship of Classes I and VII(A) the following shall be complied with:-

(a) the lifeboat radiotelegraph installation in the motor lifeboats which are required to comply with regulations 3(5)(a)(i) or 12(5)(a)(i) shall
comply with the following provisions:-

(i) it shall be installed in a cabin large enough to accommodate both the apparatus and the person using it;

(ii) the arrangements shall be such that the efficient operation of the transmitter and receiver shall not be impaired through interference from the engine of the motor lifeboat whether a battery is on charge or not; and

(iii) the radio battery shall not be used to supply power to any engine starting motor or ignition system;

(b) means shall be provided in the lifeboat for recharging batteries.

(2) In every ship of Classes I, II and VII(A) the motor lifeboats which are required to comply with regulation 3(6)(b), regulation 4(5) and regulation 12(6)(b) shall be provided with a searchlight which shall include a lamp of at least 80 watts, an efficient reflector and a source of power which will give effective illumination of a light-coloured object having a width of about 18 metres at a distance of 180 metres for a total period of six hours. The searchlight shall be capable of working for at least three hours continuously.

Security of equipment and rations in lifeboats, Class C boats, inflatable boats and other boats

40. (1) All items of equipment provided in a lifeboat, Class C boat, inflatable boat or other boat with the exception of the boat hook which shall be kept free for fending off purposes, shall be suitably secured within the lifeboat or boat. Any lashing shall be carried out in such a manner as to ensure the security of the equipment and so as not to interfere with the lifting hooks, if fitted, or to prevent ready embarkation. All items of such equipment shall be as small and as light in weight as possible and shall be packed in suitable and compact form.

(2) All the rations provided in a lifeboat shall be stowed in watertight tanks, which shall be firmly secured to the lifeboat.

(3) The tanks for the food and water ration shall be conspicuously marked “food” or “water” whichever is appropriate.

Equipment and rations for liferafts

41. (1) Subject to the provisions of paragraphs (2), (3) and (4) of this regulation the equipment and rations provided in every liferaft shall be as follows:-

(a) one buoyant rescue quoit, attached to at least 30 metres of buoyant line;

(b) for liferafts which are fit to accommodate not more than 12 persons: one safety knife and one bailer;

for liferafts which are fit to accommodate 13 persons or more : two safety knives and two bailers;

(c) two sponges;

(d) two sea anchors, one permanently attached to the liferaft and one spare with line;

(e) two paddles;

(f) one repair outfit capable of repairing punctures in buoyancy compartments unless the liferaft complies with the requirements of Part II of Schedule 9;

(g) one topping-up pump or bellows, unless the liferaft complies with

Part II of Schedule 9;

(h) three safety tin openers;

(i) a first aid outfit complying with the requirements of Part VI of Schedule 15;

(j) one rust-proof drinking vessel, graduated in 10, 20 and 50 cubic centimetres;

(k) one waterproof electric torch suitable for morse-signalling together with one spare set of batteries and one spare bulb in a waterproof container;

(l) one daylight signalling mirror and one signalling whistle;

(m) two parachute distress rocket signals complying with the requirements of Part III of Schedule 15;

(n) six hand-held distress flare signals complying with the requirements of Part IV of Schedule 15;

(o) one fishing line and six hooks;

(p) a food ration complying with the requirements of Part III of Schedule 7 of the Merchant Shipping (Life-Saving Appliances) (Ships Built on or after 1st July 1986) Regulations 1991; totalling not less than 10,000 kilojoules for each person the liferaft is permitted to accommodate; these rations shall be supplied in airtight packaging and be stowed in a watertight container.

(q) watertight receptacles containing 1.5 litres of fresh water for each person the liferaft is deemed fit to accommodate, of which half a litre per person may be replaced by a suitable de-salting apparatus capable of producing an equal amount of fresh water;

(r) six anti-seasickness tablets for each person which the liferaft is permitted to accommodate;

(s) instructions printed in English on how to survive in the liferaft;

(t) one copy of the Department of Transport Rescue Signal Table published by Her Majesty's Stationery Office; and

(u) thermal protective aids sufficient for 10 per cent of the number of persons the liferaft is permitted to accommodate or two, whichever is the greater number.

(2) In ships of Class I such liferafts shall not be required to carry the equipment specified in sub-paragraph (u) of paragraph (1) of this regulation.

(3) In ships of Classes II and II(A), one or more liferafts, not being less than one-sixth of the number of liferafts carried in any such ship, shall be provided with the equipment specified in sub-paragraphs (a) to (g) inclusive, (k), (s) and (t) of paragraph (1) of this regulation, and with one-half of the equipment specified in sub-paragraphs (m) and (n) of the said paragraph, and the remainder of the liferafts carried shall be provided with the equipment specified in paragraphs (a) to (g) inclusive, (s) and (t) of the said paragraph.

(4) In ships of Classes III, IV, V, VI, VI(A), IX(A) and IX(A)(T) liferafts shall be provided with the equipment specified in sub-paragraphs (a), (b), (c), (e), (f), (g), (s) and (t) of paragraph (1) of this regulation together with one sea-anchor which shall be permanently attached to the liferaft.

(5) In ships of Class XII of less than 21.3 metres in length liferafts shall be provided with the equipment specified in sub-paragraphs (a), (b), (c), (e), (f), (g), (i), (j), (k), (m), (r), (s), and (t) of paragraph (1) of this regulation together with the following equipment:-

(a) one sea anchor which shall be permanently attached to the liferaft;

(b) two safety tin-openers;

(c) three hand-held distress flare signals complying with the requirements of Part IV of Schedule 15; and

(d) watertight receptacles containing 0.5 litre of fresh water for each person which the liferaft is deemed fit to accommodate.

STOWAGE AND HANDLING OF LIFE-SAVING APPLIANCES

General provisions relating to the stowage and handling of life-saving appliances

42. (1) The arrangement of each lifeboat, Class C boat, inflatable boat, other boat, liferaft and article of buoyant apparatus shall be such that it will not interfere with the operation of other life-saving appliances or impede in any way their prompt handling or the marshalling of persons at the launching stations or their embarkation.

(2) Lifeboats, Class C boats, inflatable boats, other boats, liferaft and buoyant apparatus shall be so stowed that they can all be launched safely in the shortest possible time and the overall launching period shall not exceed 30 minutes in the case of (a) ships of Class I, II and II(A) and (b) ships of Class VII(A) which carry liferafts under launching appliances.

Stowage and handling of lifeboats, Class C boats, inflatable boats and other boats

43. (1) Subject to the provisions of paragraphs (2), (3) and (4) of this regulation every lifeboat attached to a set of davits, other than a lifeboat which is carried as an alternative to a Class C boat, inflatable boat or other boat, shall be so arranged that even under unfavourable conditions of trim and of up to 15 degrees of list either way it can be put into the water when loaded with its full complement of persons and equipment required by these Regulations except that in ships of under 45.7 metres in length of Classes IV and VI(A) such lifeboats may be so arranged that in the aforesaid conditions they can be put into the water when loaded with their required equipment and a launching crew of at least two persons.

(2) Any lifeboat which is carried as an alternative to a Class C boat, inflatable boat or other boat, and any Class C boat, inflatable boat, or other boat which is attached to a davit or set of davits other than a mechanically controlled single-arm davit shall be so arranged that when loaded with its equipment required by these Regulations and a launching crew of two persons it can be put into the water on one side of the ship when the ship is upright or is listed to 15 degrees towards that side.

(3) Every lifeboat, Class C boat, inflatable boat, or other boat attached to a mechanically controlled single-arm davit shall be so arranged that when loaded with its equipment required by these Regulations and a launching crew of two persons it can be put into the water on one side of the ship when the ship is upright or is listed up to 15 degrees towards that side.

(4) Every lifeboat or Class C boat carried in compliance with sub-paragraph 5(b)(iii) or 7(b) of regulation 11, regulation 16(2), sub-paragraph (a) of regulation 18(3), sub-paragraph (b) of regulation 22(2) or regulation 23(2) and every boat carried in compliance with regulation 19(2) if not attached to a davit or set of davits, shall be attached to a device which shall be provided primarily for the purpose of launching the boat and which shall be capable of putting the boat into the water on one side of the ship when it is loaded with its equipment required by these Regulations and a launching crew of two persons and when the ship is upright or is listed up to 15 degrees towards that side.

(5) Every inflatable boat carried in compliance with sub-paragraph 5(b)(iii) or 7(b) of regulation 11, regulation 16(2), sub-paragraph (a) of regulation 18(3), sub-paragraph (b) of regulation 22(2) or regulation 23(2) shall be attached to a launching device, wlich shall comply with the requirements of Schedules 16 and 17, which shall be capable of launching and recovering the inflatable boat when the ship is upright or listed to 15 degrees towards the side on which the appliance is fitted provided that the boat shall be so stowed that it is capable of being manhandled over board without the use of the launching device.

(6) Not more than one lifeboat, Class C boat, inflatable boat or other boat shall be attached to any set of davits, davit or other means of launching.

(7) Lifeboats shall only be stowed on more than one deck on condition that proper measures are taken to prevent lifeboats on a lower deck being fouled by those stowed on a deck above.

(8) Lifeboats shall if possible be positioned as close to accommodation and service spaces as possible. They shall be stowed in such positions as to ensure safe launching having particular regard to clearance from the propeller and steeply overhanging portions of the hull, with the object of ensuring so far as practicable that they can be launched down the straight side of the ship. If positioned forward they shall be stowed abaft the collision bulkhead in a sheltered position approved by the Department having regard to the strength of the davits.

(9) Davits shall be suitably placed in the ship.

(10) Davits, winches, falls, blocks and all other launching gear provided in accordance with these regulations shall comply with the requirements of Schedule 16 or 17 as the case may be.

(11) (a) All lifeboats, Class C boats, inflatable boats or other boats attached to davits shall be served by wire rope falls and winches in the following cases:-

(i) when they are attached to gravity davits; or,

(ii) when they are attached to mechanically controlled single-arm davits; or,

(iii) when they are fitted in any ship of Classes I or II, or in any ship of Class VII(A) in compliance with regulation 12(2); or

(iv) when they are fitted in any ship of Classes VII, VII(T), VIII, VIII(T), or IX in compliance with regulation 11(2) or sub-paragraph (a) of regulation 11(5) or 11(7); or

(v) when the weight of the attached lifeboat, Class C boat, inflatable boat or other boat in the lowering condition exceeds 2300 kilogrammes:

Provided that the Department may permit other types of falls to be fitted, with or without winches in cases other than emergency lifeboats, where it is satisfied that such falls are adequate.

(b) In every ship to which these Regulations apply in which lifeboats, Class C boats, inflatable boats or other boats are served by wire rope falls, winches shall be provided for handling such falls.

(c) Emergency lifeboats carried in compliance with regulation 3(3), regulation 4(4) or regulation 12(3), shall be served by winches which are capable of recovering them at a speed of not less than 0.3 metres per second when the lifeboat is loaded with its equipment required by these Regulations and a distributed load equal to 1000 kilogrammes.

(12) Efficient hand gear shall be provided for the recovery of all lifeboats, Class C boats, inflatable boats or other boats which are served by winches.

(13) Where davits or other launching devices are recovered by action of the falls by power, safety devices shall be fitted which will automatically cut off the power before the davits come against the stops if necessary to ensure that the wire rope falls or davits are not over-stressed.

(14) To facilitate the launching of lifeboats against a list of 15 degrees, skates or other suitable means shall be provided for any lifeboat stowed under davits which are of such strength that the lifeboat can be lowered with its full complement of persons and its equipment required by these Regulations.

(15) Means shall be provided for bringing the lifeboats, which are required to be capable of being lowered in the fully loaded condition, against the ship's side and for holding them there for the safe embarkation of persons.

(16) In ships other than ships in which the lifeboat, Class C boat, inflatable boat or other boat is attached to a mechanically controlled single-arm davit, the davits shall be

fitted with a wire rope span so positioned that when the boat is in the lowering position the span is as near as practicable over the centre line of the boat. There shall be at least two lifelines fitted to the span and the lifelines shall be long enough to reach the water with the ship at her lightest seagoing draught and listed to 15 degrees either way.

(17) Lifeboats, Class C boats, inflatable boats and other boats attached to davits shall have the falls ready for service, and the falls shall be at least long enough to reach the water with the ship at her lightest sea-going draught and listed to 15 degrees either way. Means shall be provided for detaching the lifeboats, Class C boats, inflatable boats or other boats from the falls. Lower fall blocks if provided shall be fitted with a suitable ring or long link for attaching to the sling hooks, unless disengaging gear complying with the requirements of Schedule 18 is fitted. The points of attachment of the lifeboats, Class C boats, inflatable boats and other boats to the falls shall be at such height above the gunwale as to ensure stability when lowering the lifeboats, Class C boats, inflatable boats or other boats.

(18) Every emergency lifeboat carried in compliance with regulation 3(3), 4(4) and regulation 12(3) shall be provided with means for facilitating the attachment of the lower fall blocks to the lifting arrangements of the boat when the boat is recovered from the sea in adverse weather conditions. For this purpose a pendant of adequate strength and suitable length shall be provided for each davit, and the one end of the pendant shall be attached to the lower fall block and the other end to the lifting arrangement on the boat. Means shall in addition be provided for hanging off the boat after hoisting to enable the lower fall block to be attached directly to the lifting hook.

(19) In any ship to which these Regulations apply when a lifeboat is attached to any set of davits, davit, or other means of launching not of sufficient strength that the lifeboat can be safely lowered into the water when loaded with its full complement of persons and equipment required by these Regulations under the conditions of trim and of list specified in these Regulations for the class of ship, or when any Class C boat, inflatable boat or other boat not of sufficient strength that it can be safely lowered into the water when loaded with its full complement of persons and equipment required by these Regulations is attached to any set of davits, davit, or other means of launching, each davit or other means of launching shall be conspicuously marked with a red band 150 millimetres wide painted on a white back-ground.

Stowage and handling of liferafts, buoyant apparatus, lifebuoys and lifejackets

44. (1) Liferafts and buoyant apparatus shall be so stowed that they can be put into the water safely even under unfavourable conditions of trim and of up to 15 degrees of list either way.

(2) (a) In every ship of Classes I, II, II(A), and VII(A) which carry liferafts

in accordance with sub-paragraph (b) of regulation 3(2) or sub-paragraph (c) of regulation 4(8) or sub-paragraph (b) of regulation 12(2) of these Regulations there shall be provided for such liferafts launching appliances complying with the requirements of Schedule 19 to these Regulations.

(b) Every liferaft launching appliance shall be so arranged that even under unfavourable conditions of trim and of up to 15 degrees of list

either way each liferaft which is designed for use with such an appliance can be launched when loaded with its full complement of
persons and equipment.

(c) The requirement of regulation 43(8) shall apply to liferafts for which approved launching devices are required to be carried and to such
launching devices, as they apply to lifeboats.

(d) Means shall be provided for bringing liferafts for which launching appliances are provided against the ship's side and for holding them there for the safe embarkation of persons.

(3) (a) Lifebuoys shall be so distributed as to be readily available on both sides of the ship and as far as practicable on all open decks extending to the ship's side. At least one lifebuoy shall be placed in the vicinity
of the stern.

(b) Lifebuoys shall be so stowed as to be capable of being rapidly cast loose, and shall not be permanently secured in any way.

(c) Except as otherwise provided, lifebuoys with lights and those with lights and smoke signals shall be equally distributed on both sides of the ship.

(4) Lifejackets shall be so stowed as to be readily accessible to all persons on board. Their position shall be clearly and permanently indicated.

MISCELLANEOUS PROVISIONS

Embarkation into lifeboats, Class C boats and other boats, and liferafts

45. (1) Arrangements shall be made to ensure that it is possible to effect embarkation into the lifeboats, Class C boats, inflatable boats and other boats, and liferafts rapidly and in good order.

(2) In every ship arrangements shall be made for warning the passengers and crew when the ship is about to be abandoned.

(3) (a) In ships of Classes VII, VII(T), VIII, VIII(T), VIII(A), VIII(A)(T), IX, XI and XII one ladder shall be carried at each set of lifeboat davits where the davits are capable of lowering the lifeboat when loaded with its full complement of persons and its equipment required by these Regulations. Such provision shall also be made for ships of Classes I, II, II(A) and III and for those ships of Class VII(A) to which regulation 12(2) refers, except that in such ships the Department may permit such ladders to be replaced by suitable mechanical devices provided that there shall not be less than one ladder on each side of the ship.

(b) In ships of Classes VII, VII(A), VII(T), VIII, VIII(A), VIII(A)(T), IX, XI and XII which carry a Class C boat or a lifeboat which is not capable of being lowered into the water when loaded with its full complement of persons and its equipment required by these Regulations suitable means shall be provided for embarking persons into the boat.

(c) In ships of Classes I, II, II(A) and III, in ships of Class VII(A) to which regulation 12(2) refers and in ships of Classes VII, VII(T), VIII, VIII(T) and IX of 500 tons or over sufficient ladders shall be provided to facilitate embarkation into the liferafts when waterborne except that in such ships the Department may permit the replacement of some or all of such ladders by suitable mechanical devices.

(d) The ladders provided in compliance with this paragraph of this regulation shall be of sufficient length to reach the water line with the ship at her lightest sea-going draught and listed to 15 degrees either way.

(4) Ships of Classes I, II, II(A), III, VII, VII(A), VII(T), VIII, VIII(A), VIII(A)(T) and IX shall be provided with means situated outside the engine room whereby any discharge of water into the lifeboats or into liferafts at fixed launching positions, including those under launching appliances, can be prevented.

Manning of survival craft

46. (1) This regulation applies to ships of Classes I, II, II(A), III, VII, VII(A) VII(T), VIII, VIII(T) and ships of Classes IX and XI engaged on international voyages.

(2) ***omitted by SD2014/0238.***

(3) A deck-officer or certificated person shall be placed in charge of each lifeboat to be used. In addition a deck officer or certificated person shall be nominated second-in-command of such lifeboat.

(4) Except as otherwise provided in this paragraph a deck officer or certificated person shall be placed in charge of each liferaft to be used. In ships of Classes II, II(A) and III the person placed in charge of each liferaft may in lieu of a deck officer or certificated person be a crew member practised in the handling and operation of liferafts.

(5) The person in charge of a survival craft shall have a list of the survival craft crew and shall ensure that the crew under his command are acquainted with their duties. In lifeboats the second-in-command shall also have a list of the lifeboat crew.

(o) Amended by S.D. 723/96

(6) In ships carrying liferafts served by launching appliances a deck officer or certificated person shall be assigned to each launching appliance.

(7) In ships carrying liferafts not served by launching appliances a deck officer or certificated person shall be assigned to each launching position.

(8) A person capable of operating the engine and carrying out minor adjustments shall be assigned to every motor lifeboat.

(9) A person capable of operating a radiotelegraph installation shall be assigned to every lifeboat required to carry such equipment until 1st February 1995.

(10) There shall be a sufficient number of trained persons on board for mustering and assisting untrained persons.

(11) The master shall ensure the equitable distribution of persons referred to in paragraphs (2), (3), (4) and (10) of this regulation when compiling the muster list referred to in regulation 4(2) of the Merchant Shipping (Musters and Training) Regulations 1986 [(p)].

(12) ***In this regulation –***

"certificated person" means a member of the crew who holds a certificate of proficiency in survival craft and rescue boats (other than fast rescue boats) issued in accordance with STCW regulation VI/2.1; and

"STCW" has the meaning given by regulation 4 of the Merchant Shipping (Manning and STCW) Regulations 2014 (SD2014/0238).

Stowage of portable radio apparatus

47. (1) The portable radio apparatus for survival craft required to be carried in compliance with regulations 3(5), 4(11), 11(12) and 12(5) shall be kept in a suitable place ready to be moved to a survival craft in an emergency.

(2) In ships where the lifeboats are stowed in widely separated positions fore and aft, the portable radio apparatus shall be stowed in the vicinity of the lifeboats which are furthest from the ship's main transmitter.

Electrically operated signals

48. Every ship of Class I shall be provided throughout the ship with electrically operated signals controlled from the bridge for summoning passengers to muster stations.

Electric lighting

49. (1) In every ship of Class I, II or II(A), an electric lighting system shall be provided throughout the ship and in particular upon the decks from which lifeboats and liferafts are embarked. Provision shall also be made in every such ship for the electric lighting of the launching gear and of the lifeboats, and of the liferaft launching appliances where provided and the liferafts which they serve, during the preparation for and process of launching and also for illuminating the water into which the lifeboats and liferafts served by launching appliances are launched until the process of launching is completed, and for lighting the stowage position of liferafts for which launching appliances are not provided.

(p) G.C. 234/86. Replaced by SD 431/99

The lighting shall be operated from the ship's main generating plant and shall be so arranged that power may be supplied from the emergency source of power referred to in Regulation 43 of the Merchant Shipping (Passenger Ship Construction) Regulations 1980 [q] or in Regulation 48 of the Merchant Shipping (Passenger Ship Construction and Survey) Regulations 1984 [r] as appropriate.

(2) In every ship of Class I, II or II(A), the exit from every main compartment occupied by passengers or crew shall be continuously lighted by an emergency electric lamp, operated from the ship's main generating plant and so arranged that power may be supplied from the emergency source of power referred to in Regulation 43 of the Merchant Shipping (Passenger Ship Construction) Regulations 1980 or in Regulation 48 of the Merchant Shipping (Passenger Ship Construction and Survey) Regulations 1984 as appropriate.

(3) (a) In every ship of Classes VII, VII(A), VII(T), VIII and VIII(T) of 500 tons or over and in every ship of Class IX of such tonnage engaged on international voyages provision shall be made for the electric lighting of the launching gear and of the lifeboats and of the liferaft launching appliances, where provided, and of the liferafts which they serve, during the preparation for and process of launching and also for lighting the water into which the lifeboats, and the liferafts served by launching appliances, are launched until the process of launching is completed, and for the lighting of the stowage position of liferafts for which launching appliances are not provided.

(b) In every ship of Classes VII, VII(A), VII(T), VIII and VIII(T) of 1,600 tons or over and in every ship of Class IX of such tonnage engaged on international voyages, provision shall be made for the electric lighting of the alleyways, stairways and exits so as to ensure that access of all persons on board to the launching stations and stowage positions of lifeboats and liferafts is not impeded.

(c) The lighting required by sub-paragraphs (a) and (b) of this paragraph shall be operated from the ship's main electric generating plant and in addition shall be capable of being operated-

(i) in every such ship of 5,000 tons or over from an emergency source of electric power which shall be provided for such lighting or, in the case of any ship to which regulation 6 of the Merchant Shipping (Cargo Ship Construction and Survey) Regulations 1981 [s] or Regulation 45 of the Merchant Shipping (Cargo Ship Construction and Survey) Regulations 1984 [t] as appropriate applies, from the emergency source of electric power required by that regulation;

(q) S.I. 1980/535 and (r) S.I. 1984/1216 as applied to the Island by G.C. 38/85

(s) S.I.1981/572 and (t) S.I. 1984/1217 both applied to the Island by G.C. 38/85 and now superseded by SD 603/98

(ii) in every ship of 1,600 tons or over but of under 5,000 tons from an emergency source of electric power which shall be provided for such lighting or, in the case of any ship to which regulation 7 of the Merchant Shipping (Cargo Ship Construction and Survey) Regulations 1981 or Regulation 45 of the Merchant Shipping (Construction and Survey) Regulations 1984 as appropriate applies, from the emergency source of electric power required by that regulation.

(d) In every such ship of 500 tons or over but of under 1,600 tons the lighting required by sub-paragraph (a) of this paragraph shall be operated from the ship's main electric generating plant and in addition shall be capable of being operated from an emergency source of electric power which shall be provided for such lighting or, in the case of any such ship to which regulation 8 of the Merchant Shipping (Cargo Ship Construction and Survey) Regulations 1981 or Regulation 45 of the Merchant Shipping (Cargo Ship Construction and Survey) Regulations 1984 applies, from the emergency source of electric power required by that regulation or, if the Department permits, the reserve source of electrical energy required by regulations 17 or 25 of the Merchant Shipping (Radio Installations) Regulations 1986 [u] on condition that the lighting circuits can be readily disconnected and the said reserve source is capable of supplying the additional load or loads without falling below the capacity required by the aforesaid Regulations.

(4) In every ship of Classes VII, VII(A), VII(T), VIII, VIII(T) and IX to which paragraph (3) of this regulation does not apply and in every ship of Classes VIII(A), VIII(A)(T), IX(A) and XI, means shall be provided for the electric lighting of the launching gear and lifeboats or boats during the preparation for and process of launching and also for the lighting of the stowage position of the liferafts.

Ship's distress signals

50. (1) Every ship to which these Regulations apply, except ships of Classes V, VI, IX(A), and IX(A)(T) and ships of Class XII, shall carry not less than twelve parachute distress rocket signals which shall comply with the requirements of Schedule 20.

(2) Ships of Class VI shall carry at least two buoyant smoke signals which shall comply with the requirements of Part V of Schedule 15.

(3) Ships of Class IX(A) and IX(A)(T) operating in partially smooth waters shall carry not less than six red star distress signals which shall comply with the requirements of Schedule 21.

(u) G.C. 235/86. Now superseded by SD 50/99

(4) Ships of Class XII operating in partially smooth waters or which proceed to sea shall carry not less than six pyrotechnic distress signals which shall be either parachute distress rocket signals of a type which complies with the requirements of Schedule 20 or red star distress signals which shall comply with the requirements of Schedule 21.

Operating instructions, training manuals and on-board maintenance

51. (1) Except as otherwise provided in sub-paragraph (2)(a) this regulation applies to ships of Classes I, II, IIA, III, IV, V, VI, VI(A), VII, VII(A), VII(T), VIII, VIII(T), VIII(A), VIII(A)(T), IX, IX(A), IX(A)(T), XI and XII which carry one or more lifeboats, Class C boats, other boats or liferafts.

(2) Every ship to which this regulation applies shall be provided with:-

(a) posters or signs showing operating instructions on or in the vicinity of survival craft and their launching controls; such posters or signs shall illustrate the purpose of controls and the procedures for operating the appliance and give relevant instructions; they shall be easily seen under emergency lighting conditions on ships of Class I, II, II(A), VII, VII(A), VII(T), VIII, VIII(T) and IX to which regulation 49(1), (2) or (3) applies; where applicable they shall use symbols which are specified in the United Kingdom Department of Transport Merchant Shipping Notice No. M.1293 and in any document amending or replacing it which is considered by the Department to be relevant from time to time.

(b) a training manual complying with the requirements of Part I of Schedule 22 in each crew messroom and recreation room or in each crew cabin; in ships of under 500 tons at least one training manual shall be provided appropriate to the life-saving appliances carried
and to the type and size of ship on which it is provided; and

(c) as far as practicable instructions complying with the requirements of Part II of Schedule 22 for on-board maintenance of life-saving appliances or a shipboard planned maintenance programme which includes the maintenance of life-saving appliances.

Replacement of Life-Saving Appliances

52. When any life-saving appliance or arrangement on a ship to which these Regulations apply is replaced or the ship undergoes repairs, alterations or modifications of a major character which involve replacement of, or any addition to, its existing life-saving appliances or arrangements, any such replacement or additional life-saving appliance or arrangement shall, so far as is reasonably practicable, be a life-saving appliance or arrangement complying with the requirements relating to that type of appliance or arrangement contained in a schedule or schedules to the Merchant Shipping (Life-Saving Appliances) (Ships built on or after 1st July 1986) Regulations 1991; and any appliance or arrangement complying with those requirements shall not be required to comply with the requirements in the relevant schedule or schedule to these Regulations;

provided that if a lifeboat is replaced but its launching appliance is not, or vice versa, the lifeboat or launching appliance as the case may be, may be of the same type as that replaced.

Operational readiness, maintenance, inspections and servicing

53 (1) All life-saving appliances shall be in working order and ready for immediate use before any ship to which these Regulations apply commences a voyage and at all times during the voyage.

(2) As far as practicable, maintenance of life-saving appliances shall be carried out in accordance with the Instructions for on-board maintenance, or in accordance with a shipboard planned maintenance programme which includes the requirements of Part II of Schedule 22.

(3) Falls used in launching shall be turned end for end at intervals of not more than 30 months and be renewed when necessary due to deterioration of the falls or at intervals of not more than 5 years, whichever is the earlier. Stainless steel falls shall be turned end for end at intervals of not more than 30 months but need not be renewed if on inspection there are no signs of mechanical damage or other possible defects.

(4) Spares and repair equipment shall be provided for life-saving appliances and their components which are subject to excessive wear or consumption and need to be replaced regularly.

(5) The following tests and inspections shall be carried out weekly:

(a) all survival craft, rescue boats, inflated boats, Class C boats and launching appliances shall be visually inspected to ensure that they are ready for use;

(b) if practicable all engines in lifeboats and other boats shall be run ahead and astern for a total period of not less than 3 minutes provided the ambient temperature is not lower than that at which the engine is required to start; and

(c) the general emergency alarm system shall be tested.

(6) Inspection of the life-saving appliances, including lifeboat equipment, shall be carried out monthly using the check list referred to in Part II of Schedule 22 to these Regulations. A report of the inspection shall be entered in the log referred to in paragraph 2(g) of Part II of Schedule 22.

(7) Every inflatable liferaft, inflated and rigid inflated rescue boat, inflated boat, inflatable lifejacket and hydrostatic release unit shall be serviced at a service station accepted by the Department at intervals not exceeding 12 months, provided that in any case where this is impracticable, such interval may be extended by a period not exceeding 5 months.

(8) Emergency repairs to inflated rescue boats and inflated boats may be carried out on board ship but permanent repairs shall be effected at an approved service station, as soon as practicable.

Table of Life-saving Signals and Rescue Methods

54. In ships of Classes I, II, II(A), III, VII, VII(A), VII(T), VIII, VIII(T), VIII(A), VIII(A)(T), IX and XI and in ships of Class XII which proceed to sea a copy of the table "Life-saving Signals and Rescue Methods, SOLAS No.1", published by the Department of Transport shall be provided.

Immersion suits

55. Immersion suits may be of the insulated or uninsulated type provided that immersion suits of the insulated type shall be carried on ships which make voyages:-

(a) north of latitude 65°N in the Atlantic Ocean;

(b) north of latitude 55°N in the Pacific Ocean;

(c) south of latitude 50°S; and

(d) east of longitude 10°E in the Kattegat and Baltic Sea between 1st December and 30th. April, both dates inclusive.

Retro-reflective material

56. Life-saving appliances carried on ships of Classes I to XI inclusive and ships of Class XII which proceed to sea, shall be fitted with retro-reflective material where it will assist in detection and to the satisfaction of the Department.

Acceptance of life-saving appliances

57. (1) Life-saving appliances and arrangements required by these Regulations shall be of a type which has been accepted by the Department.

(2) Any item of the life-saving equipment marked with an expiry date shall be replaced on or before that date.

Testing of survival craft release arrangements

58. (1) Liferaft automatic release hooks shall be serviced at intervals not exceeding 30 months and shall be proof tested at 100% safe working load at intervals not exceeding 5 years.

(2) Lifeboat disengaging gears shall be overhauled at intervals not exceeding 30 months.

Equivalents and exemptions

59. (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 Department 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 it 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) If it appears to the Department, on the application of the owner of any ship, that it is not practicable or reasonable to fit in that ship the number of sets of davits required by these Regulations it may permit one or more sets of davits to be dispensed with in that ship subject to such conditions, if any, as it thinks fit:

Provided that, in the case of Classes II and II(A) the number of sets of davits fitted shall, subject to the provisions of regulations 4(2) and 4(8) in no case be less than the minimum number determined by Column B of the table set out in Schedule 1.

(3) If it is impracticable or unreasonable for a ship to carry a lifeboat or boat of the minimum length prescribed by these Regulations, the Department may permit a smaller lifeboat or boat to be carried by that ship.

(4) The Department may exempt any ship not normally engaged on international voyages but which, in exceptional circumstances, is required to undertake a single international voyage from any of the requirements of these Regulations, provided that she complies with safety requirements which in its opinion are adequate for the voyage which is to be undertaken by the ship.

(5) The Department may exempt any ship or class of ships from all or any of the provisions of these Regulations (as may be specified in the exemption) if it is satisfied that compliance with such provision is either impracticable or unreasonable in the case of that ship or class of ships on such terms (if any) as it may so specify and may, subject to giving reasonable notice, alter or cancel any such exemption.

59A Validity of exemptions or equivalent arrangements

An exemption or equivalent arrangement permitted by these Regulations is only valid if —

a) it is in writing;

b) it specifies the date on which it takes effect; and

c) any conditions stated in it are complied with.

Penalties

60. (1) If a ship to which these Regulations apply proceeds on any voyage or excursion, or arrives within territorial waters of the Island, without complying with the requirements of these Regulations, the owner or master of the ship shall each be guilty of an offence and liable on summary conviction to a fine not exceeding ***£2,500*** or on conviction on information to imprisonment for a term not exceeding two years or both.

(2) It shall be a good defence to a charge under this regulation to prove that the person charged took all reasonable steps to avoid commission of the offence.

Power to detain

61. In any case where a ship does not comply with the requirements of these Regulations, the ship shall be liable to be detained and ***section 74 of the Merchant Shipping Registration Act 1991*** [(v)] (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 were substituted "the Merchant Shipping (Life-Saving Appliances) (Ships built before 1st. July 1986) Regulations 1991.".

(v) 1991 c.15

SCHEDULE 1

Regulation 4(2) and 59

TABLE SHOWING THE MINIMUM NUMBERS OF DAVITS TO BE PROVIDED AND THE MINIMUM CUBIC CAPACITY OF LIFEBOATS IN SHIPS OF CLASSES II AND II(A).

Registered Length of Ship in metres	(A) Minimum number of sets of davits	(B) Smaller number of sets of davits authorised exceptionally	(C) Minimum capacity of lifeboats in cubic metres
Under 37	2	2	11
37 and under 43	2	2	18
43 " " 49	2	2	26
49 " " 53	3	3	33
53 " " 58	3	3	38
58 " " 63	4	4	44
63 " " 67	4	4	50
67 " " 70	5	4	52
70 " " 75	5	4	61
75 " " 78	6	5	68
78 " " 82	6	5	76
82 " " 87	7	5	85
87 " " 91	7	5	94
91 " " 96	8	6	102
96 " " 101	8	6	110
101 " " 107	9	7	122
107 " " 113	9	7	135
113 " " 119	10	7	146
119 " " 125	10	7	157
125 " " 133	12	9	171
133 " " 140	12	9	185
140 " " 149	14	10	202
149 " " 159	14	10	221

Registered Length of Ship in metres	(A) Minimum number of sets of davits	(B) Smaller number of sets of davits authorised exceptionally	(C) Minimum capacity of lifeboats in cubic metres
159 " " 168	16	12	238
168 " " 177	16	12	-
177 " " 186	18	13	-
186 " " 195	18	13	-
195 " " 204	20	14	-
204 " " 213	20	14	-
213 " " 222	22	15	-
222 " " 232	22	15	-
232 " " 241	24	17	-
241 " " 250	24	17	-
250 " " 261	26	18	-
261 " " 271	26	18	-
271 " " 282	28	19	-
282 " " 293	28	19	-
293 " " 303	30	20	-
303 " " 314	30	20	-

SCHEDULE 2

Regulations 6(2) and 7(2)

TABLE SHOWING THE MINIMUM NUMBER OF SETS OF DAVITS TO BE PROVIDED IN SHIPS OF CLASSES III AND IV.

Length of ship in metres	Minimum numbers of sets of davits
Under 61	2
61 and under 73	3
73 " " 85	4
85 " " 98	5
94 and over	6

SCHEDULE 3

Regulation 24

GENERAL REQUIREMENTS FOR LIFEBOATS

1. Every lifeboat shall be constructed with rigid sides.

2. In any lifeboat fitted with a rigid shelter, the shelter shall be capable of being readily opened from both inside and outside and shall not impede rapid embarkation and disembarkation or the launching and handling of the lifeboat. Such a shelter where fitted may be accepted as complying with the requirements of sub-paragraph (x) of regulation 36(1).

3. Every lifeboat, except wooden lifeboats made of planks, shall have a block coefficient of the cubic capacity as determined in accordance with Schedule 4 of not less than 0.64 provided that any such lifeboat may have a block coefficient of less than 0.64 if the Department is satisfied with the sufficiency of the metacentric height and freeboard when the lifeboat is loaded with its full complement of persons and equipment.

4. Every lifeboat shall be of such form and proportions that it shall have ample stability in a seaway, and sufficient freeboard when loaded with its full complement of persons and equipment.

5. Every lifeboat shall be so constructed that it shall be capable of maintaining positive stability when open to the sea and loaded with its full complement of persons and equipment.

6. Every lifeboat shall be properly constructed for the purpose for which it is intended and shall be of sufficient strength to permit its being safely lowered into the water when loaded with its full complement of persons and equipment. It shall be of such strength that it will not suffer residual deflection if subjected to an overload of at least 25 per cent.

7. No lifeboat shall be less than 4.9 metres in length except where these Regulations permit a lifeboat to be carried as an alternative to a Class C boat.

8. No lifeboat when laden with its full complement of persons (calculated at 75 kilogrammes per person) and equipment shall weigh more than 20,300 kilogrammes.

9. In every lifeboat all thwart and side seats shall be fitted as low in the lifeboat as practicable and bottom boards shall be fitted.

10. Every lifeboat shall have a mean sheer at least equal to 4 per cent of its length. The sheer shall be approximately parabolic in form.

11. Every lifeboat shall be fitted with internal buoyancy appliances which shall consist either of air cases or buoyant material which shall not be adversely affected by oil or oil products and which shall not adversely affect the boat.

12. In every lifeboat the total volume of the internal buoyancy appliances shall be such that it will be at least equal to the sum of the volumes of:

(a) that required to float the lifeboat and its full equipment when the lifeboat is flooded and open to the sea so that the top of the gunwale amidships is not submerged; and

(b) that equal to 10 per cent of the cubic capacity of the lifeboat.

13. In the case of lifeboats which accommodate 100 or more persons, the volume of the buoyancy appliances required by sub-pargraph (b) of the preceding paragraph of this
Schedule shall be increased as follows:-

In lifeboats which accommodate from 100 to 130 persons by an amount determined by interpolating between nil at 100 persons and 1.5 per cent of the cubic capacity of the lifeboat at 130 persons;

In lifeboats which accommodate over 130 persons by an amount equal to 1.5 per cent of the cubic capacity of the lifeboat.

SCHEDULE 4

Regulation 25

CALCULATION OF CUBIC CAPACITY OF LIFEBOATS

1. Subject to the provisions of paragraph (4) of this Schedule, the cubic capacity of a lifeboat for the purposes of these Regulations shall be measured in cubic metres and shall be determined by Stirling's (Simpson's) Rule, which may be considered as given by the following formula:-

$$\text{Cubic Capacity} = \frac{L}{12}(4A+2B+4C),$$

where “L” denotes the length of the lifeboat in metres from the inside of the shell at the top of the stem to the corresponding point at the top of the stern post; in the case of a lifeboat with a square stern the length is measured to the inside of the top of the transom; and

“A, B, C,” denote respectively the areas of the cross-sections at the quarter length forward, amidships and the quarter length aft which correspond to the three points obtained by dividing L into four equal parts (the areas corresponding to the two ends of the lifeboat shall be considered negligible).

The areas A, B, C shall be deemed to be given in square metres by the successive application of the following formula to each of the three cross-sections:-

$$\text{Area} = \frac{h}{12}(a + 4b + 2c + 4d + e),$$

where “h” denotes the depth measured in metres inside the shell from the keel to the level of the gunwale, or, in certain cases, to a lower level as determined hereafter; and “a, b, c, d, e” denote the horizontal breadths of the lifeboat measured in metres inside the shell at the upper and lower points of the depth and at the three points obtained by dividing h into four equal parts (a and e being the breadths at the extreme points, and c at the middle point of h).

The capacity of a square-sterned lifeboat shall be calculated as if the lifeboat had a pointed stern.

2. If the sheer of the gunwale, measured at the two points situated at a quarter of the length of the lifeboat from the ends, exceeds 1 per cent of the length of the lifeboat the depth employed in calculating the area of the cross-section A or C shall be deemed to be the depth amidships plus 1 per cent of the length of the lifeboat.

3. If the depth of the lifeboat amidships exceeds 45 per cent of the breadth, the depth employed in calculating the area of the amidship cross-section B shall be deemed to be equal to 45 per cent of the breadth, and the depth employed in calculating the areas of the quarter length sections A and C is obtained by increasing this last figure by an amount equal to 1 per cent of the length of the lifeboat:

Provided that in no case shall the depths employed in the calculation exceed the actual depths at these points.

4. Unless the owner of the lifeboat requires the cubic capacity to be determined by exact measurement, the cubic capacity of a lifeboat constructed of wooden planks may be assumed to be the product of the length, the breadth and the depth multiplied by 0.6 if this formula does not give a greater capacity than that obtained by the formula set out in paragraph 1 of this Schedule. The dimensions shall be measured in the following manner:-

Length - From the intersection of the outside of the planking with the top of the stem to the corresponding point at the stern post, or in the case of a square-sterned lifeboat, to the after side of the top of the transom;

Breadth - From the outside of the planking at the point where the breadth of the lifeboat is greatest;

Depth - Amidships inside the planking from the keel to the level of the top of the gunwale, but the depth used in calculating the cubic capacity may not in any case exceed 45 per cent of the breadth.

5. The cubic capacity of a motor lifeboat or a lifeboat fitted with other propelling gear shall be obtained from the gross capacity by deducting a volume equal to that occupied by the motor and its accessories or the gearbox of the other propelling gear, and any equipment with which the lifeboat may be provided in compliance with regulation 39 of these Regulations.

SCHEDULE 5

Regulation 26(a)

MACHINERY OF MOTOR LIFEBOATS

PART I

1. The engine shall be capable of being readily started in cold weather and of running reliably under conditions of extremes of temperature.

2. The engine shall operate properly under conditions of at least 10 degrees list and 10 degrees trim. Circulating water pumps where fitted shall be self-priming.

3. The engine and its accessories, including the fuel tank, pipes and fittings, shall be adequately protected to ensure reliable operation under conditions likely to arise at sea during adverse weather. The engine casing shall additionally be fire-resisting, and in the case of air-cooled diesel engines shall be so designed that the supply of cooling air is not restricted.

4. Means shall be provided in all lifeboats to prevent the spread of oil. In a wooden lifeboat a metal tray shall be fitted under the engine.

5. The fuel tank shall be substantially constructed, securely fixed in position with a metal tray underneath and fitted with suitable filling, vapour venting and relief arrangements. No part of the tank or its connections nor any part of the fuel piping or fittings shall depend on soft solder for tightness, and tanks made of steel shall be protected externally against corrosion by sea water by metal spraying or similar means.

The tank and its connections shall be capable of withstanding hydraulic pressure corresponding to a head of at least 45 killonewtons per metre squared. A cock shall be fitted at each end of the fuel pipe.

6. The engine and fuel tank spaces shall be efficiently ventilated.

7. The shafting and other moving parts shall be fenced where necessary to protect the persons in the lifeboat from injury.

PART II

Regulation 29(4)

MACHINERY OF INFLATABLE BOATS

1. The engine shall be capable of being readily started by manual means in cold weather and of running reliably under conditions of extremes of temperature.

2. The engine and its accessories, including the fuel tank, pipes and fittings shall be protected to ensure reliable operation under conditions likely to arise at sea during adverse weather conditions.

3. The fuel tank shall be substantially constructed, securely fixed in position and fitted with suitable filling vapour venting and relief arrangements. Tanks made of steel shall be protected externally against corrosion by sea water by metal spraying or similar means. The tank and its fittings shall be capable of withstanding a hydraulic pressure corresponding to 45 kiloPascals. A cock shall be fitted at each end of any fixed fuel pipe, and where portable pipes are provided a means of preventing leakage of fuel on disconnection of the pipes shall be fitted.

SCHEDULE 6

Regulation 27

MACHINERY OF MECHANICALLY PROPELLED LIFEBOATS

1. The propelling gear shall be so arranged that it can be rapidly and easily made ready for service and will not interfere with the rapid embarkation of persons into the lifeboat.

2. If the propelling gear is manually operated it shall be capable of being operated by persons untrained in its use and shall be capable of being operated when the lifeboat is flooded.

3. The propelling gear shall not require adjustment to enable it to be worked by persons of different stature. It shall be effective in propelling the lifeboat partially or fully loaded.

4. The propelling gear shall be substantially constructed and fitted to the lifeboat in an efficient manner. The metal part of any operating handle shall be suitably sheathed by material other than wood to ensure that the hands of the operators are protected in conditions of extreme cold.

5. The propelling gear shall be of sufficient power to enable the lifeboat when loaded with its equipment required by these Regulations and a distributed weight equal to the full number of persons which it is fit to carry, to be propelled at a speed ahead of at least 3.5 knots in smooth water over a distance of a quarter of a mile.

6. The propelling gear shall be capable of propelling the lifeboat ahead or astern and a device shall be fitted by means of which the helmsman can cause the lifeboat to go astern or ahead at any time when the propelling gear is in operation.

SCHEDULE 7

Regulation 28

REQUIREMENTS FOR CLASS C BOATS

1. Every Class C boat shall be an open boat constructed with rigid sides.

2. The boat shall be of such form and proportions that it shall have ample stability in a seaway and sufficient freeboard when loaded with its equipment and the number of persons specified in column (2) of paragraph (3) of this Schedule.

3. The length of the boat and the number of persons for whom seating shall be provided in the boat shall be determined in accordance with the following table:-

(1)	(2)
Length of boat in metres	Minimum Seating Capacity of boat (persons)
4.8	9
4.5	8
4.2	7
3.9	5
3.6	4

4. All thwart and side seats in the boat shall be fitted as low in the boat as practicable and bottom boards shall be fitted.

5. The boat shall be square-sterned and shall have a mean sheer at least equal to five per cent of its length.

6. The boat shall be fitted with internal buoyancy appliances which shall be so placed as to secure stability when the boat is fully laden under adverse weather conditions.

7. Every boat shall be fitted with internal buoyancy appliances which shall consist either of air cases or buoyant material which shall not be adversely affected by oil or oil products and which shall not adversely affect the boat.

8. The total volume of the internal buoyancy appliances shall be such that it will be at least equal to the sum of the volumes of:

(a) that required to float the boat and its full equipment when the boat is flooded and open to the sea so that the top of the gunwale amidships is not submerged; and

(b) that equal to 7.5 per cent of the cubic capacity of the boat which shall be determined in the same manner as that prescribed for lifeboats in Schedule 4 to these Regulations.

SCHEDULE 8

Regulations 29(1)

REQUIREMENTS FOR INFLATABLE BOATS

PART I

GENERAL REQUIREMENTS

Every inflatable boat shall comply with the following requirements:-

1. The overall length of the boat shall be not less than 3.8 metres and the boat shall be of such form and proportions as to have ample stability in a seaway when afloat in the empty, laden or swamped condition. The boat shall be suitable for the accommodation of at least six persons.

2. The boat shall be of sufficiently robust construction to survive when fully loaded, without such deterioration as would involve any loss of seaworthiness, for 30 days afloat under extremes of temperatures (60°C to minus 30°C) and in weather likely to be encountered at sea anywhere in the world.

3. All materials and components used in the construction of the boat and its accessories shall be able to withstand the worldwide seagoing climatic conditions referred to in paragraph 2 above. The boat and its accessories shall be resistant to the effects of humidity when stowed on board a vessel and all fabrics, cordage, webbing and thread shall be rotproof. The boat shall be so constructed that it is not adversely affected by oil or oil products.

4. The boat shall possess a sufficient margin of durability to ensure that its performance will not be affected after 24 months' stowage on board a vessel in a weather deck stowage with a minimum of additional protection.

5. The main buoyancy chambers forming the boundary of the boat shall on inflation provide at least 0.17 cubic metres of volume for each person the boat is certified to accommodate. The diameter of the main buoyancy chambers of single tube boats shall be at least 0.43 metres.

6. The main buoyancy chambers shall be divided into at least two compartments along each side and one compartment in the bow, making a minimum total of five compartments.

7. In boats of more than one tube the volume of either tube shall not exceed 60 per cent of the total volume.

8. At least one thwart shall be fitted so that the boat can be rowed satisfactorily.

9. The floor of the boat shall be waterproof and shall provide an efficient working platform.

10. A transom which shall not be inset by more than 20 per cent of the overall length of the boat shall be provided.

11. A bow cover of a highly visible colour and extending for at least 15 per cent of the overall length of the boat shall be provided.

12. A non-return valve shall be fitted to each buoyancy chamber for manual inflation.

13. A safety relief valve designed to operate at a pressure not exceeding 125 per cent of the designed working pressure of the buoyancy chamber shall be fitted in each buoyancy chamber. Means for deflating shall be fitted in each chamber.

14. Drainage arrangements shall be fitted capable of draining the boat within 2.5 minutes when flooded. To the extent that the water levels inside and outside the boat are the same it shall not be possible accidentally to flood the boat through these drainage arrangements.

PART II

LIFTING ARRANGEMENTS

Regulation 29(6)

1. Bridle slinging arrangements shall be fitted to all inflatable boats to enable the boat to be lowered or raised from the water. The bridle sling shall comprise four legs or more which should be joined at the top in the form of an eye or be connected to a lifting ring or shackle. The arrangement shall be such that the boat is stable when suspended and:-

(a) with a four-legged sling the legs should be at equal length, or

(b) the bridle shall be permanently attached, or

(c) the arrangements shall be such that it is not possible to connect any of the bridle legs to the wrong position on the boat.

2. The bridle shall be manufactured of a material which will not adversely affect the material of the boat and, if necessary, shall be sheathed to prevent abrasion of the fabric.

3. The forward lifting attachments shall be securely fastened to the hull and may be bands passing under the hull to the tops of the buoyancy tubes terminating in D rings or eyes to take bridle slings.

4. The after lifting attachments shall be similar to the forward attachments or may be made direct to the transom.

5. The bridle slinging arrangements used for lowering and recovering the boat shall be such that their breaking tensile strength is at least 6 times the maximum working load as defined in paragraph (1) of Schedule 17 to these Regulations excluding the weight of the blocks and falls.

6. The bridle sling lifting arrangements shall be proof tested to not less than 2.5 times their respective working loads. The proof testing can be carried out either-:

(a) individually on each item associated with the lifting arrangements, or

(b) on the assembly of a structurally completed boat with its lifting arrangements and particular bridle sling. In each case fabric, webbings and cordages forming part of the lifting arrangements shall have a breaking strength of not less than six times their respective working loads.

SCHEDULE 9

Regulation 30

REQUIREMENTS FOR LIFERAFTS

PART I

INFLATABLE LIFERAFTS

1. Subject to the provisions of paragraphs (2) and (3) of this Part of this Schedule every inflatable liferaft shall comply with the following requirements:-

(a) The liferaft shall be so constructed that, when fully inflated and floating with the cover uppermost, it shall be stable in a seaway.

(b) The liferaft shall be so constructed that if it is dropped into the water from a height of 18 metres neither the liferaft nor its equipment will be damaged. If the raft is to be stowed on the ship at a height above the water of more than 18 metres it shall be of a type which has been satisfactorily drop-tested from a height at least equal to the height at which it is to be stowed.

(c) The construction of the liferaft shall include a cover which shall automatically be set in place when the liferaft is inflated. This cover shall be capable of protecting the occupants against injury from exposure, and means shall be provided for collecting rain. The top of the cover shall be fitted with a lamp which derives its luminosity from a sea-activated cell and a similar lamp shall also be fitted inside the liferaft. The cover of the liferaft
shall be of a highly visible colour.

(d) The liferaft shall be fitted with a painter and shall have a lifeline becketed round the outside. A lifeline shall also be fitted round the inside of the liferaft.

(e) The liferaft shall be capable of being readily righted by one person if it inflates in an inverted position.

(f) The liferaft shall be fitted at each opening with efficient means to enable persons in the water to climb on board.

(g) The liferaft shall be contained in a valise or other container so constructed as to be capable of withstanding hard wear under conditions met with at sea.
The liferaft in its valise or other container shall be inherently buoyant.

(h) The buoyancy of the liferaft shall be so arranged as to ensure by a division into an even number of separate compartments, half of which shall be capable of supporting out of the water the number of persons which the liferaft is fit to accommodate, or by some other equally efficient means, that there is a reasonable margin of buoyancy if the raft is damaged or partially fails to inflate.

(i) The total weight of the liferaft, its valise or other container and its equipment shall not exceed 180 kilogrammes (400 pounds).

(j) The number of persons which an inflatable liferaft shall be permitted to accommodate shall be equal to:

(i) the greatest whole number obtained by dividing by 96 the volume, measured in cubic decimetres of the main buoyancy tubes (which for this purpose shall include neither the arches nor the thwart or thwarts if fitted) when inflated; or

(ii) the greatest whole number obtained by dividing by 3.720 the area measured in square centimetres of the floor (which for this purpose may include the thwart or thwarts if fitted) of the liferaft when inflated whichever number shall be the less.

(k) The floor of the liferaft shall be waterproof and shall be capable of being sufficiently insulated against cold either:

(i) by means of one or more compartments which the occupants can inflate if they so desire, or which inflate automatically and can be deflated and re-inflated by the occupants; or

(ii) by other equally efficient means not dependent on inflation.

(l) The liferaft shall be inflated by a gas which is not injurious to the occupants and the inflation shall take place automatically either on the pulling of a line or by some other equally simple and efficient method. Means shall be provided whereby a topping-up pump or bellows may be used to maintain pressure.

(m) The liferaft shall be of suitable material and construction, and shall be so constructed as to be capable of withstanding exposure for 30 days afloat in all sea conditions.

(n) Every liferaft which is designed for use with a launching appliance shall be properly constructed for the purpose for which it is intended and shall be of sufficient strength to permit it to be safely lowered into the water when loaded with its full complement for persons and equipment.

(o) The liferaft shall have a carrying capacity calculated in accordance with sub-paragraph (j) of this paragraph of not less than six persons or more than twenty-five persons.

(p) The liferaft shall be capable of operating throughout a temperature range of 66°C. to minus 30°C.

(q) The liferaft shall be fitted with arrangements enabling it to be readily towed.

(r) Every liferaft carried on a ship which is provided with portable radio equipment complying with the relevant requirements of Part V of the Merchant Shipping (Radio Installations) Regulations 1986 until 1st February 1995 shall be provided with arrangements for accommodating properly in the operating position the aerial referred to in those Schedules to the said Regulations.

(s) (i) The liferaft shall be so stowed as to be readily available in case of emergency. It shall be stowed in such a manner as to permit it to float free from its stowage, inflate and break free from the vessel in the event of sinking.

(ii) If used, lashings shall be fitted with an automatic release system of a hydrostatic or equivalent nature accepted by the Department.

(iii) The liferaft required by paragraph (8) of regulation 11 of these Regulations may be securely fastened.

2. In ships of Classes III, IV, V, VI and IX(A), IX(A)(T) and in ships of Class XII of less than 21.3 metres in length the requirements of sub-paragraphs (b), (c), (k), (o), (p) and (q) of paragraph (1) of this Part of this Schedule may be modified as follows-

(a) the height of 18 metres referred to in the said sub-paragraph (b) may be the height equivalent to that of the deck on which the liferaft is stowed above the ship's light water line, but in no case less than 6 metres;

(b) means for collecting rain referred to in the said sub-paragraph (c) shall not be required to be provided;

(c) the method for insulating the floor of the liferaft against cold as referred to in the said sub-paragraph (k) shall not be required to be complied with;

(d) the minimum carrying capacity of liferafts required by the said sub-paragraph (o) as six persons may be four persons, provided that liferafts which are deemed fit to accommodate less than six persons shall only be carried on such ships on which the total number of persons on board is less than six;

(e) the temperature of minus 30°C. referred to in the said sub-paragraph (p) may be minus 18°C;

(f) the arrangements for towing referred to in the said sub-paragraph (q) shall not be required to be provided.

3. In ships of Classes VIII(A), VIII(A)(T) and XI, in ships of Class IX not being ships of 500 tons or over engaged on an international voyage and in ships of Class XII of 21.3 metres in length or over the requirements of sub-paragraph (o) of paragraph (1) of this Part of this Schedule may be modified as specified in sub-paragraph (d) of paragraph (2) of this Part of this Schedule.

PART II

RIGID LIFERAFTS

Every rigid liferaft shall comply with the following requirements:-

(a) The liferaft shall be so constructed that if it is dropped into the water from its stowed position neither the liferaft nor its equipment will be damaged;

(b) Any liferaft which is designed for use with a launching appliance shall be properly constructed for the purpose for which it is intended and shall be of sufficient strength to permit it to be safely lowered into the water when loaded with its full complement of persons and equipment;

(c) The liferaft shall be so constructed that its air cases or buoyant material are placed as near as possible to its sides;

(d) The deck area of the liferaft shall be situated within that part of the liferaft which affords protection to its occupants. The nature of the deck shall be such as to prevent so far as practicable the ingress of water and it shall
effectively support the occupants out of the water;

(e) The liferaft shall be fitted with a cover or equivalent arrangement of a highly visible colour, which shall be capable of protecting the occupants against
injury whichever way up the liferaft is floating;

(f) The equipment of the liferaft shall be so stowed as to be readily available whichever way up the liferaft is floating;

(g) The total weight of any liferaft and its equipment carried in passenger ships shall not exceed 180 kilogrammes. Liferafts carried in cargo ships may exceed 180 kilogrammes in weight if they are capable of being launched from both sides of the ship or if means are provided for putting them into the water mechanically on either side of the ship;

(h) The liferaft shall at all times be effective and stable when floating either way up;

(i) The number of persons which the liferaft shall be deemed fit to accommodate shall be equal to-

(i) the greatest whole number obtained by dividing by 96 the volume, in cubic decimetres, of the air cases or buoyant material; or

(ii) the greatest whole number obtained by dividing by 0.3720 the deck area of the liferaft measured in square metres whichever number
shall be the less;

(j) The liferaft shall have a painter attached and a lifeline securely becketed round the outside. A lifeline shall also be fitted round the inside of the liferaft;

(k) The liferaft shall be fitted at each opening with efficient means to enable persons in the water to climb on board;

(l) The liferaft shall be so constructed as not to be affected by oil or oil products;

(m) A buoyant light of the electric battery type shall be attached to the liferaft by
a lanyard;

(n) The liferaft shall be fitted with arrangements enabling it to be readily towed;

(o) Liferafts shall be so stowed as to float free in the event of the ship sinking;

(p) Every liferaft carried on a ship which is provided with portable radio equipment complying with the relevant requirements of Part V of the Merchant Shipping (Radio Installations) Regulations 1986 until 1st February 1995 shall be provided with arrangements for accommodating properly in the operating position the aerial referred to in those Schedules to the said Regulations.

SCHEDULE 10

Regulation 31

REQUIREMENTS FOR BUOYANT APPARATUS

1. Buoyant apparatus shall be of such construction that it retains its shape and properties when exposed to the weather on board ship and when in the water. It shall be constructed so as not to require adjustment prior to use.

2. Buoyant apparatus shall be capable of withstanding a drop test, the height of which shall be equivalent to that of the deck on which it is stowed above the ship's light water
line, but in no case less than the following:-

Apparatus carried in ships of Class I .....18 metres

Apparatus carried in ships of Class III ..... 6 metres

3. Buoyant apparatus shall be effective and stable when floating either way up. It shall be capable of supporting a weight of iron, suspended in fresh water from the grab lines, of 22.5 kilogrammes per metre of length along any edge (subject to a minimum of 29 kilogrammes) without immersing any part of the upper surface of the apparatus.

4. The air cases or equivalent buoyancy shall be placed as near as possible to the sides of the apparatus, and such buoyancy shall not be dependent upon inflation. Buoyant material shall not be adversely affected by oil or oil products nor shall it adversely affect the buoyant apparatus.

5. Grab lines shall be fitted all round the apparatus in such a manner as to provide a number of equal loops corresponding to the number of persons which the apparatus is fit to support. Each loop shall have a cork or light wood float and the depth of the loop when wet shall not be less than 150 millimetres and not more than 200 millimetres. On apparatus exceeding 305 millimetres in overall depth two rows of grab lines shall be fitted, one having its points of attachment a little below the top of the air cases and the other a little above the bottom of the air cases and as close to the sides of the air cases as is practicable. On apparatus of 305 millimetres or less in overall depth one row of grab lines may be attached along the line of the middle of the depth.

The grab lines shall be of rope of not less than 14 millimetres in diameter. They may be attached to the apparatus by being passed through holes in the framing and being interlaced to prevent movement, or they may be attached to the apparatus by means of wrought iron or steel fastenings. Whichever method is adopted the attachment shall be strong enough to permit the apparatus being lifted by the grab lines.

6. Buoyant apparatus shall be fitted with a painter.

7. Buoyant apparatus shall not exceed 180 kilogrammes in weight unless suitable means are provided to enable it to be launched without lifting by hand. If the weight of the apparatus exceeds 136 kilogrammes suitable handles or rungs shall be fitted for this purpose.

8. Buoyant apparatus carried in ships of Class I shall not be less than 1070 millimetres in breadth.

SCHEDULE 11

REQUIREMENTS FOR LIFEBUOYS

PART I

1. Every lifebuoy shall be constructed of cork, evenly formed and securely plugged, or of other equally efficient buoyant material which shall not be adversely affected by oil or oil products, and shall be capable of floating in fresh water for at least 24 hours with 14.5 kilogrammes of iron suspended from it.

2. Every lifebuoy made of plastic or other synthetic compounds shall be capable of retaining its buoyant properties and durability in contact with sea water or oil products, or under any world wide variation of temperature or climatic changes.

3. A lifebuoy shall not be fitted with rushes, cork shavings, granulated cork or any other loose granulated material, and its buoyancy shall not depend upon compartments which require to be inflated.

4. The inside diameter of a lifebuoy shall be 455 millimetres and the outside diameter 760 millimetres. The major axis of the section shall be 150 millimetres. The minor axis of the section shall be 100 millimetres.

5. Every lifebuoy shall be of a highly visible colour.

6. Every lifebuoy shall be marked in block letters with the name and, except in the case of ships of Class XII, the port of registry of the ship in which it is carried. Lifebuoys constructed of materials other than cork shall be permanently marked with the manufacturer's trade name for that product.

7. Every lifebuoy shall be fitted with beckets securely seized, and with grab lines which shall be of good quality unkinkable line and well secured at four equidistant points providing four loops of line each not less than 700 millimetres long.

8. The weight of a lifebuoy shall not exceed 6.15 kilogrammes when newly constructed.

9. Lifebuoys shall always be capable of being rapidly cast loose and shall not be permanently secured in any way.

PART II

Regulation 33(2)

1. Every lifebuoy shall be constructed of cork, evenly formed and securely plugged, or of other equally efficient buoyant material which shall not be adversely affected by oil or oil products, and shall be capable of floating in fresh water for at least 24 hours with 10.45 kilogrammes of iron suspended from it.

2. Every lifebuoy made of plastic or other synthetic compounds shall be capable of retaining its buoyant properties and durability in contact with sea water or oil products or under any world wide variation of temperature or climatic change.

3. A lifebuoy shall not be filled with rushes, cork shavings, granulated cork or any loose granulated material, and its buoyancy shall not depend upon compartments which require to be inflated.

4. The inside diameter of the lifebuoy shall be 355 millimetres and the outside diameter 610 millimetres. The major axis of the section shall be 125 millimetres and the minor axis from 89 to 100 millimetres.

5. Every lifebuoy shall be of a highly visible colour.

6. Every lifebuoy shall be marked in block letter with the name and, except in the case of ships of Class XII, the port of registry of the ship in which it is carried. Lifebuoys constructed of materials other than cork shall be permanently marked with the manufacturer's trade name for that product.

7. Every lifebuoy shall be fitted with beckets securely seized, and with grablines of good quality unkinkable line and well secured at four equidistant points providing four loops of line each not less than 510 millimetres long.

8. The weight of a lifebuoy shall not exceed 3.40 kilogrammes when newly constructed.

9. Lifebuoys shall always be capable of being rapidly cast loose and shall not be permanently secured in any way.

SCHEDULE 12

Regulation 34(5)

REQUIREMENTS FOR LIFEBUOY MARKER SMOKE SIGNALS

1. Every smoke signal shall be fitted with a self-contained means of ignition, and with means for being efficiently attached to a lifebuoy.

2. The signal shall be capable of emitting dense orange-coloured smoke for at least 15 minutes while floating in water.

3. The signals shall be water proofed and capable of functioning after immersion for 2 hours in water under 1 metre of water.

4. After completion of the ignition cycle the signal shall continue to function after immersion for 10 seconds under 10 cm of water.

5. The signal shall be capable of quick release from the stowed position.

6. The signal shall be capable of functioning after being dropped into water from a height of 25 metres at a speed of 30 knots.

7. The signal shall be safe to operate in oil covered waters.

8. Lifebuoy marker smoke signals may also be provided with self-igniting lights which are required under regulation 34.

9. All components, composition and ingredients of the signals shall be of such character and quality as to enable them to maintain their serviceability under good average storage conditions in the marine environment for a period of at least three years.

10. The date of manufacture and the date of expiry shall be marked indelibly on the signal.

11. Clear and concise directions for use in English supported by illustrations shall be printed indelibly on the signal.

SCHEDULE 13

Regulations 3(12), 4(15), 7(7), 8(4),
11(15), 12(12), 19(5), 22(6) and 23(7)

REQUIREMENTS FOR LIFEJACKETS

PART I

1. Subject to the provisions of paragraph (7) of this Part of this Schedule, every lifejacket for use by a person weighing 32 kilogrammes or more shall provide a minimum of 155 newtons buoyancy in fresh water for 24 hours, after which time the performance detailed in paragraph (3) below shall not be reduced by more than 5 per cent.

2. Every such lifejacket shall be marked indelibly on both sides in letters not less than 12 millimetres in size with the words “PERSON OF 32 KILOGRAMMES OR MORE”, and , on one side with the maker's name or other identification mark, together with the words “ACCEPTED BY THE DEPARTMENT OF TRANSPORT”.

3. Every such lifejacket shall also comply with the following requirements:-

(a) it shall be so constructed as to eliminate as far as possible all risk of its being put on incorrectly and it shall be capable of being worn inside out;

(b) it shall turn the wearer on entering still water from any position to a safe floating position within 5 seconds, with the body inclined backwards from its vertical floating position and shall support the head of the conscious or unconscious wearer so that the mouth shall not be less than 150 millimetres
above the water;

(c) it shall not be adversely affected by oil or oil products;

(d) it shall be of a highly visible colour;

(e) it shall be fitted with a ring or loop or similar device of adequate strength to facilitate rescue;

(f) it shall be made of materials of low flammability and the fabric with which it is covered and its tapes shall be rotproof;

(g) it shall be fitted with an approved whistle firmly attached by a lanyard;

(h) (i) it shall have fastening tapes securely attached to the lifejacket cover
which comply with British Standards Specification No. B.S.3F.49:1972 and are capable of taking a load of 140 kilogrammes. The method of fastening the tapes shall be such as to be easily understood and capable of being readily carried out. Metal fastenings when used shall be of a size and strength consistent with the fastening tapes and of corrosion resistant material; and

(ii) it shall allow the wearer to jump a vertical distance of 6 metres into the water without injury and without dislodgement of the lifejacket.

4. The buoyancy of every such lifejacket shall be provided by kapok or other equally effective buoyant material.

5. Every such kapok lifejacket shall, in addition to complying with the requirements of paragraph (1) to (4) of this Part of this Schedule, comply with the following requirements:-

(a) it shall contain not less than 1 kilogramme of kapok;

(b) the kapok shall be of good flotation quality, well teased, evenly packed and free from seeds and other foreign matter;

(c) the kapok shall be protected from the effects of oil or oil products so that the loss of buoyancy in the lifejackets, after floating in disturbed water containing a layer of not less than 3 millimetres in depth of a mixture of gas oil for a period of 48 hours, shall not exceed 2 per cent of the initial buoyancy and for the purpose of this test the lifejacket shall be loaded with weights equal to half its initial buoyancy; and

(d) the covering shall be of pre-shrunk cotton material or a suitable synthetic material the weight of which in loom state per linear metre shall be not less than 186 grammes for a width of 685 millimetres and in proportion for other widths. The fabric shall be free from admixture of sizing or other foreign matter. The threads per 10 cm in loomstate shall be warp 173 two-fold threads and weft 133 two-fold threads. The sewing shall be carried out with thread of undyed linen yarn having a count of 25 lea, 3 cord reverse twist (resultant Tex count 66), satin finish and complying with the specifications in Clauses 2, 3 and 4 (except sub-paragraph 4(a) of British Standards Specification No. B.S.4F.34:1960 for thread of that count.

6. Every such lifejacket using a buoyant material other than kapok shall in addition to complying with the requirements of paragraphs (1) to (4) and 5(d) of this Part of this
Schedule comply with the following requirements:-

(a) the material shall not weigh more than 190 kilogrammes per cubic metre, and shall be of good quality and clean. If the material is in pieces, the size of each piece shall be not less than 165 cubic centimetres, unless such pieces are in layer form and are fastened together with an approved adhesive; and

(b) the material shall be chemically stable.

PART II

1. Every lifejacket for use by a person weighing less than 32 kilogrammes shall provide a minimum buoyancy of 66.7 newtons in fresh water for 24 hours, after which time the performance detailed in paragraph (3) of Part I of this Schedule shall not be reduced by more than 5 per cent.

2. Every such lifejacket shall be marked indelibly on both sides in letters not less than 12 millimetres in size with the words “FOR PERSON UNDER 32 KILOGRAMMES” and on one side only with the maker's name and other identification mark, together with the words “ACCEPTED BY THE DEPARTMENT OF TRANSPORT”.

3. Every such lifejacket shall comply with the requirements of paragraphs (3) and (4) of Part I of this Schedule.

4. Every such kapok lifejacket shall contain not less than 425 grammes of kapok and shall in addition to complying with the requirements of paragraphs (1) to (3) of this Part of this Schedule comply with the requirements of sub-paragraphs (b),(c) and (d) of paragraph 5 of Part I of this Schedule.

5. Every such lifejacket using a buoyant material other than kapok shall in addition to complying with the requirements of paragraphs (1) to (3) of this Part of this Schedule comply with sub-paragraph (d) of paragraph (5) and sub-paragraphs (a) and (b) of paragraph (6) of Part I of this Schedule.

SCHEDULE 14

Regulation 35

REQUIREMENTS FOR LINE-THROWING APPLIANCES

1. Every line-throwing appliance shall consist of a rocket pistol and four individual rockets with four lines, or four separate self-contained units each of which contains a rocket and line ready for use.

2. The appliance shall be so constructed that the end from which the rocket is ejected can be positively identified by day or night.

3. The lines used in line-throwing appliances shall have a breaking load of not less than 2,000 newtons.

4. Every line-throwing appliance shall be capable of throwing a line a minimum of 4 millimetres in diameter a distance of 230 metres in calm weather.

5. Every line-throwing appliance shall be capable of throwing the line in such a manner that the lateral deflection on either side of the direction of firing does not exceed 10 per cent of the length of flight of the rocket in calm weather.

6. The rocket (in the case of a pistol fired rocket) or the assembly (in the case of an integral rocket and line) shall function after immersion for 1 minute under 10 cm of water.

7. The lines and the rockets together with the means of igniting them, shall be kept in suitable cases to afford protection from the weather.

8. All components, compositions and ingredients of the rockets and the means of igniting them shall be of such character and quality as to enable them to maintain their serviceability under good average storage conditions in the marine environment for a period of at least three years.

9. The date of manufacture and the date of expiry shall be marked indelibly on the rockets and these date markings shall be similarly stamped on the cartridges.

10 Clear and concise directions for use in English, supported by illustrations, shall form an integral part of the appliance.

SCHEDULE 15

Regulation 36(1)(j)

SPECIFICATIONS OF EQUIPMENT FOR LIFEBOATS, BOATS AND LIFERAFTS

PART I

COMPASSES FOR LIFEBOATS

1. Every compass shall be of the liquid type. The liquid used shall be a mixture of industrial methylated spirit and water, specific gravity 0.93 at 15°C. It shall be clear and free from sediment, cloudiness, and dirt defects. The compass shall function efficiently over a temperature range of 50°C to minus 20°C.

2. The magnet shall have ample directive force. In the British Isles a period of 18 to 22 seconds after a deflection of 40 degrees at a temperature of about 15°C shall be deemed to comply with this requirement. For the purposes of this paragraph a "period" is the time taken by a complete oscillation of the card after a deflection of 40 degrees, a swing past the position of rest, and back again to the completion of its swing on the side to which it was originally deflected.

3. Over a range of 50°C to minus 20°C, the card system when immersed in the compass liquid shall rest on the pivot with a weight between 4 and 10 grammes.

4. The card shall be not less than 100 millimetres in diameter and shall have a clearance from the bowl of at least 6 millimetres. It shall be marked to half points, the eight principal points being distinctively marked. The card shall be luminised or fitted with a suitable means of illumination.

5. The centre of the card shall be of sapphire or equally hard jewel and shall be removable from the float.

6. The pivot of the card shall be of iridium or equally suitable hard material.

7. The arrangements made to allow for the expansion and contraction of the liquid shall enable the compass to withstand a temperature range of 50°C to minus 20°C without leakage, formation of bubbles or other defects.

8. The bowl shall be adequately weighted and properly poised in the gimbals which shall give a fore and aft and thwartship action. The gimballing shall be in the same horizontal plane as the point of suspension of the card and the outer gimbal pins shall be placed fore and aft. The bowl shall be placed in a binnacle or box of non-magnetic material and the lubber line or point shall be luminised or fitted with suitable means of illumination. The card system shall remain free when the bowl is tilted by 10 degrees.

9. The direction of the lubber line or point from the centre of the card shall lie in the same vertical plane as the outer gimbal axis or other fore and aft datum line. The cumulative effect of card, pivot, directional and other similar errors, and of inaccurate positioning of the lubber's point shall be such that in the undisturbed earth's field the direction as read on the card against the lubber's point shall not differ by more than 3 degrees from the magnetic direction of the outer gimbal axis or other fore and aft datum line for any direction of the latter.

10. The minimum thickness of the metal used in the construction of the compass shall be as follows:-

Compass bowl	0.8 millimetres
Binnacle	0.6 millimetres
Lamp	0.6 millimetres

The compass bowl shall be efficiently stiffened to take gimbal pins. The binnacle shell shall be swaged or spun into the base ring and soldered all round.

The gimbal ring shall be of naval brass or other rigid non-magnetic metal 15 millimetres by 3 millimetres. Gimbal pins shall be of naval brass or other hard non-magnetic material of 6 millimetres diameter; both they and the bearings in which they engage shall be perfectly smooth.

11. The paint inside the bowl shall show no sign of blistering.

12. The materials and workmanship shall be good throughout and the compass shall be such as will remain efficient under sea-going conditions.

13. The bowl of the compass shall be engraved or stamped with the maker's name or other identification mark.

PART II

Regulation 36(1)(k) and (5)(g)

SEA ANCHORS FOR LIFEBOATS AND BOATS OTHER THAN CLASS C BOATS AND INFLATABLE BOATS

1. Every sea anchor shall comply with the following requirements:-

(a) it shall be constructed of No.1 best flax canvas, or other suitable material;

(b) the canvas part shall be strongly sewn together and be roped at the seams with 14 millimetres in diameter bolt rope; the ropes then being formed into a bridle with a thimble seized in the connecting end, and the ropes extended
and seized into a parcelled loop to form the attachment for the tripping line;

(c) a hawser shall be attached to the sea anchor by means of a shackle of suitable size to take the thimble;

(d) the length of the hawser shall be three times the length of the lifeboat or boats;

(e) a tripping line 3.5 metres longer than the hawser shall be provided.

2. A circular sea anchor shall be fitted at the mouth with a galvanised iron hoop. Other types of sea anchor shall be fitted with galvanised iron spreaders across the mouth and with an ash spreader at the upper edge.

3. The size of sea anchors shall be as follows:-

(a) lifeboats over 9 metres in length-

Non-circular folding sea anchors - Mouth 760 millimetres upper edge
685 millimetres lower edge
685 millimetres each side
Area of mouth 4968 square centimetres

Length of canvas bag- 1.35 metres

Hawser- 24 millimetres in diameter

Tripping line- 16 millimetres in diameter.

(b) lifeboats over 6 metres in length but not over 9 metres in length-

Circular sea anchors - Mouth 685 millimetres diameter

Non-circular folding sea anchors - Mouth 610 millimetres each side

Length of canvas bag- 1.25 metres

Hawser- 24 millimetres in diameter

Tripping line- 16 millimetres in diameter.

(c) lifeboats not over 6 metres in length and other boats (other than Class C boats)-

Circular sea anchors - Mouth 610 millimetres diameter

Non-circular folding sea anchors - Mouth 545 millimetres each side

Length of canvas bag- 1.10 metres

Hawser- 21 millimetres in diameter

Tripping line- 11 millimetres in diameter.

PART III

Regulations 36(1)(n) and 41(1)(m)

PARACHUTE DISTRESS ROCKET SIGNALS FOR LIFEBOATS AND LIFERAFTS

1. Every parachute distress rocket signal shall consist of a single bright red flare which is projected to the required height by means of a rocket, and which burns while falling, descent being controlled by a parachute or other means at an average rate not greater than 5 metres per second.

2. The signal shall be so constructed that the end from which the rocket is ejected can be positively identified by day or night.

3. When the rocket is fired approximately vertically the flare and parachute shall be ejected at or before the top of the trajectory at a minimum height of 300 metres. The signal shall in addition be capable of functioning when the rocket is fired at an angle of 45 degrees to the horizontal.

4. The flare shall burn with an average luminous intensity of not less than 30,000 candela for not less than 40 seconds. It shall burn out at a height of not less than 50 metres above sea level, when the rocket has been fired approximately vertically.

5. The signal may be ignited by any suitable method but the ignition system shall be an integral part of the signal, easy to operate with wet, cold or gloved hands in adverse conditions and require the minimum of preparation. The sealing shall not depend on adhesive tapes.

6. The signal shall be capable of functioning after immersion for 2 hours under one metre of water.

7. In the ready-to-fire condition the signal shall function after immersion for one minute under 10 cm of water.

8. All components, compositions and ingredients of the signal and the means of igniting it shall be of such character and quality as to enable the signal to maintain its serviceability under good average storage conditions in the marine environment for a period of at least three years.

9. For carriage in lifeboats, signals shall be packed in a container which shall be durable, damp proof and effectively sealed.

10. The date of manufacture and the date of expiry shall be marked indelibly on the signal.

11. Clear and concise directions for use in English supported by illustrations shall be printed indelibly on the signal.

PART IV

Regulations 36(1)(n),
41(1)(n) and 41(5)(c)

HAND HELD DISTRESS FLARE SIGNALS FOR LIFEBOATS AND LIFERAFTS

1. Every hand held distress signal shall be capable of being used from a lifeboat or liferaft without harm to the occupants and without causing discomfort to the uncovered hand of the operator.

2. The signal shall be so constructed that when fired, no burning composition will fall from the signal which might cause damage to an inflated liferaft.

3. The signal shall be capable of emitting a red light of an average luminous intensity of not less than 15,000 candela for not less than one minute.

4. The signal shall be fitted with an integral means of firing, easy to operate with wet, cold or gloved hands in adverse conditions without external aid and requiring the minimum of preparation. Sealing shall not depend on adhesive tapes.

5. The signal shall be so constructed that the end from which the light is emitted can be positively identified by day or night.

6. The signal shall be capable of functioning after immersion for 2 hours under one metre of water.

7. In the ready-to-fire condition the signal shall function after immersion for one minute under 10 cm of water.

8. After ignition the signal shall continue to function after immersion for 10 seconds under 10 cm of water.

9. All components, composition and ingredients shall be of such a character and quality as to enable the flare to burn evenly and maintain its serviceability under good average storage conditions in the marine environment for a period of at least three years.

10. The date of manufacture and the date of expiry shall be marked indelibly on the flare.

11. Clear and concise directions for use in English supported by illustrations shall be printed indelibly on the signal.

12. For carriage in lifeboats, signals shall be packed in a container which shall be durable, damp proof and effectively sealed.

PART V

Regulations 36(1)(o) and 50(2)

BUOYANT SMOKE SIGNALS FOR LIFEBOATS

1. The signals shall be capable, while floating on the water, of emitting dense orange-coloured smoke for a period of not less than two minutes and not more than four minutes.

2. Every buoyant smoke signal shall be fitted with an integral means of ignition, easy to operate with wet, cold or gloved hands in adverse conditions without external aid, require the minimum of preparation and be so designed as to enable the signal to be released from a lifeboat without harm to the occupants.

3. The signal shall be capable of functioning after immersion for 2 hours under one metre of water.

4. After completion of the ignition cycle the signal shall continue to function after immersion for 10 seconds under 10 cm of water.

5. The signals shall be safe to operate in oil-covered waters.

6. All components, composition and ingredients shall be of such character and quality as to burn evenly and as to enable the signal to maintain its serviceability under good average storage conditions in the marine environment for a period of at least three years.

7. The date of manufacture and the date of expiry shall be marked indelibly on the signal.

8. Clear and concise directions for use in English supported by illustrations shall be printed indelibly on the signal.

9. For carriage in lifeboats, signals shall be packed in a container which shall be durable, damp proof and effectively sealed.

PART VI

Regulations 36(1)(p) and 41(1)(i)

FIRST AID OUTFITS FOR LIFEBOATS AND LIFERAFTS

The first aid outfit provided in every lifeboat or liferaft carried by the vessel shall comply with the following requirements:-

1. It shall be packed in a durable, damp-proof and effectively sealed container, which shall bear on its outside an itemised list of its contents.

2. It shall include the following items, each of which shall comply with any standards or requirements specified in relation to it in the current issue of the British Pharmacopoeia, the British Pharmaceutical Index or the National Formulary:-

	ARTICLE	QUANTITY
(a)	Standard Dressing No.14, Medium BPC (15cm x 10cm)	4
(b)	Standard Dressing No.15, Large BPC (15cm x 20cm)	4
(c)	Bandages, Triangular, not less than 90cm sides, 130cm base	6
(d)	Open Wove Bandage, BPC 75cm x 3.5 metres	10
(e)	Self Adhesive Waterproof Wound Dressings, assorted sizes	1 packet
(f)	Paraffin Gauze Dressing for Burns, individual (10cm x 10cm approx.) 10 dressings per carton	1 carton
(g)	Antiseptic Burn or Wound Cream, Cetrimide BP 0.5% w/w 50gm tube	2

ARTICLE			QUANTITY
(h)	Analgesic Tablets, in containers clearly labelled with the name of the analgesic, e.g. Asprin Compound tablets, Paracetamol tablets, and directions for use		50
(i)	Scissors 10cm, 1 sharp, 1 blunt point, of rustless and stainless steel		1
(j)	(i)	Six Morphine Ampoule Syringes containing a solution of either morphine salt equivalent to Anhydrous Morphine 15mg in 1cc or Papaveretum BPC (30mg in 1cc) in a screw capped metal drum with directions for use; or	1 drum
	(ii)	Five Pantopon Ampoule Syringes, each syringe containing 20mg "Pantopon" substance in 1ml equivalent to 10mg of Anhydrous Morphine, with directions for use	2 drums
(k)	Safety pins		4
(l)	First Aid instructions in English printed on linen or waterproof paper.		

PART VII

Regulation36(1)(u)

MANUAL PUMPS FOR LIFEBOATS

Every lifeboat manual pump shall comply with the following requirements:-

1. The capacity when operated at not more than 60 double strokes per minute at 1.2 metres suction head, shall be not less than:

   (a) 30 litres per minute in lifeboats of 7 metres in length or over; or

   (b) 20 litres per minute in lifeboats of less than 7 metres length.

2. In its normal dry state (excluding internal grease or other assistance) the pump shall be readily self-priming when operated at a suction head of not less than 1.2 metres.

3. All parts of the pump shall be of material unaffected by the corrosive effects of sea water.

4. The interior of the pump, including valves, shall be readily accessible for emergency cleaning, and the cover for access shall be capable of being easily removed without the use of a spanner or other special tool.

5. The pump branches shall be suitable for use with rubber hose connections of at least 30 millimetres bore. The metal part of the operating handle shall be suitably sheathed by material other than wood to ensure that the hands of the operator are protected when the pump is used in extreme cold. The spindle gland shall be of the spring loaded seal ring type.

SCHEDULE 16

Regulation 43(10)

DAVITS AND LIFEBOAT LAUNCHING GEAR

PART I

GENERAL

Definition of "Working Load". In this Schedule the expression "Working Load" means:-

(a) in relation to davits to which sub-paragraph (a) of paragraph (1) of Part II of this Schedule applies, the sum of the weight of the lifeboat, its full equipment the blocks and falls, and the maximum number of persons which the lifeboat is permitted to carry, the weight of each person being taken to be
75 kilogrammes;

(b) in relation to davits and other means of launching to which sub-paragraph (b) or (c) of paragraph (1) of Part II of this Schedule applies, the sum of the weight of the lifeboat, Class C boat or other boat, its full equipment, the blocks and falls, and a launching crew consisting of two persons, the weight of each person being taken to be 75 kilogrammes;

(c) in relation to winches the maximum pull exerted by the fall or falls at the winch drum during lowering, hoisting or stowing which in any case is to be taken as not less than the working load on the davit or davits divided by the velocity ratio of the lowering tackle.

PART II

CONSTRUCTION

1. *Strength.* (a) Every davit serving a lifeboat which is required by regulation 43(1) of these Regulations to be put into the water when loaded with its full complement of persons shall, together with its winch, falls, blocks and all other associated lowering gear, be of such strength that the lifeboat with its full equipment and manned by a launching crew of not less than two persons can be turned out and then safely lowered into the water from the embarkation position with its full complement of persons, when the ship has a trim of up to 10 degrees and is listed up to 15 degrees either way.

(b) Every mechnically controlled single-arm davit shall together with its winch, falls, blocks and all other associated lowering gear be of such strength and the operating gear shall be of such power that the lifeboat when fully equipped and manned with a launching crew of two members can be turned out and then safely lowered into the water with the ship listed to 25 degrees.

(c) Every set of davits, davit or other means of launching to which a lifeboat, Class C boat or other boat is attached, other than a davit the strength of which is specified in sub-paragraph (a) or (b) of this paragraph, shall together with its winch, falls, blocks and all other associated lowering gear be of such strength that the lifeboat, Class C boat or other boat with its full equipment and manned by a launching crew of two members, can be turned out and then safely lowered into the water when the ship has a trim of 10 degrees and is listed up to 15 degrees either way.

(d) Every set of davits, davit or other means of launching to which a lifeboat, Class C boat or other boat is attached, together with its winch and an associated hoisting

gear shall be of such strength that the boat can be safely hoisted and stowed when loaded with its full equipment and at least two persons, and in addition in the case of an emergency lifeboat that it can be safely hoisted from the water to the embarkation deck at a speed of not less than 0.3 metres per second when loaded with its full equipment and a distributed load of 1000 kilogrammes.

2. *Gravity davits.* All gravity davits shall be so designed that there is a positive turning out moment during the whole of the davit travel from the inboard to the outboard position when the vessel is upright and also when the vessel is listed at any angle up to and including 25 degrees either way from upright.

In the case of gravity type davits comprising arms mounted on rollers which engage with and travel down fixed inclined trackways, the trackways shall be inclined at an angle of not less than 30 degrees to the horizontal when the vessel is upright.

3. *Luffing davits.* The operating gear of all luffing type davits shall be of sufficient power to ensure that the lifeboats, Class C boats or other boats fully equipped and manned with the launching crew, but not loaded with other persons, can be turned out against a list of at least 15 degrees.

4. *Mechanically controlled single-arm davits.* The working load of any mechanically controlled single-arm davit shall not exceed 1525 kilogrammes.

5. *Stresses.* (a) In the case of davits other than mechanically controlled single-arm davits the designed stress on the davit arms, when operating under maximum load and conditions of trim and of list, shall afford an adequate factor of safety having regard to the quality of the material used, the method of construction, and the live nature of the load to which the davits are subjected.

(b) In the case of mechanically controlled single-arm davits the designed stress on the davit when operating under maximum load and conditions of favourable list shall afford an adequate factor of safety having regard to the quality of the material used, the method of construction, and the live nature of the load to which the davit is subjected.

6. *Static load test.* Each davit with its arm at full out-reach shall be capable of withstanding a static load test of not less than 2.2 times that part of the working load supported by the arm.

7. *Attachments at the davit head.* The attachments at the davit head from which the blocks are suspended shall be capable of withstanding a proof load test of not less than 2.5 times the maximum load on the attachments.

8. *Blocks.* (a) All blocks used in the operation of hoisting and lowering of lifeboats, Class C boats or other boats shall be of a design that affords an adequate factor of safety. Lower blocks, when fitted, shall be non-toppling and in the case of emergency lifeboats provision shall be made to prevent the falls from cabling. The size of blocks shall be commensurate with the size of the falls.

(b) A metal block shall be capable of withstanding a proof load test of not less than 2.5 times the maximum load it is intended to carry in service. The clearance between the sheaves and the block cheeks of metal blocks in which wire rope is used shall be kept to a practical minimum that will prevent the rope from overriding the rim of the sheave of

any block or lead sheave. Component parts of blocks other than their sheaves shall be of ductile material.

(c) A wood block shall be capable of withstanding a proof load of not less than 2.5 times the load on the block. The width between the cheeks shall be 12 millimetres greater than the diameter of new cordage ropes when those ropes are 30 millimetres diameter and less in proportion to the diameter of the ropes when they are smaller.

9. *Wire ropes*. (a) The breaking tensile load of each wire rope used for lowering lifeboats, Class C boats or other boats shall be not less than six times the maximum load on the wire rope when lowering, hoisting or stowing.

(b) Wire ropes shall be securely attached to the drum of the winch, and the end attachments of the wires and other parts from which the lifeboat, Class C boat or other boat is to be suspended shall be capable of withstanding a proof load of not less than 2.5 times the load on such attachments and other parts.

(c) Where wire rope splices or ferrule-secured eye terminals are used they shall be capable of withstanding a proof test of not less than 2.5 times the load imposed on them in service unless samples representing each size of wire on which they are used, show a factor of safety of at least 5 when tested to destruction.

10. *Winches.* (a) In the case of davits other than mechanically controlled single-arm davits, winch drums shall be arranged to keep the two falls separate and to enable them to pay out at the same rate. The leads of the wire ropes shall be such that they will wind evenly on the drums and lead blocks shall be arranged to give a fleet angle or angle of lead of not more than five degrees for grooved drums and three degrees for ungrooved drums. In the case of mechanically controlled single-arm davits, the lead of the wire rope fall shall be such that the fall winds evenly on the drum.

(b) Winch brakes shall be of robust construction and afford complete control and limitation of speed in the operation of lowering. The hand brake shall be so arranged that it is normally in the “ON” position and returns to the “ON” position when the control handle is not being operated. The weight on the brake lever shall be sufficient to operate the brake effectively without additional pressure. The brake gear shall include means for automatically controlling the speed of lowering to ensure that the lifeboat, Class C boat or other boat is lowered expeditiously without exceeding a rate of lowering consistent with safety. For this purpose, the automatic brake shall be set to give a speed of lowering of the lifeboat of between 0.3 and 0.6 metres per second. Ratchet gear shall be incorporated in the hand brake mechanism of lifeboat winches. Where practicable the brake gear shall be so situated as to enable the man operating the winch to have the lifeboat, Class C boat or other boat under observation during the whole process of its being launched into the water, provided that winches serving emergency lifeboats shall in any case be so placed.

(c) Each winch shall be capable of lowering and holding a test load of 1.5 times the working load as defined in paragraph (c) of Part I of this Schedule.

(d) Winches shall be so constructed that the crank handle or handles are not rotated by moving parts of the winch when the lifeboat, Class C boat or other boat is being lowered or when it is being hoisted by power and provision shall be made to allow the falls to be manually unwound.

11. *Cordage rope falls*. Cordage rope falls shall be of manila or some other suitable material and shall be durable, unkinkable, firm laid and pliable. They shall be able to pass freely under any conditions through a hole 10 millimetres larger than the nominal diameter of the rope. The breaking load of each rope used for lowering lifeboats, Class C boats or other boats shall be not less than 6 times the maximum load on the rope when lowering or hoisting. Rope of less than 20 millimetres in diameter shall not be used for lifeboat falls. Winding reels or flaking boxes for the manila rope falls shall be provided.

12. *Bollards.* Suitable bollards or other equally effective appliances for lowering any lifeboat, Class C boat or other boat shall be provided in all cases where cordage rope falls are used. Such bollards or other appliances shall be sited so as to ensure that the lifeboat, Class C boat or other boat served by them can be safely lowered, and fairleads or lead sheaves shall be fitted so as to ensure that it shall not be lifted during the process of turning out or swinging out.

PART III

TESTS AFTER INSTALLATION ON BOARD

1. *General.* Tests shall be made to ensure that all lifeboats, Class C boats or other boats attached to davits can be re-stowed from the embarkation position safely and with facility when loaded with the required equipment and that when so loaded the lifeboat, Class C boat or other boat can when released be lowered by gravity into the water against the frictional resistance of the winch, falls, blocks and other associated gear.

2. *Lowering tests*. (a) Each pair of davits to which sub-paragraph (a) of paragraph (1) of Part II of this Schedule applies and any associated lifeboat winches and their brakes shall be capable of withstanding the following test:-

> the lifeboat at each set of davits shall be lowered from the embarkation deck into the water loaded with the equipment required by these Regulations and a distributed weight equal to the full number of persons which it is permitted to accommodate plus 10 per cent of the working load. Winch brakes exposed to the weather shall be capable of withstanding the foregoing test with the braking surface wetted.

(b) In the case of davits to which sub-paragraph (b) or (c) of paragraph (1) of Part II of this Schedule applies, the lifeboat, Class C boat or other boat shall be lowered into the water with the equipment required by these Regulations and a distributed weight equal to the weight of a launching crew of two persons plus 10 per cent of the working load.

(c) For the purpose of the tests required under sub-paragraphs (a) and (b) of this paragraph the weight of a person shall be taken to be 75 kilogrammes.

3. Hoisting tests for emergency lifeboats. Emergency lifeboats which are required by these Regulations to be served by winches for recovery shall in addition to the tests required by paragraphs (1) and (2) of this Part of this Schedule be tested by hoisting the emergency lifeboat with the equipment required by these regulations and a distributed load of 1000 kilogrammes plus 10 per cent of the total hoisting load, including blocks and falls, from the water to the embarkation deck at the maximum hoisting speed.

SCHEDULE 17

Regulation 43(5) and (10)

LAUNCHING DEVICES

1. *Definition of "Working Load"*. In this Schedule the expression "working load" means:

the sum of the weights of:-

(a) the inflatable boat and its full equipment;

(b) the blocks and falls;

(c) a launching crew of 2 persons each weighing 75 kilogrammes; and

(d) a weight of 60 kilogrammes or the weight of the engine together with its fuel tank and sufficient fuel for three hours operation, whichever is the greater.

2. Every such appliance shall be designed so that when loaded with the working load as defined in paragraph (1) of this Schedule it shall have an adequate factor of safety when the ship is upright and when the ship has a trim of 10 degrees towards the side on which the device is fitted and is listed 15 degrees.

3. Every such appliance shall be tested to a static load of 2.2 times the working load.

4. Blocks provided with every such appliance shall be proof tested to 2.5 times the working load, and the falls shall have a factor of safety of at least 6.

5. Every such appliance shall be:

(a) capable of recovering the inflatable boat and bringing it on board the ship;

(b) readily available and not stowed or used for any other purpose other than the launching of liferafts whilst the ship is at sea;

(c) provided with a suitable means for manual operation; and

(d) satisfactorily tested after installation.

6. Every such appliance shall be provided with a winch when the inflatable boat is situated more than 4.5 metres above the lightest sea going waterline. The winch shall be adequate for the lowering operation and shall be tested to 1.5 times the working load. The brake gear of the winch shall include means for automatically maintaining the lowering speed between 0.3 metres per second and 0.6 metres per second.

SCHEDULE 18

Regulation 43(17)

LIFEBOAT DISENGAGING GEARS

1. Lifeboat disengaging gears shall be so arranged as to ensure simultaneous release of both ends of the lifeboat.

2. The means of effecting release shall be placed aft.

3. The gear shall be of a type which will permit the release of the lifeboat only when it is waterborne.

4. The gear shall be of a type which will permit release should there be a towing strain on the link or falls.

5. The hooks shall be suitable for instant unhooking by hand.

6. The point of attachment of the hook to the eye, ring of link or the block shall not be lower than when ordinary fixed hooks are fitted.

7. The gear and mechanism for effecting release shall be so constructed and arranged as to ensure the safety of the lifeboat independently of any safety pins.

8. The means for effecting release shall be by hauling on or letting go a line or by using a lever. If release is effected by a pull upon a line the line shall be properly cased in. Rods or other connections between hooks shall also be cased in whenever this is necessary for the safety or the efficient action of the gear or for the protection of persons from injury.

The fairleads shall be properly arranged to prevent the lines from jamming or nipping and shall be strongly attached to permanent parts of the lifeboat. The lines shall be fitted with chains where necessary for efficiency.

9. Such parts of the gear as would otherwise be likely to be set fast by rust or corrosion shall be made of non-corrodible metal.

10. No part of the gear taking the weight of the lifeboat shall be made of cast metal.

11. The scantlings and proportions of all parts which support the weight of the lifeboat shall be designed to provide breaking strength proportionate to a load of at least 2.5 times the weight of the heaviest loaded lifeboat in which the gear is intended to be fitted.

SCHEDULE 19

Regulation 44(2)

LIFERAFT LAUNCHING APPLIANCES

1. *Definition of "Working Load"*. In this Schedule the expression "working load" means:-

the sum of the weight of the liferaft and its equipment, all other associated gear that is supported by the launching appliance during the launching operation and the maximum number of persons which the liferaft is permitted to carry, the weight of each person being taken to be 75 kilogrammes.

2. *Strength*. Every liferaft launching appliance and all associated gear which during the launching operation is subjected to the working load or to a load imposed due to the working load shall be of such strength that the liferaft when loaded with its full complement of persons and equipment can be safely lowered when the ship has a trim of up to 10 degrees and is listed up to 15 degrees either way.

3. *Construction.* Each part of every liferaft launching appliance shall be such that when the appliance is operating under the working load and unfavourable conditions of list and trim it shall have an adequate factor of safety having regard to the material used, the method of construction and the nature of its duty. Except for lead sheaves and block sheaves, all parts of the appliance and its associated gear which are subjected to the working load or on which the safety of the appliance or the liferaft while in the process of launching depends shall be constructed of ductile material and no part, other than lead sheaves and block sheaves, shall be constructed of cast metal unless the Department shall so permit.

4. *Static Load Test.* Every liferaft launching appliance shall be capable of withstanding a static load test of not less than 2.2 times the working load.

5. *Operation.* (a) Every liferaft launching appliance shall be so designed that the liferaft when loaded with its full complement of persons and equipment can be safely lowered into the water.

(b) The speed of lowering of the liferaft shall be automatically controlled at not less than 0.3 metres per second and not more than 0.6 metres per second, and the descent of the liferaft shall be at all times under the manual control of the operator.

(c) Operation of the launching appliance shall not be solely dependent on the use of means other than manual effort or gravity. The arrangements shall be such that the liferaft can be lowered by gravity.

(d) Arrangements shall be such that on becoming waterborne the liferaft shall be automatically released from the launching appliance, and there shall be provision for the manual release of the liferaft by a person on board the liferaft.

(e) When liferaft launching appliances incorporate winches, the winches shall be constructed in accordance with paragraph (10) of Part II of Schedule 16.

6. *Lowering Tests.* Every liferaft launching appliance shall be tested by lowering the largest liferaft it is intended to serve when loaded with its full equipment and a distributed weight equal to the full number of persons which it is permitted to accomodate plus 10 per cent of the working load from the embarkation position into the water.

7. *Operational Tests*. Tests shall be made to ensure that any liferaft served by any launching appliance when loaded only with its full equipment can be lowered by gravity into the water. If more than one liferaft is served by any launching appliance effective successive launching shall be demonstrated.

SCHEDULE 20

Regulation 50(1) and (4)

SHIP'S PARACHUTE DISTRESS ROCKET SIGNALS

1. Every parachute distress rocket signal shall consist of a single bright red flare which is projected to the required height by means of a rocket, and which burns while falling, descent being controlled by a parachute or other means at an average rate not greater than 5 metres per second.

2. The signal shall be so constructed that the end from which the rocket is ejected can be positively identified by day or night.

3. When the rocket is fired approximately vertically the flare and parachute shall be ejected at or before the top of the trajectory at a minimum height of 300 metres. The signal shall in addition be capable of functioning when the rocket is fired at an angle of 45 degrees to the horizontal.

4. The flare shall burn with an average luminous intensity of not less than 30,000 candela for not less than 40 seconds. It shall burn out at a height of not less than 50 metres above sea level, when the rocket had been fired approximately vertically.

5. The signal may be ignited by any suitable method but the ignition system shall be an integral part of the signal, easy to operate with wet, cold or gloved hands in adverse conditions and require the minimum of preparation. The sealing shall not depend on adhesive tapes.

6. The signal shall be capable of functioning after immersion for 2 hours under one metre of water.

7. In the ready-to-fire condition the signal shall function after immersion for one minute under 10 cm of water.

8. All components, compositions and ingredients of the signal and the means of igniting it shall be of such character and quality as to enable the signal to maintain its serviceability under good average storage conditions in the marine environment for a period of at least three years.

9. For carriage on ships, signals shall be packed in a container which shall be durable, damp proof and effectively sealed.

10. The date of manufacture and the date of expiry shall be marked indelibly on the signal.

11. Clear and concise directions for use in English supported by illustrations shall be printed indelibly on the signal.

SCHEDULE 21

Regulation 50(3) and (4)

SHIP'S TWO-STAR RED DISTRESS ROCKET SIGNALS

1. Every two-star red distress rocket signal shall be capable of emitting two or more red stars either together or separately, when projected to the required height by means of a rocket.

2. The signal shall be so constructed that the end from which the rocket is ejected can be positively identified by day or night.

3. When the rocket is fired approximately vertically the stars shall be ejected at or before the top of the trajectory at a minimum height of 45 metres. The signal shall in addition be capable of functioning when the rocket is fired at an angle of 45 degrees to the horizontal.

4. Each star shall burn with an average luminous intensity of not less than 5,000 candela for not less than 5 seconds.

5. The signal may be ignited by any suitable method but the ignition system shall be an integral part of the signal, easy to operate with wet, cold or gloved hands in adverse conditions and require the minimum of preparation. The sealing shall not depend on adhesive tapes.

6. The signal shall be capable of functioning after immersion for 2 hours under one metre of water.

7. In the ready-to-fire condition the signal shall function after immersion for one minute under 10 cm of water.

8. All components, compositions and ingredients of the signal and the means of igniting it shall be of such charater and quality as to enable the signal to maintain its serviceability under good average storage conditions in the marine environment for a period of at least three years.

9. For carriage on ships, signals shall be packed in a container which shall be durable, damp proof and effectively sealed.

10. The date of manufacture and the date of expiry shall be marked indelibly on the signal.

11. Clear and concise directions for use in English supported by illustrations shall be printed indelibly on the signal.

SCHEDULE 22

TRAINING MANUALS AND INSTRUCTIONS FOR ON-BOARD MAINTENANCE

Regulations 51(2)(b)

PART I

TRAINING MANUALS

1. A training manual shall contain instructions and information on the life-saving appliances provided in the ship. It shall also contain information on the best methods of survival. The material in the manual shall be in easily understood terms and illustrated where appropriate.

2. A training manual may comprise one or more volumes and any part of the instructions and information may be provided in the form of audio-visual aids as an alternative to printed material.

3. As appropriate, the following shall be explained in detail:

(a) donning of lifejackets and immersion suits where carried;

(b) muster at the assigned stations;

(c) boarding, launching and clearing the survival craft, rescue and inflated boats;

(d) method of launching from within the survival craft;

(e) release from launching appliances;

(f) methods and use of devices for protection in launching areas;

(g) illumination in launching areas;

(h) use of all survival equipment;

(i) use of all detection equipment;

(j) with the assistance of illustrations, the use of radio life-saving appliances;

(k) use of sea anchors;

(l) use of engine and accessories;

(m) recovery of survival craft, rescue and other boats including stowage and securing;

(n) hazards of exposure and the need for warm clothing;

(o) best use of the survival craft facilities in order to survive;

(p) methods of retrieval, including the use of helicopter rescue gear (slings, baskets, stretchers), breeches-buoy and shore life-saving apparatus and ship's line-throwing apparatus;

(q) all other functions contained in the muster list and emergency instructions; and

(r) instructions for emergency repair of the life-saving appliances.

PART II

Regulations 51(2)(c)

INSTRUCTIONS FOR ON-BOARD MAINTENANCE

1. Instructions for on-board maintenance of life-saving appliances shall be in easily understood terms and illustrated wherever possible.

2. As appropriate and as far as is practicable the instructions shall include the following for each appliance:

(a) a check list for use when carrying out the inspections required by regulation 53(6);

(b) maintenance and repair instructions;

(c) schedule of periodic maintenance;

(d) diagram of lubrication points with the recommended lubricants;

(e) list of replaceable parts;

(f) list of sources of spare parts; and

(g) log for records of inspections and maintenance.

SCHEDULE 23

Regulation 1(7)

REVOCATION

G.C. no	*Title*	*Extent of Revocation*
GC 38/85	Merchant Shipping (Safety Provisions) (Application) Order 1985	In Schedule 1 entries 5 and 6 In Schedule 4 - Part I
GC 266/86	Merchant Shipping (Safety Provisions) (Application) (no.1) Order 1986	The whole Order

Made this 29th day of August, 1991

A. Arnold Callin,

MINISTER for Highways, Ports and Properties.

EXPLANATORY NOTE

(This Note is not part of the Regulations)

These Regulations give effect in relation to Manx ships of Classes I, II, II(A), IV, V, VI(A) and Classes VII to IX(A)(T) inclusive, XI and XII and other ships of such classes and Convention size and type, to the relevant provisions in Chapter III in the 1983 Amendments to the International Convention for the Safety of Life at Sea 1974.

These Regulations replace and re-enact the Merchant Shipping (Life-Saving Appliances) Regulations 1980 with the following additional new requirements:-

(1) survival craft emergency position-indicating radio beacons (EPIRBs);
(2) satellite emergency position-indicating radio beacons (EPIRBs);
(3) two-way waterproofed radiotelephone sets;
(4) radar transponders;
(5) lifejacket lights;
(6) immersion suits;
(7) thermal protective aids;
(8) retro-reflective material; and
(9) additional life raft capacity on certain on certain types of cargo ships.

Copies of this document and Manx Shipping Notices are obtainable from the Isle of Man Ship Registry, Department of Economic Development, St Georges Court, Upper Church Street, Douglas, Isle of Man, IM1 1EX and can be accessed via the website: http://www.iomshipregistry.com

Amendments:

This text includes the amendments (indicated by ***bold italics***) made to the Regulations by-

SD 37/97 MS (Safety Provisions) (Amendment and Revocation) Regulations 1997
SD396/03 Merchant Shipping (Pleasure Vessel) Regulations 2003
SD2014/0238 Merchant Shipping (Manning and STCW) Regulations 2014
SD2017/0185 Merchant Shipping (SOLAS Chapter III)(Life-Saving Appliances and Arrangements) Regulations 2017

Note: The effect of the amendment is to limit the application of these Regulations to Manx cargo ships under 500gt (including foreign cargo ships under 500gt whilst they are within Manx territorial waters constructed before 1 July 1986. Cargo ships under 500gt which were constructed before 1 July 1986 also have to comply with the relevant requirements of SD431/99 MS (Life-Saving Appliances) Regulations 1999. Requirements for all ships above 500gt are now contained in the Merchant Shipping (SOLAS Chapter III)(Life-Saving Appliances and Arrangements)(Regulations 2017.

To avoid doubt, these Regulations only apply to a ship constructed before 1 July 1986 of Class VII, VIIT, VIII, VIIIT, VIIIA, VIIIAT or IX which is a Manx cargo ship of less than 500gt wherever it may be; and a foreign cargo ship of less than 500gt whilst it is within the territorial waters of the Island.

SD2018/0088 Merchant Shipping (Survey and Certification) Regulations 2018