

1999 No. 2721

MERCHANT SHIPPING

SAFETY

The Merchant Shipping
(Life-Saving Appliances for
Ships Other Than Ships of
Classes III to VI(A))
Regulations 1999

<i>Made</i> - - - -	<i>30th September 1999</i>
<i>Laid before Parliament</i>	<i>8th October 1999</i>
<i>Coming into force</i>	<i>29th October 1999</i>



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The Secretary of State for the Environment, Transport and the Regions, after consulting the persons referred to in section 86(4) of the Merchant Shipping Act 1995(a) in exercise of the powers conferred by section 85(1)(a) and (b), (3) and (5) to (7) and section 86(1) of that Act, and of all other powers enabling him in that behalf, hereby makes the following Regulations:

PART I PRELIMINARY

Citation, commencement and revocation

1.—(1) These Regulations may be cited as the Merchant Shipping (Life-Saving Appliances for Ships Other Than Ships of Classes III to VI(A)) Regulations 1999 and shall come into force on 29th October 1999.

(2) The following Regulations are hereby revoked:

- (a) the Merchant Shipping (Life-Saving Appliances) Regulations 1980(b);
- (b) the Merchant Shipping (Life-Saving Appliances) (Amendment) Regulations 1981(c);
- (c) the Merchant Shipping (Life-Saving Appliances) Regulations 1986(d);
- (d) the Merchant Shipping (Life-Saving Appliances) Regulations 1980 (Amendment) Regulations 1986(e); and
- (e) the Merchant Shipping (Life-Saving Appliances) (Amendment) Regulations 1991(f).

General interpretation

2.—(1) In these Regulations:

- (a) a reference to a ship constructed on or after a specified date is a reference to a ship the keel of which is laid or which is at a similar stage of construction on or after that date; or
- (b) if the ship is not a passenger ship before that date and is converted to a passenger ship it shall be treated as a passenger ship constructed on the date on which such a conversion takes place.

(2) In these Regulations the following expressions have the following meanings, except where the context otherwise requires:

“anti-exposure suit” means a protective suit designed for use by rescue boat crews and marine evacuation system parties, complying with the requirements of Schedule 10, Part 2 of MSN 1676(M);

“assembly station” and “muster station” have the same meaning;

“automatic self-righting liferaft” means a liferaft complying with the requirements of Schedule 4, Part 2 or 3 of MSN 1676(M);

“buoyant apparatus” means flotation equipment (other than lifebuoys and lifejackets) designed to support persons who are in the water and complying with the requirements of Schedule 12 of MSN 1676(M);

“buoyant lifeline” means a line complying with the requirements of Schedule 8, Part 6 of MSN 1676(M);

“buoyant smoke signal” means a pyrotechnic signal complying with the requirements of Schedule 7, Part 4 of MSN 1676(M);

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- (a) 1995 c.21: sections 85 and 86 were amended by the Merchant Shipping and Maritime Security Act 1997 (c.8), section 8.
 - (b) S.I. 1980/538.
 - (c) S.I. 1981/577.
 - (d) S.I. 1986/1066.
 - (e) S.I. 1986/1072.
 - (f) S.I. 1991/1300.

“canopied reversible liferaft” means a liferaft complying with the requirements of Schedule 4, Part 2 or 3 of MSN 1676(M);

“cargo ship” means any ship which is not a passenger ship, pleasure vessel or fishing vessel;

“Category A, B, C and D waters” means the waters specified as such in Merchant Shipping Notice No. M.1719, and cognate expressions shall be construed accordingly;

“certificated person” means a member of the crew who holds either–

(a) a Certificate of Proficiency in Survival Craft and Rescue boat under the Merchant Shipping (Training and Certification) Regulations 1997(a) or such certificate issued by or under the authority of any government outside the United Kingdom as is accepted by the Secretary of State as being the equivalent to a certificate issued under those Regulations; or

(b) a Certificate of Proficiency as Lifeboatman issued before 28th April 1984 by or under the authority of the Secretary of State or such certificate issued before 28th April 1984 by or under the authority of any government outside the United Kingdom as is accepted by the Secretary of State as being the equivalent of such a certificate issued by or under the authority of the Secretary of State;

“certified” means certified by a certificate issued under regulation 10 of the Merchant Shipping (Survey and Certification) Regulations 1995(b);

“chemical tanker” means a cargo ship constructed or adapted and used for the carriage in bulk of any liquid product listed in Chapter 17 of the 1994 edition of the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk published by the Organisation;

“Class C boat” means a boat complying with the requirements in Schedule 3 of MSN 1677(M);

“Convention” means the International Convention for the Safety of Life at Sea, (SOLAS) 1974(c), and its 1978 Protocol(d) and amendments in force on 1st July 1998;

“EEA Agreement” means the Agreement on the European Economic Area signed at Oporto on 2nd May 1992(e) as adjusted by the Protocol signed at Brussels on 17th May 1993(f);

“EEA State” means a State which is a Contracting Party to the EEA Agreement;

“date of expiry” in relation to any product referred to in Schedules 7 and 8 of MSN 1676(M) means a date within four years from the date of manufacture of that product;

“detection” means the determination of the location of survivors or survival craft;

“effective clearing of the ship” is the ability of the free-fall lifeboat to move away from the ship after free-fall launching without using its engine;

“embarkation ladder” means a ladder complying with the requirements of Schedule 6, Part 5 of MSN 1676(M) provided at survival craft embarkation stations to permit safe access to survival craft after launching;

“fast rescue boat” means a rescue boat complying with the requirements of Schedule 2, Part 10 of MSN 1676(M);

“fast rescue boat launching appliance” means an appliance complying with the requirements of Schedule 6, Part 2 of MSN 1676(M) designed to launch and recover a fast rescue boat;

“favourable weather” means fine, clear, settled weather with a sea state such as to cause only moderate rolling and/or pitching;

“free-fall acceleration” is the rate of change of velocity experienced by the occupants during launching of a free-fall lifeboat;

“free-fall certification height” is the greatest launching height for which the lifeboat is to be approved, measured from the still water surface to the lowest point on the lifeboat when the lifeboat is in the launch configuration;

(a) S.I. 1997/348, amended by S.I. 1997/1346.

(b) S.I. 1995/1210 to which there are amendments not relevant to these Regulations.

(c) Cmnd. 7874.

(d) Cmnd. 7346.

(e) Cmnd. 2073.

(f) Cmnd. 2183.

“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;

“gas carrier” means a cargo ship constructed or adapted and used for the carriage in bulk of any liquefied gas or other product listed in Chapter 19 of the 1993 edition of the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk published by the Organisation;

“general emergency alarm system” means a system complying with the requirements of Schedule 11, Part 1 of MSN 1676(M);

“hand flare” means pyrotechnic signal complying with the requirements of Schedule 7, Part 3 of MSN 1676(M);

“IAMSAR” means the 1998 Edition of International Aeronautical and Maritime Search and Rescue Manual published by IMO;

“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 Schedule 10, Part 1 of MSN 1676(M);

“IMO” means the International Maritime Organization;

“inflatable appliance” means an appliance which depends upon non-rigid, gas-filled chambers for buoyancy and which is normally kept uninflated until ready for use;

“inflatable lifejacket” means a lifejacket complying with the requirements of Schedule 9, Part 4 of MSN 1676(M);

“inflated boat” means a boat complying with the requirements of Schedule 3, Part 3 of MSN 1676(M) or Schedule 4 of MSN 1677(M);

“instructions for on-board maintenance” means the instructions for complying with the requirements of Schedule 14, Part 2 of MSN 1676(M);

“international voyage” means a voyage from a country to which the Convention applies to a port outside that country, or conversely;

“launching appliance” means an appliance complying with the requirements of Schedule 6 of MSN 1676(M);

“launching ramp angle” means the angle between the horizontal and the launch rail of a free-fall lifeboat in its launching position with the ship on even keel;

“launching ramp length” is the distance between the stern of the lifeboat and the lower end of the launching ramp;

“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 Schedule 2 of MSN 1676(M) or MSN 1677(M);

“lifebuoy” means a lifebuoy complying with the requirements of Schedule 8, Part 2 of MSN 1676(M);

“lifeboat radiotelegraph installation” means an installation complying with paragraph 6.4.1 in MSN 1693(M);

“lifejacket” means a lifejacket complying with the requirements in Schedule 8 of MSN 1677(M) or Schedule 9 of MSN 1676(M);

“lifejacket light” means a light complying with the relevant requirements of Schedule 9, Part 1 of MSN 1676(M);

“liferaft” means a liferaft complying with the requirements of either Schedule 4 of MSN 1676(M) or Schedule 5 of MSN 1677(M);

“lightest sea-going condition” is the loading condition with the ship on even keel, without cargo, with 10 per cent stores and fuel remaining and, in the case of a passenger ship, with the full number of passengers and crew and their luggage;

“line-throwing appliance” means an appliance complying with the requirements of Schedule 7, Part 5 of MSN 1676(M);

“long international voyage” means an international voyage which is not a short international voyage;

“marine evacuation system” means a system complying with the requirements of Schedule 5, Part 1 of MSN 1676(M);

“Maritime and Coastguard Agency” or “MCA” means the Maritime and Coastguard Agency, an Executive Agency of the Department of the Environment, Transport and the Regions;

“means of rescue” means equipment and arrangements complying with the requirements of Schedule 5, Part 3 of MSN 1676(M) designed to assist the recovery of survivors at sea;

“mechanically propelled lifeboat” means a lifeboat (other than a motor lifeboat) complying with the requirements of Schedule 2, Part 4 of MSN 1677(M);

“Merchant Shipping Notice” (or “MSN”) means a Notice described as such and issued by the MCA;

“mile” means a nautical mile of 1,852 metres;

“motor lifeboat” means a lifeboat complying with the requirements of Schedule 2 of MSN 1676(M) or MSN 1677(M);

“moulded depth” means in relation to a ship means the vertical distance measured from the top of the keel to the top of the freeboard deck beam at side, except that—

- (a) in the case of a wood of composite ship, it shall be measured from the lower edge of the keel rabbet;
- (b) if the form at the lower part of the midship section of the ship is of a hollow character or if thick garboards are fitted, it shall be measured from the point where the line of the flat of the bottom continued inwards cuts the side of the keel;
- (c) in the case of a ship having rounded gunwales it shall be measured to the point of intersection of the moulded lines of the deck and side shell plating, the lines extending as though the gunwale were of angular design; and
- (d) if the freeboard deck is stepped and the raised part of the deck extends over the point at which the moulded depth is to be determined, it shall be measured to a line of reference extending from the lower part of the deck along a line parallel to the raised part of the deck;

“non-United Kingdom ship” means a ship other than a United Kingdom ship;

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

“periodical survey” with regard to life-saving appliances and arrangements means a periodical survey pursuant to regulation 4 or 6 of the Merchant Shipping (Survey and Certification) Regulations 1995 being conducted—

- (a) for a passenger ship, every 12 months; and
- (b) for a cargo ship, every 24 months;

“person” means a person over the age of one year;

“pleasure vessel” means:

- (a) a vessel which at the time it is being used is—
 - (i) (aa) in the case of a vessel wholly owned by an individual or individuals used only for the sport or pleasure of the owner or the immediate family or friends of the owner; or
 - (bb) in the case of a vessel owned by a body corporate used only for sport or pleasure and on which the persons are employees or officers of the body corporate, or their immediate family or friends; and
 - (ii) on a voyage or excursion which is one for which the owner does not receive money for or in connection with operating the vessel or carrying any person, other than as a contribution to the direct expenses of the operation of the vessel incurred during the voyage or excursion;
- (b) any vessel wholly owned by or on behalf of a members’ club formed for the purpose of sport or pleasure which, 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 for the use of which any charges levied are paid into club funds and applied for the general use of the club; and

- (c) in the case of any vessel referred to in paragraphs (a) or (b) above no other payments are made by or on behalf of users of the vessel, other than by the owner.

In this definition “immediate family” means, in relation to an individual, the husband or wife of the individual, or a relative of the individual or of the individual’s husband or wife, and “relative” means brother, sister, ancestor or lineal descendant;

“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;

“retro-reflective material” means a material which reflects in the opposite direction a beam of light directed on it and complies with Marine Guidance Notice No. M 105;

“relevant standard of a member State other than the United Kingdom”, in relation to a reference to a British Standard means:

- (a) a relevant standard or code of practice of a national standards body or equivalent body of a EEA State other than the United Kingdom;
- (b) a relevant international standard recognised for use in a EEA State other than the United Kingdom; or
- (c) a relevant specification acknowledged for use as a standard by a public authority of a EEA State other than the United Kingdom;

being a standard, code of practice or specification which provides in use, levels of safety, suitability and fitness for purpose equivalent to those provided by the International Standard or the British Standard;

“required free-fall height” means the greatest distance measured from the still water surface to the lowest point on the lifeboat when the lifeboat is in the launch configuration and the ship is in its lightest seagoing condition;

“rescue boat” means a boat complying with the requirements of Schedule 2 or 3 of MSN 1676(M) and designed to rescue persons in distress and to marshall liferafts;

“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 regulations, and between sunrise and sunset in the case of any other ship;

“retrieval” means the safe recovery of survivors;

“rocket parachute flare” means a pyrotechnic signal complying with the requirements of Schedule 7, Part 2 of MSN 1676(M);

“ro-ro passenger ship” means a passenger ship provided with cargo or vehicle spaces not normally sub-divided in any way and extending to either a substantial length or the entire length of the ship in which vehicles or cargo can be loaded or unloaded in a horizontal direction;

“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 emergency position-indicating radio beacon, being an earth station in the mobile-satellite service, the emissions of which are intended to facilitate search and rescue operations and which is capable of–

- (a) floating free if the ship sinks;
- (b) being automatically activated when afloat;
- (c) being manually activated; and
- (d) being carried by one person;

“sea” does not include any waters specified as Category A, B, C or D;

“sea anchor” means an anchor complying with the requirements of Part 4 of Schedule 13, Part 4 of MSN 1676(M);

“self activating smoke signal” means a signal complying with the requirements of Schedule 8, Part 5 of MSN 1676(M);

“self-igniting light” means a light complying with the requirements of Schedule 8, Part 4 of MSN 1676(M);

“service space” includes galleys, pantries containing cooking appliances, lockers and

storerooms, paint rooms, baggage rooms, workshops other than those forming part of machinery spaces, mail rooms and similar spaces and trunks to such spaces;

“short international voyage” means an international voyage:

- (a) 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; and
- (b) which does not exceed 600 nautical miles in distance between the last port of call in the country in which this voyage begins and the final port of destination;

however, for the purposes of this definition, no account shall be taken of any deviation by a ship from the intended voyage due solely to the stress of weather or any other circumstances that neither the master nor the owner nor the charterer (if any) of the ship could have prevented or forestalled;

“similar stage of construction” means the stage at which:

- (a) construction identifiable with a specific ship begins; and
- (b) assembly of that ship has commenced comprising at least 50 tonnes or one per cent of the estimated mass of all structural material whichever is less;

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

“tanker” means a cargo ship constructed or adapted for the carriage in bulk of liquid cargoes of a flammable nature and also means a chemical tanker or gas carrier constructed or adapted to carry cargoes emitting toxic vapours or gases, or cargoes having a flash point not exceeding 60°C (closed cup test);

“thermal protective aid” means a bag or suit complying with the requirements of Schedule 10, Part 2 of MSN 1676(M);

“tons” means gross tons and a reference to tons—

- (a) in relation to a ship having alternative gross tonnages under paragraph 13 of Schedule 5 of the Merchant Shipping (Tonnage) Regulations 1982(a) permitted to be used pursuant to regulation 12(1) of the Merchant Shipping (Tonnage) Regulations 1997(b), is a reference to the larger of those tonnages; and
- (b) in relation to a ship having its gross tonnage determined both under Part II and regulation 12(2) of those Regulations is a reference to its gross tonnage as determined under regulation 12(2);

“toxic vapours or gases” means the vapours or gases associated with products for which in the event of escape, respiratory and eye protection is required in Chapter 17 of the 1994 Edition of International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk published by IMO and in Chapter 19 of the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk published by IMO;

“training manual” means a manual complying with the requirements of Schedule 14, Part 1 of MSN 1676(M);

“two-way VHF radiotelephone apparatus” means a two-way VHF radiotelephone apparatus in survival craft for communication between survival craft, between survival craft and ship and between ship and rescue boat, complying with, in the case of equipment installed before 23rd November 1996, performance standards adopted by IMO contained in IMO Resolution A.762(18) and, in the case of equipment installed on or after 23rd November 1996, performance standards adopted by the organisation in IMO Resolution A.809(19);

“voyage” includes an excursion;

“water-entry angle” is the angle between the horizontal and the launch rail of the free-fall lifeboat when it first enters the water; and

“waterproofed” means protected as far as is practicable from the ingress of water.

(3) Any reference in these Regulations—

- (a) the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk;

(a) S.I. 1982/841.
(b) S.I. 1997/1510.

- (b) the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk;
- (c) the Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk;
- (d) the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk;
- (e) a British Standard;
- (f) a Merchant Shipping Notice or a Marine Guidance Note;
- (g) any other specified Code or guidelines; and
- (h) Life-Saving Signals and Rescue Methods, SOLAS No. 1; and
- (i) IAMSAR;

shall include:

- (a) a reference to any document amending that publication which is considered by the Secretary of State to be relevant from time to time and is specified in a Merchant Shipping Notice; and
- (b) as respects a reference to a British Standard, a reference to a relevant standard of a EEA State other than the United Kingdom.

Classification of Ships

3. For the purposes of these Regulations ships shall be arranged in Classes as follows:

Passenger Ships

- Class I ships engaged on voyages any of which are long international voyages;
- Class II ships engaged only on short international voyages;
- Class II(A) ships engaged on voyages of any kind other than international voyages;
- Class III ships engaged only on voyages in the course of which they are at no time more than 70 miles by sea from their point of departure nor more than 18 miles from the coast of the United Kingdom, and which are at sea only in favourable weather and during restricted periods;
- Class IV ships engaged only on voyages in Category A, B, C and D waters;
- Class V ships engaged only on voyages in Category A, B, and C waters;
- Class VI ships engaged only on voyages with not more than 250 passengers on board, to sea, or in Category A, B, C and D 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 Category A, B, C and D waters, from their point of departure nor more than 3 miles from land;
- Class VI(A) ships carrying not more than 50 passengers for a distance of not more than 6 miles on voyages to or from isolated communities on the islands or coast of the United Kingdom, and which do not proceed for a distance of more than 3 miles from land;

Ships other than passenger ships

- Class VII ships (other than ships of Classes I, VII(A), VII(T), XI and XII) engaged on voyages any of which are long international voyages;
- Class VII(A) ships employed as fish processing or canning factory ships, and ships engaged in the carriage of persons employed in the fish processing or canning industries;
- Class VII(T) tankers engaged on voyages any of which are long international voyages;
- Class VIII ships (other than ships of Classes II, VIII(T), IX, XI and XII) engaged only on short international voyages;
- Class VIII(T) tankers engaged on 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 international 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 XI	sailing ships (other than fishing vessels and ships of Class XII) which proceed to sea; and
Class XII	pleasure vessels of 13.7 metres in length or over.

General Application

4.—(1) Subject to paragraph (2), these Regulations apply to United Kingdom ships wherever they may be, and to non-United Kingdom ships while they are within United Kingdom waters, whether or not they are engaged on international voyages.

(2) These Regulations shall not apply to:

- (a) a non-United Kingdom ship flying the flag of a state which is not a party to the Convention by reason of its being within United Kingdom waters if it would not have been there but for stress of weather or any other circumstances which neither the master nor the owner or the charterer (if any) could have prevented;
- (b) fishing vessels;
- (c) pleasure vessels of less than 13.7 metres in length;
- (d) ships of Classes III to VI(A); and
- (e) non-United Kingdom ships which are:
 - (i) cargo ships of less than 500 tons;
 - (ii) ships not propelled by mechanical means; or
 - (iii) pleasure vessels of whatever size.

PART II REQUIREMENTS FOR SHIPS CONSTRUCTED BEFORE 1ST JULY 1986 PRELIMINARY

Application

5. Part II of these Regulations applies to ships of Classes I, II and II(A), Classes VII to IX(A)(T) inclusive and Classes XI and XII, the keels of which were laid, or which were at a similar stage of construction, before 1st July 1986.

Interpretation

6. In this Part a reference to a numbered Schedule is, unless otherwise stated, a reference to the Schedule of that number in MSN 1677(M).

PASSENGER SHIPS

Ships of Class I

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

(2) Every ship 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: except that in the case of any ship constructed before 25th May 1980, this provision shall apply only if the total number of persons on board is not treated as increased a result of the provision of liferafts.

(3) On every ship, two of the lifeboats required by paragraph (2) 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).

(4) Every ship shall carry on each side of the ship at least one motor lifeboat: except that in ships which are certified to carry not more than 30 persons only one such motor lifeboat is required.

(5) Every ship shall be provided with the following equipment:

- (a) a satellite EPIRB;
- (b) at least 3 waterproofed two-way VHF radiotelephone apparatus, complying with the standards contained in IMO Resolution A.762(18); and
- (c) 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 stowed in each survival craft.

(6) Every motor lifeboat carried in compliance with these Regulations shall be provided with the equipment specified in Schedule 12, Part 4.

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

(8) In every ship 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 2,300 kgs in their turning out condition.

(9) The liferafts carried in compliance with paragraph (2)(b) 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 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 paragraph (2)(b) all liferafts carried shall be of a type capable of being launched by the appliances fitted in compliance with paragraph (9); 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 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 or more but less than 122	12
122 or more but less than 183	18
183 or more but less than 244	24
244 or more but over	30

(12)(a) Every ship shall carry a lifejacket appropriate for every person on board.

(b) In addition to lifejackets carried in compliance with subparagraph (a), every ship shall carry lifejackets for at least 5 per cent of the number of persons which the ship is certified to carry and such lifejackets shall comply with the requirements of Schedule 8, Part 1 and shall be stowed in a conspicuous place on deck or at the assembly place.

(c) Each lifejacket required to be carried by subparagraphs (a) and (b) shall be fitted with a lifejacket light complying with the requirements of Schedule 9, Part 1 of

MSN 1676(M) except for ships with lifejacket lights fitted before 1st July 1998 not in accordance with such requirements, in which case such lights shall be replaced not later than the first periodical survey after 1st July 2002.

- (13) Every ship shall carry a line-throwing appliance.
- (14)(a) Every ship 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 not provided with an immersion suit except that 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.
- (b) Every ship shall carry, for every person assigned to a marine evacuation system party, an immersion suit or an anti-exposure suit of an appropriate size complying with regulation 39.
- (15)(a) Subject to sub-paragraph (b) every ship shall be provided with a public address system complying with Schedule 11, Part 2 of MSN 1676(M).
- (b) Ships which are already fitted with a public address system which complies substantially with the requirements of Schedule 11, Part 2, paragraphs 1, 2, 3, 4, 6 and 7 are not required to change their system.
- (16)(a)(i) This paragraph applies to ro-ro passenger ships.
- (ii) Such ship shall comply with the requirements of subparagraphs (b), (c) and (d) not later than the first periodical survey after 1st July 2000.
- (b) Liferafts shall:
- (i) be served by marine evacuation systems complying with the requirements of Schedule 5, Part 1 of MSN 1676(M) or launching appliances complying with the requirements of Schedule 6, Part 3 of MSN 1676(M), equally distributed on each side of the ship;
- (ii) be provided with float-free launching arrangements complying with the requirements of Schedule 4, Part 8 of MSN 1676(M);
- (iii) be fitted with a semi-rigid boarding ramp capable of supporting a person weighing 100 kgs; and
- (iv) either be an automatic self-righting liferaft or be a canopied reversible liferaft which is stable in a seaway and is capable of operating safely whichever way up it is floating. Alternatively, and providing the existing liferafts comply with Schedule 4 of MSN 1676(M), the ship shall carry automatic self-righting liferafts or canopied reversible liferafts, in addition to its normal complement of liferafts, of such aggregate capacity as will accommodate at least 50 per cent of the persons not accommodated in lifeboats. This additional liferaft capacity shall be determined on the basis of the difference between the total number of persons on board and the number of persons accommodated in lifeboats.
- (c) *Fast rescue boats*
- (i) At least one of the rescue boats provided pursuant to paragraph (3) shall be a fast rescue boat complying with the requirements of Schedule 2, Part 10 of MSN 1676(M) except that ships having a rescue boat that is substantially in compliance with Schedule 2, Part 10 shall not be required to replace their rescue boat;
- (ii) each fast rescue boat shall be served by a suitable launching appliance complying with the requirements of Schedule 6, Part 1 and 2 of MSN 1676(M): such launching appliances shall take into account that the fast rescue boat is intended to be launched and retrieved even under severe adverse weather condition;
- (iii) at least two crews of each fast rescue boat shall be trained, certified and drilled regularly having regard to the Merchant Shipping (Training and Certification) Regulations 1997 including all aspects of rescue, handling, manoeuvring, operating these craft in various conditions, and righting them after capsized; and

- (iv) if the arrangement or size of the ship is such as to prevent the installation of the fast rescue boat required by subparagraph (c)(i), the fast rescue boat may be installed in place of an existing lifeboat which is accepted as a boat for use in an emergency, provided that all of the following conditions are met:
 - (aa) the fast rescue boat installed is served by a launching appliance complying with the provisions of (c)(ii);
 - (bb) the capacity of the survival craft lost by the above substitution is compensated by the installation of liferafts capable of carrying at least an equal number of persons served by the lifeboat replaced;
 - (cc) such liferafts are served by the existing launching appliances or marine evacuation systems; and
 - (dd) every ship shall carry, for every person assigned to crew of a fast rescue boat, an immersion suit or anti-exposure suit of an appropriate size and complying with regulation 39.
- (d) *Means of rescue*
 - (i) Each ro-ro passenger ship shall be equipped with an efficient means of rescue complying with the requirements of Schedule 5, Part 3 of MSN 1676(M) for rapidly recovering survivors from the water and transferring survivors from rescue units or survival craft to the ship;
 - (ii) the means of transfer of survivors to the ship may be part of a marine evacuation system, or may be part of a system designed for rescue purposes;
 - (iii) if the inclined passage of a marine evacuation system is intended to provide the means of transfer of survivors to the deck of the ship, the inclined passage shall be equipped with handlines or ladders to aid in climbing up the inclined passage; and
 - (iv) a fast rescue boat launching and recovery appliance may be used as part of a means of rescue system.
- (e) *Lifejackets*
A sufficient number of lifejackets shall be stowed in the vicinity of the assembly stations so that passengers do not have to return to their cabins to collect their lifejacket.
- (f) *Helicopter emergency pick-up area*
A helicopter emergency pick-up area shall be provided on a ro-ro ship complying with the requirements of IAMSAR.

Ships of Class II

- 8.—(1) This regulation applies to ships of Class II.
- (2) Every ship shall, subject to the provisions of paragraph (8), 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 more sets of davits 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), 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, two of the lifeboats required by paragraph (3) 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).
- (5) Every ship shall carry on each side of the ship at least one motor lifeboat which shall be provided with the equipment specified in Part 4, of Schedule 12: 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), when 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 the volume of traffic so required, the Secretary of State may permit any ship subdivided in accordance with the requirements of Schedule 2, Section 3 of MSN 1698(M) to carry persons in excess of the lifeboat capacity provided in compliance with paragraph (3), on condition that:—

- (a) if such a ship is to proceed to sea from a port in the United Kingdom 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) 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 2 to MSN 1698(M) 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 subparagraph (b), paragraph (8)(b) and with paragraph (12).

(8) Where it can be shown that it is impracticable to stow satisfactorily the liferafts carried in pursuance of paragraph (7) without reducing the number of lifeboats, the Secretary of State may permit the number of sets of davits required to be fitted under paragraph (2) and the number of lifeboats attached to davits required under paragraph (3) 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)
 - (i) where the total capacity of the lifeboats is less than that required by Column C of the table set out in Schedule 1, liferafts of a type capable of being launched by the appliances referred to in regulation 29(2) shall be provided;
 - (ii) the total carrying capacity of the liferafts shall be at least the number obtained by dividing by 0.283 the difference between the aggregate cubic capacity of the lifeboats and the capacity required by Column C;
 - (iii) the liferafts shall together be sufficient for at least forty persons; and
 - (iv) there is at least one launching appliance 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 required by this regulation shall not be less than 7.3 metres in length.

(10) 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 2,300 kgs in their turning out condition.

(11) Every ship shall be provided with the following equipment:

- (b) at least 3 waterproofed two-way VHF radiotelephone sets, complying with the standards contained in IMO Resolution A.762(18); and
- (c) 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 stowed in each survival craft.

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

(13) Every ship 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 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 or more but less than 122	12
122 or more but less than 183	18
183 or more but less than 244	24
244 and over	30

- (15)(a) Every ship shall carry a lifejacket appropriate for every person on board.
- (b) In addition to lifejackets carried in compliance with subparagraph (a), every ship shall carry lifejackets for at least 5 per cent of the number of persons which the ship is certified to carry and such lifejackets shall comply with the requirements of Schedule 8, Part 1 and shall be stowed in a conspicuous place on deck or at assembly stations.
- (c) Each lifejacket required to be carried by subparagraphs (a) and (b) shall be fitted with a lifejacket light complying with the requirements of Schedule 9, Part 1 of MSN 1676(M).
- (16) Every ship shall carry a line-throwing appliance.
- (17)(a) Every ship 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 not provided with an immersion suit except that immersion suits and thermal protective aids need not be carried for person 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.
- (b) Every ship shall carry, for every person assigned to a marine evacuation system party, an immersion suit or an anti-exposure suit of an appropriate size complying with regulation 39.
- (18)(a) Subject to sub-paragraph (b) every ship shall be provided with a public address system complying with Schedule 11, Part 2 of MSN 1676(M).
- (b) Ships which are already fitted with a public address system which complies substantially with the requirements of Schedule 11, Part 2, paragraphs 1, 2, 3, 4, 6 and 7 are not required to change their system.
- (19)(a) This paragraph applies to ro-ro passenger ships.
- (b) Liferrafts on ro-ro ships shall:
- (i) be served by marine evacuation systems complying with the requirements of Schedule 5, Part 1 of MSN 1676(M) or launching appliances complying with the requirements of Schedule 6, Part 3 of MSN 1676(M), equally distributed on each side of the ship;
 - (ii) be provided with float-free launching arrangements complying with the requirements of Schedule 4, Part 8 of MSN 1676(M);
 - (iii) be fitted with a semi-rigid boarding ramp capable of supporting a person weighing 100 kgs; and
 - (iv) either be an automatic self-righting liferaft or be a canopied reversible liferaft which is stable in a seaway and is capable of operating safely whichever way up it is floating. Alternatively, and providing the existing liferafts comply with Schedule 4 of MSN 1676(M), the ship shall carry automatic self-righting liferafts or canopied reversible liferafts, in addition to its normal complement of liferafts, of such aggregate capacity as will accommodate at least 50 per cent of the persons not accommodated in lifeboats. This additional liferaft capacity shall be determined on the basis of the difference between the total number of persons on board and the number of persons accommodated in lifeboats.
- (c) *Fast rescue boats*
- (i) At least one of the rescue boats provided pursuant to paragraph (4) shall be a fast rescue boat complying with the requirements of Schedule 2, Part 10 of MSN 1676(M) except that ships having a rescue boat that is substantially

in compliance with Schedule 2, Part 10 shall not be required to replace their rescue boat;

- (ii) each fast rescue boat shall be served by a suitable launching appliance complying with the requirements of Schedule 6, Part 1 and 2 of MSN 1676(M): such launching appliances shall take into account that the fast rescue boat is intended to be launched and retrieved even under severe adverse weather condition;
 - (iii) at least two crews of each fast rescue boat shall be trained, certified and drilled regularly having regard to the Merchant Shipping (Training and Certification) Regulations 1997 including all aspects of rescue, handling, manoeuvring, operating these craft in various conditions, and righting them after capsizing; and
 - (iv) if the arrangement or size of the ship is such as to prevent the installation of the fast rescue boat required by subparagraph (c)(i), the fast rescue boat may be installed in place of an existing lifeboat which is accepted as a boat for use in an emergency, provided that all of the following conditions are met:
 - (aa) the fast rescue boat installed is served by a launching appliance complying with the provisions of (c)(ii);
 - (bb) the capacity of the survival craft lost by the above substitution is compensated by the installation of liferafts capable of carrying at least an equal number of persons served by the lifeboat replaced;
 - (cc) such liferafts are served by the existing launching appliances or marine evacuation systems; and
 - (dd) every ship shall carry, for every person assigned to crew of a fast rescue boat, an immersion suit or anti-exposure suit of an appropriate size and complying with regulation 60.
- (d) *Means of rescue*
- (i) Each ro-ro passenger ship shall be equipped with an efficient means of rescue complying with the requirements of Schedule 5, Part 3 of MSN 1676(M) for rapidly recovering survivors from the water and transferring survivors from rescue units or survival craft to the ship;
 - (ii) the means of transfer of survivors to the ship may be part of a marine evacuation system, or may be part of a system designed for rescue purposes;
 - (iii) if the inclined passage of a marine evacuation system is intended to provide the means of transfer of survivors to the deck of the ship, the inclined passage shall be equipped with handlines or ladders to aid in climbing up the inclined passage; and
 - (iv) a fast rescue boat launching and recovery appliance may be used as part of a means of rescue system.
- (e) *Lifejackets*
- A sufficient number of lifejackets shall be stowed in the vicinity of the assembly stations so that passengers do not have to return to their cabins to collect their lifejacket.
- (f) *Helicopter emergency pick-up area*
- A helicopter emergency pick-up area shall be provided on a ro-ro ship complying with the requirements of IAMSAR.

Ships of Class II(A)

9. Regulation 8 shall apply to ships of Class II(A) as it applies to ships of Class II.

SHIPS OTHER THAN PASSENGER SHIPS

Ships of Class VII

- 10.—(1) This regulation applies to ships of Class VII.
- (2) Subject to paragraph (5), every ship 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 of 1,600 tons or over the lifeboats shall be not less than 7.3 metres in length.

(4) Subject to paragraph (5), every ship of 500 tons or over shall carry liferafts of sufficient aggregate capacity to accommodate at least the total number of persons on board. At least two of the liferafts shall be of approximately the same capacity.

(5) In lieu of complying with paragraphs (2) and (4) every ship of 500 tons or over but under 1,600 tons, shall carry:

- (a) liferafts on each side of the ship capable of being launched readily, and of sufficient aggregate capacity to accommodate the total number of persons on board; the liferaft capacity being approximately evenly divided. If these liferafts cannot be readily launched on each side of the ship, there shall be provided additionally the liferafts prescribed in paragraph (4) stowed in accordance with paragraph (9); and
- (b)
 - (i) a motor lifeboat;
 - (ii) a Class C boat fitted with a motor complying with Schedule 2, Part 3, if over 4.3 metres in length, or with Schedule 2, Part 4, if under 4.3 metres in length; or
 - (iii) an inflated boat fitted with a motor complying with Schedule 4, Part 3.

The boat prescribed in subparagraph (b)(i), (ii) or (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 degrees towards the side on which the boat is fitted and shall be launched and recovered by a davit complying with the requirements of Schedule 10 or Schedule 11; where a winch is provided, it shall comply with Schedule 10.

(6) In every ship provided with the liferafts prescribed in paragraph (5)(a) 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 29 and Schedule 11; 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 of under 500 tons shall carry either:

- (a) the lifeboats prescribed in paragraph (2) 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 of Class C boat or inflated 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 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), a liferaft stowed as far forward or aft, or one as far forward and another as far aft, as is reasonable and practicable.

(9) Liferafts carried under this regulation, except those liferafts fitted in compliance with paragraph (5)(a) 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) 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 2,300 kgs in their turning out condition.

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

(12) Every ship shall be provided with the following equipment:

- (a) a satellite EPIRB;
- (b) in the case of a ship of 500 tons or over, at least 3 waterproofed two-way VHF radiotelephone apparatus; and in the case of a ship of under 500 tons, at least 2 waterproofed two-way VHF radiotelephone apparatus, in either case complying with the standards contained in IMO Resolution A.762(18); and

- (c) 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 of under 500 tons, at least one radar transponder. The radar transponders shall be stowed in such locations that they can rapidly be placed in any survival craft other than the liferaft or liferafts required by regulation 10(8). Alternatively, one radar transponder shall be stowed in each survival craft other than those required by regulation 10(8).
- (13) Every ship of 500 tons or over shall carry at least eight lifebuoys.
- (14) Every ship of less than 500 tons shall carry at least four lifebuoys.
- (15)(a) Every ship shall carry a lifejacket appropriate for every person on board.
- (b) A sufficient number of additional lifejackets shall be carried for the use of persons on watch and at remotely located survival craft stations: provided that there shall be at least 4 additional lifejackets on ships where the number of persons on board is 16 or less, and at least an additional 25 per cent of the number of lifejackets required to be carried by subparagraph (a) in the case of ships where the number on board is more than 16: provided that the number of additional lifejackets need not exceed the number of persons on board.
- (c) Each lifejacket required to be carried by subparagraphs (a) and (b) shall be fitted with a lifejacket light complying with the requirements of Schedule 9, Part 1 of MSN 1676(M), except for ships with lifejacket lights fitted before 1st July 1998 not in accordance with these requirements, in which case such lights shall be replaced not later than the first periodical survey after 1st July 2002.
- (16) Every ship shall carry a line-throwing appliance.
- (17) Every ship, except a ship which complies with either subparagraphs (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: provided that immersion suits and thermal protective aids need not be carried if:
 - (a) the lifeboats required under paragraph (2) and paragraph (7)(a) are totally enclosed;
 - (b) a totally enclosed lifeboat capable of free-fall launching is carried in lieu of the lifeboats required under paragraph (2) and paragraph (7)(a); or
 - (c) the ship is constantly engaged on voyages between the parallels of latitude of 20° North and South.
- (18) Every ship which complies either with paragraph (5)(b) or (7)(b) shall be provided with an immersion suit 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 parallels of latitude of 20° North and South.

Ships of Class VII(A)

- 11—(1)** This regulation applies to ships of Class VII(A).
- (2) Every ship 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: providing 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) 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).
- (4) Every ship shall carry on each side of the ship at least one motor lifeboat.
- (5) Every ship shall be provided with the following equipment:
 - (a) a satellite EPIRB;
 - (b) at least 2 waterproofed two-way VHF radiotelephone apparatus, complying with the standards contained in IMO Resolution A.762(18); and

- (c) 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 stowed in each survival craft.
- (6) Every motor lifeboat carried in compliance with these Regulations shall be provided with the equipment specified in Schedule 12, Part 4.
- (7) In every ship of 1,600 tons or over the lifeboats shall be not less than 7.3 metres in length.
- (8) 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 paragraph (2)(b) shall be served by launching appliances. There shall never be less than one 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 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 paragraph (2)(b), all liferafts carried shall be of a type capable of being launched by the appliances fitted in compliance with paragraph (9).
- (11) Every ship shall carry at least eight lifebuoys.
- (12)(a) Every ship shall carry a lifejacket appropriate for every person on board.
- (b) A sufficient number of additional lifejackets shall be carried for the use of persons on watch and at remotely located survival craft stations: provided that:
 - (i) there shall be at least 4 additional lifejackets on ships where the number of persons on board is 16 or less, and at least an additional 25 per cent of the number of lifejackets required to be carried by subparagraph (a) in the case of ships where the number on board is more than 16:
 - (ii) the number of additional lifejackets need not exceed the number of persons on board.
- (b) Each lifejacket required to be carried by subparagraphs (a) and (b) shall be fitted with a lifejacket light complying with the requirements of Schedule 9, Part 1 of MSN 1676(M), except for ships with lifejacket lights before 1st July 1998 not in accordance with such requirements, in which case such lights shall be replaced not later than the first periodical survey after 1st July 2002.
- (13) Every ship shall carry a line-throwing appliance.
- (14) Every ship 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 parallels of latitude of 20° North and South.

Ships of Class VII(T)

- 12.—(1) This regulation applies to ships of Class VII(T).
- (2) Paragraphs (2), (3), (4), (7), (8), (9), (12), (13), (14), (15), (16), (17) and (18) of regulation 10 shall apply to ships of Class VII(T) as they apply to ships of Class VII.
- (3) Every ship 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: unless it is impracticable to carry four lifeboats aft, in which case one lifeboat on each side of the ship may be permitted, on condition that:
 - (a) each lifeboat shall not exceed 8.5 metres in length;
 - (b) each lifeboat shall be stowed as far forward as practicable and so stowed that the aft end of the lifeboat is at least one-and-a-half times the length of the lifeboat forward of the ship's propeller; and

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

(4) In every ship to which regulation 10(2) or paragraph (3) above 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 2,300 kgs in their turning out condition.

(5) In every ship of 1,600 tons or over at least one of the lifeboats carried on each side of the ship in compliance with regulation 10(2) or paragraph (3) above shall be a motor lifeboat.

Ships of Class VIII

13. Regulation 10 shall apply to ships of Class VIII as it applies to ships of Class VII.

Ships of Class VIII(T)

14. Regulation 12 shall apply to ships of Class VIII(T) as it applies to ships of Class VII(T).

Ships of Class VIII(A)

15.—(1) This regulation applies to ships of Class VIII(A).

(2) Paragraphs (2), (3), (4), (8) and (9) of regulation 10 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.

(3) Paragraphs (7) and (9) of regulation 10 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.

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

Ships of Class VIII(A)(T)

16.—(1) This regulation applies to ships of Class VIII(A)(T).

(2) Paragraphs (2), (3), (4), (8) and (9) of regulation 10 shall apply to ships of Class VIII(A)(T) of 1,600 tons or over as they apply to ships of Class VII of 500 tons or over.

(3) Paragraphs (7) and (9) of regulation 10 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.

(4) Paragraphs (2), (3) and (4) of regulation 12 shall apply to ships of Class VIII(A)(T) as they apply to ships of Class VII(T).

(5) Paragraphs (12), (13), (14), (15), (16), (17) and (18) of regulation 10 shall apply to ships of Class VIII(A)(T) as they apply to ships of Class VII.

Ships of Class IX

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

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

(3) Every ship, other than a ship of 500 tons or over engaged on an international voyage, shall carry:

(a) a lifeboat of Class C boat or inflated 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 in the case of a ship with 16 or more persons on board, at least two liferafts; and

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

(4) In every ship, liferafts (other than those fitted in compliance with regulation 10(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), (13), (14), (15), (16), (17) and (18) of regulation 10 shall apply to ships of Class IX as they apply to ships of Class VII.

Ships of Class IX(A)

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

(2) Every ship of 12.2 metres in length or over shall, when in Category A, B, C and D waters, carry:

- (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 four lifebuoys; and,
- (c) 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 two lifebuoys.

(3) Every ship of 12.2 metres in length or over when in Category A, B and C waters, and every such ship of less than 12.2 metres in length, shall carry lifebuoys of a number at least equal in number to half the total number of persons on board: provided that ships of 21.3 metres in length or over shall carry at least four lifebuoys and ships of less than 21.3 metres in length shall carry at least two lifebuoys.

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

(5) Every ship of 12.2 metres in length or over shall carry a lifejacket appropriate for every 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)

19. Regulation 18 shall apply to ships of Class IX(A)(T) as it applies to ships of Class IX(A).

Ships of Class IX

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

(2) Every ship shall carry either:

- (a) (i) at least two 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
- (ii) at least two liferafts on ships with 16 or more persons on board or at least one liferaft on ships with fewer than 16 persons on board, of sufficient aggregate capacity to accommodate the total number of persons on board; or
- (b) a lifeboat of Class C boat or inflated 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 paragraph (2)(a) applies, the lifeboat davits shall be of the gravity type except that luffing davits may be fitted for operating lifeboats weighing not more than 2,300 kgs in their turning out condition.

(5) Every ship shall carry at least four lifebuoys.

(6)(a) Every ship shall carry a lifejacket appropriate for every person on board.

- (b) A sufficient number of additional lifejackets shall be carried for the use of persons on watch and at remotely located survival craft stations; there shall be at least 4 additional lifejackets on ships where the number of persons on board is 16 or less, and at least an additional 25 per cent of the number of lifejackets required to be carried by subparagraph (a) in the case of ships where the number on board is more

than 16: provided that the number of additional lifejackets need not exceed the number of persons on board.

- (c) Each lifejacket required to be carried by paragraphs (a) and (b) shall be fitted with a lifejacket light complying with the requirements of Schedule 9, Part 1 of MSN 1676(M), except for ships with lifejacket lights not in accordance with these requirements, in which case such lights shall be replaced not later than the first periodical survey after 1st July 2001.

(7) Every ship shall carry a line-throwing appliance.

(8) Every ship shall be provided with the following equipment:

- (a) a satellite EPIRB;
- (b) in the case of a ship of 500 tons or over, at least 3 waterproofed two-way VHF radiotelephone apparatus and in the case of a ship of under 500 tons, at least 2 waterproofed two-way radiotelephone apparatus of which at least one shall be portable, in either case complying with the standards contained in IMO Resolution A.762(18); and
- (c) 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 of under 500 tons at least one radar transponder, and any such radar transponders shall be stowed in such locations that they can rapidly be placed in any survival craft or, alternatively, one radar transponder shall be stowed in each survival craft.

(9) Every ship 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) 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 of 20° North and South.

Ships of Class XII

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

(2) Every ship 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 four lifebuoys; and
- (c) a line-throwing appliance;

and every ship of 25.9 metres in length or over shall carry in addition a lifeboat, Class C boat or inflated boat which shall be capable of being launched on one side of the ship.

(3) Every ship 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 United Kingdom 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 two lifebuoys.

(4) Every ship 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 United Kingdom, shall 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 Category A, B and C waters shall not be required to carry more than two lifebuoys.

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

(6) Liferrafts 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 shall carry either—

- (i) a lifejacket appropriate for every person on board; or
- (ii) for every person on board, a lifejacket which complies with British Standard Specification BS 3595; 1981 or BS EN 394 and BS EN 3961994, provided it does not depend wholly upon oral inflation. If such lifejacket is of the partially inherently buoyant type, the buoyancy of the jacket in the uninflated state shall be not less than 89 Newtons for every lifejacket for a person weighing 32 kilogrammes or more; and

(b) Each lifejacket required to be carried by sub-paragraphs (a) and (b) shall be fitted with a lifejacket light complying with the requirements of Schedule 9, Part 1 of MSN 1676(M), except for ships with lifejacket lights not in accordance with these requirements, in which case all such lights shall be replaced not later than the first periodical survey after 1st July 2002.

GENERAL REQUIREMENTS

Inflated boats

22.—(1) Where inflated boats are carried in pursuant to these Regulations the boats shall be stowed in the inflated condition.

(2) The lifting arrangements fitted on inflated boats shall comply with the requirements of Schedule 4, Part 2.

Lifebuoys

23.—(1) Lifebuoys shall comply with the requirements of Schedule 7, Part 2 of MSN 1676(M), except in those vessels described in paragraph (2).

(2) Lifebuoys carried in ships of less than 16.8 metres in length, of Classes VIII(1), VIII(A)(T), IX, IX(A), IX(A)(T), XI and XII, shall comply with the requirements of Schedule 7, Part 2 or part 3. Lifebuoys carried shall not be so mixed as to comprise at any one time lifebuoys complying with part 2 and lifebuoys complying with Part 3 of the said Schedule.

(3) If, in a ship described in paragraph (2), the lifebuoys shall comply with Schedule 7, Part 3, and the ship is one to which the provisions of regulations 18(3) or 21(4) apply, lifebuoys shall be carried equal in number to the total number of persons on board, but at no time less than two lifebuoys.

Lifebuoy lights, smoke signals and lines

24.—(1) Lifebuoys carried in ships (except ships of Classes IX(A) and IX(A)(T)) of less than 12.2 metres, 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 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;
 - (c) in ships of Classes IX(A), IX(A)(T) and XII of 21.3 metres in length or over, on two lifebuoys; and
 - (d) 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)(a) In every ship (except 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 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.

(3) Two of the lifebuoys to which self-igniting lights are attached in accordance with paragraphs (1)(a), (b) and (c) and the lifebuoy to which a self-igniting light is attached in accordance with paragraph (1)(d) shall be provided with a self-activating smoke signal complying with the requirements of Schedule 8, Part 5 of MSN 1676(M).

(4) Two of the lifebuoys provided with self-igniting lights in accordance with subparagraphs (1)(a), (b) and (c) and self-activating smoke signals in accordance with paragraph (3) shall be carried on each side of the ship and be capable of quick release from the navigating bridge.

Line-throwing appliances

25. Ships of less than 12 metres in length need not comply with the requirements for throwing appliances contained in regulations 7(13), 8(16), 10(16), 11(13) and 20(7).

Retro-reflective material

26. 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, and the dimensions and location of the retro-reflective material shall be in accordance with Schedule 16 of MSN 1676(M).

STOWAGE AND HANDLING OF LIFE-SAVING APPLIANCES

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

27.—(1) The arrangement of each lifeboat, Class C boat, inflated 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, inflated 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 Classes 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, inflated boats and other boats

28.—(1) Subject to the provisions of paragraphs (2), (3) and (4) every lifeboat attached to a set of davits, other than a lifeboat which is carried as an alternative to a Class C boat, inflated 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.

(2) Any lifeboat which is carried as an alternative to a Class C boat, inflated boat or other boat, and any Class C boat, inflated 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, inflated 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 regulation 10(5)(b) or (7)(b), 15(2), 17(3)(a), 20(2)(b) or 21(2), and every boat carried in compliance with regulation 18(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 inflated boat carried in compliance with regulation 10(5)(b) or (7)(b), 15(2), 17(3)(a), 20(2)(b) or 21(2) shall be attached to a launching appliance, which shall be capable of launching and recovering the inflated 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 overboard without the use of the launching device.

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

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

(8) Lifeboats shall 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, steeply overhanging portions of the hull, and the ability, so far as practicable, to be launched down the straight side of the ship. If positioned forward they shall be stowed abaft the collision bulkhead in a sheltered position and the strength of the davits shall be adequate for the location.

(9) Davits shall be suitably placed on 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 10 or 11.

(11)(a) All lifeboats, Class C boats, inflated 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;
- (ii) when they are attached to mechanically controlled single-arm davits;
- (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 11(2);
- (iv) when they are fitted in any ship of Classes VII, VII(T), VIII, VIII(T) or IX in compliance with regulation 10(2), (5) or (7) (including those paragraphs as applied to such Classes); or
- (v) when the weight of the attached lifeboat, Class C boat, inflated boat or other boat in the lowering condition exceeds 2,300 kgs:

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

(b) In every ship in which lifeboats, Class C boats, inflated 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 regulations 7(3), 8(4) or 11(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 1,000 kgs.

(12) Efficient hand gear shall be provided for the recovery of all lifeboats, Class C boats, inflated 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, if necessary, before the davits come against the stops to ensure that the wire rope falls or davits are not over-stressed.

(14) Except in the case of lifeboats required by regulations 7(2), 8(4) and 11(2), 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, inflated 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 long enough to reach water with the ship at her lightest seagoing draught and listed to 15 degrees either way.

(17)(a) Lifeboats, Class C boats, inflated 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.

(b) Means shall be provided for detaching the lifeboats, Class C boats, inflated boats or other boats from the falls.

(c) 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 Schedule 2, Part 6 is fitted.

(d) The points of attachment of the Lifeboats, Class C boats, inflated 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, inflated boats or other boats.

(18) Every emergency lifeboat carried in compliance with regulation 7(3), 8(4) and regulation 11(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 one end of the pendant shall be attached to the lower fall block and the other end to the lifting arrangement on the boat. Additionally, means shall be provided for hanging off the boat after hoisting to enable the lower fall block to be attached directly to the lifting hook.

(19) When—

(a) a lifeboat is attached to a davit, set of davits or other launching device which is not of sufficient strength for the lifeboat to be safely lowered into the water loaded with its full complement of persons and equipment required by this Part of these Regulations under the conditions of trim and specified in this Part of these Regulations for the Class of ship, or

(b) a Class C boat, inflated boat or other boat is not of sufficient strength to be safely lowered into the water loaded with its full complement of persons and equipment required by this Part of these Regulations,

the davit or the launching device shall be conspicuously marked with a red band 150 millimetres wide painted on a white background.

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

29.—(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) Launching appliances shall be provided in every ship of Classes I, II, II(A) and VII(A) which carry liferafts in accordance with regulations 7(2)(b), 8(8)(c) or 11(2)(b).

(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 requirements of regulation 28(8) shall apply to liferafts for which approved launching devices are required to be carried, 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, inflated boats and other boats, and liferafts, and assembly stations

30.—(1) Arrangements shall be made to ensure that it is possible to effect embarkation into the lifeboats, Class C boats, inflated 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 and 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.

(b) In ships of Classes I, II and II(A) and Class VII(A) similar provision shall be made, except that in such ships such ladders may be replaced by suitable mechanical devices: provided that there shall not be less than one ladder on each side of the ship,

(c) In ships of Classes VII, VII(A), VII(T), VIII, VIII(A), VIII(A)(T), IX, XI and XII which carry a Class B 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, suitable means shall be provided for embarking persons into the boat.

(d) In ships of Classes I, II, II(A) and Class VII(A) and in ships of Classes II, VII(T), VIII, VIII(T) and IX of 500 tons or over, sufficient ladders or suitable mechanical devices shall be provided to facilitate embarkation into the liferafts when waterborne.

(e) Ladders provided in compliance with this paragraph 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), 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.

(5) For ro-ro passenger ships of Classes I, II and II(A) the term “muster station” shall be replaced with “assembly station” on all signs and in all emergency procedure instructions.

Manning of survival craft

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

(2) There shall be sufficient members of the crew to operate the survival craft and the launching arrangements when evacuating all on board. The minimum number of deck officers, certificated persons and others for this purpose shall be determined in accordance with Merchant Shipping Notice No. M.1682.

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

(4) A deck officer or certificated person shall be placed in charge of each liferaft to be used. In ships of Classes II and II(A) the person in charge may be a crew member practised in the handling and operation of liferafts.

(5) The person in charge of 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.

(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.

(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) when compiling the muster list referred to in regulation 4(2) of the Merchant Shipping (Musters and Training) Regulations 1986(a).

Portable radio equipment

32.—(1) The two-way radiotelephone apparatus required to be carried in compliance with regulations 7(5), 8(11), 10(12), 11(5) and 20(8), which are not stowed in survival craft, shall be kept in a suitable place ready to be moved into survival craft in case of emergency.

(2) In ships where there is substantial fore and aft separation between superstructures or deck houses, the two-way radiotelephone apparatus shall not all be located in any one superstructure or deck house.

Electrically operated signals

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

Electric lighting

34.—(1) In every ship of Class I, II or II(A) an electric lighting system, operated from the ship's main generating plant and from the emergency source of power referred to in the Merchant Shipping (Passenger Ship Construction: Ships of Classes I, II and II(A)) Regulations 1998(b), shall be provided throughout the ship and in particular so as to be capable of illuminating—

- (a) the decks from which lifeboats and liferafts are embarked.
- (b) launching gear and lifeboats, and liferaft launching appliances where provided and the liferafts which they serve during the preparation for and process of launching;
- (c) the water into which the lifeboats and liferafts are launched until the process of launching is completed; and
- (d) the stowage position of those liferafts for which launching appliances are not provided.

(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 from the emergency source of power referred to in the Merchant Shipping (Passenger Ship Construction: Ships of Classes I, II and II(A)) Regulations 1998.

- (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 electric lighting. In particular, during the preparation for and process of evacuation, electric lighting shall illuminate the—
 - (i) lifeboat davits and launching appliances;

(a) S.I. 1986/535, to which there are amendments not relevant to these Regulations.

(b) S.I. 1998/2514.

- (ii) lifeboats and liferafts;
 - (iii) the stowage position of liferafts for which launching appliances are not provided; and
 - (iv) the water into which lifeboats and liferafts are launched.
- (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 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 subparagraphs (a) and (b) shall be operated from the ship's main electric generating plant and, in addition, shall be capable of being operated in every such ship of 1,600 tons or over from an emergency source of electric power which shall be provided for such lighting or in the case of a ship to which the Merchant Shipping (Cargo Ship Construction) Regulations 1997(a) applies, from the emergency source of electric power required by those Regulations.
- (d) In every ship of 500 tons or over but of under 1,600 tons the lighting required by subparagraph (a) shall be operated from the ship's main electric generating plant and in addition shall be capable of being operated from:
- (i) an emergency source of electric power which shall be provided for such lighting; or
 - (ii) in the case of any such ship to which the Merchant Shipping (Cargo Ship Construction) Regulations 1997 applies, from the emergency source of electric power required by those Regulations; or
 - (iii) if the Secretary of State permits, the reserve source of electrical energy required by the Merchant Shipping (Radio Installations) Regulations 1998(b) 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 those Regulations.

(4) In every ship of Classes VII, VII(A), VII(T), VIII, VIII(T) and IX to which paragraph (3) 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.

Ships' distress signals

35.—(1) Every ship, except ships of Classes IX(A) and IX(A)(T) and ships of Class XII, shall carry not less than twelve parachute distress rocket signals.

(2) Ships of Class IX(A) and IX(A)(T) operating in Category A, B, C and D waters shall carry not less than six parachute distress rockets signals.

(3) Ships of Class XII operating in Category A, B, C and D waters or which proceed to sea shall carry not less than six parachute distress rocket signals.

Operational instructions for survival craft and their launching controls

36.—(1) Except as otherwise provided in paragraph (3)(a) this regulation applies to ships of Classes I, II, II(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 shall be provided:

- (a) on or in the vicinity of survival craft and their launching controls, with posters or signs illustrating the purpose of controls, the procedures for operating the appliance and giving relevant operating instructions;
- (b) with a training manual complying with the requirements of Schedule 14, Part 1 of MSN 1676(M) in each crew messroom and recreation room or in each crew cabin;

(a) S.I. 1997/1509, to which there are amendments not relevant to these Regulations.

(b) S.I. 1998/2070.

- (c) as far as practicable, with instructions complying with the requirements of Schedule 14, Part 2 of MSN 1676(M) for on-board maintenance of life-saving appliances or a shipboard planned maintenance programme which includes the maintenance of life-saving appliances.
- (3)(a) Posters and signs shall be easily seen under emergency lighting conditions on ships of Classes I, II, II(A), VII, VII(A), VII(T), VIII, VIII(T) and IX to which regulation 34(1), (2) or (3) applies; and where applicable they shall use symbols which are specified in Schedule 16 of MSN 1676(M);
- (b) 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.

Replacement of life-saving appliances

37.—(1) When, in a ship constructed on or before 1st July 1986, any life-saving appliance or arrangement is replaced or the ship undergoes 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 in MSN 1676(M).

(2) Any appliance or arrangement complying with those requirements shall not be required to comply with the requirements in MSN 1677(M),

(3) If a lifeboat is replaced but its launching appliance is not, or vice versa, the lifeboat or launching appliance, as the case may be, must be of the same type as that replaced.

Table of life-saving signals and rescue methods

38. In ships of Classes I, II, II(A), 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 the Environment, Transport and the Regions, shall be provided.

Immersion suits and anti-exposure suits

39. Immersion suits and anti-exposure suits required to be carried by this Part of the Regulations 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; or
- (d) east of longitude 10°E in the Kattegat and Baltic Sea between 1st December and 30th April, both dates inclusive.

PART III

REQUIREMENTS FOR SHIPS CONSTRUCTED ON OR AFTER 1ST JULY 1986 AND BEFORE 1ST JULY 1998

PRELIMINARY

Application

40. Part III applies to ships of Classes I, II and II(A), Classes VII to IX(A)(T) inclusive and Classes XI and XII, the keels of which were laid, or which were at a similar state of construction, on or after 1st July 1986 and before 1st July 1998.

Interpretation

41. In Part III a reference to a numbered Schedule is, unless otherwise stated, a reference to the Schedule of that number in MSN 1676(M).

PASSENGER SHIPS

Ships of Class I

- 42.—(1) This regulation applies to ships of Class I.
- (2) Every ship shall carry:
- (a) on each side of the ship lifeboats complying with the requirements of Schedule 2, Parts 3 and 4 of sufficient aggregate capacity to accommodate 50 per cent 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; the liferafts shall be served by launching appliances equally distributed on each side of the ship; and
 - (c) in addition to the survival craft carried in compliance with subparagraph (a) or (b), liferafts of sufficient aggregate capacity to accommodate 25 per cent of the total number of persons which the ship is certified to carry. These liferafts shall be served by at least one launching appliance on each side of the ship (which may be the appliances provided to comply with subparagraph (b)), or, if it is to be used on both sides, by appliances so approved.
- (3)(a) (i) Every ship of less than 500 tons carrying less than 200 persons may, in lieu of carrying the lifeboats and liferafts required by paragraph (2), shall carry on each side of the ship liferafts of sufficient aggregate capacity to accommodate the total number of persons the ship is certified to carry.
- (ii) If these liferafts cannot be readily launched on either side of the ship additional liferafts shall be provided so that the total capacity available on each side will accommodate 150 per cent of the total number of persons which the ship is certified to carry.
- (iii) All liferafts shall be served by at least one launching appliance on each side of the ship.
- (b) If the rescue boat required by paragraph (4)(b) is also a lifeboat it may be included in the aggregate capacity referred to in subparagraph (a).
- (c) The number and arrangement of survival craft shall be such that in the event of any one survival craft being lost or rendered unserviceable, there shall still be sufficient survival craft available for use on each side of the ship to accommodate the total number of persons the ship is certified to carry.
- (4)(a) Every ship of 500 tons and over shall carry at least one rescue boat on each side of the ship.
- (b) Every ship of less than 500 tons shall carry at least one rescue boat.
- (c) A lifeboat may be accepted as a rescue boat provided it also complies with the requirements for a rescue boat.
- (d) Every ship shall carry sufficient lifeboats and rescue boats to ensure that when evacuating the total number of persons the ship is certified to carry, a lifeboat or rescue boat should not need to marshal more than six liferafts.
- (5) Each lifeboat and rescue boat shall be served by its own launching appliance.
- (6) Every lifeboat shall be provided with the following equipment—
- (a) a satellite EPIRB;
 - (b) at least 3 waterproofed two-way VHF radiotelephone apparatus, complying with the standards contained in IMO Resolution A.762(18); and
 - (c) on each side of the ship, at least one radar transponder stowed in such locations

that it can be rapidly placed in any survival craft or, alternatively, one radar transponder stowed in each survival craft.

- (7)(a) Every ship 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 60	8
60 or more but less than 120	12
120 or more but less than 180	18
180 or more but less than 240	24
240 and over	30

- (b) At least one lifebuoy on each side of the ship shall be fitted with a buoyant lifeline. Not less than 50 per cent of the total number of lifebuoys, and on every ship of less than 60 metres in length not less than 6 lifebuoys, shall be provided with self-igniting lights and not less than two of the lifebuoys provided with such lights shall also be provided with self-activating smoke signals and be capable of quick release from the navigating bridge.

- (8) Every ship shall carry—

- (a) for each person the ship is certified to carry, a lifejacket suitable for a person weighing 32 kilogrammes or more
- (b) a lifejacket suitable for a person weighing less than 32 kilogrammes for each such person on board or for 10 per cent of the number of passengers the ship is certified to carry, whichever is the greater;
- (c) in addition to the lifejackets carried in compliance with subparagraphs (a) and (b), lifejackets suitable for persons weighing 32 kilogrammes or more for not less than 5 per cent of the total number of persons the ship is certified to carry which shall be stowed in conspicuous places on the deck or at assembly stations; and
- (d) a sufficient number of lifejackets for persons on watch and for use at remotely located survival craft stations.

(9) Included in the number of lifejackets required to be carried by paragraph (8) there shall be at least sufficient inflatable lifejackets for the crew of each rescue boat and, for those crew members whose emergency duties require it, a lifejacket which will not unduly hinder them during the execution of these duties.

(10) Each lifejacket required to be carried by paragraphs (8) and (9) shall be fitted with a lifejacket light complying with the requirements of Schedule 9, Part 1, except for ships with lifejacket lights fitted before 1st July 1998 not in accordance with these requirements, in which case all such lights shall be replaced not later than the first periodical survey after 1st July 2002.

(11) Every ship shall carry, for every person assigned to crew a rescue boat or assigned to the marine evacuation system party, an immersion suit or an anti-exposure suit of an appropriate size and comply with regulation 60.

(12) Every ship shall carry not less than 12 rocket parachute flares.

(13) Every ship shall carry a line-throwing appliance.

(14) Every ship shall be provided with—

- (a) an emergency means for two-way communication (which may be fixed or portable equipment, or both) between emergency control stations, assembly and embarkation stations and strategic positions on board. This may be the equipment carried to comply with subparagraph (6)(a);
- (b) a general emergency alarm system and, in addition, either a public address system or other suitable means of communication; and
- (c) lighting as specified in regulations 50(4) and (5) and 53(8).

(15) Every ship shall be provided with—

- (a) posters or signs showing operating instructions on or in the vicinity of survival craft and their launching controls;
- (b) a training manual in each crew messroom and recreation room or in each crew cabin;

- (c) instructions for on-board maintenance of life-saving appliances or a shipboard planned maintenance programme which includes the maintenance of life-saving appliances; and
 - (d) on the bridge, a copy of the table "Life-Saving Signals and Rescue Methods, SOLAS No. 1" published by the Department of the Environment, Transport and the Regions.
- (16) Every ship shall be provided with a public address system complying with Schedule 11, Part 2 except that—
- (a) Subject to the provisions of subparagraph (c) in ships constructed before 1st July 1997, only the requirements of Schedule 11, Part 2, paragraphs 1, 2, 3, 4, 6 and 7;
 - (b) in ships constructed on or after the 1st July 1997, the requirements of Schedule 11, Part 2 shall apply; and
 - (c) ships constructed before 1st July 1997 which are already fitted with a public address system which complies substantially with the requirements of Schedule 11, Part 2, paragraphs 1, 2, 3, 4, 6 and 7 are not required to change their system.
- (17)(a)(i) This paragraph applies to ro-ro passenger ships.
- (ii) Every ship shall comply with the requirements of subparagraphs (b), (c) and (d) not later than the first periodical survey after 1st July 2000.
- (b) Liferafts on ro-ro ships shall:
- (i) be served by marine evacuation systems complying with the requirements of Schedule 5, Part 1 or launching appliances complying with the requirements of Schedule 6, Part 3 equally distributed on each side of the ship;
 - (ii) be provided with float-free launching arrangements complying with the requirements of Schedule 4, Part 8;
 - (iii) be of a type fitted with a semi-rigid boarding ramp, capable of supporting a person weighing 100 kgs;
 - (iv) shall either be an automatic self-righting liferaft or be a canopied reversible liferaft which is stable in a seaway and is capable of operating safely whichever way up it is floating. Alternatively, the ship shall carry automatic self-righting liferafts or canopied reversible liferafts, in addition to its normal complement of liferafts, of such aggregate capacity as will accommodate at least 50 per cent of the persons not accommodated in lifeboats. This additional liferaft capacity shall be determined on the basis of the difference between the total number of persons on board and the number of persons accommodated in lifeboats.
- (c) *Fast rescue boats*—
- (i) At least one of the rescue boats shall be a fast rescue boat complying with the requirements of Schedule 2, Part 10 except that ships constructed before 1st July 1998 having a rescue boat that is substantially in compliance with Schedule 2, Part 10 shall not be required to replace the rescue boat;
 - (ii) each fast rescue boat shall be served by a suitable launching appliance complying with the requirements of Schedule 6, Parts 1 and 2; such launching appliances shall take into account that the fast rescue boat is intended to be launched and retrieved even under severe adverse weather conditions;
 - (iii) at least two crews of each fast rescue boat shall be trained and drilled regularly having regard to the Merchant Shipping (Training and Certification) Regulations 1997 including all aspects of rescue, handling, manoeuvring, operating these craft in various conditions, and righting them after capsizing; and
 - (iv) in the case where the arrangement or size of a ship constructed before 1st July 1997 is such as to prevent the installation of the fast rescue boat required by subparagraph (c)(i), the fast rescue boat may be installed in place of an existing lifeboat which is accepted as a rescue boat on condition that—
 - (aa) the fast rescue boat installed is served by a launching appliance complying with the provisions of subparagraph (c)(ii);
 - (bb) the capacity of the survival craft lost by the above substitution is compensated by the installation of liferafts capable of carrying at least an equal number of persons served by the liferaft replaced; and

- (cc) such liferafts are served by the existing launching appliances or marine evacuation systems;
 - (dd) every ship shall carry, for every person assigned to crew of a fast rescue boat, an immersion suit or anti-exposure suit of an appropriate size and complying with regulation 60.
- (d) *Means of rescue*
- (i) Each ro-ro passenger ship shall be equipped with an efficient means of rescue complying with the requirements of Schedule 5, Part 3 for rapidly recovering survivors from the water and transferring survivors from rescue units or survival craft to the ship;
 - (ii) the means of transfer of survivors to the ship may be part of a marine evacuation system, or may be part of a system designed for rescue purposes;
 - (iii) if the inclined passage of a marine evacuation system is intended to provide the means of transfer of survivors to the deck of the ship, the inclined passage shall be equipped with handlines or ladders to aid in climbing up the inclined passage;
 - (iv) a fast rescue boat launching and recovery appliance may be used as part of a means of rescue system;
- (e) *Lifejackets*
- A sufficient number of lifejackets shall be stowed in the vicinity of the assembly stations so that passengers do not have to return to their cabins to collect their lifejacket.
- (f) *Helicopter emergency pick-up area*
- A helicopter emergency pick-up area shall be provided complying with the requirements of IAMSAR.

Ships of Classes II and II(A)

- 43.—**(1) This regulation applies to ships of Classes II and II(A).
- (2) Every ship which is subdivided in accordance with the requirement of Schedule 2, Section 3 of MSN 1698(M) shall carry:
- (a) lifeboats of sufficient aggregate capacity to accommodate at least 30 per cent of the total number of persons which the ship is certified to carry. Such lifeboats shall be equally distributed, as far as practicable, on each side of the ship; and
 - (b) liferafts of sufficient aggregate capacity that, together with the lifeboat capacity required by subparagraph (a), will accommodate the total number of persons which the ship is certified to carry. The liferafts shall be served by launching appliances equally distributed on each side of the ship.
- (3) Every ship which is subdivided in accordance with the requirements of Schedule 2, Section 2 of MSN 1698(M) shall carry:
- (a) on each side of the ship lifeboats of sufficient aggregate capacity to accommodate 50 per cent of the total number of persons which the ship is certified to carry; or
 - (b) lifeboats complying with the requirements of Part 3 and 4 of Schedule 2 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. The liferafts shall be served by launching appliances equally distributed on each side of the ship.
- (4) Every ship shall carry, in addition to the survival craft carried in compliance with paragraph (2) or (3), liferafts of sufficient aggregate capacity to accommodate 25 per cent of the total number of persons which the ship is certified to carry. These liferafts shall be served by at least one launching appliance on each side of the ship which may be the appliances carried in compliance with paragraph (2)(b) or (3)(b), or equivalent approved appliances capable of being used on both sides.
- (5)(a) (i) Every ship of less than 500 tons carrying less than 200 persons may, in lieu of carrying the lifeboats and liferafts required by paragraph (2), (3) or (4) may carry on each side of the ship liferafts of sufficient aggregate capacity to accommodate the total number of persons the ship is certified to carry.

- (ii) If these liferafts cannot be readily launched on either side of the ship additional liferafts shall be provided so that the total capacity available on each side will accommodate 150 per cent of the total number of persons which the ship is certified to carry.
- (iii) All liferafts shall be served by at least one launching appliance on each side of the ship.
- (b) If the rescue boat required by subparagraph (6)(b) is also a lifeboat it may be included in the aggregate capacity referred to in subparagraph (a).
- (c) The number and arrangements of survival craft shall be such that in the event of any one survival craft being lost or rendered unserviceable, there shall still be sufficient survival craft available for use on each side of the ship to accommodate the total number of persons the ship is certified to carry.
- (6)(a) Every ship of 500 tons and over shall carry at least one rescue boat on each side of the ship.
 - (b) Every ship of less than 500 tons shall carry at least one rescue boat.
 - (c) A lifeboat may be accepted as a rescue boat provided it also complies with the requirements for a rescue boat.
 - (d) Every ship which is subdivided in accordance with the Merchant Shipping (Passenger Ship Construction: Ships of Classes I, II and II(A)) Regulations 1998 shall carry sufficient lifeboats and rescue boats to ensure that when evacuating the total number of persons the ship is certified to carry, no lifeboat or rescue boat needs to marshal more than 6 liferafts.
- (7) Each lifeboat and rescue boat shall be served by its own launching appliance.
- (8) Every lifeboat shall be provided with the following equipment:
 - (a) a satellite EPIRB;
 - (b) at least 3 waterproofed two-way VHF radiotelephone apparatus, complying with the standards contained in IMO Resolution A.762(18);
 - (c) 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 stowed in each survival craft.

- (9)(a) Every ship 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 60	8
60 or more but less than 120	12
120 or more but less than 180	18
180 or more but less than 240	24
240	30

- (b) At least one lifebuoy on each side of the ship shall be fitted with a buoyant lifeline. Not less than 50 per cent of the total number of lifebuoys, and on every ship of less than 60 metres in length not less than 6 lifebuoys, shall be provided with self-igniting lights and not less than two of the lifebuoys provided with such lights shall also be provided with self-activating smoke signals and be capable of quick release from the navigating bridge.
- (10) Every ship shall carry:
 - (a) for each person the ship is certified to carry, a lifejacket suitable for a person weighing 32 kilogrammes or more;
 - (b) a lifejacket suitable for a person weighing less than 32 kilogrammes for each such person on board or for 10 per cent of the number of passengers the ship is certified to carry, whichever is the greater;
 - (c) in addition to the lifejackets carried in compliance with subparagraphs (a) and (b) lifejackets suitable for persons weighing 32 kilogrammes or more for not less than 5 per cent of the total number of persons the ship is certified to carry which shall be stowed in conspicuous places on deck or at assembly stations;
 - (d) a sufficient number of lifejackets for persons on watch and for use at remotely located survival craft stations; and
 - (e) each lifejacket required to be carried by subparagraphs (a) and (b) shall be fitted with a lifejacket light complying with the requirements of Schedule 9, Part I.

(11) Included in the number of lifejackets required to be carried by paragraph (10) there shall be at least sufficient inflatable lifejackets for the crew of each rescue boat and for those crew members whose emergency duties require a lifejacket which will not unduly hinder them during the execution of these duties.

(12) Every ship shall carry, for every person assigned to crew a rescue boat or assigned to the marine evacuation system party, an immersion suit or an anti-exposure suit of an appropriate size complying with regulation 60.

(13) Every ship shall carry not less than 12 rocket flares.

(14) Every ship shall carry a line-throwing appliance.

(15) Every ship shall be provided with:

(a) an emergency means for two-way communication (which may be fixed or portable) between emergency control stations, assembly and embarkation stations and strategic positions on board. This may be the equipment which is carried in compliance with paragraph (8)(a);

(b) a general emergency alarm system and, in addition, either a public address system or other suitable means of communication; and

(c) lighting as specified in regulations 50(4) and (5) and 53(8).

(16) Every ship shall be provided—

(a) with posters or signs showing operating instructions; on or in the vicinity of survival craft and their launching controls;

(b) with a training manual in each crew messroom and recreation room or in each crew cabin;

(c) with instructions for on-board maintenance of life-saving appliances or a shipboard planned maintenance programme which includes the maintenance of life-saving appliances; and

(d) on the bridge, with a copy of the table “Life-Saving Signals and Rescue Methods, SOLAS No. 1” published by the Department of the Environment, Transport and the Regions.

(17) Every ship shall be provided with a public address system complying with Schedule 11, Part 2, except that ships constructed before 1st July 1997 which are already fitted with a public address system which complies substantially with the requirements of Schedule 11, Part 2, paragraphs 1, 2, 3, 4, 6 and 7 are not required to change their system.

(18)(a) This paragraph applies to ro-ro passenger ships.

(b) Liferafts shall—

(i) be served by marine evacuation systems complying with the requirements of Schedule 5, Part 1 or launching appliances complying with the requirements of Schedule 6, Part 3 equally distributed on each side of the ship;

(ii) be provided with float-free launching arrangements complying with the requirements of Schedule 4, Part 8;

(iii) be fitted with a semi-rigid boarding ramp capable of supporting a person weighing 100 kgs; and

(iv) either be an automatic self-righting liferaft or be a canopied reversible liferaft which is stable in a seaway and is capable of operating safely whichever way up it is floating. Alternatively, and providing the existing liferafts comply with Schedule 4, the ship shall carry automatic self-righting liferafts or canopied reversible liferafts, in addition to its normal complement of liferafts, of such aggregate capacity as will accommodate at least 50 per cent of the persons not accommodated in lifeboats. This additional liferaft capacity shall be determined on the basis of the difference between the total number of persons on board and the number of persons accommodated in lifeboats.

(c) *Fast rescue boats*

(i) At least one of the rescue boats provided pursuant to shall be a fast rescue boat complying with the requirements of Schedule 2, Part 10, except that ships having a rescue boat that is substantially in compliance with Schedule 2, Part 10 shall not be required to replace their rescue boats;

- (ii) each fast rescue boat shall be served by a suitable launching appliance complying with the requirements of Schedule 6, Part 1 and 2, such launching appliances shall take into account that the fast rescue boat is intended to be launched and retrieved even under severe adverse weather condition;
- (iii) at least two crews of each fast rescue boat shall be trained, certified and drilled regularly having regard to the Merchant Shipping (Training and Certification) Regulations 1997 including all aspects of rescue, handling, manoeuvring, operating these craft in various conditions, and righting them after capsized; and
- (iv) if the arrangement or size of the ship is such as to prevent the installation of the fast rescue boat required by subparagraph (c)(i), the fast rescue boat may be installed in place of an existing lifeboat which is accepted as a boat for use in an emergency, provided that all of the following conditions are met:
 - (aa) the fast rescue boat installed is served by a launching appliance complying with the provisions of (c)(ii);
 - (bb) the capacity of the survival craft lost by the above substitution is compensated by the installation of liferafts capable of carrying at least an equal number of persons served by the lifeboat replaced;
 - (cc) such liferafts are served by the existing launching appliances or marine evacuation systems; and
 - (dd) every ship shall carry, for every person assigned to crew of a fast rescue boat, an immersion suit or anti-exposure suit of an appropriate size and complying with regulation 60.
- (d) *Means of rescue*
 - (i) Each ship shall be equipped with an efficient means of rescue complying with the requirements of Schedule 5, Part 3 for rapidly recovering survivors from the water and transferring survivors from rescue units or survival craft to the ship;
 - (ii) the means of transfer of survivors to the ship may be part of a marine evacuation system, or may be part of a system designed for rescue purposes;
 - (iii) if the inclined passage of a marine evacuation system is intended to provide the means of transfer of survivors to the deck of the ship, the inclined passage shall be equipped with handlines or ladders to aid in climbing up the inclined passage; and
 - (iv) a fast rescue boat launching and recovery appliance may be used as part of a means of rescue system.
- (e) *Lifejackets*
A sufficient number of lifejackets shall be stowed in the vicinity of the assembly stations so that passengers do not have to return to their cabins to collect their lifejacket.
- (f) *Helicopter emergency pick-up area*
A helicopter emergency pick-up area shall be provided on a ro-ro ship complying with the requirements of IAMSAR.

SHIPS OTHER THAN PASSENGER SHIPS

Ships of Classes VII, VIII, VIII(A) and IX

- 44.—**(1) This regulation applies to ships of Classes VII, VIII, VIII(A) and IX.
- (2) Every ship shall carry:
- (a) on each side of the ship one or more lifeboats complying with the requirements of Schedule 2, Part 4 of sufficient aggregate capacity to accommodate the total number of persons on board: provided that the Secretary of State may permit the carriage of lifeboats complying with the requirements of Schedule 2, Part 3 in lieu of Part 4 on ships operating solely under favourable climatic conditions and in suitable areas; and
 - (b) one or more liferafts capable of being launched on either side of the ship and of sufficient aggregate capacity to accommodate the total number of persons on

board; if the liferaft or liferafts cannot be readily transferred for launching on either side of the ship, the total capacity available on each side shall be sufficient to accommodate the total number of persons on board.

- (3) In lieu of complying with the requirements of paragraph (2) ships may carry–
- (a) one or more lifeboats complying with the requirements of Schedule 2, Part 9, capable of free-fall launching over the stern of the ship of sufficient aggregate capacity to accommodate the total number of persons on board; and
 - (b) on each side of the ship one or more liferafts of sufficient aggregate capacity to accommodate the total number of persons on board. The liferafts on at least one side of the ship shall be served by launching appliances.
- (4)(a) Every ship of less than 85 metres in length may, in lieu of carrying the lifeboats and liferafts required by paragraph (2) or (3), carry on each side of the ship one or more liferafts of sufficient aggregate capacity to accommodate the total number of persons on board.
- (b) If these liferafts cannot be readily transferred for launching on either side of the ship, the total capacity available on each side shall be sufficient to accommodate 150 per cent of the total number of persons on board.
 - (c) If the rescue boat required by paragraph (6) is also a lifeboat complying with the requirements of Schedule 2, Parts 3 or 4, it may be included in the aggregate capacity referred to in subparagraph (a).
 - (d) The number and arrangement of survival craft shall be such that in the event of any one survival craft being lost or rendered unserviceable there shall be sufficient survival craft available for use on each side of the ship to accommodate the total number of persons on board.
- (5) Where survival craft are stowed in a position which is more than 100 metres from the stem or stern there shall be carried, in addition to the liferafts required by subparagraph (2)(b) or (3)(b), a liferaft stowed as far forward or aft, or one as far forward and another as far aft, as is reasonable and practicable.
- (6) Every ship of 500 tons or over shall carry at least one rescue boat. Every ship of less than 500 tons shall carry at least one rescue boat, or inflated boat fitted with an engine. A lifeboat may be accepted as a rescue boat, provided that it also complies with the requirements for a rescue boat.
- (7) Each lifeboat, rescue boat and inflated boat shall be served by its own launching appliance.
- (8) Every tug of Class IX other than a tug of 500 tons or over engaged on an international voyage, shall in addition to complying with the requirements of paragraph (2), (3) or (4), and with the requirements of paragraph (6), carry buoyant apparatus sufficient to support the total number of persons on board.
- (9) Every ship shall be provided with the following equipment–
- (a) a satellite EPIRB;
 - (b) in the case of a ship of 500 tons or over, at least 3 waterproofed two-way VHF radiotelephone apparatus and, in the case of a ship of under 500 tons, at least 2 waterproofed two-way VHF radiotelephone apparatus, complying with the standards contained in IMO Resolution A.762(18); and
 - (c) 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 of 300 tons and under 500 tons, at least one radar transponder. The radar transponder shall be stowed in such a location that it can be rapidly placed in any survival craft other than the liferaft or liferafts required by regulation 44(5) or, alternatively, one radar transponder shall be stowed in each survival craft other than those required by regulation 44(5).
- (10)(a) Every ship 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 100	8
100 or more but less than 150	10
150 or more but less than 200	12
200	14

provided that in ships under 100 metres in length and less than 500 tons, not more than 4 lifebuoys need to be carried.

- (b) At least one lifebuoy on each side of the ship shall be fitted with a buoyant lifeline. Not less than 50 per cent of the total number of lifebuoys shall be provided with self-igniting lights and not less than two of the lifebuoys provided with such lights shall also be provided with self-acting smoke signals and be capable of quick release from the navigating bridge.

(11) Every ship shall carry:

- (a) for each person on board, a lifejacket suitable for a person weighing 32 kilogrammes or more
- (b) a lifejacket suitable for a person weighing less than 32 kilogrammes for each such person on board, provided that there shall never be less than 2 such lifejackets on any ship whichever carries children; and
- (c) additional lifejackets for the use of persons on watch and at remotely located survival craft stations. There shall be at least 4 additional lifejackets on ships where the number of persons on board is 16 or less, and at least an additional 25 per cent of the number of lifejackets required to be carried by subparagraph (a) in the case of ships where the number on board is more than 16; provided that the number of additional lifejackets need not exceed the number of persons on board.

(12) Included in the number of lifejackets required by paragraph (11) to be carried there shall be at least sufficient inflatable lifejackets for the crew of the rescue boat and for those crew members whose emergency duties require a lifejacket which will not unduly hinder them during the execution of these duties.

(13) Each lifejacket required to be carried by paragraphs (11) and (12) shall be fitted with a lifejacket light complying with the requirements of Schedule 9, Part 1. Except for ships with lifejacket lights not in accordance with these requirements, all such lights shall be replaced not later than the first periodical survey after 1st July 2001.

(14) Every ship shall carry, for every person assigned to crew the rescue boat or inflated boat, an immersion suit or anti-exposure of an appropriate size complying with regulation 60.

(15) (a) Every ship which carries survival craft as prescribed in paragraph (4)(a) shall carry an immersion suit as specified in regulation 60 for every person on board unless:

- (i) the liferafts are served by launching appliances;
- (ii) the liferafts are served by equivalent appliances capable of being used on both sides of the ship and which do not require entry into the water to board the liferaft; or
- (iii) the ship is constantly engaged on voyages between the parallels of latitude of 20° North and South.

(b) The immersion suits required by this paragraph may be used to comply with the requirements of paragraph (14).

(16) Every ship shall carry not less than 12 rocket parachute flares.

(17) Every ship of 12 metres in length and over shall carry a line-throwing appliance.

(18) Every ship shall be provided with—

- (a) an emergency means for two-way communication (which may be fixed or portable equipment or both) between emergency control stations, assembly and embarkation stations and strategic positions on board. This may be the equipment carried in compliance with subparagraph (9)(a);
- (b) a general emergency alarm system, except that in ships of less than 45.7 metres in length the additional electrically operated means referred to in Schedule 11, Part 1 need not be provided; in addition, in ships of 500 tons or over, either a public address system or other suitable means of communication; and
- (c) lighting as specified in regulations 50(4) and (5) and 53(8): provided that in ships of less than 500 tons such lighting need only be provided from one source of electrical power.

- (19) Every ship shall be provided—
- (a) with posters or signs showing operating instructions, in the vicinity of survival craft and their launching controls;
 - (b) with a training manual in each crew messroom and recreation room or in each crew cabin;
 - (c) with instructions for on-board maintenance of life-saving appliances or a shipboard planned maintenance programme which includes the maintenance of life-saving appliances; and
 - (d) on the bridge, with a copy of the table “Life-Saving Signals and Rescue Methods, SOLAS No. 1”, published by the Department of the Environment, Transport and the Regions.

Ships of Classes VII(T), VIII(T) and VIII(A)(T)

- 45.—(1) This regulation applies to ships of Classes VII(T), VIII(T) and VIII(A)(T).
- (2) Every ship carrying cargo which emits toxic vapours or gases shall carry on each side of the ship one or more lifeboats complying with the requirements of Schedule 2, Part 5 of sufficient aggregate capacity to accommodate the total number of persons on board.
- (3) Every ship carrying cargo having a flashpoint not exceeding 60°C (closed cup test) shall carry on each side of the ship one or more lifeboats complying with the requirements of Part 6 of Schedule 2 of sufficient aggregate capacity to accommodate the total number of persons on board.
- (4) Every ship shall carry, in addition to the lifeboats required by paragraph (2) or (3), one or more liferafts capable of being launched on either side of the ship of sufficient capacity to accommodate the total number of persons on board. If the liferaft or liferafts cannot be readily launched on either side of the ship, the total capacity available on each side shall be sufficient to accommodate the total number of persons on board.
- (5) In lieu of complying with the requirements of paragraphs (2) and (4) ships carrying cargoes emitting toxic vapours or gases may carry—
- (a) one or more lifeboats complying with the requirements of Schedule 2, Part 5, capable of free-fall launching over the stern of the ship of sufficient capacity to accommodate the total number of persons on board; and
 - (b) one or more liferafts on each side of the ship of sufficient capacity to accommodate the total number of persons on board. The liferafts on at least one side of the ship shall be served by launching appliances.
- (6) In lieu of complying with the requirements of paragraphs (3) and (4) ships carrying cargoes having a flashpoint not exceeding 60°C (closed cup test) may carry—
- (a) one or more lifeboats complying with the requirements of Schedule 2, Part 6 capable of free-fall launching over the stern of the ship of sufficient capacity to accommodate the total number of persons on board; and
 - (b) one or more liferafts on each side of the ship of sufficient capacity to accommodate the total number of persons on board. The liferafts on at least one side of the ship shall be served by launching appliances.
- (7)(a) Every ship of less than 500 tons may, in lieu of carrying the lifeboats and liferafts required by paragraph (2), (3), (4), (5) or (6), carry one or more liferafts on each side of the ship of sufficient capacity to accommodate the total number of persons on board.
- (b) If such liferafts cannot be readily launched on either side of the ship, the total capacity available on each side shall be sufficient to accommodate 150 per cent of the total number of persons on board.
 - (c) If the rescue boat required by paragraph (9) is also a lifeboat complying with the requirements of Schedule 2, Part 5 or 6, it may be included in the capacity referred to in subparagraph (a): provided that the total capacity available on either side of the ship is at least 150 per cent of the total number of persons on board.

(d) The number and arrangement of survival craft shall be such that in the event of any one survival craft being lost or rendered unserviceable, there shall be sufficient survival craft available for use on each side to accommodate the total number of persons on board.

(8) Where survival craft are stowed in a position which is more than 100 metres from the stem to stern, there shall be carried, in addition to the liferafts required by paragraph (4) or subparagraph (5)(b) or (6)(b) a liferaft stowed as far forward or aft as is reasonable and practicable.

(9) Every ship of 500 tons or over shall carry at least one rescue boat. Every ship of less than 500 tons shall carry at least one rescue boat, or inflated boat fitted with an engine. A lifeboat may be accepted as a rescue boat, provided that it also complies with the requirements for a rescue boat.

(10) Each lifeboat, rescue boat and inflated boat shall be served by its own launching appliance.

(11) Every ship shall be provided with the following equipment—

- (a) a satellite EPIRB;
- (b) in the case of a ship of 500 tons or over, at least 3 waterproofed two-way VHF radiotelephone apparatus and, in the case of a ship of under 500 tons, at least 2 waterproofed two-way VHF radiotelephone apparatus, in either case complying with the standards contained in IMO Resolution A.762(18); and
- (c) 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 of 300 tons or over and 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 the liferaft or liferafts required by paragraphs (8) or, alternatively, one radar transponder shall be stowed in each survival craft other than those required by regulation (8).

(12)(a) Every ship 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 100	8
100 or more but less than 150	10
150 or more but less than 200	12
200 and over	14

provided that in ships under 100 metres in length and less than 500 tons, not more than 4 lifebuoys need to be carried.

- (b) At least one lifebuoy on each side of the ship shall be fitted with a buoyant lifeline. Not less than 50 per cent of the total number of lifebuoys shall be provided with self-igniting lights of an electric battery type and not less than two of the lifebuoys provided with such lights shall also be provided with self-activating smoke signals and be capable of quick release from the navigating bridge.

(13) Every such ship shall carry—

- (a) for each person on board, a lifejacket suitable for a person weighing 32 kilogrammes or more
- (b) a lifejacket suitable for a person weighing less than 32 kilogrammes for each such person on board: provided that there shall never be less than 2 such lifejackets on any ship which ever carries children; and
- (c) additional lifejackets for the use of persons on watch and at remotely located survival craft stations. There shall be at least 4 additional lifejackets on ships where the number of persons on board is 16 or less, and at least an additional 25 per cent of the number of lifejackets required to be carried by subparagraph (a) in the case of ships where the number on board is more than 16: provided that the number of additional lifejackets need not exceed the number of persons on board.

(14) Included in the number of lifejackets required by paragraph (13) to be carried there shall be at least sufficient inflatable lifejackets for the crew of the rescue boat and for those crew members whose emergency duties require a lifejacket which will not unduly hinder them during the execution of those duties.

(15) Each lifejacket required to be carried by paragraphs (13) and (14) shall be fitted with a lifejacket light complying with the requirements of Schedule 9, Part 1, except for ships with lifejacket lights not in accordance with these requirements fitted before 1st July 1998, in which case all such lights shall be replaced not later than the first periodical survey after 1st July 2001.

(16) Every ship shall carry, for every person assigned to crew the rescue boat or inflated boat, an anti-exposure suit or immersion suit of an appropriate size and complying with regulation 60.

(17)(a) Every ship which carries survival craft as prescribed in subparagraph (7)(a) shall carry an immersion suit complying with regulation 60 for every person on board unless—

- (i) the liferafts are served by launching appliances;
- (ii) the liferafts are served by equivalent appliances capable of being used on both sides of the ship and which do not require entry into the water to board the liferaft; or
- (iii) the ship is constantly engaged on voyages between the parallels of latitude of 20° North and South.

(b) The immersion suits required by this paragraph may be used to comply with the requirements of paragraph (16).

(18) Every ship shall carry not less than 12 rocket parachute flares.

(19) Every ship shall carry a line-throwing appliance.

(20) Every ship shall be provided with—

- (a) an emergency means for two-way communication (which may be fixed or portable equipment or both) between emergency control stations, assembly and embarkation stations and strategic positions on board. This may be the equipment carried in compliance with subparagraph (11)(a) above;
- (b) a general emergency alarm system, except that in ships of less than 45.7 metres in length the additional electrically operated means referred to in Schedule 11, Part 1 need not be provided; in addition, in ships of 500 tons or over, either a public address system or other suitable means of communication; and
- (c) lighting as specified in regulations 50(4) and (5) and 53(8): provided that in ships of less than 500 tons such lighting need only be provided from one source of electrical power.

(21) Every ship shall be provided—

- (a) with posters or signs showing operating instructions, on or in the vicinity of survival craft and their launching controls;
- (b) with a training manual in each crew messroom and recreation room or in each crew cabin;
- (c) with instructions for on-board maintenance of life-saving appliances or a shipboard planned maintenance programme which includes the maintenance of life-saving appliances; and
- (d) on the bridge, with a copy of the table “Life-Saving Signals and Rescue Methods, SOLAS No. 1”, published by the Department of the Environment, Transport and the Regions.

Ships of Classes IX(A) and IX(A)(T)

46.—(1) This regulation applies to ships of Classes IX(A) and IX(A)(T).

(2) Every ship shall, when in Category A, B and C waters, be equipped as follows—

- (a) ships of less than 12 metres in length shall carry either one lifebuoy complying with Schedule 8, Part 2 for each two persons on board or one lifebuoy complying with Schedule 8, Part 3 for each person: provided that at least two lifebuoys are carried and that all are the same type. One lifebuoy shall be fitted with a buoyant lifeline at least 18 metres in length and one lifebuoy with a self-igniting light and self-activating smoke signal;

- (b) ships of 12 metres in length and over but less than 20 metres in length shall carry–
 - (i) one lifebuoy for each two persons on board: provided that at least two lifebuoys are carried; one lifebuoy shall be fitted with a buoyant lifeline at least 18 metres in length and one lifebuoy with a self-igniting light and self-activating smoke signal;
 - (ii) a lifejacket suitable for a person weighing 32 kilogrammes or more for each person on board; and
 - (iii) a lifejacket suitable for a person weighing less than 32 kilogrammes for each such person on board;
 - (c) ships of 20 metres in length and over shall carry–
 - (i) one lifebuoy for each two persons on board, provided that at least four lifebuoys are carried; one lifebuoy on each side of the ship shall be fitted with a buoyant lifeline and one lifebuoy on each side of the ship with a self-igniting light and self-activating smoke signal;
 - (ii) a lifejacket suitable for a person weighing 32 kilogrammes or more for each person on board; and
 - (iii) a lifejacket suitable for a person weighing less than 32 kilogrammes for each such person on board;
 - (d) in ships of Class IX(A)(T) lifebuoy self-igniting lights shall be of an electric battery type.
- (3) Every ship shall, when in Category A, B, C and D waters, be equipped as follows–
- (a) ships of less than 12 metres in length shall carry–
 - (i) either one lifebuoy complying with Schedule 8, Part 2 for each two persons on board or one lifebuoy complying with Schedule 8, Part 3 for each person; provided that at least two lifebuoys are carried and are all of the same type; one lifebuoy shall be fitted with a buoyant lifeline at least 18 metres in length and one lifebuoy with a self-igniting light and self-activating smoke signal; and
 - (ii) six rocket parachute flares;
 - (b) ships of 12 metres in length and over but less than 20 metres in length shall carry–
 - (i) one or more liferafts complying with the requirements of Schedule 4, Part 2, 3 or 5, of sufficient aggregate capacity to accommodate the total number of persons on board; if the liferaft or liferafts cannot be readily launched on either side of the ship, the total capacity available on each side shall be sufficient to accommodate the total number of persons on board;
 - (ii) two lifebuoys, one of which shall be fitted with a buoyant lifeline at least 18 metres in length and the other with a self-igniting light and self-activating smoke signal;
 - (iii) a lifejacket suitable for a person weighing 32 kilogrammes or more for each person on board;
 - (iv) a lifejacket suitable for a person weighing less than 32 kilogrammes for each such person on board; and
 - (v) six distress rocket parachute flares;
 - (c) ships of 20 metres in length and over shall carry–
 - (i) one or more liferafts complying with the requirements of Schedule 4, Part 2, 3 or 5, of sufficient aggregate capacity to accommodate the total number of persons on board; if the liferaft or liferafts cannot be readily launched on either side of the ship, the total capacity available on each side shall be sufficient to accommodate the total number of persons on board;
 - (ii) four lifebuoys, two of which shall be fitted with buoyant lifelines and two with self-igniting lights and self-activating smoke signals;
 - (iii) a lifejacket suitable for a person weighing 32 kilogrammes or more for each person on board;
 - (iv) a lifejacket suitable for a person weighing less than 32 kilogrammes for each such person on board; and
 - (v) six rocket parachute flares;

(d) in ships of Class IX(A)(T) lifebuoy self-igniting lights shall be of an electric battery type.

(4) Every tug and tender to which paragraphs (2) and (3) apply shall, in addition to the equipment required by these paragraphs, carry buoyant apparatus of sufficient capacity to accommodate the total number of persons on board.

(5) Every ship to which paragraph (3)(b) or (c) or paragraph (4) applies shall be provided—

- (a) with lighting as specified in regulations 50(4) and (5) and 53(8) provided from at least one source of electrical power;
- (b) with posters and signs showing operating instructions, on or in the vicinity of the liferafts and their launching controls;
- (c) with a training manual; and
- (d) with instructions for on-board maintenance of life-saving appliances or a shipboard planned maintenance programme which includes the maintenance of life-saving appliances.

Ships of Class XI

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

(2) Every ship shall carry—

- (a) one or more liferafts on each side of the ship of sufficient aggregate capacity to accommodate the total number of persons on board, provided that—
 - (i) if the liferafts cannot be readily launched on either side of the ship, the total capacity available on each side shall be sufficient to accommodate 150 per cent of the total number of persons on board;
 - (ii) if the rescue boat required by subparagraph (b) is also a lifeboat it may be included in the aggregate capacity provided the total capacity available on either side of the ship is at least 150 per cent of the total number of persons on board; and
 - (iii) the number and arrangement of survival craft shall be such that in the event of any one survival craft being lost or rendered unserviceable, there shall be sufficient survival craft available for use on each side to accommodate the total number of persons on board;
- (b) at least one rescue boat: provided that in ships of less than 500 tons an inflated boat fitted with an engine may be carried in lieu of a rescue boat; a lifeboat may be accepted as a rescue boat, provided that it also complies with the requirements for a rescue boat. The lifeboat, rescue boat or inflated boat shall be served by its own launching appliance.

(3) Every ship to which this regulation applies, shall be provided with the following equipment—

- (a) a satellite EPIRB;
- (b) in the case of a ship of 500 tons or over, at least 3 waterproofed two-way VHF radiotelephone apparatus and, in the case of a ship of under 500 tons, at least 2 waterproofed two-way VHF radiotelephone apparatus, in either case complying with the standards contained in IMO Resolution A.762(18); and
- (c) 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 of 300 tons or over and under 500 tons at least one radar transponder. The radar transponders shall be stowed in such locations that they can rapidly be placed in any survival craft or, alternatively, one radar transponder shall be stowed in each survival craft.

(4)(a) Every ship 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 50	6
50 and over	8

- (b) Ships of less than 12 metres in length may carry, in lieu of lifebuoys complying with Schedule 8, Part 2, lifebuoys complying with Schedule 8, Part 3, provided that all are of the same type.

- (c) At least one lifebuoy on each side of the ship shall be fitted with a buoyant lifeline. Not less than 50 per cent of the total number of lifebuoys shall be provided with self-igniting lights and not less than two of the lifebuoys provided with such lights shall also be provided with self-activating smoke signals and be capable of quick release from the navigating bridge/steering position. On ships of less than 12 metres in length the buoyant lifelines shall be at least 18 metres in length.
- (5) Every ship shall carry:
- (a) for each person on board, a lifejacket suitable for a person weighing 32 kgs or more;
 - (b) a lifejacket suitable for a person weighing less than 32 kgs for each such person on board; provided that there shall never be less than 2 such lifejackets on any ship which is ever likely to carry children; and
 - (c) a sufficient number of additional lifejackets for the use of persons on watch and for use at remotely located survival craft stations: provided that there shall be at least 4 additional lifejackets on ships where the number of persons on board is 16 or less, and at least an additional 25 per cent of the number of lifejackets required to be carried by subparagraph (a) in the case of ships where the number on board is more than 16; provided that the number of additional lifejackets need not exceed the number of persons on board.
- (6) Included in the number of lifejackets required to be carried by paragraph (5) there shall be at least sufficient inflatable lifejackets for the crew of the rescue boat and for those crew members whose emergency duties require a lifejacket which will not unduly hinder them during the execution of these duties.
- (7) Each lifejacket required to be carried by paragraphs (5) and (6) shall be fitted with a lifejacket light complying with the requirements of Schedule 9, Part 1, except for ships with lifejacket lights not in accordance with these requirements fitted before 1st July 1998, in which case all such lights shall be replaced not later than the first periodical survey after 1st July 2001.
- (8) Every ship shall carry, for every person assigned to crew the rescue boat or inflated boat, an anti-exposure or immersion suit of an appropriate size complying with regulation 60.
- (9)(a) Every ship shall carry an immersion suit complying with regulation 60 for every person on board unless—
- (i) the liferafts are served by launching appliances;
 - (ii) the liferafts are served by equivalent appliances capable of being used on both sides of the ship and which do not require entry into the water to board the liferaft; or
 - (iii) the ship is constantly engaged on voyages between the parallels of latitude of 20° North and South.
- (b) The immersion suits required by this paragraph may be used to comply with the requirements of paragraph (8).
- (10) Every ship shall carry not less than 12 rocket parachute flares.
- (11) Every ship of 12 metres in length and over shall carry a line-throwing appliance.
- (12) Every ship shall be provided with—
- (a) a general emergency alarm system except that in ships of less than 45.7 metres in length the additional electrically operated means referred to in Schedule 11, Part 1 of MSN 1676(M) need not be provided; and
 - (b) lighting as specified in regulations 50(4) and (5) and 53(8): provided that such lighting need only be provided from one source of electrical power.
- (13) Every ship shall be provided—
- (a) with posters or signs showing operating instructions, on or in the vicinity of survival craft and their launching controls;
 - (b) with a training manual in each crew messroom and recreation room or in each crew cabin;
 - (c) with instructions for on-board maintenance of life-saving appliances or a

- shipboard planned maintenance programme which includes a maintenance programme which includes a maintenance of life-saving appliances; and
- (d) on the bridge, with a copy of the table “Life-Saving Signals and Rescue Methods, SOLAS No. 1”, published by the Department of the Environment, Transport and the Regions.

Ships of Class XII

- 48.—**(1) This regulation applies to ships of Class XII.
- (2) Every ship of 21.3 metres in length and over shall carry—
- (a) at least two liferafts so stowed that they can be readily transferred to the water on either side of the ship, of sufficient aggregate capacity to accommodate twice the total number of persons on board;
 - (b) four lifebuoys, two of which shall be fitted with buoyant lifelines and two with self-igniting lights and self-activating smoke signals;
 - (c) a lifejacket suitable for a person weighing 32 kgs or more for each person on board;
 - (d) a lifejacket suitable for a person weighing less than 32 kgs for each such person on board;
 - (e) a lifejacket light fitted on each of the lifejackets required by subparagraphs (c) and (d) complying with the requirements of Schedule 9, Part 1, except for ships with lifejacket lights fitted before 1st July 1998 not in accordance with such requirements, in which case such lights shall be replaced not later than the first periodical survey after 1st July 2002;
 - (f) 6 rocket parachute flares;
 - (g) a line-throwing appliance;
 - (h) posters or signs showing operating instructions on or in the vicinity of survival craft and their launching controls;
 - (i) a training manual;
 - (j) instructions for on-board maintenance of life-saving appliances; and
 - (k) on the bridge, with a copy of the table “Life-Saving Signals and Rescue Methods, SOLAS No. 1”, published by the Department of the Environment, Transport and the Regions;

and any such ship of 25.9 metres in length or over shall carry, in addition, a rescue boat or inflated boat. A lifeboat may be accepted as a rescue boat, provided that it also complies with the requirements for a rescue boat. The lifeboat, rescue boat or inflated boat shall be served by a launching appliance.

- (3) Every ship of 13.7 metres in length or over but less than 21.3 metres in length and engaged on either a voyage to sea in the course of which it is more than 3 miles from the coast of the United Kingdom or a voyage to sea during the months of November to March, inclusive, shall carry—
- (a) one or more liferafts complying with the requirements of Schedule 4, Part 2, 3 or 5, so stowed as to be readily transferable to the water on either side of the ship and of sufficient aggregate capacity to accommodate the total number of persons on board;
 - (b) two lifebuoys, one of which shall be fitted with a self-igniting light and self-activating smoke signal;
 - (c) a buoyant lifeline at least 18 metres in length;
 - (d) a lifejacket suitable for a person weighing 32 kgs or more for each person on board;
 - (e) a lifejacket suitable for a person weighing less than 32 kgs for each such person on board;
 - (f) a lifejacket light fitted on each of the lifejackets required by subparagraphs (d) and (e) complying with the requirements of Schedule 9, Part 1, except for ships with lifejacket lights not in accordance with these requirements fitted before 1st July 1998, in which case, all such lights shall be replaced not later than the first periodical survey after 1st July 2001;
 - (g) 6 rocket parachute flares;
 - (h) posters or signs showing operating instructions on or in the vicinity of survival craft and their launching controls;

- (i) a training manual;
 - (j) instructions for on-board maintenance of life-saving appliances; and
 - (k) on the bridge, with a copy of the table "Life-Saving Signals and Rescue Methods, SOLAS No. 1", published by the Department of the Environment, Transport and the Regions;
- (4) Every ship of 13.7 metres in length or over but 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 United Kingdom shall carry—
- (a) one lifebuoy or more liferafts complying with the requirements of Schedule 4, Part 2, 3 or 5, so stowed as to be readily transferable to the water on either side of the ship and of sufficient aggregate capacity to accommodate the total number of persons on board;
 - (b) a buoyant lifeline at least 18 metres in length;
 - (c) a lifejacket suitable for a person weighing 32 kgs or more for each person on board;
 - (d) a lifejacket suitable for a person weighing less than 32 kgs for each such person on board;
 - (e) a lifejacket light on each lifejacket required by subparagraphs (a) and (b) complying with with the requirements of Schedule 9, Part 1 except for ships not in accordance with such requirements fitted before 1st July 1998, in which case such lights shall be replaced not later than the first periodical survey after 1st July 2001;
 - (f) 6 rocket parachute flares;
 - (g) on the bridge, with a copy of the table "Life-Saving Signals and Rescue Methods, SOLAS No. 1", published by the Department of the Environment, Transport and the Regions.
- (5) In lieu of carrying lifejackets complying with the requirements of Schedule 9, Part 2 or 3, every such ship may carry lifejackets complying with British Standard Specification BS 3595; 1981 or BS 394 and BS EN 396 1994, provided that such lifejackets do not depend wholly upon oral inflation. Lifejackets of the partially inherently buoyant type for persons weighing 32 kilogrammes or more shall have buoyancy in the uninflated state of not less than 89 Newtons.

GENERAL REQUIREMENTS

Operating instructions for survival craft and their launching controls

- 49.**—(1) Posters and signs provided on or in the vicinity of survival craft and their launching controls shall—
- (a) illustrate the purpose of controls and the procedures for operating the appliance and give relevant instructions;
 - (b) be easily seen under emergency lighting conditions on ships of Classes I, II and II(A) and of Classes VII, VII(T), VIII, VIII(T) and IX; and
 - (c) where applicable, use symbols which are specified in Schedule 16.

Survival craft assembly and embarkation arrangements

- 50.**—(1) Lifeboats and liferafts for which launching appliances are required shall be stowed as close to accommodation and service spaces as possible.
- (2) Assembly stations shall be provided close to the embarkation stations. Each assembly station shall have sufficient space to accommodate all persons assigned to muster at that station. In ships of Classes I, II and II(A) passenger assembly stations shall have ample room for the marshalling and instruction of the passengers and there shall be ready access between assembly stations and the embarkation station.
- (3) Assembly and embarkation stations shall be readily accessible from accommodation and work areas.
- (4) In ships of Classes I, II and II(A) and in ships of Classes VII, VII(T), VIII, VIII(T), VIII(A), VIII(A)(T) and IX of 500 tons or over, assembly and embarkation stations shall

be adequately illuminated by lighting supplied from the emergency source of electrical power required by the Merchant Shipping (Passenger Ship Construction: Ships of Classes I, II and II(A)) Regulations 1998 or the Merchant Shipping (Cargo Ship Construction) Regulations 1997, as appropriate.

(5) Alleyways, internal and external stairways and exits giving access to the assembly and embarkation stations shall be lighted. In ships of the Classes referred to in paragraph (4) such lighting shall be capable of being supplied by the emergency source of electrical power required by the Merchant Shipping (Passenger Ship Construction: Ships of Classes I, II and II(A)) Regulations 1998 or the Merchant Shipping (Cargo Ship Construction) Regulations 1997, as appropriate.

(6) Davit-launched survival craft assembly and embarkation stations shall be so arranged as to enable stretcher cases to be placed in survival craft.

(7) In ships of Classes I, II, II(A), VII, VII(T), VIII, VIII(T), VIII(A), VIII(A)(T), IX, XI and XII an embarkation ladder shall be provided at each launching station or at every two adjacent launching stations, extending, in a single length, from the deck to the waterline in the lightest seagoing condition under unfavourable conditions of trim and with the ship listed not less than 15 degrees either way and where such distance exceeds 1 metre. Such ladders may be replaced by devices to afford access to survival craft when waterborne, provided that there shall be at least one embarkation ladder on each side of the ship. Handholds shall be provided to assist in a safe passage from the deck to the ladder and vice-versa. Other means of embarkation may be permitted for the liferafts required to be carried in compliance with regulations 44(5) and 45(8).

(8) Means shall be provided for bringing davit-launched survival craft against the ship's side and holding them alongside so that persons can be safely embarked.

(9) On ships of Classes I, II and II(A) survival craft embarkation arrangements shall be so designed that—

(a) all lifeboats can be boarded and launched either directly from the stowed position or from an embarkation deck but not both; and

(b) davit-launched liferafts can be boarded and launched from a position immediately adjacent to the stowed position or from a position to which, in compliance with the requirements of regulation 51(5), the liferaft is transferred prior to launching.

Notwithstanding the requirements of subparagraph (a), if the rescue boat is also a lifeboat and the other lifeboats are boarded and launched from an embarkation deck, the arrangements shall be such that the rescue boat can also be boarded and launched from the embarkation deck.

(10) On every ship provided with a rescue boat, arrangements shall be such that the rescue boat can be boarded and launched directly from the stowed position with the number of persons assigned to crew the rescue boat on board.

(11) On ships of Classes VII, VII(T), VIII, VIII(T), VIII(A), VIII(A)(T), IX, and XI embarkation arrangements for survival craft shall be so designed that lifeboats can be boarded and launched directly from the stowed position and davit-launched liferafts can be boarded and launched from a position immediately adjacent to the stowed position or from a position to which the liferaft is transferred prior to launching in compliance with the requirements of regulation 53(5).

(12) For ro-ro passenger ships of Classes I, II and II(A) the term “muster station” shall be replaced with “assembly station” on all signs and in all emergency procedure instructions.

Stowage of survival craft, rescue boats and inflated boats

51.—(1) Each survival craft shall be stowed—

(a) so that neither the survival craft nor its stowage arrangements will interfere with the operation of any other survival craft or rescue boat at any other launching station;

(b) as near the water surface as is safe and practicable and, in the case of a survival craft other than a liferaft intended for throw-overboard launching, in such a position that the survival craft in the embarkation position is not less than 2 metres above the waterline with the ship in the fully loaded condition under unfavourable

conditions of trim and listed up to 20 degrees either way, or to the angle at which the ship's weatherdeck edge becomes submerged, whichever is less;

- (c) in a state of continuous readiness so that two crew members can carry out preparations for embarkation and launching in less than 5 minutes;
- (d) fully equipped as prescribed in Schedule 2, Part 2 or Schedule 4, Part 6; and
- (e) as far as practicable, in a secure and sheltered position and protected from damage by fire and explosion.

(2) Lifeboats for lowering down the ship's side shall be stowed as far forward of the propeller as practicable. On ships of Classes VII, VII(T), VIII, VIII(T), VIII(A), VIII(A)(T) and IX of 80 metres in length or more but less than 120 metres in length, each lifeboat shall be so stowed that the after end of the lifeboat is not less than the length of the lifeboat forward of the propeller. On such ships of 120 metres in length or more and on ships of Classes I, II and II(A) of 80 metres in length or more, each lifeboat shall be so stowed that the after end of the lifeboat is not less than 1.5 times the length of the lifeboat forward of the propeller. Where appropriate, the ship shall be so arranged that lifeboats, in their stowed positions, are protected from damage by heavy seas.

(3) Lifeboats shall be stowed attached to launching appliances.

(4) In addition to meeting the requirements of paragraph (7) or (8) liferafts shall be so stowed as to permit manual release from their securing arrangements.

(5) Davit-launched liferafts, other than those required to be carried by regulations 42(2)(c) and 43(4), shall be stowed within reach of the lifting hooks unless some means of transfer is provided which is not rendered inoperable within the limits of trim and list prescribed in paragraph (1)(b) or by ship motion or power failure.

(6) Liferafts intended for throw-overboard launching shall be so stowed as to be readily transferable for launching on either side of the ship unless liferafts, of the aggregate capacity required by regulations 44(2)(b), 45(4), 46(3)(b)(i), 46(3)(c)(i) and 47(2)(a)(i) to be capable of being launched on either side, are stowed on each side of the ship.

(7) On ships of Classes I, II and II(A) every liferaft shall be stowed with its painter permanently attached to the ship and with a float-free arrangement complying with the requirements of Schedule 4, Part 8 so that, as far as practicable, the liferaft floats free and, if inflatable, inflates automatically when the ship sinks.

(8) On ships of Classes VII, VII(T), VIII, VIII(T), VIII(A), VIII(A)(T), IX, XI and XII every liferaft, other than the liferafts required by regulations 44(5) and 45(8) shall be stowed with its painter permanently attached to the ship and with a float-free arrangement complying with the requirements of Schedule 4, Part 8 so that the liferaft floats free and, if inflatable, inflates automatically when the ship sinks. The liferafts required by regulations 44(5) and 45(8) if securely fastened shall have provision for manual release.

(9) Rescue boats shall be stowed:

- (a) in a state of continuous readiness for launching in not more than 5 minutes;
- (b) in a position suitable for launching and recovery;
- (c) so that neither the rescue boat nor its stowage arrangements will interfere with the operation of any survival craft at any other launching station; and
- (d) if it is also a lifeboat, in compliance with the requirements of this regulation for the stowage of lifeboats.

(10) Inflated boats shall be stowed—

- (a) in a state of continuous readiness for launching in the shortest possible time;
- (b) in a position suitable for launching and recovery; and
- (c) so that neither the inflated boat nor its stowage arrangements will interfere with the operation of any survival craft at any other launching station.

Launching stations

52. Launching stations shall be 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 that so far as practicable survival craft, except survival craft specially designed for free-fall launching, can be launched down the straight side of the

ship. If positioned forward survival craft shall be stowed abaft the collision bulkhead in a sheltered position.

Survival craft launching arrangements

53.—(1) Launching appliances complying with the requirements of Schedule 6, Parts 1 and 3, shall be provided for all liferafts except:

- (a) liferafts which are boarded from a position which is less than 4.5 metres above the waterline in the lightest seagoing condition and which either—
 - (i) have a mass of not more than 185 kilogrammes; or
 - (ii) are stowed for launching directly from the stowed position under unfavourable conditions of trim of up to 10 degrees and with the ship listed not less than 20 degrees either way;
- (b) liferafts having a mass of not more than 185 kilogrammes and which are carried in excess of the survival craft for 200 per cent of the total number of persons on board the ship; and
- (c) the liferafts stowed as far forward or aft as required by regulation 44(5).

(2) Each lifeboat shall be provided with an appliance which is capable of launching and recovering the lifeboat.

(3) Only one type of release mechanism shall be used for similar survival craft carried on board the ship.

(4) On ships of Classes I, II and II(A) all survival craft required to provide for abandonment by the total number of persons on board shall be capable of being launched with their full complement of persons and equipment within a period of 30 minutes from the time the abandon ship signal is given.

(5) On ships of Classes VII, VII(T), VIII(T), VIII(T), VIII(A), VIII(A)(T), IX AND XI, with the exception of the survival craft referred to in subparagraph (1)(a), all survival craft required to provide for abandonment by the total number of persons on board shall be capable of being launched with their full complement of persons and equipment within a period of 10 minutes from the time the abandon ship signal is given.

(6) On ships of Classes VII, VII(T), VIII, VIII(T), VIII(A), VIII(A)(T) and IX of 20,000 tons and upwards, lifeboats shall be capable of being launched, where necessary utilising painters, with the ship making headway at speeds up to 5 knots in calm water.

(7) Preparation and handling of survival craft at any one launching station shall not interfere with the prompt preparation and handling of any other survival craft or rescue boat at any other station.

(8) During preparation and launching, each survival craft, its launching appliance, and the area of water into which it is to be launched shall be adequately illuminated by lighting supplied from the emergency source of electrical power required by the Merchant Shipping (Passenger Ship Construction: Ships of Classes I, II and II(A)) Regulations 1998 or the Merchant Shipping (Cargo Ship Construction) Regulations 1997, as appropriate.

(9) Means shall be available to prevent any over-board discharge of water on to survival craft during abandonment.

(10) If there is a danger of a survival craft being damaged by the ship's stabiliser fins, means shall be available, powered by an emergency source of energy, to bring the stabiliser fins inboard. Indicators operated by an emergency source of energy shall be available on the navigating bridge to show the position of the stabiliser fins.

Marine escape systems

54.—(1) A marine escape system or systems complying with the requirements of Schedule 5, Part 1 may be substituted on ships of Classes II and II(A) for some or all of the liferafts and launching appliances required by regulation 43(2)(b) or (3)(b). The liferafts included in such system or systems, together with any other liferafts served by launching appliances other than the liferafts referred to in regulation 43(4), shall provide the same aggregate capacity as that required by regulation 43(2)(b) or (3)(b).

(2) Where marine escape systems are provided on a ship, at least all the systems on one side shall be subjected to a trial deployment after installation.

(3) Where marine escape systems are provided, provision for training the crew in its use shall be made which shall include the arrangements specified in Schedule 5, Part 3.

Rescue boat embarkation, launching and recovery arrangements

55.—(1) The rescue boat embarkation and launching arrangements shall be such that the rescue boat can be boarded and launched in the shortest possible time and in any case in not more than 5 minutes.

(2) If the rescue boat is one of the ship's survival craft, the embarkation arrangements and launching station shall comply with the requirements of regulations 50 and 52.

(3) Launching arrangements shall comply with the requirements of regulation 53 and rescue boat launching appliances shall comply with the requirements of Schedule 6, Parts 1 and 2. All rescue boats shall be capable of being launched, where necessary utilising painters, with the ship making headway at speeds up to 5 knots in calm water.

(4) Rapid recovery of the rescue boat shall be possible—

- (a) when the boat is loaded with its full complement of persons and equipment; and
- (b) if the rescue boat is also a lifeboat, when it is loaded with its lifeboat equipment, and the approved rescue boat complement or 6 persons, whichever is the greater.

STOWAGE AND HANDLING OF LIFE-SAVING APPLIANCES

Stowage of lifebuoys

56.—(1) 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.

(2) Lifebuoys shall not be permanently secured in any way and shall be stowed so as to be capable of being rapidly thrown overboard.

(3) Except as otherwise provided, one lifebuoy on each side of the ship shall be fitted with a buoyant lifeline.

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

Stowage of lifejackets

57.—(1) Lifejackets shall be so stored as to be readily accessible and their position shall be plainly indicated. Where, due to the particular arrangements of the ship, lifejackets stored in remote positions may become inaccessible, the number of lifejackets carried elsewhere shall be suitably increased.

(2) Lifejackets providing the additional 5 per cent required on passenger ships of Classes I, II and II(A) shall be stowed in conspicuous places on deck or at assembly stations.

Stowage of two-way radiotelephone sets

58.—(1) The two-way radiotelephone sets carried in accordance with this Part of these Regulations which are not stowed in survival craft, shall be kept in a suitable place ready to be moved into survival craft in case of emergency.

(2) In ships where there is substantial fore and aft separation between superstructure or deck houses, the two-way radiotelephone sets shall all not be located in any one superstructure or deck house.

Stowage and packing of pyrotechnic distress signals and line-throwing appliances

59.—(1) Pyrotechnic distress signals provided for use on board ship shall be stowed on or near the navigating bridge.

(2) All pyrotechnic distress signals provided for use on board ships or for use in a lifeboat shall be packed in a watertight container which shall not be a plastic envelope.

(3) In the case of a line-throwing appliance, which includes a pistol, the pistol, line and rockets together with the means of ignition shall be stowed in a container, which provides protection from the weather.

MISCELLANEOUS PROVISIONS

Immersion suits and anti-exposure suits

60. Immersion suits and anti-exposure suits required to be carried by this Part of these Regulations, may be of the insulated or uninsulated type but immersion suits of the insulated type shall be carried on ships which make voyage—

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

Manning of survival craft

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

(2) There shall be a sufficient number of crew members to operate the survival craft and launching arrangements required for evacuating the total number of persons on board. The minimum number of deck officers, certificated persons and other crew members required to be carried shall be determined in accordance with MSN 1682 (M).

(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 to be second-in-command of such lifeboat.

(4) A deck officer or certificated person shall be placed in charge of each liferaft to be used. However, in ships of Classes II and II(A) the person placed in charge may 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.

(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 lifeboat.

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

(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.

PART IV
REQUIREMENTS FOR SHIPS CONSTRUCTED ON OR AFTER
1ST JULY 1998
PRELIMINARY

Application

62.—(1) This Part applies to ships of Classes I, II, II(A), VII to IX(A)(T) XI and XII constructed on or after 1st July 1998.

(2) In this Part a reference to a numbered Schedule is, unless otherwise stated, a reference to the Schedule of that number in MSN 1676(M).

PASSENGER SHIPS

Ships of Class I

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

(2) Every ship shall carry:

- (a) on each side of the ship partially or totally enclosed lifeboats or sufficient aggregate capacity to accommodate one half of the total number of persons which the ship is certified to carry;
- (b) lifeboats and inflatable or rigid 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; the inflatable or rigid liferafts shall be served by launching appliances equally distributed on each side of the ship; or
- (c) in addition to the survival craft carried in compliance with subparagraph (a) or (b), inflatable or rigid liferafts of sufficient aggregate capacity to accommodate 25 per cent of the total number of persons which the ship is certified to carry. These liferafts shall be served by at least one launching appliance on each side of the ship (which may be the appliances provided to comply with subparagraphs (b)) or, if it is to be used on both sides, by appliances so approved.

(3)(a) (i) Every ship of less than 500 tons carrying less than 200 persons may, in lieu of carrying the lifeboats and liferafts required by paragraph (2), carry on each side of the ship liferafts of sufficient aggregate capacity to accommodate the total number of persons the ship is certified to carry.

(ii) If these liferafts cannot be readily launched on either side of the ship additional liferafts shall be provided so that the total capacity available on each side will accommodate 150 per cent of the total number of persons which the ship is certified to carry.

(iii) All liferafts shall be served by at least one launching appliance on each side of the ship.

(b) If the rescue boat required by paragraph (5)(b) is also a lifeboat it may be included in the aggregate capacity referred to in subparagraph (a).

(d) The number and arrangement of survival craft shall be such that in the event of any one survival craft being lost or rendered unserviceable, there shall still be sufficient survival craft available for use on each side of the ship to accommodate the total number of persons the ship is certified to carry.

(4) A marine evacuation system may be substituted for the equivalent capacity of liferafts and launching appliances required by paragraph (2)(b).

(5)(a) Every ship of 500 tons and over shall carry at least one rescue boat on each side of the ship.

(b) Every ship of less than 500 tons shall carry at least one rescue boat.

(c) A lifeboat may be accepted as a rescue boat provided it also complies with the requirements for a rescue boat.

- (d) Every ship shall carry sufficient lifeboats and rescue boats to ensure that when evacuating the total number of persons the ship is certified to carry, a lifeboat or rescue boat should not need to marshal more than six liferafts.
- (6) Each lifeboat and rescue boat shall be served by its own launching appliance.
- (7) Every ship shall be provided with the following equipment–
 - (a) a satellite EPIRB;
 - (b) at least 3 waterproofed two-way VHF radiotelephone apparatus; and
 - (c) 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 stowed in each survival craft.
- (8)(a) Every ship shall carry at least the number of lifebuoys determined in accordance with the following table–

Length of ship in metres	Number of lifebuoys
Under 60	8
60 or more but less than 120	12
120 or more but less than 180	18
180 or more but less than 240	24
240 and over	30

- (b) At least one lifebuoy on each side of the ship shall be fitted with a buoyant lifeline. Not less than 50 per cent of the total number of lifebuoys, and on every ship of less than 60 metres in length not less than 6 lifebuoys, shall be provided with self-igniting lights and not less than two of the lifebuoys provided with such lights shall also be provided with self-activating smoke signals and be capable of quick release from the navigating bridge.
- (9) Every ship shall carry–
 - (a) for each person the ship is certified to carry, a lifejacket suitable for a person weighing 32 kilogrammes or more;
 - (b) a lifejacket suitable for a person weighing less than 32 kilogrammes for each such person on board or for 10 per cent of the number of passengers the ship is certified to carry, whichever is the greater;
 - (c) in addition to the lifejackets carried in compliance with subparagraphs (a) and (b), lifejackets suitable for persons weighing 32 kilogrammes or more for not less than 5 per cent of the total number of persons the ship is certified to carry; and
 - (d) a sufficient number of lifejackets for persons on watch and for use at remotely located survival craft stations.
- (10) Included in the number of lifejackets required to be carried by paragraph (9) there shall be at least sufficient inflatable lifejackets for the crew of each rescue boat and, for those crew members whose emergency duties require it, a lifejacket which will not unduly hinder them during the execution of these duties.
- (11) Each lifejacket required to be carried by paragraphs (9) and (10) shall be fitted with a lifejacket light complying with the requirements of Schedule 9, Part 1.
- (12) Every ship shall carry, for every person assigned to crew a rescue boat or assigned to the marine evacuation system party, an immersion suit or an anti-exposure suit of an appropriate size and as specified in regulation 81.
- (13) Every ship shall carry not less than 12 rocket parachute flares.
- (14) Every ship shall carry a line-throwing appliance.
- (15) Every ship shall be provided with:
 - (a) an emergency means for two-way communication (which may be fixed or portable equipment or both) between emergency control stations, assembly and embarkation stations and strategic positions on board. This may be the equipment carried to comply with paragraph (7);
 - (b) on ships fitted with a marine evacuation system communication between the embarkation station and the platform or the survival craft shall be ensured;
 - (c) a general emergency alarm system complying with Schedule 11, Part 1;

- (d) a public address system complying with Schedule 11, Part 2; and
 - (e) lighting as specified in regulations 71(4) and (5) and 74(8).
- (16) Every ship shall be provided with:
- (a) posters or signs showing operating instructions on or in the vicinity of survival craft and their launching controls;
 - (b) a training manual in each crew messroom and recreation room or in each crew cabin;
 - (c) instructions for on-board maintenance of life-saving appliances or a shipboard planned maintenance programme which includes the maintenance of life-saving appliances; and
 - (d) on the bridge, a copy of the table "Life-Saving Signals and Rescue Methods, SOLAS No. 1" published by the Department of the Environment, Transport and the Regions.
- (17)(a) This paragraph applies to ro-ro passenger ships.
- (b) Liferafts on ships shall:
- (i) be served by marine evacuation systems complying with the requirements of Schedule 5, Part 1 or launching appliances complying with the requirements of Schedule 6, Part 3 equally distributed on each side of the ship;
 - (ii) be provided with float-free launching arrangements complying with the requirements of Schedule 4, Part 8;
 - (iii) be fitted with a semi-rigid boarding ramp capable of supporting a person weighing 100 kgs; and
 - (iv) either be an automatic self-righting liferaft or be a canopied reversible liferaft which is stable in a seaway and is capable of operating safely whichever way up it is floating. Alternatively, and providing the existing liferafts comply with Schedule 4, the ship shall carry automatic self-righting liferafts or canopied reversible liferafts, in addition to its normal complement of liferafts, of such aggregate capacity as will accommodate at least 50 per cent of the persons not accommodated in lifeboats. This additional liferaft capacity shall be determined on the basis of the difference between the total number of persons on board and the number of persons accommodated in lifeboats.
- (c) *Fast rescue boats*
- (i) At least one of the rescue boats provided pursuant to paragraph (5) shall be a fast rescue boat complying with the requirements of Schedule 2, Part 10 except that ships having a rescue boat that is substantially in compliance with Schedule 2, Part 10 shall not be required to replace their rescue boat;
 - (ii) each fast rescue boat shall be served by a suitable launching appliance complying with the requirements of Schedule 6, Part 1 and 2: such launching appliances shall take into account that the fast rescue boat is intended to be launched and retrieved even under severe adverse weather condition;
 - (iii) at least two crews of each fast rescue boat shall be trained, certificated and drilled regularly having regard to the Merchant Shipping (Training and Certification) Regulations 1997 including all aspects of rescue, handling, manoeuvring, operating these craft in various conditions, and righting them after capsizing; and
 - (iv) if the arrangement or size of the ship is such as to prevent the installation of the fast rescue boat required by subparagraph (c)(i), the fast rescue boat may be installed in place of an existing lifeboat which is accepted as a boat for use in any emergency, provided that all of the following conditions are met:
 - (aa) the fast rescue boat installed is served by a launching appliance complying with the provisions of (c)(ii);
 - (bb) the capacity of the survival craft lost by the above substitution is compensated by the installation of liferafts capable of carrying at least an equal number of persons served by the lifeboat replaced;
 - (cc) such liferafts are served by the existing launching appliances or marine evacuation systems; and
 - (dd) every ship shall carry, for every person assigned to crew of a fast rescue

boat, an immersion suit or anti-exposure suit of an appropriate size and complying with regulation 81.

(d) *Means of rescue*

- (i) Each passenger ship shall be equipped with an efficient means of rescue complying with the requirements of Schedule 5, Part 3 for rapidly recovering survivors from the water and transferring survivors from rescue units or survival craft to the ship;
- (ii) the means of transfer of survivors to the ship may be part of a marine evacuation system, or may be part of a system designed for rescue purposes;
- (iii) if the inclined passage of a marine evacuation system is intended to provide the means of transfer of survivors to the deck of the ship, the inclined passage shall be equipped with handlines or ladders to aid in climbing up the inclined passage; and
- (iv) a fast rescue boat launching and recovery appliance may be used as part of a means of rescue system.

(e) *Lifejackets*

A sufficient number of lifejackets shall be stowed in the vicinity of the assembly stations so that passengers do not have to return to their cabins to collect their lifejackets.

(f) *Helicopter emergency pick-up area*

A helicopter emergency pick-up area shall be provided on a ship complying with the requirements of IAMSAR.

Ships of Classes II and II(A)

64.—(1) This regulation applies to ships of Classes II and II(A).

(2) Every ship which is subdivided in accordance with the requirements of Schedule 2 of MSN 1698(M) shall carry:

- (a) partially or totally enclosed lifeboats of sufficient aggregate capacity to accommodate at least 30 per cent of the total number of persons which the ship is certified to carry. Such lifeboats shall be equally distributed, as far as practicable, on each side of the ship; and
- (b) inflatable or rigid liferafts of sufficient aggregate capacity that, together with the lifeboat capacity required by subparagraph (a), will accommodate the total number of persons which the ship is certified to carry; the liferafts shall be served by launching appliances equally distributed on each side of the ship.

(3) Every ship which is not subdivided in accordance with the requirements of Schedule 2 of MSN 1698(M) shall carry—

- (a) on each side of the ship partially or totally enclosed lifeboats of sufficient aggregate capacity to accommodate 50 per cent of the total number of persons which the ship is certified to carry; or
- (b) partially or totally enclosed lifeboats and inflatable or rigid 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; the liferafts shall be served by launching appliances equally distributed on each side of the ship.

(4) Every ship shall carry, in addition to the survival craft carried in compliance with paragraph (2) or (3), liferafts of sufficient aggregate capacity to accommodate 25 per cent of the total number of persons which the ship is certified to carry. These liferafts shall be served by at least one launching appliance on each side of the ship, which may be the appliance carried in compliance with subparagraph (2)(b) or (3)(b), or, if it is to be used on both sides, by appliances so approved.

- (5)(a) (i) Every ship of less than 500 tons carrying less than 200 persons may, in lieu of carrying the lifeboats and liferafts required by paragraph (2), (3) or (4) carry on each side of the ship liferafts of sufficient aggregate capacity to accommodate the total number of persons the ship is certified to carry.
- (ii) If these liferafts cannot be readily launched on either side of the ship

additional liferafts shall be provided so that the total capacity available on each side will accommodate 150 per cent of the total number of persons which the ship is certified to carry.

- (iii) All liferafts shall be served by at least one launching appliance on each side of the ship.
 - (b) If the rescue boat required by subparagraph (7)(b) is also a lifeboat it may be included in the aggregate capacity referred to in subparagraph (a).
 - (e) The number and arrangement of survival craft shall be such that in the event of any one survival craft being lost or rendered unserviceable, there shall still be sufficient survival craft available for use on each side of the ship to accommodate the total number of persons the ship is certified to carry.
- (6) A marine evacuation system may be substituted for the equivalent capacity of liferafts and launching appliances required by paragraph (2)(b) or (3)(b).
- (7)(a) Every ship of 500 tons and over shall carry at least one rescue boat on each side of the ship.
- (b) Every ship of less than 500 tons shall carry at least one rescue boat.
 - (c) A lifeboat may be accepted as a rescue boat provided it also complies with the requirements for a rescue boat.
 - (d) Every ship which is subdivided in accordance with the Merchant Shipping (Passenger Ship Construction: Ships of Classes I, II and II(A)) Regulations 1998 shall carry sufficient lifeboats and rescue boats to ensure that when evacuating the total number of persons the ship is certified to carry the lifeboat or rescue boat should not need to marshal more than 6 liferafts.
- (8) Each lifeboat and rescue boat shall be served by its own launching appliance.
- (9) Every ship shall be provided with the following equipment—
- (a) a satellite EPIRB;
 - (b) at least 3 waterproofed two-way VHF radiotelephone apparatus; and
 - (c) 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 stowed in each survival craft.
- (10)(a) Every ship shall carry at least the number of lifebuoys determined in accordance with the following table:

Length of ship in metres	Number of lifebuoys
Under 60	8
60 or more but less than 120	2
120 or more but less than 180	18
180 or more but less than 240	24
240 and over	30

- (b) At least one lifebuoy on each side of the ship shall be fitted with a buoyant lifeline. Not less than 50 per cent of the total number of lifebuoys, and on every ship of less than 60 metres in length not less than 6 lifebuoys, shall be provided with self-igniting lights and not less than two of the lifebuoys provided with such lights shall also be provided with self-activating smoke signals and be capable of quick release from the navigating bridge.
- (11) Every ship shall carry:
- (a) for each person the ship is certified to carry a lifejacket suitable for a person weighing 32 kilogrammes or more;
 - (b) a lifejacket suitable for a person weighing less than 32 kilogrammes for each such person on board or for 10 per cent of the number of passengers the ship is certified to carry, whichever is the greater;
 - (c) in addition to the lifejackets carried in compliance with subparagraphs (a) and (b) lifejackets suitable for persons weighing 32 kilogrammes or more for not less than 5 per cent of the total number of persons the ship is certified to carry; and
 - (d) a sufficient number of lifejackets for persons on watch and for use at remotely located survival craft stations.

(12) The lifejackets used in totally enclosed lifeboats shall not impede entry into the lifeboat or seating, including operation of the seat belts in the lifeboat.

(13) Included in the number of lifejackets required to be carried by paragraph (11) there shall be at least sufficient inflatable lifejackets for the crew of each rescue boat and, for those crew members whose emergency duties require it, a lifejacket which will not unduly hinder them during the execution of these duties.

(14) Each lifejacket required to be carried by paragraphs (11) and (13) shall be fitted with a lifejacket light complying with the requirements of Schedule 9, Part 1.

(15) Every ship shall carry, for every person assigned to crew a rescue boat or assigned to the marine evacuation system party, an immersion suit or an anti-exposure suit of an appropriate size and as specified in regulation 23.

(16) Every ship shall carry not less than 12 rocket parachute flares.

(17) Every ship shall carry a line-throwing appliance.

(18) Every ship shall be provided with:

- (a) an emergency means for two-way communication (which may be fixed or portable equipment, or both) between emergency control stations, assembly and embarkation stations and strategic positions on board. This may be the equipment which is carried in compliance with paragraph (9);
- (b) on ships fitted with a marine evacuation system, communication between the embarkation station and the platform or the survival craft;
- (c) a general emergency alarm system, complying with the requirements of Schedule 11, Part 1;
- (d) a public address system complying with the requirements of Schedule 11, Part 2; and
- (e) lighting as specified in regulations 71(4) and (5) and 74(8).

(19) Every ship shall be provided with:

- (a) posters or signs showing operating instructions, on or in the vicinity of survival craft and their launching controls;
- (b) a training manual in each crew messroom and recreation room or in each crew cabin;
- (c) instructions for on-board maintenance of life-saving appliances or a shipboard planned maintenance programme which includes the maintenance of life-saving appliances; and
- (d) on the bridge, a copy of the table "Life-Saving Signals and Rescue Methods, SOLAS No. 1" published by the Department of the Environment, Transport and the Regions.

(20)(a) This paragraph applies to ro-ro passenger ships.

(b) Liferafts on ships shall—

- (i) be served by marine evacuation systems complying with the requirements of Schedule 5, Part 1 or launching appliances complying with the requirements of Schedule 6, Part 3 equally distributed on each side of the ship;
- (ii) be provided with float-free launching arrangements complying with the requirements of Schedule 4, Part 8;
- (iii) be fitted with a semi-rigid boarding ramp capable of supporting a person weighing 100 kgs; and
- (iv) either be an automatic self-righting liferaft or be a canopied reversible liferaft which is stable in a seaway and is capable of operating safely whichever way up it is floating. Alternatively, and providing the existing liferafts comply with Schedule 4, the ship shall carry automatic self-righting liferafts or canopied reversible liferafts, in addition to its normal complement of liferafts, of such aggregate capacity as will accommodate at least 50 per cent of the persons not accommodated in lifeboats. This additional liferaft capacity shall be determined on the basis of the difference between the total number of persons on board and the number of persons accommodated in lifeboats.

- (c) *Fast rescue boats*
- (i) At least one of the rescue boats provided pursuant to paragraph (7) shall be a fast rescue boat complying with the requirements of Schedule 2, Part 10 except that ships having a rescue boat that is substantially in compliance with Schedule 2, Part 10 shall not be required to replace their rescue boat;
 - (ii) each fast rescue boat shall be served by a suitable launching appliance complying with the requirements of Schedule 6, Part 1 and 2: such launching appliances shall take into account that the fast rescue boat is intended to be launched and retrieved even under severe adverse weather condition;
 - (iii) at least two crews of each fast rescue boat shall be trained, certified and drilled regularly having regard to the Merchant Shipping (Training and Certification) Regulations 1997 including all aspects of rescue, handling, manoeuvring, operating these craft in various conditions, and righting them after capsized; and
 - (iv) if the arrangement or size of the ship is such as to prevent the installation of the fast rescue boat required by subparagraph (c)(i), the fast rescue boat may be installed in place of an existing lifeboat which is accepted as a boat for use in any emergency, provided that all of the following conditions are met—
 - (aa) the fast rescue boat installed is served by a launching appliance complying with the provisions of (c)(ii);
 - (bb) the capacity of the survival craft lost by the above substitution is compensated by the installation of liferafts capable of carrying at least an equal number of persons served by the lifeboat replaced;
 - (cc) such liferafts are served by the existing launching appliances or marine evacuation systems; and
 - (dd) every ship shall carry, for every person assigned to crew of a fast rescue boat, an immersion suit or anti-exposure suit of an appropriate size and complying with regulation 81.
- (d) *Means of rescue*
- (i) Each ship shall be equipped with an efficient means of rescue complying with the requirements of Schedule 5, Part 3 for rapidly recovering survivors from the water and transferring survivors from rescue units or survival craft to the ship;
 - (ii) the means of transfer of survivors to the ship may be part of a marine evacuation system, or may be part of a system designed for rescue purposes;
 - (iii) if the inclined passage of a marine evacuation system is intended to provide the means of transfer of survivors to the deck of the ship, the inclined passage shall be equipped with handlines or ladders to aid in climbing up the inclined passage; and
 - (iv) a fast rescue boat launching and recovery appliance may be used as part of a means of rescue system.
- (e) *Lifejackets*
- A sufficient number of lifejackets shall be stowed in the vicinity of the assembly stations so that passengers do not have to return to their cabins to collect their lifejackets.
- (f) *Helicopter emergency pick-up area*
- A helicopter emergency pick-up area shall be provided on a ro-ro ship complying with the requirements of IAMSAR.

SHIPS OTHER THAN PASSENGER SHIPS

Ships of Classes VII, VIII, VIII(A) and IX

65.—(1) This regulation applies to ships of Classes VII, VIII, VIII(A) and IX.

(2) Every ship shall carry:

- (a) on each side of the ship one or more totally enclosed liferafts complying with the requirements of Schedule 2, Part 4 of sufficient aggregate capacity to accommodate the total number of persons on board; and

- (b) one or more inflatables or rigid liferafts stowed in a position providing for easy side-to-side transfer at a single open deck level and capable of being launched on either side of the ship and of sufficient aggregate capacity to accommodate the total number of persons on board; if the liferaft or liferafts cannot be readily transferred for launching on either side of the ship, the total capacity available on each side shall be sufficient to accommodate the total number of persons on board.
- (3) In lieu of complying with the requirements of paragraph (2) ships may carry–
 - (a) one or more lifeboats complying with the requirements of Schedule 2, Part 9 capable of free-fall launching over the stern of the ship of sufficient aggregate capacity to accommodate the total number of persons on board; and
 - (b) on each side of the ship one or more inflatable liferafts of sufficient aggregate capacity to accommodate the total number of persons on board. The liferafts on at least one side of the ship shall be served by launching appliances.
- (4)(a) Every ship of less than 85 metres in length may, in lieu of carrying the lifeboats and liferafts required by paragraph (2) or (3), carry on each side of the ship one or more inflatable or rigid liferafts of sufficient aggregate capacity to accommodate the total number of persons on board.
 - (b) If these liferafts are not stowed in a position providing for each side-to-side transfer at a single open deck level and cannot be readily transfers for launching on either side of the ship, the total capacity available on each side shall be sufficient to accommodate 150 per cent of the total number of persons on board.
 - (c) If the rescue boat required by paragraph (6) is also a totally enclosed lifeboat complying with the requirements of Schedule 2, Parts 3 or 4, it may be included in the aggregate capacity referred to in subparagraph (a).
 - (d) The number and arrangement of survival craft shall be such that in the event of any one survival craft being lost or rendered unserviceable there shall still be sufficient survival craft available for use on each side of the ship including any which are stowed in a position providing for easy side-to-side transfer at a single open deck level, to accommodate the total number of persons on board.
- (5) Where survival craft are stowed in a position where the horizontal distance from the extreme end of the stem or stern of the ship to the nearest end of the survival craft is more than 100 metres there shall be carried, in addition to the liferafts required by paragraph (2)(b) or (3)(b), a liferaft stowed as far forward or aft, or one as far forward and another as far aft, as is reasonable and practicable.
- (6) Every ship of 500 tons or over shall carry at least one rescue boat. Every ship of less than 500 tons shall carry at least one rescue boat, or inflated boat fitted with an engine. A lifeboat may be accepted as a rescue boat, provided that it also complies with the requirements for a rescue boat.
- (7) Each lifeboat, rescue boat and inflated boat shall be served by its own launching appliance.
- (8) Every tug of Class IX other than a tug of 500 tons or over engaged on an international voyage, shall, in addition to complying with the requirements of paragraph (2), (3) or (4) and with the requirements of paragraph (6), carry buoyant apparatus sufficient to support the total number of persons on board.
- (9) Every ship shall be provided with the following equipment:
 - (a) a satellite EPIRB;
 - (b) in the case of a ship of 500 tons or over, at least 3 waterproofed two-way VHF radiotelephone apparatus and in the case of ship of under 500 tons, at least 2 waterproofed two-way VHF radiotelephone apparatus; and
 - (c) 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 of over 300 tons and under 500 tons at least one radar transponder. The radar transponder shall be stowed in such a location that it can be rapidly placed in any survival craft other than the liferaft or liferafts required by regulation 65(5) or, alternatively, one radar transponder shall be stowed in each survival craft other than those required by regulation 65(5). On ships carrying at least two radar transponders and equipped with free-fall lifeboats one of the radar transponders shall be stowed in a free-fall lifeboat and the other

located in the immediate vicinity of the navigation bridge so that it can be utilised on board and be ready for transfer to any of the other survival craft.

(10)(a) Every ship 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 100	8
100 or more but less than 150	10
150 or more but less than 200	12
200 and over	14

provided that in ships under 100 metres in length and less than 500 tons, not more than 4 lifebuoys need to be carried.

(b) At least one lifebuoy on each side of the ship shall be fitted with a buoyant lifeline. Not less than 50 per cent of the total number of lifebuoys shall be provided with self-igniting lights and not less than two of the lifebuoys provided with such lights shall also be provided with self-activating smoke signals and be capable of quick release from the navigating bridge.

(11) Every ship shall carry:-

- (a) for each person on board, a lifejacket suitable for a person weighing 32 kilogrammes or more;
- (b) a lifejacket suitable for a person weighing less than 32 kilogrammes for each such person on board: provided that there shall never be less than 2 such lifejackets on any ship which carries children;
- (c) a sufficient number of additional lifejackets for the use of persons on watch and at remotely located survival craft stations: provided that there shall be at least 4 additional lifejackets on ships where the number of persons on board is 16 or less, and at least an additional 25 per cent of the number of lifejackets required to be carried by subparagraph (a) in the case of ships where the number on board is more than 16: provided that the number of additional lifejackets need not exceed the number of persons on board. Lifejackets used in totally enclosed lifeboats shall not impede entry into the lifeboat or seating, including operation of the seat belts.

(12) Included in the number of lifejackets required by paragraph (11) to be carried there shall be at least sufficient inflatable lifejackets:

- (a) for the crew of the rescue boat and for those crew members whose emergency duties require a lifejacket which will not unduly hinder them during the execution of those duties; and
- (b) on ships fitted with free-fall lifeboats, to provide one for each person on board; these inflatable lifejackets shall be stowed adjacent to the free-fall lifeboat embarkation area.

(13) Each lifejacket required to be carried by paragraphs (11) and (12) shall be fitted with a lifejacket light complying with the requirements of Schedule 9, Part 1.

(14) Every ship shall carry, for every person assigned to crew the rescue boat or inflated boat, an immersion suit or an anti-exposure suit of an appropriate size and as specified in regulation 81.

(15)(a) Every ship which carries survival craft as prescribed in paragraph (4)(a) shall carry an immersion suit as specified in regulation 81 for every person on board unless:

- (i) the liferafts are served by launching appliances; or
- (ii) the liferafts are served by equivalent approved appliances capable of being used on both sides of the ship and which do not require entry into the water to board the liferaft.

(b) The immersion suits required by this paragraph may be used to comply with the requirements of paragraph (14).

(16) Every ship shall carry not less than 12 rocket parachute flares.

(17) Every ship of 12 metres in length and over shall carry a line-throwing appliance.

(18) Every ship shall be provided with:

- (a) an emergency means for two-way communication (which may be fixed or portable equipment or both) between emergency control stations, assembly and embarkation stations and strategic positions on board. This may be the equipment carried in compliance with paragraph (9);
 - (b) a general emergency alarm system, except that in ships of less than 45.7 metres in length the additional electrically operated means referred to in Schedule 11, Part 1 need not be provided; in addition, in ships of 500 tons or over, either a public address system or other suitable means of communication; and
 - (c) lighting as specified in regulations 71(4) and (5) and 74(8): provided that in ships of less than 500 tons such lighting need only be provided from one source of electrical power.
- (19) Every ship shall be provided:
- (a) posters or signs showing operating instructions on or in the vicinity of survival craft and their launching controls;
 - (b) a training manual in each crew messroom and recreation room or in each crew cabin;
 - (c) instructions for on-board maintenance of life-saving appliances or a shipboard planned maintenance programme which includes the maintenance of life-saving appliances; and
 - (d) on the bridge, with a copy of the table "Life-Saving Signals and Rescue Methods, SOLAS No. 1", published by the Department of the Environment, Transport and the Regions.

Ships of Classes VII(T), VIII(T) and VIII(A)(T)

66.—(1) This regulation applies to ships of Classes VII(T), VIII(T) and VIII(A)(T).

(2) Every ship carrying cargo which emits toxic vapours or gasses shall carry on each side of the ship one or more lifeboats with a self-contained air support system complying with the requirements of Schedule 2, Part 5 of sufficient aggregate capacity to accommodate the total number of persons on board.

(3) Every ship carrying cargo having a flashpoint not exceeding 60°C (closed cup test) shall carry on each side of the ship one or more fire protected lifeboats complying with the requirements of Schedule 2, Part 6 of sufficient aggregate capacity to accommodate the total number of persons on board.

(4) Every ship shall carry, in addition to the lifeboats required by paragraph (2) or (3), one or more inflatables or rigid liferafts stowed in a position providing for easy side-to-side transfer at a single open deck level and capable of being launched on either side of the ship of sufficient aggregate capacity to accommodate the total number of persons on board. If the liferaft or liferafts cannot be readily launched on either side of the ship, the total capacity available on each side shall be sufficient to accommodate the total number of persons on board.

(5) In lieu of complying with the requirements of paragraphs (2) and (4) ships carrying cargoes emitting toxic vapours or gases may carry:

- (a) one or more lifeboats with a self-contained air support system complying with the requirements of Schedule 2, Parts 5 and 9, capable of free-fall launching over the stern of the ship of sufficient aggregate capacity to accommodate the total numbers of persons on board; and
- (b) one or more liferafts on each side of the ship of sufficient aggregate capacity to accommodate the total number of persons on board. The liferafts on at least one side of the ship shall be served by launching appliances.

(6) In lieu of complying with the requirements of paragraphs (3) and (4) ships carrying cargoes having a flashpoint not exceeding 60°C (closed cup test) may carry:

- (a) one or more lifeboats complying with the requirements of Schedule 2, Parts 5, 6 and 9 capable of free-fall launching over the stern of the ship of sufficient aggregate capacity to accommodate the total number of persons on board; and
- (b) one or more liferafts on each side of the ship of sufficient aggregate capacity to

accommodate the total number of persons on board. The liferafts on at least one side of the ship shall be served by launching appliances.

- (7)(a) Every ship of less than 500 tons may, in lieu of carrying the lifeboats and liferafts required by paragraph (2), (3), (4), (5) or (6), carry one or more liferafts on each side of the ship of sufficient aggregate capacity to accommodate the total number of persons on board.
- (b) If such liferafts are not stowed in a position providing for easy side-to-side transfer at a single open deck level and cannot be readily launched on either side of the ship, the total capacity available on each side shall be sufficient to accommodate 150 per cent of the total number of persons on board.
- (c) If the rescue boat required by paragraph (9) is also a lifeboat complying with the requirements of Schedule 2, Parts 5 or 6, it may be included in the aggregate capacity referred to in subparagraph (a): provided that the total capacity available on either side of the ship is at least 150 per cent of the total number of persons on board.
- (d) The number and arrangement of survival craft shall be such that in the event of any one survival craft being lost or rendered unserviceable, there shall be sufficient survival craft available for use on each side, including any which are stowed in a position providing for easy side-to-side transfer at a single open deck level to accommodate the total number of persons on board.

(8) Where survival craft are stowed in a position where the horizontal distance from the extreme end of the stem or stern of the ship to the nearest end of the survival craft is more than 100 metres from the stem or stern, there shall be carried, in addition to the liferafts required by paragraph (4) or paragraph (5)(b) or (6)(b) a liferaft stowed as far forward or aft as is reasonable and practicable.

(9) Every ship of 500 tons or over shall carry at least one rescue boat. Every ship of less than 500 tons shall carry at least one rescue boat, or inflated boat fitted with an engine. A lifeboat may be accepted as a rescue boat: provided that it also complies with the requirements for a rescue boat.

(10) Each lifeboat, rescue boat and inflated boat shall be served by its own launching appliance.

(11) Every ship shall be provided with the following equipment:

- (a) a satellite EPIRB;
- (b) in the case of a ship of 500 tons or over, at least 3 waterproofed two-way VHF radiotelephone apparatus and in the case of a ship of under 500 tons, at least 2 waterproofed two-way VHF radio telephone apparatus; and
- (c) 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 of over 300 tons and 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 the liferaft or liferafts required by regulation 66(8) or, alternatively, one radar transponder shall be stowed in each survival craft other than those required by regulation 66(8). On ships carrying at least two radar transponders and equipped with free-fall lifeboats, one of the radar transponders shall be stowed in a free-fall lifeboat and the other located in the immediate vicinity of the navigation bridge so that it can be utilised on board and ready for transfer to any of the other survival craft.

(12)(a) Every ship 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 100	8
100 or more but less than 150	10
150 or more but less than 200	12
200 and over	14

provided that in ships under 100 metres in length and less than 500 tons, not more than 4 lifebuoys need to be carried.

- (b) At least one lifebuoy on each side of the ship shall be fitted with a buoyant lifeline. Not less than 50 per cent of the total number of lifebuoys shall be provided with

self-igniting lights of an electric battery type and not less than two of the lifebuoys provided with such lights shall also be provided with self-activating smoke signals and be capable of quick release from the navigating bridge.

(13) Every such ship shall carry:

- (a) for each person on board, a lifejacket suitable for a person weighing 32 kilograms or more;
- (b) a lifejacket suitable for a person weighing less than 32 kilograms for each such person on board: provided that there shall never be less than 2 such lifejackets on any ship whichever carries children;
- (c) a sufficient number of additional lifejackets for the use of persons on watch and at remotely located survival craft stations: provided that there shall be at least 4 additional lifejackets on ships where the number of persons on board is 16 or less and at least an additional 25 per cent of the number of lifejackets required to be carried by subparagraph (a) in the case of ships where the number on board is more than 16: provided that the number of additional lifejackets need not exceed the number of persons on board, lifejackets used in totally enclosed lifeboats shall not impede entry into the lifeboat or seating, including operation of the seat belts.

(14) Included in the number of lifejackets required by paragraph (13) to be carried there shall be at least sufficient inflatable lifejackets:

- (a) for the crew of the rescue boat and for those crew members whose emergency duties require a lifejacket which will not unduly hinder them during the execution of these duties; and
- (b) on ships fitted with free-fall lifeboats, to provide one for each person on board, these inflatable lifejackets shall be stowed adjacent to the free-fall lifeboat embarkation area.

(15) Each lifejacket required to be carried by paragraphs (13) and (14) shall be fitted with a lifejacket light complying with the requirements of Schedule 9.

(16) Every ship shall carry, for every person assigned to crew the rescue boat or inflated boat, an immersion suit or an anti-exposure suit of an appropriate size and as specified in regulation 81.

(17)(a) Every ship which carries survival craft pursuant to paragraph (7)(a) shall carry an immersion suit as specified in regulation 81 for every person on board unless:

- (i) the liferafts are served by launching appliances; or
- (ii) the liferafts are served by equivalent approved appliances capable of being used on both sides of the ship and which do not require entry into the water to board the liferaft.

(b) The immersion suits required by this paragraph may be used to comply with the requirements of paragraph (16).

(18) Every ship shall carry not less than 12 rocket parachute flares.

(19) Every ship of 12 metres in length and over shall carry a line-throwing appliance.

(20) Every ship shall be provided with:

- (a) an emergency means for two-way communication (which may be fixed or portable equipment or both) between emergency control stations, assembly and embarkation stations and strategic positions on board. This may be the equipment carried in compliance with subparagraph (11)(b);
- (b) a general emergency alarm system, except that in ships of less than 45.7 metres in length the additional electrically operated means referred to in Schedule 11, Part 1, need not be provided; in addition, in ships of 500 tons or over, either a public address system or other suitable means of communication; and
- (c) lighting as specified in regulations 71(4) and (5) and 74(8); provided that in ships of less than 500 tons such lighting need only be provided from one source of electrical power.

(21) Every ship shall be provided with:

- (a) posters or signs showing operating instructions, on or in the vicinity of survival craft and their launching controls;
- (b) a training manual in each crew messroom and recreation room or in each crew cabin;
- (c) instructions for on-board maintenance of life-saving appliances or a shipboard planned maintenance programme which includes the maintenance of life-saving appliances; and
- (d) on the bridge, a copy of the table "Life-Saving Signals and Rescue Methods, SOLAS No. 1", published by the Department of the Environment, Transport and the Regions.

Ships of Classes IX(A) and IX(A)(T)

67.—(1) This regulation applies to ships of Classes IX(A) and IX(A)(T).

- (2) Every ship shall, when in Category A, B and C waters, be equipped as follows:
 - (a) ships of less than 12 metres in length shall carry either one lifebuoy complying with Schedule 8, Part 2 for each two persons on board or one lifebuoy complying with Schedule 8, Part 3 for each person: provided that at least two lifebuoys are carried and that all are the same type. One lifebuoy shall be fitted with a buoyant lifeline at least 18 metres in length and one lifebuoy with a self-igniting light and self-activating smoke signal;
 - (b) ships of 12 metres in length and over but less than 20 metres in length shall carry:
 - (i) one lifebuoy for each two persons on board: provided that at least two lifebuoys are carried; one lifebuoy shall be fitted with a buoyant lifeline at least 18 metres in length and one lifebuoy with a self-igniting light and self-activating smoke signal;
 - (ii) a lifejacket suitable for a person weighing 32 kilogrammes or more for each person on board; and
 - (iii) a lifejacket suitable for a person weighing less than 32 kilogrammes for each such person on board; and
 - (iv) each lifejacket required to be carried by this subparagraph shall be fitted with a lifejacket light complying with the requirements of Schedule 9, Part 1;
 - (c) ships of 20 metres in length and over shall carry:
 - (i) one lifebuoy for each two persons on board: provided that at least four lifebuoys are carried; one lifebuoy on each side of the ship shall be fitted with a buoyant lifeline and one lifebuoy on each side of the ship with a self-igniting light and self-activating smoke signal;
 - (ii) a lifejacket suitable for a person weighing 32 kilogrammes or more for each person on board; and
 - (iii) a lifejacket suitable for a person weighing less than 32 kilogrammes for each such person on board; and
 - (iv) each lifejacket required to be carried by this subparagraph shall be fitted with a lifejacket light complying with the requirements of Schedule 9, Part 1;
 - (d) in ships of Class IX(A)(T) lifebuoy self-igniting lights shall be of an electric battery type.
- (3) Every ship shall when in Category A, B, C and D waters, be equipped as follows—
 - (a) ships of less than 12 metres in length shall carry:
 - (i) either one lifebuoy complying with Schedule 8, Part 2 for each two persons on board or one lifebuoy complying with Schedule 8, Part 3 for each person: provided that at least two lifebuoys are carried and all are of the same type; one lifebuoy shall be fitted with a buoyant lifeline at least 18 metres in length and one lifebuoy with a self-igniting light and self-activating smoke signal; and
 - (ii) six rocket parachute flares;
 - (b) ships of 12 metres in length and over but less than 20 metres in length shall carry:
 - (i) one or more liferafts stowed in a position providing for easy side-to-side transfer at a single open deck level and complying with the requirements of

- Schedule 4, Part 2, 3 or 5, of sufficient aggregate capacity to accommodate the total number of persons on board; if the liferaft or liferafts cannot be readily launched on either side of the ship, the total capacity available on each side shall be sufficient to accommodate the total number of persons on board;
- (ii) two lifebuoys, one of which shall be fitted with a buoyant lifeline at least 18 metres in length and the other with a self-igniting light and self-activating smoke signal;
- (iii) a lifejacket suitable for a person weighing 32 kilogrammes or more for each person on board;
- (iv) a lifejacket suitable for a person weighing less than 32 kilogrammes for each such person on board;
- (v) each lifejacket required to be carried by this subparagraph shall be fitted with a lifejacket light complying with the requirements of Schedule 9, Part 1; and
- (vi) six distress rocket parachute flares;
- (c) ships of 20 metres in length and over shall carry:
 - (i) one or more liferafts stowed in a position providing for easy side-to-side transfer at a single open deck level and complying with the requirements of Schedule 4, Part 2, 3 or 5, of sufficient aggregate capacity to accommodate the total number of persons on board; if the liferaft or liferafts cannot be readily launched on either side of the ship the total capacity available on each side shall be sufficient to accommodate the total number of persons on board;
 - (ii) four lifebuoys, two of which shall be fitted with buoyant lifelines and two with self-igniting lights and self-activating smoke signals;
 - (iii) a lifejacket suitable for a person weighing 32 kilogrammes or more for each such person on board;
 - (iv) a lifejacket suitable for a person weighing less than 32 kilogrammes for each such person on board;
 - (v) each lifejacket required to be carried by this subparagraph shall be fitted with a lifejacket light complying with the requirements of Schedule 9, Part 1; and
 - (vi) six rocket parachute flares;
- (d) in ships of Class IX(A)(T) lifebuoy self-igniting lights shall be of an electric battery type.

(4) Every tug and tender which paragraphs (2) or (3) apply shall, in addition to the equipment required by these paragraphs, carry buoyant apparatus of sufficient aggregate capacity to accommodate the total number of persons on board.

(5) Every ship to which paragraph (3)(b) or (c) or paragraph (4) applies shall be provided with:

- (a) lighting as specified in regulations 71(4) and (5) and 74(8) provided from at least one source of electrical power;
- (b) posters and signs showing operating instructions on or in the vicinity of the liferafts and their launching controls, where provided;
- (c) a training manual; and
- (d) with instructions for on-board maintenance of life-saving appliances or a shipboard planned maintenance programme which includes the maintenance of life-saving appliances.

Ships of Class XI

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

(2) Every ship shall carry:

- (a) one or more inflatable or rigid liferafts stowed in a position providing for easy side-to-side transfer at a single open deck level on each side of the ship of sufficient aggregate capacity to accommodate the total number of persons on board, provided that:
 - (i) if the liferafts cannot be readily launched on either side of the ship, the total capacity available on each side shall be sufficient to accommodate 150 per cent of the total number of persons on board;

- (ii) if the rescue boat required by subparagraph (b) is also a lifeboat it may be included in the aggregate capacity provided the total capacity available on either side of the ship is at least 150 per cent of the total number of persons on board; and
 - (iii) the number and arrangement of survival craft shall be such that in the event of any one survival craft being lost or rendered unserviceable, there shall be sufficient survival craft available for use on each side to accommodate the total number of persons on board;
- (b) at least one rescue boat: provided that in ships of less than 500 tons an inflated boat fitted with an engine may be carried in lieu of a rescue boat; a lifeboat may be accepted as a rescue boat; provided that it also complies with the requirements for a rescue boat. The lifeboat, rescue boat or inflated boat shall be served by its own launching appliance.

(3) Every ship to which this regulation applies shall be provided with the following equipment:

- (a) a satellite EPIRB;
- (b) in the case of a ship of 500 tons or over, at least 3 waterproofed two-way VHF radiotelephone apparatus and in the case of a ship of under 500 tons, at least 2 waterproofed two-way VHF radiotelephone apparatus; and
- (c) 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 of 300 tons and under 500 tons at least one radar transponder. The radar transponders shall be stowed in such locations that they can rapidly be placed in any survival craft or, alternatively, one radar transponder shall be stowed in each survival craft.

(4)(a) Every ship 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 50	6
50 and over	8

- (b) Ships of less than 12 metres in length may carry, in lieu of lifebuoys complying with Schedule 8, Part 2, lifebuoys complying with Schedule 8, Part 3: provided that all are of the same type.

At least one lifebuoy on each side of the ship shall be fitted with a buoyant lifeline. Not less than 50 per cent of the total number of lifebuoys shall be provided with self-igniting lights and not less than two of the lifebuoys provided with such lights shall also be provided with self-activating smoke signals and be capable of quick release from the navigating bridge/steering position. On ships of less than 12 metres in length the buoyant lifelines shall be at least 18 metres in length.

(5) Every ship shall carry:

- (a) for each person on board, a lifejacket suitable for a person weighing 32 kilograms or more;
- (b) a lifejacket suitable for a person weighing less than 32 kilograms for each such person on board; provided that there shall never be less than 2 such lifejackets on any ship whichever carries children; and
- (c) a sufficient number of additional lifejackets for the use of persons on watch and for use at remotely located survival craft stations: provided that there shall be at least 4 additional lifejackets on ships where the number of persons on board is 16 or less, and at least an additional 25 per cent of the number of lifejackets required to be carried by subparagraph (a) in the case of ships where the number on board is more than 16: provided that the number of additional lifejackets need not exceed the number of persons on board.

(6) Included in the number of lifejackets required to be carried by paragraph (5) there shall be at least sufficient inflatable lifejackets for the crew of the rescue boat and for those crew members whose emergency duties require a lifejacket which will not unduly hinder them during the execution of these duties.

(7) Each lifejacket required to be carried by paragraphs (5) and (6) shall be fitted with a lifejacket light complying with the requirements of Schedule 9, Part 1.

- (8) Every ship shall carry, for every person assigned to crew the rescue boat or inflated boat, an immersion suit or an anti-exposure suit of an appropriate size and as specified in regulation 81.
- (9)(a) Every ship shall carry an immersion suit complying as specified in regulation 81 for every person on board unless:
- (i) the liferafts are served by launching appliances; or
 - (ii) the liferafts are served by equivalent approved appliances capable of being used on both sides of the ship and which do not require entry into the water to board the liferaft.
- (b) The immersion suits required by this paragraph may be used to comply with the requirements of paragraph (8).
- (10) Every ship shall carry not less than 12 rocket parachute flares.
- (11) Every ship of 12 metres in length and over shall carry a line-throwing appliance.
- (12) Every ship shall be provided with:
- (a) a general emergency alarm system except that in ships of less than 45.7 metres in length the additional electrically operated means referred to in Schedule 11, Part 1 need not be provided; in addition, in ships of 500 tons or over, either a public address system or other suitable means of communication; and
 - (b) lighting as specified in regulations 71(4) & (5) and 74(8): provided that such lighting need only be provided from one source of electrical power.
- (13) Every ship shall be provided with:
- (a) posters or signs showing operating instructions on or in the vicinity of survival craft and their launching controls;
 - (b) a training manual in each crew messroom and recreation room or in each crew cabin;
 - (c) instructions for on-board maintenance of life-saving appliances or a shipboard planned maintenance programme which includes the maintenance of life-saving appliances; and
 - (d) on the bridge, with a copy of the table "Life-Saving Signals and Rescue Methods, SOLAS No. 1", published by the Department of the Environment, Transport and the Regions.

Ships of Class XII

- 69.—**(1) This regulation applies to ships of Class XII.
- (2) Every ship of 21.3 metres in length and over shall carry:
- (a) at least two inflatable or rigid liferafts stowed in a position providing for easy side-to-side transfer at a single open deck level so that they can be readily transferred to the water on either side of the ship, of sufficient aggregate capacity to accommodate twice the total number of persons on board;
 - (b) four lifebuoys, two of which shall be fitted with buoyant lifelines and two with self-igniting lights and self-activating smoke signals;
 - (c) a lifejacket suitable for a person weighing 32 kilogrammes or more for each person on board;
 - (d) a lifejacket suitable for a person weighing less than 32 kilogrammes for each person on board;
 - (e) 6 rocket parachute flares;
 - (f) a line-throwing appliance;
 - (g) posters or signs showing operating instruction on or in the vicinity of survival craft and their launching controls;
 - (h) a training manual;
 - (i) instructions for on-board maintenance of life-saving appliances; and
 - (j) on the bridge a copy of the table "Life-Saving Signals and Rescue Methods, SOLAS No. 1", published by the Department of the Environment, Transport and the Regions;
- and any such ship of 25.9 metres in length or over shall carry in addition a rescue boat or

inflated boat. A lifeboat may be accepted as a rescue boat; provided that it also complies with the requirements for a rescue boat. The lifeboat, rescue boat or inflated boat shall be served by a launching appliance. Each lifejacket required to be carried by subparagraphs (c) and (d) shall be fitted with a lifejacket light complying with the requirements of Schedule 9, Part 1.

(3) Every ship of 13.7 metres in length or over but less than 21.3 metres in length and engaged on either a voyage to sea in the course of which it is more than 3 miles from the coast of the United Kingdom or a voyage to sea during the months of November to March, inclusive, shall carry:

- (a) one or more liferafts complying with the requirements of Schedule 4, Part 2, 3 or 5, stowed in a position providing for easy side-to-side transfer at a single open deck level as to be readily transferable to the water on either side of the ship and of sufficient aggregate capacity to accommodate the total number of persons on board;
- (b) two lifebuoys, one of which shall be fitted with a self-igniting light and self-activating smoke signal;
- (c) a buoyant lifeline at least 18 metres in length;
- (d) a lifejacket suitable for a person weighing 32 kilogrammes or more for each person on board;
- (e) a lifejacket suitable for a person weighing less than 32 kilogrammes for each such person on board;
- (f) each lifejacket required to be carried by subparagraphs (d) and (e) shall be fitted with a lifejacket light complying with the requirements of Schedule 9, Part 1;
- (g) 6 rocket parachute flares;
- (h) posters or signs showing operating instructions on or in the vicinity of survival craft and their launching controls;
- (i) a training manual;
- (j) instructions for on-board maintenance of life-saving appliances; and
- (k) a copy of the table "Life-saving Signals and Rescue Methods, SOLAS No. 1", published by the Department of the Environment, Transport and the Regions.

(4) Every such ship of 13.7 metres in length or over but 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 United Kingdom shall carry:

- (a) one lifebuoy for each two persons on board; provided that at least two lifebuoys are carried; such ships which operate only in Category A, B or C waters shall not be required to carry more than two lifebuoys. One lifebuoy shall be fitted with a self-igniting light and self-activating smoke signal;
- (b) a buoyant lifeline at least 18 metres in length;
- (c) a lifejacket suitable for a person weighing 32 kilogrammes or more for each person on board;
- (d) a lifejacket suitable for a person weighing less than 32 kilogrammes for each such person on board;
- (e) each lifejacket required to be carried by subparagraphs (c) and (d) in the case of ships which proceed to sea shall be fitted with a lifejacket light complying with the requirements of Schedule 9, Part 1;
- (f) 6 rocket parachute flares; and
- (g) a copy of the table "Life-Saving Signals and Rescue Methods, SOLAS No. 1", published by the Department of the Environment, Transport and the Regions.

GENERAL REQUIREMENTS

Operating instructions for survival craft and their launching controls

70. Posters and signs provided on or in the vicinity of survival craft and their launching controls shall:

- (a) illustrate the purpose of controls and the procedures for operating the appliance and give relevant instructions;
- (b) be easily seen under emergency lighting conditions on ships of Classes I, II and II(A), and of Classes VII, VII(T), VIII, VIII(T), VIII(A), VIII(A)(T) and IX; and
- (c) where applicable, use symbols which are specified in Schedule 16.

Survival craft assembly and embarkation arrangements

71.—(1) Lifeboats and liferafts for which launching appliances are required shall be stowed as close to accommodation and service spaces as possible.

(2) Assembly stations shall be provided close to the embarkation stations. Each assembly station shall have sufficient clear deck space of at least 0.35 square metres per person, to accommodate all persons assigned to assemble at that station. In ships of Classes I, II and II(A) passenger assembly stations shall have ample room for the marshalling and instruction of the passengers and there shall be ready access between assembly stations and the embarkation station.

(3) Assembly and embarkation stations shall be readily accessible from accommodation and work areas.

(4) In ships of Classes I, II and II(A) and in ships on Classes VII, VII(T), VIII, VIII(T), VIII(A), VIII(A)(T) and IX of 500 tons or over, assembly and embarkation stations shall be adequately illuminated by lighting supplied from the emergency source of electrical power required by the Merchant Shipping (Passenger Ship Construction: Ships of Classes I, II and II(A)) Regulations 1998 or the Merchant Shipping (Cargo Ship Construction) Regulations 1997, as appropriate.

(5) Alleyways, internal and external stairways and exits giving access to the assembly and embarkation stations shall be lighted. In ships of the Classes referred to in paragraph (4) such lighting shall be capable of being supplied by the emergency source of electrical power required by the Merchant Shipping (Passenger Ship Construction: Ships of Classes I, II and II(A)) Regulations 1998 or the Merchant Shipping (Cargo Ship Construction) Regulations 1997, as appropriate. In addition to, and as part of the markings required by the Merchant Shipping (Fire Protection: Large Ships) Regulation 1998(a), routes to assembly stations shall be indicated with the assembly station symbol intended for that purpose; where applicable use symbols which are specified in Schedule 16.

(6) Davit-launched and free-fall launched craft assembly and embarkation stations shall be so arranged as to enable stretcher cases to be placed in survival craft.

- (7)(a) In ships of Classes I, II, II(A), VII, VII(T), VIII, VIII(T), VIII(A), VIII(A)(T), IX, XI and XII an embarkation ladder shall be provide at each embarkation station or at every two adjacent embarkation stations, extending, in a single length, from the deck to the waterline in the lightest seagoing condition under unfavourable conditions of trim of up to 10 degrees and with the ship listed not less than 20 degrees either way and where such distance exceeds 1 metre.
- (b) Such ladders may be replaced by approved devices to afford access to survival craft when waterborne: provided that there shall be at least one embarkation ladder on each side of the ship.
- (c) Handholds shall be provided to assist in a safe passage from the deck to the ladder and vice-versa.
- (d) Other means of embarkation may be permitted for the liferafts carried in compliance with regulations 65(5) and 66(8).

(8) Where necessary, means shall be provided for bringing davit-launched survival craft against the ship's side and holding them alongside so that persons can be safely embarked.

(9) On ships of Classes I, II and II(A) survival craft embarkation arrangements shall be so designed that:

- (a) all lifeboats can be boarded and launched either directly from the stowed position or from an embarkation deck, but not both; and
- (b) davit-launched liferafts can be boarded and launched from a position immediately adjacent to the stowed position or from a position to which, in compliance with the requirements of regulation 72(5), the liferaft is transferred prior to launching.

(a) S.I. 1998/1012.

Notwithstanding the requirements of subparagraph (9)(a), if the rescue boat or fast rescue boat is also a lifeboat and the other lifeboats are boarded and launched from an embarkation deck, the arrangements shall be such that they can also be boarded and launched from the embarkation deck.

(10) On every ship provided with a rescue boat or fast rescue boat, arrangements shall be such that they can be boarded and launched directly from the stowed position with the number of persons assigned to crew the boats on board.

(11) On ships of Classes VII, VII(T), VIII, VIII(T), VIII(A), VIII(A)(T), IX and XI survival craft embarkation arrangements shall be so designed that lifeboats can be boarded and launched directly from the stowed position and davit-launched liferafts can be boarded and launched from a position immediately adjacent to the stowed position or from a position to which the liferaft is transferred prior to launching in compliance with the requirements of regulation 74(5).

Stowage of survival craft, fast rescue boats, marine evacuation systems, means of rescue, rescue boats and inflated boats

72.—(1) Each survival craft shall be stowed:

- (a) so that neither the survival craft nor its stowage arrangements will interfere with the operation of any other survival craft or rescue boat at any other launching station;
- (b) as near the water surface as is safe and practicable and, in the case of a survival craft other than a liferaft intended for throw-overboard launching, in such a position that the survival craft in the embarkation position is not less than 2 metres above the waterline with the ship in the fully loaded condition under unfavourable conditions of trim of up to 10 degrees and listed up to 20 degrees either way, or to the angle at which the ship's weatherdeck edge becomes submerged, whichever is less;
- (c) in a state of continuous readiness so that two crew members can carry out preparations for embarkation and launching in less than 5 minutes;
- (d) fully equipped as prescribed in Schedule 2, or Part 2 or Schedule 4, of Part 6; and
- (e) as far as practicable, in a secure and sheltered position and protected from damage by fire and explosion. In particular, survival craft on tankers, other than the liferafts required by regulations 65(5) and 66(8) shall not be stowed on or above a cargo tank, slop tank, or other tank containing explosive or hazardous cargoes.

(2) Lifeboats for lowering down the ship's side shall be stowed as far forward of the propeller as practicable. On ships of Classes VII, VII(T), VIII, VIII(T), VIII(A), VIII(A)(T) and IX of 80 metres in length and upwards but less than 120 metres in length, each lifeboat shall be so stowed that the after end of the lifeboat is not less than the length of the lifeboat forward of the propeller. On such ships of 120 metres in length and upwards and on ships of Classes I, II and II(A) of 80 metres in length and upwards, each lifeboat shall be so stowed that the after end of the lifeboat is not less than 1.5 times the length of the lifeboat forward of the propeller. Where appropriate, the ship shall be so arranged that lifeboats, in their stowed positions, are protected from damage by heavy seas.

(3) Lifeboats shall be stowed attached to launching appliances.

(4)(a) Marine evacuation and means of rescue systems shall be stowed in a state of continuous readiness for launching in the shortest possible time:

- (i) so that the ship's side shall not have any openings between the embarkation station of the marine evacuation and means of rescue systems and the waterline in the lightest seagoing condition and means shall be provided to protect the systems from any projections;
- (ii) in such positions as to ensure safe launching having particular regard to clearance from the propeller and steeply overhanging portions of the hull and so that, as far as practicable, the system can be launched down the straight side of the ship;
- (iii) so that neither the passage nor platform nor its stowage or operational arrangements will interfere with the operation of any other life-saving appliance at any other launching station.

(b) Where appropriate, the ship shall be so arranged that the marine evacuation and means of rescue systems in their stowed positions are protected from damage by heavy seas.

(5) Davit-launched liferafts shall be stowed within reach of the lifting hooks unless some means of transfer is provided which is not rendered inoperable within the limits of trim and list prescribed in paragraph (1)(b) or by ship motion or power failure: provided that the liferafts required to be carried by regulations 63(2)(c) and 64(4) need not be so stowed.

(6) Canopied reversible liferafts and automatic self-righting liferafts carried on ro-ro passenger ships in accordance with regulation 63(17)(b)(iv) and 64(20)(b)(iv) do not need to be arranged for easy side-to-side transfer and are therefore not subject to the 185 kilogrammes mass limitation of Schedule 4, or Part 1 of paragraph 2.7.

(7) Liferafts intended for throw-overboard launching shall be stowed in a position providing for easy side-to-side transfer at a single open deck level so as to be readily transferable for launching on either side of the ship unless liferafts, of the aggregate capacity required by regulations 65(4)(a), 66(4), 67(3)(c)(i), 68(2)(a) and 69(2)(a) to be capable of being launched on either side, are stowed on each side of the ship.

(8) On ships of Classes I, II and II(A) every liferaft shall be stowed with its painter permanently attached to the ship and with a float-free arrangement complying with the requirements of Schedule 4, Part 8 so that, as far as practicable, the liferaft floats free and, if inflatable, inflates automatically when the ship sinks.

(9) On ships of Classes VII, VII(T), VIII, VIII(T), VIII(A), VIII(A)(T), IX, XI and XII every liferaft, other than the liferafts required by regulations 65(5) and 66(8) shall be stowed with its painter permanently attached to the ship and with a float-free arrangement complying with the requirements of Schedule 4, Part 8 so that the liferaft floats free and if inflatable, inflates automatically when the ship sinks. The liferafts required by regulations 65(5) and 66(8) if securely fastened shall have provision for manual release.

(10) On all ships operating on fixed routes in shallow water, the requirement that liferafts be arranged as to ensure that the liferafts are not dragged under by the sinking ship can be achieved by using a liferaft painter with a length of at least the maximum depth of the water plus an additional 10 metres.

(11) In addition to meeting the requirements of paragraph (8) or (9) liferafts shall be stowed as to permit manual release of one raft or container at a time from their securing arrangements.

(12) Rescue boats and fast rescue boats shall be stowed:

- (a) in a state of continuous readiness for launching in not more than 5 minutes;
- (b) in a position suitable for launching and recovery;
- (c) so that neither the boat nor its stowage arrangements will interfere with the operation of any survival craft at any other launching station; and
- (d) if it is also a lifeboat, in compliance with the requirements of this regulation for the stowage of lifeboats.

(13) Inflated boats shall be stowed:

- (a) in a state of continuous readiness for launching in the shortest possible time;
- (b) in a position suitable for launching and recovery; and
- (c) so that neither the inflated boat nor its stowage arrangements will interfere with the operation of any survival craft at any other launching station.

(14) The stowage height of a survival craft on a passenger ship shall take into account the requirements of this regulation, the assembly, means of escape and evacuation procedures for the ship in accordance with the Merchant Shipping (Fire Protection: Large Ships) Regulations 1998, the size of the ship and the weather conditions likely to be encountered in its area of operation. For a davit launched survival craft, the height of the davit head with the survival craft in the embarkation position, shall, as far as practicable, not exceed 15 metres to the waterline when the ship is in its lightest sea going condition.

Launching stations

73. Launching stations shall be 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 that so far as practicable survival craft, except survival craft specially designed for free-fall launching, can be launched down the straight side of the ship. If positioned forward survival craft shall be stowed abaft the collision bulkhead in a sheltered position.

Survival craft launching arrangements

74.—(1) Launching appliances complying with the requirements of Schedule 6, Parts 1 and 3, shall be provided for all liferafts except:

- (a) liferafts which are boarded from a position which is less than 4.5 metres above the waterline in the lightest seagoing condition and which either:
 - (i) have a mass of not more than 185 kilogrammes; or
 - (ii) are stowed for launching directly from the stowed position under unfavourable conditions of trim of up to 10 degrees and with the ship listed not less than 20 degrees either way;
- (b) liferafts having a mass of not more than 185 kilogrammes and which are carried in excess of the survival craft for 200 per cent of the total number of persons on board the ship;
- (c) liferafts carried in excess of the survival craft for 200 per cent of the total number of persons on board the ship, are stowed for launching directly from the stowed position under unfavourable conditions of trim of up to 10 degrees and list of up to 20 degrees either way;
- (d) liferafts provided for use in conjunction with a marine evacuation system, complying with Schedule 5, Part 1 and stowed for launching directly from the stowed position under unfavourable conditions of trim of up to 10 degrees and list of up to 20 degrees either way.

(2) Each lifeboat shall be provided with an appliance complying with the requirement of Schedule 6, which is capable of launching and recovering the lifeboat. In addition there shall be provision for hanging-off the lifeboat to free the release gear for maintenance.

(3) Only one type of release mechanism shall be used for similar survival craft carried on board the ship.

(4) On ships of Classes I, II and II(A) all survival craft required to provide for abandonment by the total number of persons on board shall be capable of being launched with their full complement of persons and equipment within a period of 30 minutes from the time the abandon ship signal is given.

(5) On ships of Classes VII, VII(T), VIII, VIII(T), VIII(A), VIII(A)(T), IX and XI, with the exception of the survival craft referred to in subparagraph (1)(a), all survival craft required to provide for abandonment by the total number of persons on board shall be capable of being launched with their full complement of persons and equipment within a period of 10 minutes from the time the abandon ship signal is given.

(6) On ships of Classes VII, VII(T), VIII, VIII(T), VIII(A), VIII(A)(T), and IX of 20,000 tonnes and upwards, lifeboats shall be capable of being launched where necessary utilising painters, with the ship making headway at speeds up to 5 knots in calm water.

(7) Preparation and handling of survival craft at any one launching station shall not interfere with the prompt preparation and handling of any other survival craft or rescue boat at any other station.

(8) During preparation and launching, each survival craft, its launching appliance, and the area of water into which it is to be launched shall be adequately illuminated by lighting supplied from the emergency source of electrical power required by the Merchant Shipping (Passenger Ship Construction: Ships of Classes I, II and II(A)) Regulations 1998 or the Merchant Shipping (Cargo Ship Construction) Regulations 1997, as appropriate.

(9) Means shall be available to prevent any overboard discharge of water on to survival craft during abandonment or man overboard operations.

(10) If there is a danger of a survival craft being damaged by the ship's stabiliser fins, means shall be available, powered by an emergency source of energy, to bring the stabiliser fins inboard. Indicators operated by an emergency source of energy shall be available on the navigating bridge to show the position of the stabiliser fins.

Marine evacuation systems

75.—(1) A marine evacuation system or systems complying with the requirements of Schedule 5 may be substituted on ships of Classes I, II and II(A) for some or all of the liferafts and launching appliances required by regulations 63(2)(b) and 64(2)(b) or 3(b). The liferafts included in such system or systems, together with any other liferafts served by launching appliances other than the liferafts referred to in regulation 63(2)(c) and 64(4) shall provide the same aggregate capacity as that required by regulation 63(2)(b) and 64(2)(b) or (3)(b), as appropriate.

(2) Where marine evacuation systems are provided on a ship, at least all the systems on one side shall be subjected to a trial deployment after installation; the remainder of the systems are to be satisfactorily deployed within 12 months of the installation date.

(3) Where a marine evacuation system is provided, provision for training the crew in its use shall be made which shall include the arrangements specified in Schedule 5.

Fast rescue boat and rescue boat embarkation, launching and recovery arrangements

76.—(1) The rescue boat embarkation and launching arrangements shall be such that the rescue boat can be boarded and launched in the shortest possible time and in any case in not more than 5 minutes.

(2) If the rescue boat is one of the ship's survival craft, the embarkation arrangements and launching station shall comply with the requirements of regulations 71 and 73.

(3) Launching arrangements shall comply with the requirements of regulation 74 and rescue boat launching appliances shall comply with the requirements of Schedule 6, Parts 1 and 2. All rescue boats shall be capable of being launched, where necessary utilising painters, with the ship making headway at speeds up to 5 knots in calm water.

(4) Recovery time of the rescue boat shall be not more than five minutes in moderate sea conditions when loaded with its full complement of persons and equipment. If the rescue boat is also a lifeboat, this recovery time shall be possible when loaded with its lifeboat equipment, and the approved rescue boat complement or 6 persons, whichever is the greater.

(5) Rescue boat embarkation and recovery arrangements shall allow for safe and efficient handling of a stretcher case. Foul weather recovery strops shall be provided for safety if heavy blocks constitute a danger.

(6) Fast rescue boat launching and recovery arrangements shall comply with the requirements of paragraphs (2) and (5) inclusive of this paragraph; in addition the launching and recovery arrangements shall comply with the requirements of Schedule 6, Parts 1 and 2.

STOWAGE AND HANDLING OF LIFE-SAVING APPLIANCES

Stowage of lifebuoys

77.—(1) 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.

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

(3) Except as otherwise provided, one lifebuoy on each side of the ship shall be fitted with a buoyant lifeline.

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

Stowage of lifejackets

78.—(1) Lifejackets shall be so stowed as to be readily accessible and their position shall be clearly indicated. Where, due to the particular arrangements of the ship, lifejackets stowed in remote positions may become inaccessible, the number of lifejackets carried elsewhere shall be suitably increased.

(2) Lifejackets carried for persons on watch shall be stowed on the bridge, in the engine control room and at any other manned watch station.

(3) Lifejackets providing the additional 5 per cent required on passenger ships of Classes I, II and II(A) shall be stowed in conspicuous places on deck or at assembly stations. On ro-ro ships an extra number of lifejackets shall be provided in the vicinity of the assembly stations so that passengers do not have to return to their cabins to collect their lifejackets.

(4) Inflatable lifejackets for use in free-fall lifeboats shall be stowed adjacent to the lifeboat embarkation position.

Stowage of two-way radiotelephone sets

79.—(1) The two-way radiotelephone sets carried in accordance with these Regulations which are not stowed in survival craft shall be kept in a suitable place ready to be moved into survival craft in case of emergency.

(2) In ships where there is substantial fore and aft separation between superstructure or deck houses, the two-way radiotelephone sets should not all be located in any one superstructure or deck house.

Stowage and packing of pyrotechnic distress signals and line-throwing appliances

80.—(1) Pyrotechnic distress signals provided for use on board ship shall be stowed on or near the navigating bridge.

(2) All pyrotechnic distress signals provided for use on board ships or for use in a lifeboat shall be packed in watertight containers which shall not be plastic envelopes.

(3) In the case of a line-throwing appliance which includes a pistol, the pistol, line and rockets, together with the means of ignition, shall be stowed in a container which provides protection from the weather.

MISCELLANEOUS PROVISIONS

Immersion suits and anti-exposure suit

81.—(1) Immersion suits or anti-exposure suits required to be carried by this Part of these Regulations may be of the insulated or uninsulated type but 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; or
- (d) east of longitude 10°E in the Kattegat and Baltic Sea between 1st December and 30th April, both dates inclusive.

(2) Immersion suits or anti-exposure suits required to be carried by this Part of these Regulations may be dispensed with if the ship is constantly engaged on voyages between the parallels of latitude of 20° North and South.

Manning of survival craft

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

(2) There shall be a sufficient number of crew members to operate the survival craft and launching arrangements required for evacuating the total number of persons on board. The minimum number of deck officers, certificated persons and other crew members required to be carried shall be determined in accordance with MSN 1682(M).

(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 to be second-in-command of such lifeboat.

(4) A deck officer or certificated person shall be placed in charge of each liferaft to be used. However, in ships of Classes II and II(A) the person placed in charge may 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.

(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 lifeboat.

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

(10) There shall be a sufficient number of trained persons on board for assembling 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.

PART V CONTROL AND ENFORCEMENT

Approval and replacement of life-saving appliances

83.—(1) Life-saving appliances and arrangements required by these Regulations shall be of a type which has been approved by the Secretary of State, by persons specified in Merchant Shipping Notice No. M.1734 or M.1735 as appropriate in relation to that equipment or arrangement or by a Notified Body appointed by a member State in accordance with Council Directive 96/98/EC of 20th December 1996 on Marine Equipment(a).

(2) Any approval shall be given in writing and shall specify the date when it is to come into force and the conditions (if any) on which it is given.

(3)(a) Subject to subparagraph (b), any item of life-saving equipment marked with an expiry date shall, on that date, cease to be approved for the purpose of these Regulations, and shall be replaced on or before that date.

(b) The emergency pack of an inflatable liferaft which is inspected at the time of servicing of the liferaft may be retained if there is more than 6 months remaining before the expiry date.

Operational readiness, maintenance, inspections and servicing

84.—(1) All life-saving appliances shall be in working order and ready for immediate use before any ship 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 Schedule 14, Part 2 of MSN 1676(M).

(3)(a) 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 or at intervals of not more than five years, whichever is earlier. Stainless steel falls, however, need

(a) OJ No. L46, 17.2.97, p. 26.

not be renewed within the lifetime recommended by the manufacturer or supplier if, on inspection, there are no signs of mechanical damage or other defects.

- (b) The Secretary of State may accept in lieu of the “end for ending” required in paragraph (3)(a), periodic inspection of falls and their renewal, whenever necessary, due to deterioration, or at intervals of not more than 4 years, whichever one is earlier.
- (4) Spares and repair equipment shall be provided for life-saving appliances and for any of their components which are subject to excessive wear or consumption and which 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;
 - (c) the general emergency alarm system shall be tested; and
 - (d) any public address system fitted 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 Schedule 14, Part 2 of MSN 1676(M).
- (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 Secretary of State, at intervals not exceeding twelve months: provided that in any case where this is impracticable, such interval may be extended by a period not exceeding five months with the consent of the Secretary of State on application to the Maritime and Coastguard Agency at Spring Place, 105 Commercial Road, Southampton SO15 5EG.
- (8) In addition to or in conjunction with the servicing intervals of marine evacuation systems required by paragraph (7), each marine evacuation system shall be deployed from the ship on a rotational basis at intervals to be agreed by the Secretary of State which shall not be longer than at least once every six years.
- (9) Emergency repairs to inflated rescue boats and inflated boats may be carried out on board ship but permanent repairs shall be effected at an accepted service station, as soon as practicable.
- (10)(a) Launching appliances, including winches and brakes, lifeboat disengaging gears, liferaft automatic release hooks and rescue boat release gears shall be serviced and tested at regular intervals. At least once every 5 years the rescue boats and lifeboats shall be turned out and lowered when loaded with weights to simulate 1.1 times the total mass of the lifeboat when loaded with its full complement of persons and equipment. During this test the winch brake shall be dynamically tested in accordance with MSN 1676(M), Schedule 6, Part 1, paragraph 5.2.2; and
 - (b) lifeboat on-load release gear shall be serviced and tested at regular intervals; at least once every 5 years the release gear shall be operationally tested under a load of 1.1 times the total mass of the lifeboat when loaded with its full complement of persons and equipment.
- (11) Stowage locations for life-saving equipment including containers, brackets, racks or other similar locations shall be marked with symbols in accordance with Schedule 16 to indicate the type and location of equipment; the number of devices stowed should be indicated if it is more than one.

Equivalent and exemptions

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

(2) For the purpose of these Regulations and of MSN 1676(M) and MSN 1677(M), the results of a verification or test shall be accepted if the verification or the test is carried out:

- (a) in accordance with these Regulations or with a standard, code of practice, specification or technical description of a EEA State, other than the United Kingdom, offering equivalent levels of safety, survivability and fitness for purpose; and
- (b) by a body or laboratory of a EEA State, other than the United Kingdom, offering suitable and satisfactory guarantees of technical and professional competence and independence.

(3) The Secretary of State may exempt any ship or description of ships from all or any of the provisions of these Regulations (as may be specified in the exemption) if he is satisfied that compliance with such provision is either impracticable or unreasonable in the case of that ship or description of ships on such terms (if any) as he may specify.

(4) Without prejudice to paragraph (3)–

- (a) The Secretary of State 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 it complies with safety requirements which are adequate for the voyage which is to be undertaken by the ship.
- (b) If it appears to the Secretary of State, 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 Part II he may permit one or more sets of davits to be dispersed with in that ship subject to such conditions, if any, as he thinks fit: provided that in paragraph (a), in the case of ships of Classes II and II(A) the number of sets of davits fitted shall, subject to the provisions of regulation 7(2) and (8) in no case be less than the minimum number determined by Column B of the table set out in Schedule 1 of MSN 1677(M).
- (c) The Secretary of State may exempt any ship of Class I or Class II employed in special trades for the carriage of large numbers of special trade passengers, such as the pilgrim trade, from any of the provisions of regulations 7(2) or (10) or 8(2), (3), (6), (7), (8), (12) and (13): provided that it complies fully with the provisions of–
 - (i) the Final Act of the International Conference on Special Trade Passengers 1971(a); and
 - (ii) the Protocol on Space Requirements for Special Trade Passenger Ships 1973(b).
- (d) If it is impracticable or unreasonable for a ship to carry a lifeboat or boat of the minimum length prescribed by Part II, the Secretary of State may permit a smaller lifeboat or boat to be carried by that ship.

(5) The Secretary of State may, subject to giving reasonable notice, alter or cancel any such exemption given under paragraph (3) or (4).

Penalties

86.—(1) If a ship proceeds or attempts to proceed to sea or on any voyage, or arrives within United Kingdom waters, without complying with the requirements of these Regulations, the owner and master of the ship shall each be guilty of an offence in respect of each case of non-compliance and liable on summary conviction to a fine not exceeding the statutory maximum or, on conviction on indictment, to imprisonment for a term not exceeding two years, or a fine, or both.

(2) It shall be 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

87.— 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 284 of the Merchant Shipping

(a) Cmnd. 5103.

(b) Cmnd. 5530.

Act 1995 (which relates to the detention of a ship) shall have effect in relation to the ship, subject to the modification that as if for the words “this Act”, wherever they appear, there were substitute “the Merchant Shipping (Life-Saving Appliances for Ships Other Than Ships of Classes III and VI(A)) Regulations 1999”.

Signed by the authority of the
Secretary of State for Environment, Transport and the Regions.

Keith Hill
Parliamentary Under Secretary of State,
Department of the Environment, Transport and the Regions

30th September 1999

EXPLANATORY NOTE

(This note is not part of the Regulations)

1. These Regulations revoke and replace the Merchant Shipping (Life-Saving Appliances) Regulations 1980 and the Merchant Shipping (Life-Saving Appliances) Regulations 1986, and their amendments. They will apply from [1999] to ships of Classes I, II, II(A), VII, VII(A), VII(T), VIII, VIII(A), VIII(A)(T), VIII(T), IX, IX(A), IX(A)(T), XI and XII.

2. These Regulations deal separately with ships constructed before 1st July 1986 (*Part II*), ships constructed on or after 1st July 1986 and before 1st July 1998 (*Part III*) and ships constructed on or after 1st July 1998 (*Part IV*).

3. A number of the detailed technical requirements and specifications are not contained in Merchant Shipping Notices MSN 1676(M) and 1677(M).

4. The principal changes from the previous Regulations include changes concerning—

- (a) recent amendments to the SOLAS Convention revising the performance specifications of radar transponders, satellite emergency position indicator radar beacons and two-way VHF radiotelephones;
- (b) substitution of parachute rocket signals for the obsolescent red star distress signal;
- (c) the requirement of EC Directive 92/29/EEC on the contents of a first-aid kit;
- (d) the provision of public address systems on passenger ships;
- (e) liferafts to be served by marine evacuation systems or launching appliances;
- (f) certain survival craft may be replaced by a marine evacuation system;
- (g) provision of float-free stowage arrangements and boarding ramps for liferafts;
- (h) provision of automatic self-righting and canopied reversible liferafts;
- (i) provision of fast rescue boats and launching appliances;
- (j) lifejackets to be stowed in vicinity of assembly stations and provision of lifejacket lights;
- (k) provision of a “a means of rescue”;
- (l) provision of lifejacket lights on Class II and II(A) vessels;
- (m) provision of helicopter landing and pick-up areas on Class I, II and II(A) vessels;
- (n) amendment term “muster station” to “assembly station” on Class I, II and II(A) on Class I, II and II(A) ro-ro passenger ships; and
- (o) replacement of lifejacket lights with improved performances.

5. A compliance cost assessment has been prepared and copies can be obtained from the Maritime and Coastguard Agency, Spring Place, 105 Commercial Road, Southampton SO15 1EG. A copy has been placed in the library of each House of Parliament.

6. Merchant Shipping Notices referred to in these Regulations are obtainable from distribution agents Eros Marketing Support Services Ltd, Delta House, Imber Court Trading Estate, Orchard Land, East Molesey, Surrey KT8 0BN (Telephone Number: 0181 957 5028).

7. The SOLAS Convention, its Protocol and amendments, IMO Resolutions and Publications and the Codes and Guidelines referred to in the Regulations are obtainable from the International Maritime Organisation, 4 Albert Embankment, London SE1 7SR.

8. Copies of the British Standard specifications and International Standards referred to in these Regulations may be obtained from any of the sale outlets operated by the British Standards Institution, or by post from the British Standards Institution at Linford Wood, Milton Keynes MK14 6LE (Telephone Number: Milton Keynes (STD 01908) 320066).

9. Copies of the table "Life-Saving Signals and Rescue Methods, SOLAS No. 1" referred to in these Regulations may be obtained from The Stationery Office Limited, Publications Centre at PO Box 276, London SW8 5DT.

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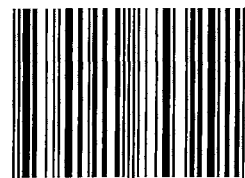
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