STATUTORY INSTRUMENTS

1999 No. 2721

The Merchant Shipping (Life-Saving Appliances For Ships Other Than Ships Of Classes III To VI(A)) Regulations 1999

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.

- (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.
- (a) (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.
 - (a) (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, SOLASNo. 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.
- (a) (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) This paragraph applies to ro-ro passenger ships.
 - (iv) 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 of a type fitted with a semi-rigid boarding ramp, capable of supporting a person weighing 100 kgs;
 - (ii) 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 capsize; 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.
 - (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.
 - (a) (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;

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- (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.
- (a) (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

Length of ship in metres	Minimum number of lifebuoys
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.
 - (a) (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 retried 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 capsize; 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.
- (a) (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).
 - (a) (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

Length of ship in metres	Minimum number of lifebuoys
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.
 - (a) (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..

- (a) (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).
 - (a) (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.
 - (a) (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 selfigniting 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.
 - (a) (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.
 - (a) (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) needs 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 2001;
- (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;
 - (i) 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 (c) and (d) 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 2002;
 - (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, VIII(T), 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, VIII(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(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), 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-incommand 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.