

DEPARTMENT OF TRANSPORT

MERCHANT SHIPPING ACT, 1951 (ACT NO. 57 OF 1951)

THE DRAFT LIFE-SAVING EQUIPMENT AMENDMENT REGULATIONS, 2021

(The English Text is the official text of the Regulations)

I, Fikile April Mbalula, Minister of Transport hereby, in terms of section 356 of the Merchant Shipping Act, 1951 (Act No. 57 of 1951), make the Regulations set out in the Schedule hereunder.

Mr FA Mbalula, MP
Minister of Transport

Date:

SCHEDULE

Contents

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GENERAL EXPLANATORY NOTE:

[] Words in bold type in square brackets indicate omissions from existing regulations.

_____ Words underlined with a solid line indicate insertions in existing regulations.

Definition

1. In this Schedule “the Regulations” means the Life-Saving Equipment Regulations, 1968 published in Government Gazette No. 1970 by Government Notice No. R. 141 dated 02 February 1968, as amended.

Amendment of regulation 2 of the Regulations

2. Regulation 2 of the Regulations is hereby amended by—
 - (a) the substitution for the definition of “accommodation space” of the following definition:

“**accommodation space**” means a passenger [spaces, corridors, lavatories, cabins, offices, crew spaces, shops, isolated pantries and lockers and similar spaces]space, corridor, lavatory, cabin, office, crew space, shop, isolated pantry and locker and any similar space;”;

- (b) the insertion after the definition of “accommodation space” of the following definitions:

“**anti-exposure suit**” means a protective suit designed for use by a rescue boat crew or a marine evacuation system party;”; and

“**Authority**” means the South African Maritime Safety Authority established by section 2 of the South African Maritime Safety Authority Act, 1998 (Act No. 5 of 1998);”;

- (c) the substitution for the definition of “buoyant apparatus” of the following definition:

“**buoyant apparatus**” means flotation equipment, other than **[lifebuoys and lifejackets]**a lifebuoy or lifejacket, designed to support **[persons who are]**a person in the water, and complying with the requirements of regulation 26;”;

- (d) the substitution for the definition of “cargo space” of the following definition:

“**cargo space**” means **[spaces]**a space appropriated for cargo, other than mail and bullion, and **[trunks]**a trunk leading to such **[spaces]**a space;”;

- (e) the deletion of the definition of “certificated lifeboatman”;

- (f) the insertion after the definition of “cargo space” of the following definition:

“**certificated person**” means a person who holds a certificate of proficiency in survival craft issued under the authority of, or recognised as valid by, the Authority in accordance with the requirements of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, in force; or a person who holds a certificate issued or recognised by the authority of a State not a Party to that Convention for the same purpose as the convention certificate;”;

- (g) the substitution for the definition of “control station” of the following definition:

“**control station**” includes **[those spaces]**a space in which radio, main navigating or central fire-recording equipment or the emergency generator, is located;”;

- (h) the insertion after the definition of “crew space” of the following definitions:

“**detection**” means the determination of the location of a survivor or survival craft;”; and

“**embarkation ladder**” means a ladder provided at a survival craft embarkation station to permit safe access to survival craft after launching;”

- (i) the substitution for the definition of “fire extinguisher” of the following definition:

“**fire extinguisher**” provided in compliance with **[part]Part II**, means a fire extinguisher complying with the requirements of regulation 108;”;

- (j) the insertion after the definition of “fire extinguisher” of the following definitions:

“**float-free launching**” means a method of launching a survival craft whereby the craft is automatically released from a sinking ship and is ready for use;”; and

“**free-fall launching**” means a 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;”;

- (k) the insertion after the definition of “immersion suit” of the following definitions:

“**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;”;

“**inflated appliance**” means an appliance which depends upon non-rigid, gas-filled chambers for buoyancy and which is kept inflated and ready for use at all times;”; and

“**International Life-Saving Appliance (LSA) Code**” means the International Life-Saving Appliance (LSA) Code adopted by the Maritime Safety Committee of the Organization by resolution MSC.48(66), as it may be amended by the Organization, provided that such amendments are adopted, brought into force and take effect in accordance with the provisions of article VIII of the present Convention concerning the amendment procedures applicable to the Annex other than chapter I;”;

- (l) the substitution for the definition of “international shore connection” of the following definition:

“**international shore connection**” provided in compliance with **[part]Part II**, means an international shore connection complying with the requirements of regulation 107;”;

- (m) the substitution for the definition of “launching appliance” of the following definition:

“**launching appliance or arrangement**” means an appliance or a means of transferring a survival craft or rescue boat from its stowed position safely to the water, complying with the requirements of regulation 39(2);”;

- (n) the substitution for the definition of “length” of the following definition:

“**length**” **[in relation to a registered ship means registered length, and in relation to any other vessel means length overall]**means 96% of the total length on a waterline at 85% of the least moulded depth measured from the top of the keel, or the length from the fore-side of the stem to the axis of the rudder stock on that waterline, if that be greater. In ships designed with a rake of keel the waterline on which this is measured shall be parallel to the designed waterline;”;

- (o) the insertion after the definition of “lifejacket” of the following definition:

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

- (p) the insertion after the definition of “liferaft” of the following definition:

“**marine evacuation system**” means an appliance for the rapid transfer of persons from the embarkation deck of a ship to a floating survival craft;”;

- (q) the substitution for the definition of “mile” of the following definition:

“**mile**” means a nautical mile of 6,080 feet, the equivalent of 1852 meters;”;

- (r) the insertion after the definition of “motor lifeboat” of the following definitions:

“**moulded depth**” means the vertical distance measured from the top of the keel to the top of the freeboard deck beam at side measured as follows:

- (a) in a wood and composite ship the distance is measured from the lower edge of the keel rabbet, where the form at the lower part of the midship section is of a hollow character, or where thick garboards are fitted, the distance is measured from the point where the line of the flat of the bottom continued inwards cuts the side of the keel;
- (b) in a ship having rounded gunwales, the moulded depth 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;
- (c) where 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, the moulded depth shall be measured to a line of reference extending from the lower part of the deck along a line parallel with the raised part;”; and

“**novel life-saving appliance or arrangement**” means a life-saving appliance or arrangement which embodies new features not fully covered by the provisions of chapter III of the Safety Convention or the Code but which provides an equal or higher standard of safety;”;

- (s) the insertion after the definition of “person” of the following definitions:

“**positive stability**” means the ability of a craft to return to its original position after the removal of a heeling moment;”; and

“**recovery time**” for a rescue boat means the time required to raise the boat to a position where a person on board can disembark to the deck of the ship and includes the time required to make preparations for recovery on board the rescue boat such as passing and securing a painter, connecting the rescue boat to the launching appliance, and the time to raise the rescue boat but does not include the time needed to lower the launching appliance into position to recover the rescue boat;”;

- (t) the substitution for the definition of “rescue boat” of the following definition:

“**rescue boat**” means an approved inflated rescue boat referred to in regulation 31A designed to rescue persons in distress and to marshal survival craft;

- (u) the insertion after the definition of “rescue boat” of the following definitions:

“retrieval” means the safe recovery of a survivor;”;

“ro-ro passenger ship” means a passenger ship with ro-ro cargo spaces or special category spaces;”; and

“requirements for maintenance, thorough examination, operational testing, overhaul and repair” means the Requirements for maintenance, thorough examination, operational testing, overhaul and repair of lifeboats and rescue boats, launching appliances and release gear, adopted by the Maritime Safety Committee of the Organization by resolution MSC.402(96), as may be amended by the Organization, provided that such amendments are adopted, brought into force and take effect in accordance with the provisions of article VIII of the present Convention concerning the amendment procedures applicable to the annex other than chapter I;”;

- (v) the substitution for the definition of “service space” of the following definition:

“service space” includes [galleys, main pantries, laundries, store rooms, paint rooms, baggage rooms, mail rooms, bullion rooms, carpenters’ and plumbers’ workshops, and trunkways]a galley, main pantry, laundry, store room, paint room, baggage room, mail room, bullion room, carpenters’ and plumbers’ workshop, and trunkway leading to such [spaces]a space;”;

- (w) the substitution for the definition of “settling tank” of the following definition:

“settling tank” means an oil storage tank having a heating surface of not less than [2 square feet]60.96 centimetres per ton of oil capacity;”;

- (x) the insertion after the definition of “settling tank” of the following definitions:

“short international voyage” means an international voyage in the course of which a ship is not more than 321 kilometers from a port or place in which the passengers and crew could be placed in safety where neither the distance between the last port of call in the country in which the voyage begins and the final port of destination nor the return voyage shall exceed 965 kilometers and the final port of destination is the last port of call in the scheduled voyage at which

the ship commences its return voyage to the country in which the voyage began;”;

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

- (y) the insertion after the definition of “tanker” of the following definition:

““thermal protective aid” means a bag or suit made of waterproof material with low thermal conductance; and”.

Substitution of regulation 3 of the Regulations

3. The following regulation is hereby substituted for regulation 3 of the Regulations:

“Application

- 3.** (1) Subject to subregulation (2), these regulations apply to **[all vessels]**a vessel of 25 tons or more, and so apply to—
- (a) **[vessels]**a vessel that **[are]**is registered or licensed in the Republic wherever they may be; and
 - (b) **[other vessels]**any other vessel when in the Republic or its territorial waters.
- (2) These regulations do not apply to **[vessels]**a vessel of less than 100 tons that are used solely for sport or recreation.”.

Amendment of regulation 4 of the Regulations

4. Regulation 4 of the Regulations is hereby amended by—

- (a) the substitution for subregulation (1) of the following subregulation:

“Classification of ships

- 4.** (1) The vessels to which these regulations apply are divided into the following classes:
- (a) *Passenger ships*
Class I-A passenger ship engaged on voyages any of which are international voyages other than short international voyages~~[.]~~;
 - Class II-A passenger ship, other than a ship of **[class]**Class I, engaged on voyages any of which are short international voyages~~[.]~~;

Class IIA-A passenger ship of **[70 feet]**21.3 meters in length or over, other than a ship of **[class]**Class V or V1, engaged on voyages of any kind other than international voyages[.];

Class III-Not yet allocated[.];

Class IV-Not yet allocated[.];

Class V-A passenger ship of **[50 feet]**15 meters in length or over engaged only on voyages to sea in fine weather with not more than 40 persons on board, in the course of which voyages the ship is at no time more than 40 miles from the point of departure nor more than 15 miles from land[.]; and

Class VI-A passenger ship which operates at a port or is engaged on voyages to sea in fine weather with not more than 250 persons on board, in the course of which voyages the ship is at no time more than 15 miles from the point of departure nor more than 5 miles from land.

(b) *Vessels other than passenger ships*

Class VII—A **[ship (other)]**ship, other than a ship of class VIIA, X, XI or **[XII)]**XII engaged on voyages any of which are international voyages other than short international voyages[.];

Class VIIA—A ship employed as a whale factory ship or as a fish processing or canning factory ship, or a ship engaged in the carriage of persons employed in the whaling industry or the fish processing or canning industry[.];

Class VIII—A **[ship (other)]**ship, other than a ship of class X, XI or **[XII)]**XII engaged on voyages in the Republic or on short international voyages[.];

Class IX—A tug, tender, lighter, dredger, barge or hopper which is employed at a port in the Republic and proceeds to sea for not more than 10 miles from the entrance to such port[.];

Class IXA— A tug, tender, lighter, dredger, barge or hopper which is employed at a port in the Republic and does not proceed to sea[.];

Class X—A fishing boat, sealing boat or whaling boat[.];

Class XI—A sailing **[ship (other)]**ship, other than a ship of class X or **[XII)]**XII which proceeds to sea[.]; and

Class XII—A pleasure yacht of 25 tons or over.”.

Amendment of Part I of the Regulations

5. Part I is hereby amended by the substitution in Chapter I of the Arrangement of Regulations (table of contents) of the following table:

“SCHEDULE

Arrangement of regulations

PRELIMINARY

1. Title of these regulations
2. Interpretation
3. Application
4. Classification

PART I LIFE-SAVING APPLIANCES

CHAPTER I – LIFE-SAVING APPLIANCES FOR THE RESPECTIVE CLASSES OF VESSELS

5. **[Ships of class I]**Class I ships
6. **[Ships of class II]**Class II ships
7. **[Ships of class IIA]**Class IIA ships
8. **[Ships of class III]**Class III ships
9. **[Ships of class IV]**Class IV ships
10. **[Ships of class V]**Class V ships
11. **[Ships of class VI]**Class VI ships
12. **[Ships of class VII]**Class VII ships
13. **[Ships of class VIIA]**Class VIIA ships
14. **[Ships of class VIII]**Class VIII ships
15. **[Ships of class IX]**Class IX ships
16. **[Ships of class IXA]**Class IXA ships
17. **[Vessels of class X]**Class X ships
18. **[Ships of class XI]**Class XI ships
19. **[Ships of class XII]**Class XII ships
- 19A Passenger Ships (Additional Requirements)**
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CHAPTER II- REQUIREMENTS FOR LIFE-SAVING APPLIANCES

20. General requirements for lifeboats
21. Carrying capacity of lifeboats
22. Motor lifeboats
23. Mechanically propelled lifeboats
24. Class C boats
25. Liferrafts

- 26 Buoyant apparatus
- 27. Marking of lifeboats, **[class]**Class C boats, liferafts and buoyant apparatus
- 28 Lifebuoys
- 29. Lifebuoy and buoyant apparatus lights and lines
- 30. Lifejackets
- 30A. Immersion suits
- 31. Line-throwing appliances
- 31A. Approved inflated rescue boat
- 31B. Evaluation, Production tests, testing and approval of life-saving appliances and arrangements
- 31C. Operational readiness, maintenance and inspections
- 31D. Compliance with LSA Code
- 31E. Training manual and on-board training aids
- 31F. Instructions for on-board maintenance
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- 31H. Alternative design and arrangements

CHAPTER III-PROVISION OF EQUIPMENT AND RATIONS IN LIFEBOATS, CLASS C BOATS, BOATS AND LIFERAFTS

- 32. Equipment for lifeboats, **[class]**Class C boats and boats
- 33. Rations of lifeboats and **[class]**Class C boats
- 34. Special equipment for certain motor lifeboats
- 35. Security of equipment and rations in lifeboats, **[class]**Class C boats and boats
- 36. Equipment and rations for liferafts

CHAPTER IV-STOWAGE AND HANDLING OF LIFE-SAVING APPLIANCES

- 37. General provisions relating to the stowage and handling of life-saving equipment
- 38. Stowage and handling of lifeboats, **[class]**Class C boats and boats

CHAPTER V—MISCELLANEOUS PROVISIONS

- 39. Stowage and handling of liferafts, buoyant apparatus, **[lifebuoys and lifejackets]**lifebuoys, lifejackets, immersion suits, anti-exposure suits, rescue boats and marine evacuation systems
- 40. Embarkation into lifeboats, class C boats, boats and liferafts, rescue boat embarkation, launching and recovery arrangements
- 41. Manning of lifeboats and liferafts

- 42. Certificated **[lifeboatmen]**persons
- 43. Portable radio equipment
- 44. Electrically operated signals, on-board communications, alarm systems and public address systems
- 45. Electric lighting
- 46. Vessels' identification marks, vessels' distress signals and list of persons on board
- 46A** Search and rescue locating devices
- 46B** Radar transponders
- 46C** Muster list and emergency instructions
- 46D** Survival craft
- 46E** Recovery of persons from water
- 46F** Emergency training and drills".

Amendment of regulation 5 of the Regulations

- 6. Regulation 5 of the Regulations is hereby amended by—
 - (a) the substitution for the heading of regulation 5 of the following heading:

“[Ships of class]Class I Ships”; and
 - (b) the substitution for subregulations (1) to (12) of the following subregulations:

“5. (1) [Every class]A Class I 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]:** Provided that—
 - (i) there shall never be less than sufficient lifeboats on each side of the ship to accommodate 37½ per cent of the total number of persons which the ship is certified to carry**[, and provided that];**
and
 - (ii) in the case of any ship the keel of which was laid before the coming into operation of this [part]Part, these provisions shall apply only if the total number of persons on board is not increased as a result of the provision of liferafts.

- (2) (a) On [every class] a Class I ship, two of the lifeboats required by subregulation (1) shall be kept ready, one on each side of the ship, for immediate use in an emergency while the ship is at sea.
- (b) [These] The lifeboats referred to in paragraph (a) shall be not more than [28 feet] 9 meters in length and each of them may be a motor lifeboat and may be counted for the purpose of compliance with subregulation (3).
- (c) Notwithstanding the provisions of regulation 38(13), skates or other suitable appliances are not required to be fitted to [these] the lifeboats referred to in paragraph (a).
- (3) **[Every class]** A Class I ship shall carry on each side of the ship at least one motor lifeboat: Provided that in a ship which is certified to carry not more than 30 persons, only one motor lifeboat shall be required.
- (4) (a) In **[every class]** a Class I ship which is certified to carry 1,500 persons or more, each of the motor lifeboats carried in compliance with subregulation (3) shall be provided with the equipment specified in regulation 34(1), and in **[every class]** a Class I ship which is certified to carry more than 199 but less than 1,500 persons at least one of the motor lifeboats carried in compliance with subregulation (3) shall be provided with such equipment.
- (b) **[Every]** A motor lifeboat carried in compliance with this regulation shall be provided with the equipment specified in regulation 34(2).
- (5) **[Every class]** A Class I ship which does not carry on each side of the ship a motor lifeboat provided with the equipment specified in regulation 34(1), shall carry portable radio equipment which shall comply with the requirements of regulation 43.
- (6) **[The lifeboats]** A lifeboat carried in compliance with this regulation shall be not less than [24 feet] 7 meters in length.
- (7) In **[every class]** a Class I 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 2¼ tons in their turning out condition.
- (8) (a) [The liferafts] A liferaft carried in compliance with subregulation (1)(b), shall be served by launching appliances.

(b) There shall never be less than one **[such]** launching appliance on each side of the ship, and the difference in the number of launching appliances fitted on each side shall not exceed one.

(9) **[Every class]** A Class I 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 subregulation (1)(b), all liferafts carried shall be of a type capable of being launched by the appliances fitted in compliance with subregulation (8); and
- (b) a ship which has 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.

(10) **[Every class]** A Class I ship shall carry at least the number of lifebuoys indicated in the following table:

<i>Length of ship in [feet] <u>meters</u></i>	<i>Minimum number of lifebuoys</i>
Under [200] <u>60</u>	8
[200] <u>60</u> or over, but under [400] <u>121</u>	12
[400] <u>121</u> or over, but under [600] <u>182</u>	18
[600] <u>182</u> or over, but under [800] <u>243</u>	24
[800] <u>243</u> or over	30

(11) (a) **[Every class]** A Class I ship shall carry one lifejacket for every person on board the ship.

(b) In addition to lifejackets carried in compliance with paragraph (a), **[every class]** a Class I ship shall carry lifejackets for at least 5 per cent of the number of persons which the ship is certified to carry.

(c) **[Such]** The lifejackets referred to in paragraph (a) shall be suitable for persons weighing [70 lb] 31 kg. or more, and shall be stowed on deck in a suitable place which shall be conspicuously marked.

(12) **[Every class]** A Class I ship shall carry a line-throwing appliance.”.

Amendment of regulation 6 of the Regulations

7. Regulation 6 of the Regulations is hereby amended by—

(a) the substitution for the heading of regulation 6 of the following heading:

“[Ships of class]Class II Ships”;

(b) the substitution for subregulations (1) to (4) of the following subregulations:

“6. (1) [Every class]A Class II ship shall, subject to the provisions of subregulation (7) and of regulation 48, be fitted, in accordance with its length, with the number of sets of davits specified in column A of the table set out in **[annex]Annex 1**: Provided that **[no]a** ship shall not be required to be fitted with a number of sets of davits greater than the number of lifeboats required to accommodate the total number of persons which the ship is certified to carry.

(2) A lifeboat shall be attached to every such set of davits and the lifeboats so attached shall, subject to the provisions of subregulation (7), together provide at least the capacity specified in column C of the table set out in **[annex]Annex I**, or the capacity required to accommodate the total number of persons which the ship is certified to carry if this is less.

(3) (a) On **[every class]a Class II** ship, two of the lifeboats required by subregulation (2) shall be kept ready, one on each side of the ship, for immediate use in an emergency while the ship is at sea.

(b) **[These]The** lifeboats referred to in paragraph (a) shall be not more than **[28 feet]9 meters** in length, and each of them may be a motor lifeboat and may be counted for the purpose of compliance with subregulation (4).

(c) Notwithstanding the provisions of regulation 38(13), skates or other suitable appliances not required to be fitted to **[these]the** lifeboats referred to in paragraph (a).

(4) **[Every class]A Class II** ship shall carry on each side of the ship, at least one motor lifeboat which shall be provided with the equipment specified in regulation 34(2): Provided that in a ship which is certified to carry not more than 30 persons, only one such motor lifeboat shall be required.”; and

(c) the substitution for subregulations (6) to (15) of the following subregulations:

“(6) If in the opinion of the Authority the volume of traffic so requires, it may permit any **[class]**Class II ship, being a ship which is subdivided in accordance with the requirements of **[part]**Part III of **[annex]**Annex 2 to the Construction Regulations, 1968, to carry persons in excess of the lifeboat capacity provided on board that ship in compliance with subregulation (2): Provided that—

- (a) if **[such]**the ship is permitted by the Authority in terms of section 200(3) of the Act, to proceed to sea from a port in the Republic on an international voyage not exceeding 1,200 miles between the last port of call in the Republic and the final port of destination, such a ship shall carry lifeboats attached to davits affording accommodation for at least 75 per cent of the persons on board the ship;
- (b) in all cases liferafts shall be carried so that the total number of lifeboats together with such liferafts shall be sufficient to accommodate the total number of persons which the ship is certified to carry; and
- (c) in any such ship in which a two-compartment standard of subdivision is not achieved throughout by virtue of the application of the provisions of paragraph 9 of **[annex]**Annex 2 to the Construction Regulations, 1968, 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 paragraph (b) or with subregulation (7)(b) and with subregulation (11).

(7) Where it is shown to the satisfaction of the Authority that it is impracticable in a ship engaged in a short international voyage or on a voyage which is not an international voyage, to stow satisfactorily the liferafts carried in that ship in pursuance of subregulation (6) without reducing the number of lifeboats, it may permit the number of sets of davits required to be fitted by subregulation (1) and regulation 48 and the number of lifeboats attached to davits required by subregulation (2), to be reduced: Provided that—

- (a) the number of lifeboats shall, in the case of a ship of **[190 feet]**57 meters 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 a ship of less than **[190 feet]**57 meters in length, shall never be less than two, one of which shall be carried on each side of the ship;

- (b) the number of lifeboats and liferafts shall always be sufficient to accommodate the total number of persons which the ship is certified to carry; and
 - (c) where the capacity of the lifeboats together provide less than that specified in column C of the table set out in **[annex]**Annex 1, there shall be provided liferafts of a type capable of being launched by the appliances referred to in regulation 39(2)**[. The]**with a total carrying capacity of **[such liferafts shall be]** at least the number obtained by dividing by 10 the difference between the aggregate cubic capacity of the lifeboats and that specified in the said column C: Provided that such liferafts shall together be sufficient for at least 40 persons and that at least one launching appliance shall be provided on each side of the ship and that the difference in the number of such appliances fitted on each side shall not exceed one.
- (8) The lifeboats carried in compliance with this regulation shall not be less than **[24 feet]**7 meters in length.
- (9) In **[every class]**a Class II ship, 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 2¼ tons in their turning out condition.
- (10) **[Every class]**A Class II ship which does not carry on each side of the ship a motor lifeboat provided with the equipment specified in regulation 34(1), shall carry portable radio equipment which shall comply with the requirements of regulation 43.
- (11) **[Every class]**A Class II ship shall carry, in addition to any liferafts which may be carried in pursuance of subregulation (6) and (7), liferafts sufficient to accommodate 10 per cent of the total number of persons for whom there is accommodation in lifeboats.
- (12) **[Every class]**A Class II ship shall carry buoyant apparatus sufficient to support 5 per cent of the total number of persons which the ship is certified to carry.
- (13) **[Every class]**A Class II ship shall carry at least the number of lifebuoys indicated in the following table:

<i>Length of ship in [feet] meters</i>	<i>Minimum number of lifebuoys</i>
Under [200] 60	8
[200] 60 or over, but under [400] 121	12
[400] 121 or over, but under [600] 182	18
[600] 182 or over, but under [800] 243	24
[800] 243 or over	30

- (14) (a) **[Every class]** A Class II ship shall carry one lifejacket for every person on board the ship.
- (b) In addition to lifejackets carried in compliance with paragraph (a), **[every class]** a Class II ship shall carry lifejackets for at least 5 per cent of the number of persons which the ship is certified to carry.
- (c) **[Such]** The lifejackets referred to in paragraph (a) shall be suitable for persons weighing **[70 lb]** 31 kg. or more, and shall be stowed on deck in a suitable place which shall be conspicuously marked.

(15) **[Every class]** A Class II ship shall carry a line-throwing appliance.”.

Amendment of regulation 7 of the Regulations

8. Regulation 7 of the Regulations is hereby amended by—

(a) the substitution for the heading of regulation 7 of the following heading:

“[Ships of class]Class IIA Ships”; and

(b) the substitution for regulation 7 of the following regulation:

“7. The provisions of regulation 6 shall apply also to a [class]Class IIA ship.”.

Amendment of regulation 8 of the Regulations

9. Regulation 8 of the Regulations is hereby amended by—

(a) the substitution for the heading of regulation 8 of the following heading:

“[Ships of class]Class III Ships”; and

- (b) the substitution for regulation 8 of the following regulation:

“**8.** Not yet allocated.”.

Amendment of regulation 9 of the Regulations

10. Regulation 9 of the Regulations is hereby amended by—

- (a) the substitution for the heading of regulation 9 of the following heading:

“**[Ships of class]Class IV Ships**”; and

- (b) the substitution for regulation 9 of the following regulation:

“**9.** Not yet allocated.”.

Amendment of regulation 10 of the Regulations

11. Regulation 10 of the Regulations is hereby amended by—

- (a) the substitution for the heading of regulation 10 of the following heading:

“**[Ships of class]Class V Ships**”; and

- (b) the substitution for subregulations (1) to (5) of the following subregulations:

“**10.** (1) **[Every class]A Class V** ship shall carry liferafts of sufficient capacity to accommodate all persons on board the ship.

(2) **[Every class]A Class V** ship shall carry at least 8 lifebuoys.

(3) **[Every class]A Class V** ship shall carry 1 lifejacket for every person on board the ship.

(4) **[Every class]A Class V** ship shall carry a line-throwing appliance.

- (5) **[Every class]**A Class V ship of 20 metres or more in length shall be equipped with a rescue boat and a launching device in accordance with the provisions of **[annex]**Annex 24.”.

Amendment of regulation 11 of the Regulations

12. Regulation 11 of the Regulations is hereby amended by—

- (a) the substitution for the heading of regulation 11 of the following heading:

“[Ships of class]**Class VI Ships**”;

- (b) the substitution for subregulations (1) to (8) of the following subregulations:

“11. (1) [Every class]A Class VI ship of **[70 feet]**21 meters or over in length shall carry such boats, liferafts or buoyant apparatus, as shall be sufficient, together with any boats required to be carried in compliance with subregulation (2), for all persons on board the ship.

(2) **[Every class]**A Class VI ship of **[70 feet]**21 meters or over in length but of less than **[150 feet]**45 meters in length shall carry at least one boat and **[every class]**a Class VI ship of **[150 feet]**45 meters or over in length shall carry at least two boats[,].

(3) **[Every]**A boat carried in accordance with this regulation shall be attached to separate davits.

(4) **[Every class]**A Class VI ship of **[70 feet]**21 meters or over in length, but of less than **[150 feet]**45 meters in length, shall carry at least four lifebuoys, and **[every class]**Class VI ship of **[150 feet]**45 meters or over in length shall carry at least 8 lifebuoys.

(5) **[Every class]**A Class VI ship of less than **[70 feet]**21 meters in length and plying not more than 3 miles from its starting point, shall be provided with liferafts or buoyant apparatus, sufficient to support at least 40 per cent of the total number of persons which the ship is certified to carry, together with lifebuoys not less in number than that set forth in the table appearing in subregulation (8), provided that the liferafts or buoyant apparatus, together with the lifebuoys, shall in all cases be sufficient to support at least 70 per cent of the total number of persons which the ship is certified to carry.

- (6) **[Every class]**A Class VI ship of less than **[70 feet]**21 meters in length and plying more than 3 miles from its starting point, shall be provided with liferafts or buoyant apparatus, sufficient to support at least 60 per cent of the total number of persons which the ship is certified to carry together with lifebuoys not less in number than that set forth in the table appearing in subregulation (8), provided that the liferafts or buoyant apparatus together with the lifebuoys, shall in all cases be sufficient to support the total number of persons which the ship is certified to carry.
- (7) **[Every class]**A Class VI ship shall carry one lifejacket for every person on board the ship.
- (8) **[Every class]**A Class VI ship to which subregulations (5) and (6) apply, shall carry at least the number of lifebuoys indicated in the following table:

<i>Length of ship in [feet]<u>meters</u></i>	<i>Minimum number of lifebuoys</i>
Not over [30] <u>9</u>	2
Over [30] <u>9</u> but not over [35] <u>10</u>	4
Over [35] <u>10</u> , but not over [40] <u>12</u>	6
Over [40] <u>12</u> , but not over [50] <u>15</u>	8
Over [50] <u>15</u> , but not over [70] <u>21</u>	10

“; and

- (c) the substitution for subregulations (10) to (11) of the following subregulations:

“(10) **[Every class]**A Class VI ship shall carry a line-throwing appliance.

(11) **[Every class]**A Class VI ship of 20 metres or more in length shall be equipped with a rescue boat and a launching device in accordance with the provisions of **[annex]**Annex 24.”.

Amendment of regulation 12 of the Regulations

13. Regulation 12 of the Regulations is hereby amended by—

- (a) the substitution for the heading of regulation 12 of the following heading:

“[Ships of class]Class VII Ships”;

(b) the substitution for subregulations (1) to (5) of the following subregulations:

“12. (1) **[Every class]**A Class VII 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 the ship.

(2) In **[every class]**a Class VII ship of 1,600 tons or over, the lifeboats shall be not less than **[24 feet]**7 meters in length.

(3) **[Every class]**A Class VII ship of 500 tons or over, other than a tanker of 1,600 tons or over, shall carry one or more liferafts of sufficient aggregate capacity to accommodate at least half the total number of persons on board the ship.

(4) **[Every class]**A Class VII ship of less than 500 tons, shall carry either—
(a) the lifeboats prescribed in subregulation (1) for a ship of 500 tons or over and one or more liferafts of sufficient aggregate capacity to accommodate all persons on board the ship**[. Such] and where such** a ship **[with]**carries 16 persons or more on board, shall carry at least 2 liferafts; or
(b) a lifeboat or a rescue boat which shall be capable of being launched on one side of the ship, and at least 2 liferafts of sufficient aggregate capacity to accommodate twice the total number of persons on board the ship.

(5) **[Every class]**A Class VII ship being a tanker of 3,000 tons or over, shall carry on each side of the ship at least 2 lifeboats of sufficient aggregate capacity to accommodate the total number of persons on board the ship**[. Two]where two** lifeboats shall be carried aft and 2 amidships, except that in a tanker which has no amidships superstructure all lifeboats shall be carried aft: Provided that, if in the case of a tanker with no amidships superstructure, it is impracticable to carry 4 lifeboats aft, the Authority may permit instead the carriage aft of 1 lifeboat on each side of the ship, and in such a case the following provisions shall apply:

(a) **[Each]**each lifeboat shall not exceed **[26 feet]**7 meters in length;

- (b) each lifeboat shall be stowed as far forward as practicable and at least so far forward that the after end of the lifeboat is one and-a-half times the length of the lifeboat forward of the ship's propeller;
 - (c) each lifeboat shall be stowed as near the sea level as is safe and practicable; and
 - (d) there shall be carried in addition liferafts sufficient to accommodate at least one-half of the total number of persons on board the ship.”; and
- (c) the substitution for subregulations (7) to (13) of the following subregulations:
- “(7) In **[every]**a ship to which subregulation (1) or (5) applies, each lifeboat shall be attached to a separate set of davits which shall be of the gravity type except that, in a ship other than a tanker of 1,600 tons or over, luffing type davits may be fitted for operating lifeboats weighing not more than 2¼ tons on their turning out condition.
- (8) (a) In **[every class]**a Class VII ship of 1,600 tons or over other than a tanker, one of the lifeboats carried in compliance with subregulation (1) shall be a motor lifeboat.
- (b) In **[every class]**a Class VII ship being a tanker of 1,600 tons or over, at least one of the lifeboats carried on each side of the ship in compliance with subregulation (1) or (5), shall be a motor lifeboat.
- (9) **[Every class]**A Class VII ship shall carry portable radio equipment which shall comply with the requirements of regulation 43.
- (10) **[Every class]**A Class VII ship of 500 tons or over, shall carry at least 8 lifebuoys.
- (11) **[Every class]**A Class VII ship of less than 500 tons shall carry at least 4 lifebuoys.
- (12) **[Every class]**A Class VII ship shall carry 1 lifejacket for every person on board the ship.
- (13) **[Every class]**A Class VII ship shall carry a line-throwing appliance.”.

Amendment of regulation 13 of the Regulations

14. Regulation 13 of the Regulations is hereby amended by—
- (a) the substitution for the heading of regulation 13 of the following heading:
- “[Ships of class]Class VIIA Ships”**; and
- (b) the substitution for subregulations (1) to (13) of the following subregulations:
- “13. (1) [Every class]A Class VIIA ship of 500 tons or over shall carry—**
- (a) lifeboats on each side of the ship of sufficient aggregate capacity to accommodate one half of the total number of persons on board the ship; or
- (b) lifeboats and liferafts together providing sufficient aggregate capacity to accommodate the total number of persons on board the ship, provided that there shall never be less than sufficient lifeboats on each side of the ship to accommodate 37½ per cent of the total number of persons on board the ship.
- (2) (a) On **[every class]a Class VIIA** ship of 500 tons or over, 2 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.
- (b) **[These]The** lifeboats referred to in paragraph (a) shall not be more than **[28 feet]8 meters** in length and each of them may be a motor lifeboat and may be counted for the purpose of compliance with subregulation (3).
- (c) Notwithstanding the provisions of regulation 38(13) skates or other suitable appliances are not required to be fitted to **[these]the** lifeboats referred to in paragraph (a).
- (3) **[Every class]A Class VIIA** ship of 500 tons or over, shall carry on each side of the ship at least 1 motor lifeboat.
- (4) (a) In **[every class]a Class VIIA** ship of 500 tons or over which is certified to carry 1,500 persons or more, each of the motor lifeboats carried in compliance with subregulation (3) shall be provided with the equipment specified in regulation 34(1), and in **[every class]a Class VIIA** ship of 500 tons or over which is certified to carry more than 199 but less than 1,500 persons at least one of the motor lifeboats carried in compliance with subregulation (3) shall be provided with such equipment.

- (b) **[Every]**A motor lifeboat carried in compliance with subregulation (3), shall be provided with the equipment specified in regulation 34(2).
- (5) **[Every]**A class VIIA ship of 500 tons or over which does not carry on each side of the ship a motor lifeboat provided with the equipment specified in regulation 34(1), shall carry portable radio equipment which shall comply with the requirements of regulation 43.
- (6) In **[every class]**a Class VIIA ship of 1,600 tons or over, the lifeboats shall be not less than **[24 feet]**7 meters in length.
- (7) In **[every class]**a Class VIIA ship of 500 tons or over, each lifeboat shall be attached to a separate set of davits which shall be of the gravity type.
- (8) The liferafts carried in compliance with subregulation (1)(b), shall be served by launching appliances~~[. There]~~ and there shall never be less than one such launching appliance on each side of the ship, and the difference in the number of launching appliances fitted on each side shall not exceed one.
- (9) **[Every class]**A Class VIIA ship of 500 tons or over, 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 the ship: Provided that, if liferafts in addition to those carried in compliance with this subregulation, are carried in compliance with subregulation (1)(b), all liferafts carried shall be of a type capable of being launched by the appliances fitted in compliance with subregulation (8).
- (10) **[Every class]**A Class VIIA ship of 500 tons or over, shall carry at least 8 lifebuoys.
- (11) **[Every class]**A Class VIIA ship of 500 tons or over, shall carry 1 lifejacket for every person on board the ship.
- (12) **[Every class]**A Class VIIA ship of 500 tons or over, shall carry a line-throwing appliance.
- (13) Regulation 17 shall apply to a **[class]**Class VIIA ship of less than 500 tons.”.

Amendment of regulation 14 of the Regulations

15. Regulation 14 of the Regulations is hereby amended by—
- (a) the substitution for the heading of regulation 14 of the following heading:
“**[Ships of class]Class VIII Ships**”; and
- (b) the substitution for regulation 14 of the following regulation:
“**14.** The provisions of regulation 12 shall apply also to a **[class]Class VIII** ship.”.

Amendment of regulation 15 of the Regulations

16. Regulation 15 of the Regulations is hereby amended by—
- (a) the substitution for the heading of regulation 15 of the following heading:
“**[Ships of class]Class IX Ships**”; and
- (b) the substitution for subregulations (1) to (4) of the following subregulations:
- “**15.** (1) **[Every class]A Class IX** ship, other than a dumb lighter, barge or hopper which is towed to sea, shall carry a lifeboat or a rescue boat which shall be capable of being launched on one side of the ship.
- (2) **[Every class]A Class IX** ship, other than a dumb lighter, barge or hopper which is towed to sea, shall carry liferafts of sufficient capacity to accommodate the total number of persons on board the ship, and so stowed that they can readily be transferred to the water on either side of the ship.
- (3) **[Every class]A Class IX** ship shall carry at least 2 lifebuoys.
- (4) **[Every class]A Class IX** ship shall carry 1 lifejacket for **[every]each** person on board the ship.”.

Amendment of regulation 16 of the Regulations

17. Regulation 16 of the Regulations is hereby amended by—
- (a) the substitution for the heading of regulation 16 of the following heading:

“[Ships of class]Class IXA Ships”; and

- (b) the substitution for subregulations (1) to (2) of the following subregulations:

“16. (1) [Every class]A Class IXA ship shall carry at least 2 lifebuoys.

(2) [Every class]A Class IXA ship shall carry 1 lifejacket for every person on board the ship.”.

Amendment of regulation 17 of the Regulations

18. Regulation 17 of the Regulations is hereby amended by—

- (a) the substitution for the heading of regulation 17 of the following heading:

“[Vessels of class]Class X Vessels”;

- (b) the substitution for subregulation (1) of the following subregulation:

17. (1) [Every class]A Class X ship of [150 feet]45 meters or over in length shall carry—”;

- (c) the substitution for subregulation (2) of the following subregulation:

“(2) [Every class]A Class X ship of [75 feet]22 meters or over in length but of less than [150 feet]45 meters in length shall carry—

- (a) the lifeboats required by subregulation (1)(a);**
- (b) a lifeboat which shall be capable of being launched on one side of the ship of sufficient capacity to accommodate all the persons on board the ship, attached to davits, and liferafts on the following scale:**
 - (i) [A]a ship with less than 16 persons on board—at least 1 liferaft;**
and
 - (ii) a ship with 16 or more persons on board—at least 2 liferafts[;].**

of sufficient aggregate capacity to accommodate all persons on board the ship and so stowed that they can readily be transferred to the water on either side of the ship;

- (c) a rescue boat which shall be capable of being launched on one side of the ship attached to a davit or davits, and at least 2 liferafts of**

sufficient aggregate capacity to accommodate not less than one and a half times the number of persons on board the ship, and so stowed that they can readily be transferred to the water on either side of the ship; or

- (d) at least 2 liferafts of sufficient aggregate capacity to accommodate not less than twice the number of persons on board the ship, and so stowed that they can readily be transferred to the water on either side of the ship: Provided that the provisions of paragraphs (c) and (d) shall not apply to a new ship the construction of which is completed after 31 December 1996, but such a ship shall carry—
 - (i) a rescue boat capable of being launched on one side of the ship attached to a davit; and
 - (ii) at least two life-rafts of sufficient aggregate capacity to accommodate not less than twice the number of persons on board the ship, and so stowed that a life-raft on each side of the ship can accommodate the total number of persons on board the ship.”;

- (d) the substitution for subregulation (3) of the following subregulation:

“(3) (a) In **[every class]** a Class X ship which carries lifeboats, the davits shall be of the gravity type except that davits which serve a lifeboat weighing not more than 2¼ tons in the turning out condition may be of the luffing type.

(b) In **[every class]** a Class X ship which carries a **[class]** Class C boat, the davits shall be of the luffing or single-arm type.”;

- (e) the substitution for subregulation (4) of the following subregulation:

“(4) **[Every class]** A Class X ship of **[50 feet]** 15 meters or over in length but of less than **[75 feet]** 22 meters in length, shall carry—”;

- (f) the substitution for subregulation (5) of the following subregulation:

“(5) (a) **[Every class]** A Class X ship being a wholly or partially decked ship of less than **[50 feet]** 15 meters in length, shall carry liferafts, buoyant apparatus, lifebuoys, or dinghies, or any combination of these, sufficient to support all persons on board the ship.

(b) For the purpose of this subregulation, 1 lifebuoy or dinghy shall be deemed fit to support 2 persons.”;

(g) the substitution for subregulation (6) of the following subregulation:

“(6) **[Every class]**A Class X ship, being a whaling boat, shall carry portable radio equipment which shall comply with the requirements of regulation 43.”;

(h) the substitution for subregulation (7) of the following subregulation:

“(7) **[Every class]**A Class X ship, being a wholly or partially decked ship, shall carry at least the number of lifebuoys indicated in the following table:

<i>Length of ship in [feet]<u>meters</u></i>	<i>Minimum number of lifebuoys</i>
Not over [40] <u>12</u>	2
Over [40] <u>12</u> but not over [75] <u>22</u>	3
Over [75] <u>22</u> , but not over [100] <u>30</u>	4
Over [100] <u>30</u>	6

”; and

(i) the substitution for subregulations (9) to (11) of the following subregulations:

“(9) **[Every class]**A Class X vessel shall carry 1 lifejacket for **[every]**each person on board the vessel.

(10) **[Every class]**A Class X ship of **[50 feet]**15 meters or over in length shall carry a line-throwing appliance.

(11) **[Every class]**A Class X ship which, on any voyage, proceeds further south than 40/ S latitude or further north than 40/ N latitude shall carry 1 immersion suit, of an appropriate size, for each person on board the ship.”.

Amendment of regulation 18 of the Regulations

19. Regulation 18 of the Regulations is hereby amended by—

(a) the substitution for the heading of regulation 18 of the following heading:

“[Ships of class]Class XI Ships”;

(b) the substitution for subregulation (1) of the following subregulation:

“18. (1) [Every class]A Class XI ship shall carry either—

(a) at least 2 lifeboats, attached to davits, so arranged that there is at least 1 lifeboat on each side of the ship, the lifeboats on each side of the ship being of sufficient aggregate capacity to accommodate one half of the total number of persons on board the ship, and liferafts on the following scale:

(i) [A]a ship with less than 16 persons on board—at least 1 liferaft;

and

(ii) a ship with 16 or more persons on board—at least 2 liferafts[;].

of sufficient aggregate capacity to accommodate the total number of persons on board the ship; or

(b) a lifeboat or **[class]Class C [bboat]boat** which shall be capable of being launched on one side of the ship, attached to a davit or davits, and at least 2 liferafts of sufficient aggregate capacity to accommodate twice the total number of persons on board the ship.”;

and

(c) the substitution for subregulations (3) to (6) of the following subregulations:

“(3) In [every class]a Class XI ship which carries the equipment required by subregulation (1)(a), the lifeboat davits shall be of the gravity type, except that in such a ship davits which serve lifeboats weighing not more than 2¼ tons in their turning out condition may be of the luffing type. In [every class]a Class XI ship which carries a lifeboat or [class]Class C boat in accordance with subregulation (1)(b), the davits shall be of the luffing or single-arm type.

(4) [Every class]A Class XI ship shall carry at least 4 lifebuoys.

(5) [Every class]A Class XI ship shall carry one lifejacket for every person on board the ship.

(6) [Every class]A Class XI ship of [50 feet]15 meters or over in length shall carry a line-throwing appliance.”.

Amendment of regulation 19 of the Regulations

20. Regulation 19 of the Regulations is hereby amended by—
- (a) the substitution for the heading of regulation 19 of the following heading:
“**[Ships of class]Class XII Ships**”; and
 - (b) the substitution for subregulation (1) of the following subregulation:
“**19. (1) [Every class]A Class XII ship of [75 feet]22 meters or over in length shall carry—**”;
 - (c) the substitution for subregulation (2) of the following subregulation:
“(2) **[Every class]A Class XII ship of less than [75 feet]22 meters in length shall carry—**”; and
 - (d) the substitution for subregulation (4) of the following subregulation:
“(4) **[Every class]A Class XII ship carry 1 lifejacket for every person on board the ship.**”.

Insertion of regulations 19A and 19B of the Regulations

21. The following regulations are inserted in Part I, Chapter I of the Regulations after regulation 19:

“Passenger Ships (Additional Requirements)”

19A. (1) A passenger ship engaged on international voyages which are not short international voyages shall carry:

- (a) partially or totally enclosed lifeboats complying with the requirements of section 4.5 or 4.6 of the Code on each side of such aggregate capacity as will accommodate not less than 50% of the total number of persons on board; and
- (b) in addition, inflatable or rigid liferafts complying with the requirements of section 4.2 or 4.3 of the Code of such aggregate capacity as will accommodate at least 25% of the total number of persons on board.

- (2) The liferafts in subregulation (1)(b) shall be served by at least one launching appliance on each side which may be those provided in compliance with the requirements of subregulation (1)(a) or equivalent approved appliances capable of being used on both sides and stowage of these liferafts need not comply with the requirements of regulation 13.5 of the Safety Convention.
- (3) The Authority may permit the substitution of lifeboats by liferafts of equivalent total capacity: Provided that—
- (a) there shall never be less than sufficient lifeboats on each side of the ship to accommodate 37.5% of the total number of persons on board; and
- (b) the inflatable or rigid liferafts shall comply with the requirements of section 4.2 or 4.3 of the Code and shall be served by launching appliances equally distributed on each side of the ship.
- (4) A passenger ship engaged on short international voyages shall carry:
- (a) partially or totally enclosed lifeboats complying with the requirements of section 4.5 or 4.6 of the Code of such aggregate capacity as will accommodate at least 30% of the total number of persons on board; and
- (b) in addition, inflatable or rigid liferafts complying with the requirements of section 4.2 or 4.3 of the Code of such aggregate capacity as will accommodate at least 25% of the total number of persons on board.
- (5) The lifeboats in subregulation (4)(a) shall, as far as practicable, be equally distributed on each side of the ship.
- (6) In addition to the requirements of subregulation (4), inflatable or rigid liferafts complying with the requirements of section 4.2 or 4.3 of the Code shall be carried of such aggregate capacity that, together with the lifeboat capacity, the survival craft will accommodate the total number of persons on board.
- (7) The liferafts in subregulation (4)(b) shall—
- (a) be served by launching appliances equally distributed on each side of the ship;
- (b) be served by at least one launching appliance on each side which may be those provided in compliance with the requirements of subregulation (3)(b) or equivalent approved appliances capable of

being used on both sides: Provided the stowage of these liferafts need not comply with the requirements of regulation 13.5 of the Safety Convention.

- (8) 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, after all persons have been assembled, with lifejackets donned.
- (9) In lieu of meeting the requirements of subregulations (1) to (8), a passenger ship of less than 500 gross tonnage where the total number of persons on board is less than 200, may comply with the following:
- (a) carry on each side of the ship, inflatable or rigid liferafts complying with the requirements of section 4.2 or 4.3 of the Code and of such aggregate capacity as will accommodate the total number of persons on board;
 - (b) unless the liferafts required by subregulation (10) are stowed in a position providing for easy side-to-side transfer at a single open deck level, additional liferafts shall be provided so that the total capacity available on each side will accommodate 150% of the total number of persons on board;
 - (c) if the rescue boat required by subregulation (11) is also a partially or totally enclosed lifeboat complying with the requirements of section 4.5 or 4.6 of the Code, it may be included in the aggregate capacity required by subregulation (10), provided that the total capacity available on either side of the ship is at least 150% of the total number of persons on board; and
 - (d) 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 those 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.
- (10) A marine evacuation system or systems complying with section 6.2 of the Code may be substituted for the equivalent capacity of liferafts and launching appliances required by subregulations (3)(b) or (7)(a).

- (11) A passenger ship of 500 gross tonnage and over shall carry at least one rescue boat complying with the requirements of section 5.1 of the Code on each side of the ship.
- (12) A passenger ship of less than 500 gross tonnage shall carry at least one rescue boat complying with the requirements of section 5.1 of the Code.
- (13) A lifeboat may be accepted as a rescue boat provided that it and its launching and recovery arrangements also comply with the requirements for a rescue boat.
- (14) The number of lifeboats and rescue boats that are carried on a passenger ship shall be sufficient to ensure that in providing for abandonment by the total number of persons on board not more than six liferafts need be marshalled by each lifeboat or rescue boat.
- (15) The number of lifeboats and rescue boats that are carried on a passenger ship engaged on short international voyages shall be sufficient to ensure that in providing for abandonment by the total number of persons on board not more than nine liferafts need be marshalled by each lifeboat or rescue boat.
- (16) A passenger ship shall carry not less than the number of lifebuoys complying with the requirements of regulation 7.1 of the Safety Convention and section 2.1 of the Code prescribed in the following table:

<u>Length of ship in metres:</u>	<u>Minimum number of lifebuoys:</u>
<u>Under 60</u>	<u>8</u>
<u>60 and under 120</u>	<u>12</u>
<u>120 and under 180</u>	<u>18</u>
<u>180 and under 240</u>	<u>24</u>
<u>240 and over</u>	<u>30</u>

- (17) Notwithstanding regulation 7.1.3 of the Safety Convention, a passenger ship of under 60 m in length shall carry not less than six lifebuoys provided with self-igniting lights.
- (18) In addition to the lifejackets required by regulation 7.2 of the Safety Convention, a passenger ship shall carry lifejackets for not less than 5% of

the total number of persons on board, stowed in conspicuous places on deck or at muster stations.

- (19) Where lifejackets for passengers are stowed in staterooms which are located remotely from direct routes between public spaces and muster stations, the additional lifejackets for these passengers required under regulation 7.2.2 of the Safety Convention, shall be stowed either in the public spaces, the muster stations, or on direct routes between them, so that their distribution and donning does not impede orderly movement to muster stations and survival craft embarkation stations.
- (20) On a passenger ship, each lifejacket shall be fitted with a light complying with the requirements of paragraph 2.2.3 of the Code.
- (21) Lights fitted on lifejackets on board passenger ships prior to 1 July 1998 and not complying fully with paragraph 2.2.3 of the Code may be accepted by the Authority until the lifejacket light would normally be replaced or until the first periodical survey after 1 July 2002, whichever is the earliest.
- (22) A passenger ship shall carry for each lifeboat on the ship at least three immersion suits complying with the requirements of section 2.3 of the Code and, in addition, a thermal protective aid complying with the requirements of section 2.5 of the Code for every person to be accommodated in the lifeboat and not provided with an immersion suit.
- (23) The immersion suits and thermal protective aids in subregulation (22) need not be carried—
(a) for persons to be accommodated in totally or partially enclosed lifeboats; or
(b) if the ship is constantly engaged on voyages in warm climates where, in the opinion of the Administration, they are unnecessary.
- (24) The provisions of subregulation (23)(a) also apply to partially or totally enclosed lifeboats not complying with the requirements of section 4.5 or 4.6 of the Code, provided the lifeboats are carried on a ship constructed before 1 July 1986.
- (25) The requirements of subregulations (20) to (24) apply to all passenger ships irrespective of construction date.

- (26) Survival craft embarkation arrangements shall be designed for:
- (a) all lifeboats to be boarded and launched either directly from the stowed position or from an embarkation deck but not both; and
 - (b) davit-launched liferafts to 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 13.5, the liferaft is transferred prior to launching.
- (27) Rescue boat arrangements shall be such that a 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.
- (28) Notwithstanding the requirements of subregulation (26(a), if a 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.
- (29) The stowage height of a survival craft on a passenger ship shall take into account the requirements of regulation 13.1.2 of the Safety Convention, the escape provisions of regulation II-2/13 of the Safety Convention, the size of the ship, and the weather conditions likely to be encountered in its intended area of operation.
- (30) For a davit-launched survival craft, the height of the davit head with the survival craft in embarkation position, shall, as far as practicable, not exceed 15 m to the waterline when the ship is in its lightest seagoing condition.
- (31) A passenger ship shall, in addition to complying with the requirements of regulation 11 of the Safety Convention, have passenger muster stations which shall—
- (a) be in the vicinity of, and permit ready access for the passengers to, the embarkation stations unless in the same location; and
 - (b) have ample room for marshalling and instruction of the passengers, but at least 0.35 m² per passenger.
- (32) A ro-ro passenger ship constructed—
- (a) on or after 1 July 1998 shall comply with the requirements of subregulations (35), (36) to (39), (42) to (44), (46) to (48) and (49) to (50);

- (b) on or after 1 July 1986 and before 1 July 1998 shall comply with the requirements of subregulations (49) to (50) not later than the first periodical survey after 1 July 1998 and with the requirements of subregulations (35), (36) to (39), (42) to (45) and (46) to (48) not later than the first periodical survey after 1 July 2000;
- (c) before 1 July 1986 shall comply with the requirements of subregulations (49) to (50) not later than the first periodical survey after 1 July 1998 and with the requirements of subregulation (33), (34), (35), (36) to (39), (42) to (45) and (46) to (48) not later than the first periodical survey after 1 July 2000; and
- (d) before 1 July 2004 shall comply with the requirements of subregulations (40) and (41) not later than the first survey on or after that date.
- (33) A ro-ro passenger ship's liferafts shall be served by marine evacuation systems complying with the requirements of section 6.2 of the Code or launching appliances complying with the requirements of paragraph 6.1.5 of the Code, equally distributed on each side of the ship.
- (34) A liferaft on a ro-ro passenger ship shall be provided with float-free stowage arrangements complying with the requirements of regulation 13.4 of the Safety Convention.
- (35) A liferaft on a ro-ro passenger ship shall be of a type fitted with a boarding ramp complying with the requirements of paragraph 4.2.4.1 or 4.3.4.1 of the Code, as appropriate.
- (36) A liferaft on a ro-ro passenger ship shall either be automatically self-righting or be a canopied reversible liferaft which is stable in a seaway and is capable of operating safely whichever way up it is floating.
- (37) Alternatively to the provisions of subregulation (36), the ship shall carry automatically 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% of the persons not accommodated in lifeboats.
- (38) The additional liferaft capacity in subregulation (37) 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.

- (39) A liferaft on a ro-ro passenger ship shall be approved by the Administration having regard to the recommendations adopted under the Safety Convention.
- (40) Liferafts carried on a ro-ro passenger ship shall be fitted with a search and rescue locating device in the ratio of one search and rescue locating device for every four liferafts.
- (41) The search and rescue locating device in subregulation (40) shall—
- (a) be mounted inside the liferaft so its antenna is more than one metre above the sea level when the liferaft is deployed, except that for canopied reversible liferafts the search and rescue locating device shall be so arranged as to be readily accessed and erected by survivors;
 - (b) be arranged to be manually erected when the liferaft is deployed; and
 - (c) where containers of liferafts are fitted with search and rescue locating devices, the said containers shall be clearly marked.
- (42) At least one of the rescue boats on a ro-ro passenger ship shall be a fast rescue boat complying with section 5.1.4 of the Code having regard to the recommendations adopted under the Safety Convention.
- (43) Each fast rescue boat shall be served by a suitable launching appliance complying with section 6.1.7 of the Code.
- (44) At least two crews of each fast rescue boat shall be trained and drilled regularly having regard to the Seafarers Training, Certification and Watchkeeping (STCW) Code and recommendations adopted under the Safety Convention, including all aspects of rescue, handling, manoeuvring, operating these craft in various conditions, and righting them after capsizing.
- (45) In the case where the arrangement or size of a ro-ro passenger ship, constructed before 1 July 1997, is such as to prevent the installation of the fast rescue boat required by subregulation (42), the fast rescue boat may be installed in place of an existing lifeboat which is accepted as a rescue boat or, in the case of ships constructed prior to 1 July 1986, boats for use in an emergency, provided that all of the following conditions are met:
- (a) the fast rescue boat installed is served by a launching appliance complying with the provisions of subregulation (43);

- (b) 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; and
 - (c) such liferafts are served by the existing launching appliances or marine evacuation systems.
- (46) A ro-ro passenger ship shall be equipped with efficient means for rapidly recovering survivors from the water and transferring survivors from rescue units or survival craft to the ship.
- (47) 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.
- (48) If the slide of a marine evacuation system is intended to provide the means of transfer of survivors to the deck of the ship, the slide shall be equipped with handlines or ladders to aid in climbing up the slide.
- (49) Notwithstanding the requirements of regulations 7.2 and 22.2 of the Safety Convention, a sufficient number of lifejackets shall be stowed in the vicinity of the muster stations so that passengers do not have to return to their cabins to collect their lifejackets.
- (50) In a ro-ro passenger ship, each lifejacket shall be fitted with a light complying with the requirements of paragraph 2.2.3 of the Code.
- (51) On a passenger ship—
 - (a) all persons on board all passenger ships shall be counted prior to departure;
 - (b) details of persons who have declared a need for special care or assistance in emergency situations shall be recorded and communicated to the master prior to departure;
 - (c) in addition, not later than 1 January 1999, the names and gender of all persons on board, distinguishing between adults, children and infants shall be recorded for search and rescue purposes; and
 - (d) the information required by paragraphs (a), (b) and (c) shall be kept ashore and made readily available to search and rescue services when needed.

- (52) The Authority may exempt a passenger ship from the requirements of subregulation (51)(c), if the scheduled voyages of such ships render it impracticable for them to prepare such records.
- (53) A ro-ro passenger ship shall be provided with a helicopter pick-up area approved by the Authority having regard to the recommendations adopted under the Safety Convention.
- (54) A ro-ro passenger ship of 130 m in length and upwards, constructed on or after 1 July 1999, shall be fitted with a helicopter landing area approved by the Authority having regard to the recommendations adopted under the Safety Convention.
- (55) A passenger ship constructed before 1 July 1997 shall comply with the requirements of subregulations (56) to (60) not later than the date of the first periodical survey after 1 July 1999.
- (56) In a passenger ship, a decision support system for emergency management shall be provided on the navigation bridge.
- (57) The system in subregulation (56) shall, as a minimum, consist of a printed emergency plans identifying all foreseeable emergency situations including the following main groups of emergencies:
- (a) fire;
 - (b) damage to ship;
 - (c) pollution;
 - (d) unlawful acts threatening the safety of the ship and the security of its passengers and crew;
 - (e) personnel accidents;
 - (f) cargo-related accidents; and
 - (g) emergency assistance to other ships.
- (58) The emergency procedures established in the emergency plans shall provide decision support to masters for handling any combination of emergency situations.
- (59) The emergency plans shall have a uniform structure and be easy to use. Where applicable, the actual loading condition as calculated for the passenger ship's voyage stability shall be used for damage control purposes.

- (60) In addition to the printed emergency plan or plans, the Administration may also accept the use of a computer-based decision support system on the navigation bridge which provides all the information contained in the emergency plans, procedures, or checklists, which is able to present a list of recommended actions to be carried out in foreseeable emergencies.
- (61) On a passenger ship, an abandon ship drill and fire drill shall take place weekly subject to the following:
- (a) the entire crew need not be involved in every drill, but each crew member must participate in an abandon ship drill and a fire drill each month as required in regulation 19.3.2 of the Safety Convention;
 - (b) passengers shall be strongly encouraged to attend these drills; and
 - (c) damage control drills shall be conducted as required in regulation II-1/19-1 of the Safety Convention.

Cargo Ships (Additional Requirements)

19B. (1) A cargo ship shall carry:

- (a) one or more totally enclosed lifeboats complying with the requirements of section 4.6 of the Code of such aggregate capacity on each side of the ship as will accommodate the total number of persons on board; and
 - (b) in addition, one or more inflatable or rigid liferafts, complying with the requirements of section 4.2 or 4.3 of the Code, of a mass of less than 185 kg and stowed in a position providing for easy side-to-side transfer at a single open deck level, and of such aggregate capacity as will accommodate the total number of persons on board.
- (2) If the liferafts in subregulation (1) are not of a mass of less than 185 kg and stowed in a position providing for easy side-to-side transfer at a single open deck level, the total capacity available on each side shall be sufficient to accommodate the total number of persons on board.
- (3) In lieu of meeting the requirements of subregulation (1)(a), a cargo ship may carry:
- (a) one or more free-fall lifeboats, complying with the requirements of section 4.7 of the Code, capable of being free-fall launched over the stern of the ship of such aggregate capacity as will accommodate the total number of persons on board; and
 - (b) in addition, one or more inflatable or rigid liferafts complying with the requirements of section 4.2 or 4.3 of the Code, on each side of the

ship, of such aggregate capacity as will accommodate the total number of persons on board.

(4) The liferafts in subregulation (3)(b) on at least one side of the ship shall be served by launching appliances.

(5) In lieu of meeting the requirements of subregulation (1(a) or (3), a cargo ship of less than 85 m in length other than oil tankers, chemical tankers and gas carriers, may comply with the following:

(a) the cargo ship shall carry on each side of the ship, one or more inflatable or rigid liferafts complying with the requirements of section 4.2 or 4.3 of the Code and of such aggregate capacity as will accommodate the total number of persons on board;

(b) unless the liferafts required by paragraph (a) are of a mass of less than 185 kg and stowed in a position providing for easy side-to-side transfer at a single open deck level, additional liferafts shall be provided so that the total capacity available on each side will accommodate 150% of the total number of persons on board;

(c) if the rescue boat required by subregulations (11) to (14) is also a totally enclosed lifeboat complying with the requirements of section 4.6 of the Code, the rescue boat may be included in the aggregate capacity required by this paragraph (a), provided that the total capacity available on either side of the ship is at least 150% of the total number of persons on board; and

(d) 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 of a mass of less than 185 kg and 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) A cargo ship where the horizontal distance from the extreme end of the stem or stern of the ship to the nearest end of the closest survival craft is more than 100 m shall carry, in addition to the liferafts required by paragraphs 1.1.2 and 1.2.2, a liferaft stowed as far forward or aft, or one as far forward and another as far aft, as is reasonable and practicable.

(6) The liferafts in subregulation (5) may be securely fastened so as to permit manual release and need not be of the type which can be launched from an approved launching device.

- (7) With the exception of the survival craft referred to in regulation 16.1.1 of the Safety Convention, 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 min from the time the abandon ship signal is given.
- (8) Chemical tankers and gas carriers carrying cargoes emitting toxic vapours or gases shall carry, in lieu of totally enclosed lifeboats complying with the requirements of section 4.6 of the Code, lifeboats with a self-contained air support system complying with the requirements of section 4.8 of the Code.
- (9) Oil tankers, chemical tankers and gas carriers carrying cargoes having a flashpoint not exceeding 60 degrees C (closed cup test) shall carry, in lieu of totally enclosed lifeboats complying with the requirements of section 4.6 of the Code, fire-protected lifeboats complying with the requirements of section 4.9 of the Code.
- (10) Notwithstanding the requirements of paragraph 1.1, bulk carriers as defined in regulation IX/1.6 constructed on or after 1 July 2006 shall comply with the requirements of subregulation (1(b)).
- (11) A cargo ship shall carry at least one rescue boat complying with the requirements of section 5.1 of the Code.
- (12) A lifeboat may be accepted as a rescue boat, provided that it and its launching and recovery arrangements also comply with the requirements for a rescue boat.
- (13) In addition to their lifeboats, all cargo ships constructed before 1 July 1986 shall carry:
- (a) one or more liferafts capable of being launched on either side of the ship and of such aggregate capacity as will accommodate the total number of persons on board equipped with a lashing or an equivalent means of securing the liferaft which will automatically release it from a sinking ship; and
 - (b) where the horizontal distance from the extreme end of the stem or stern of the ship to the nearest end of the closest survival craft is more than 100 m, in addition to the liferafts required by paragraph (a), a

liferaft stowed as far forward or aft, or one as far forward and another as far aft, as is reasonable and practicable.

(14) Notwithstanding the requirements of subregulation (13)(a), the liferafts may be securely fastened so as to permit manual release.

(15) A cargo ship shall carry not less than the number of lifebuoys complying with the requirements of regulation 7.1 of the Safety Convention and section 2.1 of the Code prescribed in the following table:

<u>Length of ship in metres:</u>	<u>Minimum number of lifebuoys:</u>
<u>Under 100</u>	<u>8</u>
<u>100 and under 150</u>	<u>10</u>
<u>150 and under 200</u>	<u>12</u>
<u>200 and over</u>	<u>14</u>

(16) Self-igniting lights for lifebuoys on a tanker required by regulation 7.1.3 of the Safety Convention shall be of an electric battery type.

(17) On a cargo ship, each lifejacket shall be fitted with a lifejacket light complying with the requirements of paragraph 2.2.3 of the Code.

(18) Lights fitted on lifejackets on board cargo ships prior to 1 July 1998 and not complying fully with paragraph 2.2.3 of the Code may be accepted by the Authority until the lifejacket light would normally be replaced or until the first periodical survey after 1 July 2001, whichever is the earliest.

(19) A cargo ship constructed before 1 July 2006, shall comply with subregulations (20) to (23) not later than the first safety equipment survey on or after 1 July 2006.

(20) An immersion suit of an appropriate size, complying with the requirements of section 2.3 of the Code shall be provided for every person on board the ship: Provided, for a ship other than a bulk carrier, as defined in regulation IX/1, these immersion suits need not be required if the ship is constantly

engaged on voyages in warm climates where, in the opinion of the Authority, immersion suits are unnecessary.

(21) If a ship has any watch or work stations which are located remotely from the place or places where immersion suits are normally stowed, including remotely located survival craft carried in accordance with regulation 31.1.4 of the Safety Convention, additional immersion suits of an appropriate size shall be provided at these locations for the number of persons normally on watch or working at those locations at any time.

(22) An immersion suit shall be so placed as to be readily accessible and their position shall be plainly indicated.

(23) The immersion suits required by subregulations (15) to (22) may be used to comply with the requirements of regulation 7.3 of the Safety Convention.

(24) Cargo ship 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 13.5 of the Safety Convention.

(25) On a cargo ship of 20,000 gross tonnage and upwards, lifeboats shall be capable of being launched, where necessary utilizing painters, with the ship making headway at speeds up to 5 knots in calm water.”.

Substitution of regulation 20 of the Regulations

22. The following regulation is hereby substituted for regulation 20 of the Regulations:

“CHAPTER II—REQUIREMENTS FOR LIFESAVING APPLIANCES

General requirements of lifeboats

20. [Every]A lifeboat shall comply with the requirements of **[annex]Annex 2.”.**

Amendment of regulation 21 of the Regulations

23. Regulation 21 of the Regulations is hereby amended by—

(a) the substitution for subregulation (1) of the following subregulation:

“**21.(1)(a)** Subject to the provisions of subregulations (2), (3), (4) and (5), the number of persons which a lifeboat shall be deemed fit to accommodate shall be equal to the greatest whole number obtained by the formula $\frac{V}{x}$ where V is the cubic capacity of the lifeboat in **cubic feet** determined in accordance with the provisions of **[annex]Annex 3**; and x is the volume in cubic **[feet]meters** for each person and which shall be **[10]3** for a lifeboat of **[24 feet]7 meters** in length or over and **[16]4** for a lifeboat of **[12 feet]3.6 meters** in length.

(b) For intermediate lengths of lifeboats, the value x shall be determined by interpolation.”; and

(b) the substitution for subregulation (3) to (5) of the following subregulations:

“(3) **[No]A** lifeboat shall not be deemed fit to accommodate more than 150 persons.

(4) **[No]A** lifeboat shall not be deemed fit to accommodate more than 100 persons unless it is a motor lifeboat.

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

Substitution of regulation 22 of the Regulations

24. The following regulation is hereby substituted for regulation 22 of the Regulations:

“Motor lifeboats

22. [Every]A motor lifeboat **[shall]**, in addition to complying with the requirements of **[annex]Annex 2**, **[comply with the following requirements:]shall—**

(a) **[It shall]** be fitted with a compression ignition engine and such engine and its accessories shall comply with the requirements of **[annex]Annex 4**, and shall be kept so as to be at all times ready for use;

(b) **[it shall]** be provided with sufficient fuel for 24 hours continuous operation at the speed specified in paragraph (d) or (e);

- (c) **[it shall]**be capable of going astern;
- (d) if it is a lifeboat provided in accordance with regulation 5(3), 6(4), 12(8)(b) or 13(3), **[it shall]**be capable of going ahead in smooth water when loaded with its full complement of persons and equipment at a speed of 6 knots; and
- (e) if it is a lifeboat other than a lifeboat provided in accordance with the regulations referred to in paragraph (d), **[it shall]**be capable of going ahead under the conditions specified in the said paragraph at a speed of 4 knots.”.

Substitution of regulation 23 of the Regulations

25. The following regulation is hereby substituted for regulation 23 of the Regulations:

“Mechanically propelled lifeboats

- 23. [Every]A** mechanically propelled lifeboat shall, in addition to complying with the requirements of **[annex]Annex 2**, be fitted with machinery which shall comply with the requirements of **[annex]Annex 5**.”.

Substitution of regulation 24 of the Regulations

26. The following regulation is hereby substituted for regulation 24 of the Regulations:

“Class C boats

- 24. [Every class]A Class C** boat shall comply with the requirements of **[annex]Annex 6**.”.

Substitution of regulation 25 of the Regulations

27. The following regulation is hereby substituted for regulation 25 of the Regulations:

“Liferafts

- 25. (1) [Every]A** liferaft shall comply with the requirements of either **[part]Part I** or **[part]Part II** of **[annex]Annex 7**.

- (2) A liferaft which is required to comply with part I of **[annex]Annex 7**, shall be surveyed at a servicing station approved by the Authority or at the works of the manufacturers at intervals of not more than 12 months: Provided that in any case where this is impracticable, such intervals may be extended by the Authority by a period not exceeding three months.”.

Substitution of regulation 26 of the Regulations

28. The following regulation is hereby substituted for regulation 26 of the Regulations:

“Buoyant apparatus

26.(1) Buoyant apparatus shall comply with the requirements of **[annex]Annex 8**.

- (2) The number of persons which buoyant apparatus shall be deemed fit to support shall be equal to—
- (a) the greatest whole number obtained by dividing by 32 the number of **[pounds]kilograms** of iron which the apparatus is capable of supporting from its grab lines in fresh water; or
 - (b) the greatest whole number of **[feet]meters** in the perimeter of the apparatus, whichever number shall be the less.”.

Substitution of regulation 27 of the Regulations

29. The following regulation is hereby substituted for regulation 27 of the Regulations:

“Marking of lifeboats, [class]Class C boats, liferafts and buoyant apparatus

27. (1)(a) The dimensions of a lifeboat or **[class]Class C** boat and the number of persons which each is deemed fit to accommodate shall be clearly marked on it in permanent characters.

(b) The name and port of registry of the ship to which the lifeboat or **[class]Class C** boat belongs shall be painted on each side of the bow.

- (2) **(a)** The number of persons which a liferaft which complies with **[part]Part I** of **[annex]Annex 7** is deemed fit to accommodate, shall be clearly marked in permanent characters on the liferaft and on the valise or other container in which the liferaft is contained when not in use.

(b) **[Every such]** The liferaft referred to in paragraph (a) shall also bear a serial number and the manufacturer's name.

- (3) **[Every]** A liferaft which complies with [part]Part II of [annex]Annex 7, shall be marked with the name of the ship in which it is carried, with the name of the port where the ship is registered or licensed and with the number of persons it is deemed fit to accommodate.
- (4) The number of persons which buoyant apparatus is deemed fit to support, shall be clearly marked on it in permanent characters.”.

Substitution of regulation 28 of the Regulations

30. The following regulation is hereby substituted for regulation 28 of the Regulations:

“Lifebuoys

28. [Every] A lifebuoy shall comply with the requirements of [annex]Annex 9.”.

Substitution of regulation 29 of the Regulations

31. The following regulation is hereby substituted for regulation 29 of the Regulations:

“Lifebuoy and buoyant apparatus lights and lines

29. (1) In [every class]a Class I, II or IIA ship, not less than half the total number of lifebuoys carried and in no case less than six, shall be provided with self-igniting lights.

(2) In **[every class]a Class VII or VIIA ship**, and in **[every class]a Class VIII ship of 500 tons or over**, at least half the number of lifebuoys carried shall be provided with self-igniting lights.

(3) (a) In [every class]a Class V or VI ship except a ship which is engaged in daylight voyages only, in **[every class]a Class VIII ship of less than 500 tons**, and in **[every class]a Class IX, IXA, X or XI ship**, not less than half the total number of lifebuoys carried and in no case less than 2 shall be provided with self-igniting lights.

- (b) A lifebuoy [so] provided in terms of paragraph (a) shall be carried on each side of the ship.
- (4) In **[every class]** a Class XII ship, 1 of the lifebuoys carried shall be provided with a self-igniting light.
- (5) In **[every class]** a Class X ship, each buoyant apparatus shall be provided with a self-igniting light.
- (6) (a) The self-igniting lights required by this regulation, shall be such that they cannot be extinguished in water.
 (b) **[They]** The lights referred to in paragraph (a) shall be capable of burning for not less than 45 minutes and shall have a luminosity of not less than 3.5 lumens.
- (7) The self-igniting lights attached to lifebuoys carried in tankers, shall be of an electric battery type.
- (8) **[Not less than]** A minimum of 2 of the lifebuoys required by subregulations (1) and (2) to be provided with self-igniting lights, **[not less than]** A minimum of 1 of the lifebuoys required by subregulation (3) to be provided with self-igniting lights and the lifebuoy which is required by subregulation (4) to be provided with a self-igniting light, shall be provided with a self-activating smoke signal capable of producing smoke of a highly visible colour for at least 15 minutes.
- (9) (a) One of the lifebuoys required by subregulation (1) and (2) to be provided with self-igniting lights and with self-activating smoke signals by subregulation (8), shall be carried on each side of the navigating bridge and so fitted as to be capable of quick release.
 (b) The lifebuoys [so] carried in terms of paragraph (a) and other lifebuoys in positions where the release of a self-igniting light depends upon the weight of the lifebuoy, shall each weigh not less than **[9½ lb.]** 4.3 kg.
- (10) In **[every]** A ship, 1 lifebuoy on each side of the ship shall be fitted with a buoyant life line at least **[15 fathoms]** 27 meters in length.”.

Substitution of regulation 30 of the Regulations

32. The following regulation is hereby substituted for regulation 30 of the Regulations:

“Lifejackets

30. A lifejacket kept on board a vessel in accordance with these regulations shall—

- [(1)]** (a) in the case of a lifejacket supplied in the Republic or in a country the government of which is not a contracting government to the Safety Convention, comply with the requirements of **[part]Part** 1 of **[annex]Annex** 10 if the lifejacket is intended for a person of a mass of 32 kilograms or more, and with the requirements of **[part]Part** II of that **[annex]Annex** if it is intended for a person of a mass of less than 32 kilograms; and
- [(2)]** (b) in the case of a lifejacket supplied in a country the government of which is such a contracting government, comply with the requirements prescribed by law for lifejackets on vessels registered or licensed in that country.”.

Substitution of regulation 30A of the Regulations

33. The following regulation is hereby substituted for regulation 30A of the Regulations:

“Immersion suits

30A. (1) **[Every]An** immersion suit shall comply with the requirements of **[annex]Annex** 10A.

- (2) **[Every]An** immersion suit shall be serviced at intervals not exceeding 12 months by a competent person in accordance with the manufacturer's instructions. All repairs and replacements shall be carried out by a duly authorised agent of the manufacturer.
- (3) An immersion suit which complies with the requirements of regulation 30 in addition to those of **[annex]Annex** 10A may be treated also as a lifejacket.”.

Substitution of regulation 31 of the Regulations

34. The following regulation is hereby substituted for regulation 30 of the Regulations:

“Line-throwing appliances

31. ~~[Every]~~A line-throwing appliance shall comply with the requirements of ~~[annex 11]~~Annex 11 and the requirements of section 7.1 of the Code.”.

Substitution of regulation 31A of the Regulations

35. The following regulation is hereby substituted for regulation 31A of the Regulations:

“Approved inflated rescue boat

31A. In order to be approved an inflated rescue boat shall be constructed, equipped and tested in accordance with the provisions of ~~[annex]~~Annex 24.”.

Insertion of regulations 31B and 31H of the Regulations

36. The following regulation is inserted in Part I, Chapter II of the Regulations after regulation 31A:

“Evaluation, Production tests, testing and approval of life-saving appliances and arrangements

31B. (1) Except as provided in subregulations (5) and (6), life-saving appliances and arrangements required by chapter III of the Safety Convention shall be approved by the Authority.

(2) Before giving approval to life-saving appliances and arrangements, the Authority shall ensure that such life-saving appliances and arrangements—
(a) are tested, to confirm that they comply with the requirements of chapter III of the Safety Convention and the Code; or
(b) have successfully undergone, to the satisfaction of the Authority, tests which are substantially equivalent to those specified in those recommendations.

(3) Before giving approval to novel life-saving appliances or arrangements, the Authority shall ensure that such—
(a) appliances provide safety standards at least equivalent to the requirements of chapter III of the Safety Convention and the Code and

have been evaluated and tested based on the guidelines developed under the Safety Convention; or

(b) arrangements have successfully undergone an engineering analysis, evaluation and approval in accordance with regulation 38 of the Safety Convention.

(4) Procedures adopted by the Authority for approval shall also include the conditions whereby approval would continue or would be withdrawn.

(5) Before accepting life-saving appliances and arrangements that have not been previously approved by the Authority, the Authority shall be satisfied that life-saving appliances and arrangements comply with the requirements of chapter III of the Safety Convention and the Code.

(6) Life-saving appliances required by chapter III of the Safety Convention for which detailed specifications are not included in the Code shall be to the satisfaction of the Authority.

(7) The Authority shall require life-saving appliances to be subjected to such production tests as are necessary to ensure that the life-saving appliances are manufactured to the same standard as the approved prototype.

Operational readiness, maintenance and inspections

31C. (1) Before a ship leaves port and at all times during the voyage, all life-saving appliances shall be in working order and ready for immediate use.

(2) Maintenance, testing and inspections of life-saving appliances shall be carried out in a manner having due regard to ensuring reliability of such appliances.

(3) Instructions for on-board maintenance of life-saving appliances complying with regulation 36 of the Safety Convention shall be provided and maintenance shall be carried out accordingly.

(4) The Authority may accept, in compliance with the requirements of subregulation (3), a shipboard planned maintenance programme, which includes the requirements of regulation 36 of the Safety Convention.

(5) Falls used in launching shall be inspected periodically with special regard for areas passing through sheaves, and renewed when necessary due to

deterioration of the falls or at intervals of not more than 5 years, whichever is the earlier.

- (6) Spares and repair equipment shall be provided for life-saving appliances and their components which are subject to excessive wear or consumption and need to be replaced regularly.
- (7) The following tests and inspections shall be carried out weekly and a report of the inspection shall be entered in the log-book:

 - (a) all survival craft, rescue boats and launching appliances shall be visually inspected to ensure that they are ready for use and the inspection shall include—

 - (i) the condition of hooks;
 - (ii) their attachment to the lifeboat; and
 - (iii) the on-load release gear being properly and completely reset;
 - (b) all engines in lifeboats and rescue boats shall be run for a total period of not less than 3 minutes, provided the ambient temperature is above the minimum temperature required for starting and running the engine to demonstrate that the gear box and gear box train are engaging satisfactorily: Provided that If the special characteristics of an outboard motor fitted to a rescue boat would not allow it to be run other than with its propeller submerged for a period of 3 minutes, a suitable water supply may be provided and further provided that in special cases, the Authority may waive this requirement for ships constructed before 1 July 1986;
 - (c) lifeboats, except free-fall lifeboats, on cargo ships shall be moved from their stowed position, without any persons on board, to the extent necessary to demonstrate satisfactory operation of launching appliances, if weather and sea conditions so allow; and
 - (d) the general emergency alarm shall be tested.
- (8) All lifeboats, except free-fall lifeboats, shall be turned out from their stowed position, without any persons on board if weather and sea conditions so allow.
- (9) Inspection of the life-saving appliances, including lifeboat equipment, shall be carried out monthly using the checklist required by regulation 36.1 of the Safety Convention to ensure that they are complete and in good order and a report of the inspection shall be entered in the log-book.

- (10) Every inflatable liferaft, inflatable lifejacket, and marine evacuation system shall be serviced—
- (a) at intervals not exceeding 12 months, provided where in any case this is impracticable, the Authority may extend this period to 17 months; and
 - (b) at an approved servicing station which is competent to service them, maintains proper servicing facilities and uses only properly trained personnel.
- (11) In addition to or in conjunction with the servicing intervals of marine evacuation systems required by subregulation (10) paragraph (a), each marine evacuation system should be deployed from the ship on a rotational basis at intervals to be agreed by the Authority provided that each system is to be deployed at least once every six years.
- (12) Where the Authority approves new and novel inflatable liferaft arrangements pursuant to regulation 4 of the Safety Convention, the Authority may allow for extended service intervals on the following conditions:
- (a) the new and novel liferaft arrangement has proved to maintain the same standard, as required by testing procedure, during extended service intervals;
 - (b) the liferaft system shall be checked on board by certified personnel according to subregulation (10) paragraph (a); and
 - (c) service at intervals not exceeding 5 years shall be carried out in accordance with the recommendations of the Safety Convention.
- (13) All repairs and maintenance of inflated rescue boats shall be carried out in accordance with the manufacturer's instructions and emergency repairs may be carried out on board the ship however, permanent repairs shall be effected at an approved servicing station.
- (14) Where the Authority permits extension of liferaft service intervals in accordance with subregulation (10) paragraph (a), the Authority shall notify the Organization of such action in accordance with regulation I/5(b) of the Safety Convention.
- (15) Hydrostatic release units, other than disposable hydrostatic release units, shall be serviced—

- (a) at intervals not exceeding 12 months, provided where in any case this is impracticable, the Authority may extend this period to 17 months; and
 - (b) at a servicing station which is competent to service them, maintains proper servicing facilities and uses only properly trained personnel.

- (16) Containers, brackets, racks, and other similar stowage locations for life-saving equipment shall be marked with symbols in accordance with the recommendations under the Safety Convention, indicating the devices stowed in that location for that purpose and, if more than one device is stowed in that location, the number of devices shall also be indicated.

- (17) Launching appliances shall be—
 - (a) subject to a thorough examination at the annual surveys required by regulations I/7 or I/8 of the Safety Convention, as applicable; and
 - (b) upon completion of the examination referred to in paragraph (a), subjected to a dynamic test of the winch brake at maximum lowering speed and the load to be applied shall be the mass of the survival craft or rescue boat without persons on board, except that, at intervals of at least once every five years, the test shall be carried out with a proof load equal to 1.1 times the weight of the survival craft or rescue boat and its full complement of persons and equipment.

- (18) Lifeboat and rescue boat release gear, including fast rescue boat release gear and free-fall lifeboat release systems, shall be—
 - (a) subject to a thorough examination and operational test during the annual surveys required by regulations I/7 and I/8 of the Safety Convention;
 - (b) in case of on-load release gear, operationally tested under a load of 1.1 times the total mass of the boat when loaded with its full complement of persons and equipment whenever the release gear is overhauled which overhauling and operational test shall be carried out at least once every five years; and
 - (c) notwithstanding paragraph (b), the operational testing of free-fall lifeboat release systems shall be performed either by free fall launch with only the operating crew on board or by a test without launching the lifeboat carried out based on requirements for maintenance, thorough examination, operational testing, overhaul and repair.

- (19) Davit-launched liferaft automatic release hooks shall be—

- (a) subject to a thorough examination and operational test during the annual surveys required by regulations I/7 and I/8 of the Safety Convention; and
- (b) operationally tested under a load of 1.1 times the total mass of the liferaft when loaded with its full complement of persons and equipment whenever the automatic release hook is overhauled and the overhauling and operational test shall be carried out at least once every five years.

(20) Lifeboats and rescue boats, including fast rescue boats, shall be subject to a thorough examination and operational test during the annual surveys required by regulations I/7 and I/8 of the Safety Convention.

(21) The thorough examination, operational testing and overhaul required by paragraphs 11.1 to 11.4 and the maintenance and repair of equipment specified in paragraphs 11.1 to 11.4 shall be carried out in accordance with the Requirements for maintenance, thorough examination, operational testing, overhaul and repair, and the instructions for onboard maintenance as required by regulation 36.

Compliance with LSA Code

31D. All life-saving appliances and arrangements shall comply with the applicable requirements of the Code.

Training manual and on-board training aids

31E. (1) A training manual complying with the requirements of subregulation (2) shall be provided in each crew mess room and recreation room or in each crew cabin.

(2) The training manual in subregulation (1), which may comprise several volumes, shall contain instructions and information, in easily understood terms illustrated wherever possible, on the life-saving appliances provided in the ship and on the best methods of survival and any part of such information may be provided in the form of audio-visual aids in lieu of the manual and further the following shall be explained in detail:

- (a) donning of lifejackets, immersion suits and anti-exposure suits, as appropriate;
- (b) muster at the assigned stations;

- (c) boarding, launching, and clearing the survival craft and rescue boats, including, where applicable, use of marine evacuation systems;
- (d) method of launching from within the survival craft;
- (e) release from launching appliances;
- (f) methods and use of devices for protection in launching areas, where appropriate;
- (g) illumination in launching areas;
- (h) use of all survival equipment;
- (i) use of all detection equipment;
- (j) with the assistance of illustrations, the use of radio life-saving appliances;
- (k) use of drogues;
- (l) use of engine and accessories;
- (m) recovery of survival craft and rescue boats including stowage and securing;
- (n) hazards of exposure and the need for warm clothing;
- (o) best use of the survival craft facilities in order to survive;
- (p) methods of retrieval, including the use of helicopter rescue gear including slings, baskets and stretchers, breeches-buoy and shore life-saving apparatus and ship's line-throwing apparatus;
- (q) all other functions contained in the muster list and emergency instructions; and
- (r) instructions for emergency repair of the life-saving appliances.

(3) A ship fitted with a marine evacuation system shall be provided with on-board training aids in the use of the system.

(4) The training manual in subregulation (1) shall be written in the working language of the ship.

Instructions for on-board maintenance

31F. (1) Instructions for on-board maintenance of life-saving appliances shall be easily understood, illustrated wherever possible, and, as appropriate, shall include the following for each appliance:

- (a) a checklist for use when carrying out the inspections required by regulation 20.7 of the Safety Convention;
- (b) maintenance and repair instructions;
- (c) schedule of periodic maintenance;
- (d) diagram of lubrication points with the recommended lubricants;

- (e) list of replaceable parts;
- (f) list of sources of spare parts; and
- (g) log for records of inspections and maintenance.

Muster list and emergency instructions

31G. (1) A muster list shall —

- (a) specify details of the general emergency alarm and public address system prescribed by section 7.2 of the Code and also action to be taken by crew and passengers when this alarm is sounded; and
 - (b) specify how the order to abandon ship will be given.
- (2) A passenger ship shall have procedures in place for locating and rescuing passengers trapped in their staterooms.
- (3) A muster list shall show the duties assigned to the different members of the crew including:
- (a) closing of the watertight doors, fire doors, valves, scuppers, sidescuttles, skylights, portholes and other similar openings in the ship;
 - (b) equipping of the survival craft and other life-saving appliances;
 - (c) preparation and launching of survival craft;
 - (d) general preparations of other life-saving appliances;
 - (e) muster of passengers;
 - (f) use of communication equipment;
 - (g) manning of fire parties assigned to deal with fires;
 - (h) special duties assigned in respect to the use of fire-fighting equipment and installations; and
 - (i) for passenger ships only, damage control for flooding emergencies.
- (4) A muster list shall specify which officers are assigned to ensure that life-saving and fire appliances are maintained in good condition and are ready for immediate use.
- (5) A muster list shall specify substitutes for key persons who may become disabled, taking into account that different emergencies may call for different actions.
- (6) A muster list shall show the duties assigned to members of the crew in relation to passengers in case of emergency which duties shall include:
- (a) warning the passengers;

- (b) ensuring that they are suitably clad and have donned their lifejackets correctly;
 - (c) assembling passengers at muster stations;
 - (d) keeping order in the passageways and on the stairways and generally controlling the movements of the passengers; and
 - (e) ensuring that a supply of blankets is taken to the survival craft.
- (7) A muster list shall be prepared before the ship proceeds to sea and thereafter, if any change takes place in the crew which necessitates an alteration in the muster list, the master shall either revise the list or prepare a new list.
- (8) The format of a muster list used on passenger ships shall be approved by the Authority.

Alternative design and arrangements

- 31H.** (1) Life-saving appliances and arrangements may deviate from the requirements set out in in this Chapter, provided that the alternative design and arrangements meet the intent of the requirements concerned and provide an equivalent level of safety to this chapter.
- (2) When alternative design or arrangements deviate from the prescriptive requirements of this Chapter, an engineering analysis, evaluation and approval of the design and arrangements shall be carried out in accordance with this regulation.
- (3) The engineering analysis in subregulation (2) shall be prepared and submitted to the Authority, based on the guidelines developed under the Safety Convention and shall include, as a minimum, the following elements:
- (a) determination of the ship type and the life-saving appliance and arrangements concerned;
 - (b) identification of the prescriptive requirements with which the life-saving appliance and arrangements will not comply;
 - (c) identification of the reason the proposed design will not meet the prescriptive requirements supported by compliance with other recognized engineering or industry standards;
 - (d) determination of the performance criteria for the ship and the life-saving appliance and arrangements concerned addressed by the following relevant prescriptive requirements:

- (i) performance criteria shall provide a level of safety not inferior to the relevant prescriptive requirements contained in this Chapter;
and
 - (ii) performance criteria shall be quantifiable and measurable;
 - (e) detailed description of the alternative design and arrangements, including a list of the assumptions used in the design and any proposed operational restrictions or conditions;
 - (f) technical justification demonstrating that the alternative design and arrangements meet the safety performance criteria;
 - (g) risk assessment based on identification of the potential faults and hazards associated with the proposal; and
 - (h) evaluation of the alternative design and arrangements.
- (4) The engineering analysis required in subregulation (2) shall be evaluated and approved by the Authority, taking into account the guidelines developed under the Safety Convention.
- (5) A copy of the documentation, as approved by the Authority, indicating that the alternative design and arrangements comply with this regulation, shall be carried on board the ship.
- (6) The Authority shall communicate to the Organization pertinent information concerning alternative design and arrangements approved by them for circulation to all Contracting Governments.
- (7) If the assumptions and operational restrictions that were stipulated in the alternative design and arrangements are changed, the engineering analysis shall be carried out under the changed condition and shall be approved by the Authority.”.

Substitution of regulation 32 of the Regulations

37. The following regulation is hereby substituted for regulation 32 of the Regulations:

“CHAPTER III—PROVISION OF EQUIPMENT AND RATIONS IN LIFEBOATS, CLASS C BOATS, BOATS AND LIFERAFTS

Equipment for lifeboats, [class]Class C boats and boats

32. (1) Subject to the provisions of subregulations (2), (3) and (4), the equipment of **[every]**a lifeboat carried in a ship shall be as follows:
- (a) **[A]**a single banked complement of buoyant oars, 2 spare buoyant oars, and a buoyant steering oar; 1 set and a half of crutches, attached to the lifeboat by lanyard or chain; a boat hook;
 - (b) two plugs for each **[plughole (except)]**plughole, except where proper automatic valves are **[fitted)]**fitted, attached to the lifeboat by lanyards or chains; a bailer and 2 buckets;
 - (c) a rudder attached to the lifeboat, and a tiller;
 - (d) a lifeline becketed round the outside of the lifeboat; means to enable persons to cling to the lifeboat if upturned, in the form of bilge keels or keel rails, together with grab lines secured to the gunwale under the keel;
 - (e) a locker conspicuously marked as such, suitable for the stowage of small items of equipment;
 - (f) two hatchets, 1 at each end of the lifeboat;
 - (g) a lamp, with oil sufficient for 12 hours;
 - (h) a watertight box containing 2 boxes of matches not readily extinguished by wind;
 - (i) a mast, or masts with galvanised wire stays together with orange coloured sails which shall be marked for identification purposes with the first and last letter of the name of the ship to which the lifeboat belongs;
 - (j) a compass in a binnacle complying with the requirements of **[part]**Part I of **[annex]**Annex 12;
 - (k) a sea anchor complying with the requirements of **[part]**Part II of **[annex]**Annex 12;
 - (l) two painters of sufficient length and size **[. One]** one of which shall be secured to the forward end of the lifeboat with strop and toggle so that it can be released, and other shall be firmly secured to the stem of the lifeboat and be ready for use;
 - (m) a vessel containing **[1 gallon]**3.7 litres of vegetable, fish or animal oil **[. A means]**which shall be provided with means to enable the oil to be easily distributed on the water, and shall be so arranged that it can be attached to the sea anchor;
 - (n) four parachute distress rocket signals complying with the requirements of **[part]**Part III of **[annex]**Annex 12, and 6 hand-held distress flare signals complying with the requirements of **[part]**Part IV of that **[annex]**Annex;

- (o) two buoyant smoke signals complying with the requirements of **[part]Part V** of **[annex]Annex 12**;
 - (p) . . .
 - (q) a waterproof electric torch suitable for morse signalling, together with 1 spare set of batteries and one spare bulb, in a waterproof container;
 - (r) a daylight-signalling mirror;
 - (s) a jack-knife fitted with a tin opener, to be kept attached to the lifeboat with a lanyard;
 - (t) two light buoyant heaving lines;
 - (u) a manual pump complying with the requirements of **[part]Part VII** of **[annex]Annex 12**;
 - (v) a whistle;
 - (w) a fishing line and 6 hooks;
 - (x) a cover of highly visible colour capable of protecting the occupants against injury by exposure;
 - (y) a copy of an illustrated table of life-saving signals referred to in **[annex]Annex 13**; and
 - (z) means to enable persons in the water to climb into the lifeboat.
- (2) **[No]**A motor lifeboat or mechanically propelled lifeboat shall not be required to carry a mast or sails **[not more]**less than half the complement of oars**[. Every such lifeboat]**and shall carry 2 boat hooks.
- (3) (a) **[Every]**A motor lifeboat shall carry at least 2 portable fire extinguishers capable of discharging foam or other substance suitable for quenching oil fires, a receptacle containing a sufficient quantity of sand and a scoop for distributing the sand.
- (b) **[Such]**The portable fire extinguishers referred to in paragraph (a) shall be of a type complying with regulation 108, except that the capacity of each extinguisher shall not be required to exceed **[1 gallon]**3.7 litres of fluid or its equivalent.
- (4) The equipment of **[every]**a lifeboat or **[class]Class C** boat carried in a **[class]Class VII** ship in compliance with regulation 12(4)(b), in a **[class]Class VIIA** ship in compliance with regulation 13(13) read with regulation 17(1)(c) or (2)(c), in a **[class]Class VIII** ship in compliance with regulation 12(4)(b) read with regulation 14, in a **[class]Class IX** ship in compliance with regulation 15(1), in a **[class]Class X** ship in compliance with regulation 17(1)(c) or (2)(c) and in a **[class]Class XI** ship in compliance with regulation 18(1)(b), shall be as follows:

- (a) **[A]**a single banked complement of buoyant oars and a steering oar; 1 set of crutches attached to the lifeboat or **[class]Class** C boat by lanyard or chain; a boat hook;
 - (b) two plugs for each plug hole, attached to the lifeboat or **[class]Class** C boat by lanyard or chain;
 - (c) a rudder attached to the lifeboat or **[class]Class** C boat, and a tiller;
 - (d) a lifeline becketed round the outside of the lifeboat or **[class]Class** C boat;
 - (e) a painter of sufficient length and size;
 - (f) a bailer;
 - (g) a hatchet;
 - (h) a locker suitably marked, suitable for holding small items;
 - (i) means to enable persons to cling to the lifeboat or **[class]Class** C boat if upturned, in the form of bilgekeels or keel rails;
 - (j) a waterproof electric torch suitable for morse signalling together with one spare set of batteries and a spare bulb, in a waterproof container;
 - (k) two light buoyant heaving lines; and
 - (l) six hand-held distress flare signals complying with the requirements of **[part]Part** IV of **[annex]Annex** 12.
- (5) The equipment of **[every]**a boat carried in a **[class]Class** VI ship in compliance with regulation 11, in a **[class]Class** VIIA ship in compliance with regulation 13(13) read with regulation 17(4)(b) and in a **[class]Class** X ship in compliance with regulation 17(4)(b), shall be as follows:
- (a) At least 3 buoyant oars and crutches;
 - (b) a painter of sufficient length and size;
 - (c) a rudder and tiller, or a steering oar;
 - (d) a bailer;
 - (e) a hatchet;
 - (f) six hand-held distress flare signals complying with the requirements of **[part]Part** IV of **[annex]Annex** 12; and
 - (g) a waterproof electric torch together with one spare set of batteries and one spare bulb.”.

Amendment of regulation 33 of the Regulations

38. Regulation 33 of the Regulations is hereby amended by—

- (a) the substitution for the heading of regulation 33 of the following heading:

“Rations of lifeboats and [class]Class C boats”;

(b) the substitution for subregulation (1) of the following subregulation:

33. (1) (a) Subject to the provisions of subregulation (2), **[every]**a lifeboat or **[class]Class C** boat carried in a ship, except in a **[class]Class IX** ship, shall be provided with at least the rations specified in the following scale for each person whom it is fit to accommodate:

- (i) Six pints (or 3 litres) of fresh water, or 4 pints (2 litres) of fresh water together with a desalting apparatus capable of providing at least 2 pints (or 1 litre) of drinking water, in either case the quantity shall be increased as far as is practicable;
- (ii) Sixteen ounces (or 500 grams) of biscuits;
- (iii) Sixteen ounces (or 500 grams) of barley sugar; and
- (iv) Sixteen ounces (or 500 grams) of sweetened condensed milk of first quality:

Provided that emergency rations which are produced specifically for use in lifeboats, may be substituted for the foodstuffs mentioned in subparagraphs (ii), (iii) and (iv).

- (b) (i) The water shall be kept in the lifeboat or **[class]Class C** boat in suitable containers, and there shall be provided at least 1 dipper which shall be attached to the container by a lanyard, and 3 rust-proof drinking vessels (one graduated in ½, 1 and 2 ounces): Provided that a container of not more than 4 pints (or 2 litre) capacity, shall not be required to be provided with a dipper.
- (ii) The water shall be frequently changed so as to ensure that it is always clean and fit for drinking.
- (iii) Containers shall be marked to indicate their capacity.
- (c) All the foods prescribed shall be packed in suitable watertight containers, labelled to indicate the contents.”; and

(c) the substitution for subregulation (2) of the following subregulation:

“(2) A **[class]Class C** boat or a lifeboat carried as alternative to a **[class]Class C** boat, shall be provided with at least **[2 gallons]7 litres** of fresh water in a suitable container together with a dipper and drinking vessel.”.

Substitution of regulation 34 of the Regulations

39. The following regulation is hereby substituted for regulation 34 of the Regulations:

“Special equipment for certain motor lifeboats

34. (1) In **[every class]**a Class I or VIIA ship, **[the]**a motor [lifeboats]lifeboat which **[are]**is required to comply with regulation 5(4)(a) or 13(4)(a), shall be provided with the following equipment:

(a) **[Radio]**radio equipment which shall comply with the requirements of the Merchant Shipping Radio Regulations, 1968, and in addition the following provisions shall apply thereto:

(i) **[It]**the radio equipment shall be installed in a cabin large enough to accommodate both the apparatus and the person using [it]the equipment;

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

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

(b) a dynamo fitted to the engine of the motor lifeboat and capable of recharging all batteries in the lifeboat.

(2) In **[every class]**a Class I, II or VIIA ship, **[the]**a motor [lifeboats]lifeboat which **[are]**is required to comply with regulation 5(4)(b), 6(4) or 13(4)(b), shall be provided with a searchlight which shall include a lamp of at least 80 watts, capable of working for at least 3 hours continuously, an efficient reflector and a source of power which will give effective illumination of a light-coloured object having a width of about **[6 feet]**2 meters at a distance of **[200 yards]**2 kilometres for a total period of 6 hours. **[The searchlight shall be capable of working for at least 3 hours continuously.]”**.

Amendment of regulation 35 of the Regulations

40. Regulation 35 of the Regulations is hereby amended by—

(a) the substitution for the heading of regulation 35 of the following heading:

“Security of equipment and rations in lifeboats, [class]Class C boats and boats”;

(b) the substitution for subregulations (1) to (3) of the following subregulations:

- “35. (1) (a) **[All items]** Items of equipment provided in a lifeboat, **[class]** Class C boat or boat, with the exception of the boat hook which shall be kept free for fending of purposes, shall be suitably secured within the lifeboat, **[class]** Class C boat or boat.
- (b) Any lashing shall be carried out in such a manner as to ensure the security of the equipment and so as not to interfere with the lifting hooks, if fitted, or to prevent ready embarkation.
- (c) **[All items]** Items of **[such]** the equipment referred to in paragraph (a) shall be as small and as light in weight as possible and shall be packed in suitable and compact form.
- (2) **[All the rations]** Rations provided in a lifeboat or **[class]** Class C boat shall be stowed in watertight tanks which shall be firmly secured to the lifeboat or **[class]** Class C boat.
- (3) **[The tanks]** A tank for **[the]** food **[and]** or water ration shall be conspicuously marked “food” or “water” whichever is appropriate.”.

Substitution of regulation 36 of the Regulations

41. The following regulation is hereby substituted for regulation 36 of the Regulations:

“Equipment and rations for liferafts

36. (1) Subject to the provisions of subregulation (2), the equipment and rations provided in **[every]** a liferaft carried in a ship shall be as follows:
- (a) one buoyant rescue quoit, attached to at least **[100 feet]** 30 meters of buoyant line;
- (b) for liferafts which are fit to accommodate not more than 12 persons: 1 safety knife and 1 bailer; for liferafts which are fit to accommodate 13 persons or more: 2 safety knives and 2 bailers;
- (c) two sponges;
- (d) two sea anchors, one permanently attached to the liferaft and 1 spare with line;
- (e) two paddles;
- (f) one repair outfit capable of repairing punctures in buoyancy compartments, unless the liferaft complies with the requirements of **[part]** Part II of **[annex]** Annex 7;

- (g) one topping-up pump or bellows, unless the liferaft complies with **[part]Part II of [annex]Annex 7**;
- (h) three safety tin openers;
- (i) . . .
- (j) one rust-proof drinking vessel, graduated in ½, 1 and 2 **[ounces]grams**;
- (k) one waterproof electric torch suitable for morse signalling together with 1 spare set of batteries and 1 spare bulb in a waterproof container;
- (l) one daylight signalling mirror and 1 signalling whistle;
- (m) two parachute distress rocket signals complying with the requirements of **[part]Part III of [annex]Annex 12**;
- (n) six hand-held distress flare signals complying with the requirements of **[part]Part IV of [annex]Annex 12**;
- (o) one fishing line and six hooks;
- (p) **[12 ounces]340 grams** of suitable non-thirst-provoking food providing at least 2,200 calories per **[pound]kilogram** weight and **[6 ounces]170 grams** of barley sugar or other equally suitable sweets for each person the liferaft is deemed fit to accommodate;
- (q) watertight receptacles containing 3 pints (or 1½ litres) of fresh water for each person the liferaft is deemed fit to accommodate, of which 1 pint (or ½ litre) per person may be replaced by a suitable de-salting apparatus capable of producing an equal amount of fresh water;
- (r) six anti-seasickness tablets for each person whom the liferaft is deemed fit to accommodate;
- (s) instructions printed in both official languages of the Republic on how to survive in the liferaft; and
- (t) a copy of an illustrated table of life-saving signals referred to in **[annex]Annex 13**.

- (2) Liferafts carried on a **[class]Class V, VI or IX** ship shall not be required to be provided with the equipment specified in subregulation (1)(h), (i), (j), (k),(m), (n), (o), (p), (q), (r) and (t).”.

Substitution of regulation 37 of the Regulations

42. The following regulation is hereby substituted for regulation 37 of the Regulations:

“CHAPTER IV—STOWAGE AND HANDLING OF LIFE-SAVING APPLIANCES

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

37. (1) The arrangement of each lifeboat, **[class]Class** C boat or boat, liferaft and article of buoyant apparatus, shall be such that it will not interfere with the operation of other lifesaving appliances or impede in any way their prompt handling or the marshalling of persons at the launching stations or their embarkation.
- (2) Lifeboats, **[class]Class** C boats or boats, liferafts 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) a **[class]Class** I, II or IIA ship; and
 - (b) a **[class]Class** VIIA ship which carries liferafts under launching appliances.”.

Amendment of regulation 38 of the Regulations

43. Regulation 38 of the Regulations is hereby amended by—

- (a) the substitution for the heading of regulation 38 of the following heading:

“Stowage and handling of lifeboats, **[class]Class C boats and boats”;**

- (b) the substitution for subregulations (1) to (5) of the following subregulations:

“38. (1) Subject to the provisions of subregulations (2), (3) and (4), **[every]a** lifeboat attached to a set of davits, other than a lifeboat which is carried as an alternative to a **[class]Class** C boat or 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 this **[part]Part**.

- (2) Any lifeboat which is carried as an alternative to a **[class]Class** C boat or boat, and any **[class]Class** C boat or 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 this **[part]Part**

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]**A lifeboat, **[class]**Class C boat or boat attached to a mechanically controlled single-arm davit, shall be so arranged that when loaded with its equipment required by this **[part]**Part 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]**A lifeboat or **[class]**Class C boat carried in compliance with regulation 12(4)(b) or 15(1), 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 lifeboat or **[class]**Class C boat and which shall be capable of putting the lifeboat or **[class]**Class C boat into the water on one side of the ship when it is loaded with its equipment required by this **[part]**Part and a launching crew of two persons and when the ship is upright or is listed up to 15 degrees towards that side.
- (5) **[Not more than]**A maximum of one lifeboat, **[class]**Class C boat or boat shall be attached to any set of davits, davit or other means of launching.”;

(c) the substitution for subregulations (9) to (11) of the following subregulations:

“(9) Davits, winches, falls, blocks and all other launching gear provided in accordance with this **[part]**Part, shall comply with the requirements of **[annex]**Annex 14.

- (10) (a) All lifeboats, **[class]**Class C boats or boats attached to davits shall be served by wire rope falls and winches **[in the following cases:]**when—
 - (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 **[class]**Class I or II ship, or in any **[class]**Class VIIA ship in compliance with regulation 13(1);
 - (iv) **[when they are]**fitted in any **[class]**Class VII, VIII or IX ship in compliance with regulation 12(1), 12(4)(a) or 15(1); or
 - (v) **[when]**the weight of the attached lifeboat, **[class]**Class C boat or boat in the lowering condition exceeds 2 ¼ tons:

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

- (b) In **[every]**a ship to which this **[part]**Part applies in which lifeboats, **[class]**Class C boats or boats are served by wire rope falls, winches shall be provided for handling such falls.
- (c) Emergency lifeboats carried in compliance with regulation 5(2), 6(3) or 13(2), shall be served by winches which are capable of recovering them at a speed of not less than **[60 feet]**18 meters per minute when the lifeboat is loaded with its equipment required by this **[part]**Part and a distributed load equal to **[2,240 lb.]**1016 kg.

(11) Efficient hand gear shall be provided for the recovery of all lifeboats, **[class]**Class C boats or boats which are served by winches.”;

(d) the substitution for subregulation (13) of the following subregulation:

“(13) 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 this **[part]**Part.”; and

(e) the substitution for subregulations (15) to (18) of the following subregulations:

“(15) (a) In a ship, other than a ship in which the lifeboat **[class]**Class C boat or 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.

(b) There shall be at least 2 lifelines fitted to the span, and the lifelines shall be long enough to reach the water with the ship at her lightest sea-going draught and listed to 15 degrees either way.

(16) (a) Lifeboats, **[class]**Class C boats and 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]**Class C boats or boats from the falls.

- (c) Lower fall blocks shall be fitted with a suitable ring or long link for attaching to the sling hooks, unless disengaging gear complying with the requirements of **[annex]Annex 15** is fitted.
- (d) The points of attachment of the lifeboats, **[class]Class C** boats and boats to the falls shall be at such height above the gunwale as to ensure stability when lowering the lifeboats, **[class]Class C** boats or boats.
- (17) (a) **[Every]An** emergency lifeboat carried in compliance with regulation 5(2), 6(3) or 13(2), 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.
- (b) For **[this]the** purpose of paragraph (a), a pendant of adequate strength and suitable length shall be provided for each davit, and the one end of the pendant shall be attached to the lower fall block and the other end to the lifting arrangement on the boat.
- (c) Means shall in addition be provided for hanging of the boat after hoisting to enable the lower fall block to be attached directly to the lifting hook.
- (18) In **[any]a** ship to which this **[part]Part** applies, when a lifeboat is attached to any set of davits, davit, or other means of launching not of sufficient strength that the lifeboat can be safely lowered into the water when loaded with its full complement of persons and equipment required by this **[part]Part** under the conditions of trim and of list specified in this **[part]Part** for the class of ship, or when any **[class]Class C** boat or boat not of sufficient strength that it can be safely lowered into the water when loaded with its full complement of persons and equipment required by this **[part]Part** is attached to any set of davits, davit, or other means of launching, each davit or other means of launching shall be conspicuously marked with a red band **[6 inches]15 centimetres** wide painted on a white background.”.

Substitution of regulation 39 of the Regulations

44. The following regulation is hereby substituted for regulation 39 of the Regulations:

“CHAPTER V—MISCELLANEOUS PROVISIONS

Stowage and handling of liferafts, buoyant apparatus, [lifebuoys, lifejackets and immersion suits]lifebuoys, lifejackets, immersion suits, anti-exposure suits, rescue boats and marine evacuation systems

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

- (2) (a) In **[every class]**a Class I, II, IIA or VIIA ship which carries liferafts in accordance with regulation 5(1)(b), 6(7)(c) or 13(1)(b), there shall be provided for such liferafts launching appliances complying with the requirements of **[annex]**Annex 16.
- (b) **[Every]**A 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) **[Liferafts]**A liferaft for which launching appliances are provided and such launching appliances, shall not be placed in the bows of the ship, and shall be so placed as to ensure safe launching having particular regard to clearance from the propeller and steeply overhanging portions of the hull aft, and to ensure so far as is practicable that they can be launched down the straight side of the ship.
- (d) Means shall be provided for bringing **[liferafts]**a liferaft, for which launching appliances are provided, against the ship's side and for holding **[them]**the liferaft there for the safe embarkation of persons.

[(3) Lifebuoys shall be so stowed as to be readily accessible to all persons on board the ship, and in such a way that they can be rapidly cast loose.

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

(3) Lifebuoys complying with the requirements of paragraph 2.1.1 of the Code shall be—

- (a) 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 shall be placed in the vicinity of the stern; and

- (b) so stowed as to be readily accessible to all persons on board the ship, capable of being rapidly cast loose, and not permanently secured in any way.
- (4) At least one lifebuoy on each side of the ship shall be fitted with a buoyant lifeline complying with the requirements of paragraph 2.1.4 of the Code equal in length to not less than twice the height at which it is stowed above the waterline in the lightest seagoing condition, or 30 m, whichever is the greater.
- (5) Not less than one half of the total number of lifebuoys shall be provided with lifebuoy self-igniting lights complying with the requirements of paragraph 2.1.2 of the Code: Provided—
 - (a) not less than two of these shall also be provided with lifebuoy self-activating smoke signals complying with the requirements of paragraph 2.1.3 of the Code and be capable of quick release from the navigation bridge;
 - (b) lifebuoys with lights and those with lights and smoke signals shall be equally distributed on both sides of the ship and shall not be the lifebuoys provided with lifelines in compliance with the requirements of paragraph 1.2.
- (6) Each lifebuoy shall be marked in block capitals of the Roman alphabet with the name and port of registry of the ship on which it is carried.
- (7) A lifejacket complying with the requirements of paragraph 2.2.1 or 2.2.2 of the Code shall be provided for every person on board the ship and, in addition—
 - (a) for passenger ships on voyages less than 24 hours, a number of infant lifejackets equal to at least 2.5% of the number of passengers on board shall be provided;
 - (b) for passenger ships on voyages 24 hours or greater, infant lifejackets shall be provided for each infant on board;
 - (c) a number of lifejackets suitable for children equal to at least 10% of the number of passengers on board shall be provided or such greater number as may be required to provide a lifejacket for each child;
 - (d) a sufficient number of lifejackets shall be carried for persons on watch and for use at remotely located survival craft stations and the lifejackets carried for persons on watch should be stowed on the

- bridge, in the engine control room and at any other manned watch station; and
- (e) if the adult lifejackets provided are not designed to fit persons weighing up to 140 kg and with a chest girth of up to 1,750 mm, a sufficient number of suitable accessories shall be available on board to allow them to be secured to such persons.
- (8) Lifejackets shall be so placed as to be readily accessible and their position shall be plainly indicated and where, due to the particular arrangements of the ship, the lifejackets provided in compliance with the requirements of subregulation (7) may become inaccessible, alternative provisions shall be made to the satisfaction of the Authority which may include an increase in the number of lifejackets to be carried.
- (9) The lifejackets used in totally enclosed lifeboats, except free-fall lifeboats, shall not impede entry into the lifeboat or seating, including operation of the seat belts in the lifeboat.
- (10) Lifejackets selected for free-fall lifeboats, and the manner in which they are carried or worn, shall not interfere with entry into the lifeboat, occupant safety or operation of the lifeboat.
- (11) An immersion suit, complying with the requirements of section 2.3 of the Code or an anti-exposure suit complying with section 2.4 of the Code, of an appropriate size, shall be provided for every person assigned to crew the rescue boat or assigned to the marine evacuation system party: Provided that if a ship is constantly engaged in warm climates where, in the opinion of the Authority thermal protection is unnecessary, this protective clothing need not be carried.
- (12) Rescue boats shall be stowed—
- (a) in a state of continuous readiness for launching in not more than 5 minutes, and if the inflated type, in a fully inflated condition at all times;
- (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 regulation 13 of the Safety Convention.

- (13) The ship's side shall not have any openings between an embarkation station of a marine evacuation system and the waterline in the lightest seagoing condition and means shall be provided to protect the system from any projections.
- (14) A marine evacuation system shall be in such a position 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.
- (15) A marine evacuation system shall be stowed 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.
- (16) Where appropriate, a ship shall be so arranged that the marine evacuation system in its stowed position is protected from damage by heavy seas.”.

Amendment of regulation 40 of the Regulations

45. Regulation 40 of the Regulations is hereby amended by—

- (a) the substitution for the heading of regulation 40 of the following heading:

“Embarkation into lifeboats, [class]Class C boats, boats and liferafts, rescue boat embarkation, launching and recovery arrangements”; and

- (b) the substitution for subregulations (1) to (4) of the following subregulations:

“40. (1) Arrangements shall be made to ensure that it is possible to effect embarkation into lifeboats, **[class]Class C boats, boats and liferafts** rapidly and in good order.

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

(3) (a) (i) In **[every class]a Class VII, VIII or IX ship, in [every class]a Class X ship of [150 feet]45 meters** in length or over and in **[every class]a Class XI ship**, one ladder shall be carried at each set of lifeboat davits where the davits are capable of lowering the

lifeboat when loaded with its full complement of persons and its equipment required by this **[part]**Part.

(ii) Such provision shall also be made in **[every class]**a Class I, II or IIA ship and in **[every class]**a Class VIIA ship of 500 tons or over, except that in such a ship the Authority may permit such ladders to be replaced by suitable mechanical devices provided that there shall not be less than one ladder on each side of the ship.

(b) In **[every class]**a Class VII, VIIA, VIII, IX, X or XI ship which carries a **[class]**Class C boat or a lifeboat which is not capable of being lowered into the water when loaded with its full complement of persons and its equipment required by this **[part]**Part, means shall be provided for embarking persons into the **[class]**Class C boat or lifeboat.

(c) In **[every class]**a Class I, II or IIA ship and in **[every class]**a Class VII, VIIA or VIII ship of 500 tons or over, sufficient ladders shall be provided to facilitate embarkation into the liferafts when waterborne, except that in such a ship the Authority may permit the replacement of some or all such ladders by suitable mechanical devices.

(d) The ladders provided in compliance with this subregulation, 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) **[Every class]**A Class I, II, IIA, VII, VIIA or VIII ship, 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) The rescue boat embarkation and launching arrangements shall be such that the rescue boat can be boarded and launched in the shortest possible time.

(6) 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 11 and 12 of the Safety Convention.

(7) Launching arrangements shall comply with the requirements of regulation 16 of the Safety Convention and a rescue boat shall be capable of being launched, where necessary utilising painters, with the ship making headway at speeds up to 5 knots in calm water.

- (8) Recovery time of the rescue boat shall be not more than 5 minutes in moderate sea conditions when loaded with its full complement of persons and equipment and 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 of at least six persons.
- (9) Rescue boat embarkation and recovery arrangements shall allow for safe and efficient handling of a stretcher case and foul weather recovery strops shall be provided for safety if heavy fall blocks constitute a danger.”.

Substitution of regulation 41 of the Regulations

46. The following regulation is hereby substituted for regulation 41 of the Regulations:

“Manning of lifeboats and liferafts

- 41. (1) (a)** In **[every class]** a Class I, II or IIA ship, a deck officer or certificated **[lifeboatman]** person shall be placed in charge of each lifeboat and a second in command shall also be nominated.
- (b) The person in charge shall have a list of the lifeboat’s crew, and shall [see]ensure that the persons placed under [his]the person’s order are acquainted with their several duties.
- (2) In **[every class]** a Class I ship a person trained in the handling and operation of liferafts shall be assigned to each liferaft.
- (3) (a) In **[every class]** a Class II or IIA ship carrying liferafts served by launching appliances, two persons trained in the handling and operation of liferafts shall be assigned to each launching appliance.
- (b) In **[every class]** a Class II or IIA ship carrying liferafts not served by launching appliances, which are stowed in groups at fixed launching positions, a person trained in the handling and operation of liferafts shall be assigned to each such position.
- (4) In **[every class]** a Class I, II or IIA ship, a person capable of working the radio equipment and searchlight equipment, shall be assigned to each lifeboat carrying such equipment.
- (5) In **[every]** a ship in which motor lifeboats are carried, a person capable of working the motor shall be assigned to each motor lifeboat.”.

Amendment of regulation 42 of the Regulations

47. Regulation 42 of the Regulations is hereby amended by—

(a) the substitution for the heading of regulation 42 of the following heading:

“Certificated [~~lifeboatmen~~]persons”; and

(b) the substitution for subregulations (1) to (2) of the following subregulations:

“42. (1) The crew of [~~every class~~]a Class I, II or IIA ship shall include, for each lifeboat carried in compliance with this [~~part~~]Part, a number of certificated [~~lifeboatmen~~]persons not less than that specified in the following table:

<i>Prescribed complement of lifeboat</i>	<i>Minimum number of certificated [lifeboatmen]persons</i>
Less than 41 persons	2
From 41 to 61 persons	3
From 62 to 85 persons	4
More than 85 persons	5

(2) For the purpose of this regulation, “prescribed complement” means the number of persons which a lifeboat is in accordance with this [~~part~~]Part deemed fit to carry.”.

Amendment of regulation 43 of the Regulations

48. Regulation 43 of the Regulations is hereby amended by—

(a) the insertion after subregulation (2) of the following subregulations:

“(3) At least three two-way VHF radiotelephone apparatus shall be provided on a passenger ship and every cargo ship of 500 gross tonnage and upwards.

“(4) At least two two-way VHF radiotelephone apparatus shall be provided on a cargo ship of 300 gross tonnage and upwards but less than 500 gross tonnage.

- (5) The apparatus in subregulations (3) and (4) shall conform to performance standards not inferior to those adopted under the Safety Convention.

Substitution of regulation 44 of the Regulations

49. The following regulation is hereby substituted for regulation 44 of the Regulations:

“Electrically operated signals, on-board communications, alarm systems and public address systems

- 44.(1) [Every class]**A Class I, II, IIA, VII, VIIA or VIII ship shall be provided throughout the ship with electrically operated signals, controlled from the bridge, for summoning the crew and passengers to muster stations.
- (2) An emergency means comprised of either fixed or portable equipment or both shall be provided for two-way communications between emergency control stations, muster and embarkation stations and strategic positions on board.
- (3) A general emergency alarm system complying with the requirements of the Code shall be provided and shall be used for summoning passengers and crew to muster stations and to initiate the actions included in the muster list.
- (4) The general emergency alarm system in subregulation (3) shall—
- (a) be supplemented by either a public address system complying with the requirements of the Code or other suitable means of communication;
 - (b) be audible throughout all the accommodation and normal crew working spaces; and
 - (c) on a passenger ship, also be audible on all open decks.
- (5) Entertainment sound systems shall automatically be turned off when the general emergency alarm system in subregulation (3) is activated.
- (6) On a ship fitted with a marine evacuation system communication between the embarkation station and the platform or the survival craft shall be ensured.

- (7) In addition to the requirements of the Safety Convention, a passenger ship shall be fitted with a public address system.
- (8) The public address system and its performance standards in subregulation (7) shall be approved by the Authority and shall—
- (a) be clearly audible above the ambient noise in all spaces, as prescribed by the Code;
 - (b) be provided with an override function controlled from one location on the navigation bridge and such other places on board as the Authority deems necessary, so that all emergency messages will be broadcast if any loudspeaker in the spaces concerned has been switched off, its volume has been turned down or the public address system is used for other purposes;
 - (c) have at least two loops which shall be sufficiently separated throughout their length and have two separate and independent amplifiers; and
 - (d) be connected to the emergency source of electrical power required by the Safety Convention
- (9) A ship constructed before 1 July 1997 which is already fitted with a public address system approved by the Authority which complies the requirements of subregulation (8) and paragraph 7.2.2.1 of the Code is not required to change its system.”

Substitution of regulation 45 of the Regulations

50. The following regulation is hereby substituted for regulation 45 of the Regulations:

“Electric lighting

- 45. (1) (a)** In **[every class]**a Class I, II or IIA ship, an electric lighting system shall be provided throughout the ship and in particular upon the decks from which lifeboats and liferafts are embarked.
- (b)** Provision shall also be made in every such ship for the electric lighting of the launching gear and of the lifeboats, and of the liferaft launching appliances where provided and the liferafts which they serve, during the preparation for and process of launching and also for illuminating the water into which the lifeboats and liferafts served by launching appliances are launched until the process of launching is completed,

and for lighting the stowage position of liferafts for which launching appliances are not provided.

(c) The lighting shall be operated from the ship's main generating plant and shall be so arranged that power may be supplied from the emergency source of power referred to in regulation 42 of the Construction Regulations, 1968.

- (2) In **[every class]**a Class I, II or IIA ship, the exit from **[every]**a main compartment occupied by passengers or crew, shall be continuously lighted by an emergency electric lamp operated from the ship's main generating plant and so arranged that power may be supplied from the emergency source of power referred to in regulation 42 of the Construction Regulations, 1968.
- (3) (a) In **[every class]**a Class VII, VIIA or VIII ship of 500 tons or over, provision shall be made for the electric lighting of the launching gear and of the lifeboats and of the liferaft launching appliances, where provided, and of the liferafts which they serve, during the preparation for and process of launching and also for lighting the water into which the lifeboats, and the liferafts served by launching appliances, are launched until the process of launching is completed, and for lighting of the stowage position of liferafts for which launching appliances are not provided.
- (b) In **[every class]**a Class VII, VIIA or VIII ship of 1,600 tons or over, provision shall be made for the electric lighting of the alleyways, stairways and exits so as to ensure that access of all persons on board to the launching stations and stowage positions of lifeboats and liferafts is not impeded.
- (c) The lighting required by paragraphs (a) and (b), shall be operated from the ship's main electric generating plant and, in addition, shall be capable of being operated—
- (i) in **[every]**a such ship of 5,000 tons or over, from an emergency source of electric power which shall be provided for such lighting, or in the case of any ship to which regulation 112 of the Construction Regulations, 1968, applies, from the emergency source of electric power required by that regulation; and
- (ii) in **[every]**a such ship of 1,600 tons or over but of under 5,000 tons, from an emergency source of electric power which shall be provided for such lighting, or in the case of any ship to which regulation 113 of the Construction Regulations, 1968 applies,

from the emergency source of electric power required by that regulation.

- (d) In **[every class]**a Class VII, VIIA or VIII ship of 500 tons or over but of less than 1,600 tons, the lighting required by paragraph (a) shall be operated from the ship's main electric generating plant and, in addition, shall be capable of being operated from an emergency source of electric power which shall be provided for such lighting or, in the case of any ship to which regulation 114 of the Construction Regulations, 1968 applies, from the emergency source of electric power required by that regulation or, if the Authority so permits, the reserve source of electrical energy required by regulation 13(2) or by regulation 23(1) of the Merchant Shipping Radio Regulations, 1968, on condition that the lighting circuits can be readily disconnected and the said reserve source is capable of supplying additional load or loads without falling below the capacity required by the aforesaid regulations.

- (4) In **[every class]**a Class VII, VIIA or VIII ship to which subregulation (3) does not apply and in **[every class]**a Class X ship of **[75 feet]**22 meters or over in length, 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.”.

Substitution of regulation 46 of the Regulations

51. The following regulation is hereby substituted for regulation 46 of the Regulations:

“Vessels’ identification marks, vessels’ distress signals, and list of persons on board

46. (1) *Identification marks— . . .*

(2) *Distress signals—*

- (a) **[Every class]**A Class I, II, IIA, VII, VIIA or VIII ship, and **[ever class]**A Class X or XI ship of **[50 feet]**15 meters or over in length, shall carry at least 12 parachute distress rocket signals which shall comply with the requirements of **[annex 17]**Annex 17, stowed on or near the navigation bridge.
- (b) (i) **[Every class]**A Class V or VI ship, **[every class]**a Class X ship of **[25 feet]**7.6 meters or over but less than **[50 feet]**15 meters

in length, **[every class]** a Class XI ship of less than **[50 feet]** 15 meters in length and **[every class]** a Class IX or XII ship, shall carry at least 12 pyrotechnic distress signals which shall be either parachute distress rocket signals, stowed on or near the navigation bridge and complying with the requirements of **[part]** Part III of **[annex]** Annex 12 or red star distress signals.

(ii) **[Every such]** The red star distress signal referred to in subparagraph (i) shall be capable of emitting 2 or more red stars either together or separately at or to a height of not less than **[150 feet]** 45 meters, and each of these stars shall burn with a minimum luminosity of 5,000 candle power for not less than 5 seconds.

(c) **[Every class]** A Class X vessel of less than **[25 feet]** 7.6 meters in length shall carry at least **[6]** 12 hand-held distress flare signals complying with the requirements of **[part]** Part IV of **[annex]** Annex 12.

(d) **[Every class]** A Class V or VI ship shall carry at least 6 and **[every class]** a Class X vessel of less than **[50 feet]** 15 meters in length shall carry at least 2 buoyant smoke signals which shall comply with the requirements of **[part]** Part V of **[annex]** Annex 12.

(e) All pyrotechnic distress signals shall be packed in a water tight container and shall be clearly and indelibly labelled to indicate their purpose.

(f) A copy of the illustrated table referred to in **[annex]** Annex 13 shall be readily available in **[every]** a vessel.

(3) *List of persons on board—*

(a) The master or owner of **[every]** a ship who has not entered into an agreement with the crew of the ship, shall make out and sign a list setting forth the name and address of each person on board the ship.

(b) The list referred to in paragraph (a) shall indicate in respect of each person on board whether **[he]** that person is a member of the crew or a passenger.

(c) The **[said]** list referred to in paragraph (a) shall be handed to the proper officer, port authority or person nominated by the proper officer before the ship proceeds to sea.”.

Insertion of regulations 46A to 46E of the Regulations

52. The following regulations are inserted in Part I, Chapter V of the Regulations after regulation 46:

“Search and rescue locating devices

- 46A.** (1) At least one search and rescue locating device shall be carried on each side of a passenger ship and of a cargo ship of 500 gross tonnage and upwards.
- (2) At least one search and rescue locating device shall be carried on a cargo ship of 300 gross tonnage and upwards but less than 500 gross tonnage.
- (3) The search and rescue locating devices in subregulations (1) and (2) shall—
- (a) conform to the applicable performance standards not inferior to those adopted under the Safety Convention and
 - (b) be stowed in such location that they can be rapidly placed in any survival craft; or at least one search and rescue locating device shall be stowed in each survival craft.
- (4) On a ship carrying at least two search and rescue locating devices and equipped with free-fall lifeboats one of the search and rescue locating devices 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.

Radar transponders

- 46B.** (1) At least one At least one radar transponder shall be carried on each side of a passenger ship and a cargo ship of 500 gross tonnage and upwards.
- (2) At least one radar transponder shall be carried on a cargo ship of 300 gross tonnage and upwards but less than 500 gross tonnage.
- (3) The radar transponders in subregulation (1) and (2) shall—
- (a) conform to the applicable performance standards not inferior to those adopted under the Safety Convention; and
 - (b) be stowed in such location that they can be rapidly placed in any survival craft; or at least one search and rescue locating device shall be stowed in each survival craft.
- (4) On a ship 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.

Muster list and emergency instructions

46C. (1) Clear instructions to be followed in the event of an emergency shall be provided for every person on board.

(2) In the case of a passenger ship the instructions in subregulation (1) shall be drawn up in the language or languages required by the ship's flag State and in the English language.

(3) Muster lists and emergency instructions complying with the requirements of regulation 37 of the Safety Convention shall be exhibited in conspicuous places throughout the ship including the navigation bridge, engine-room and crew accommodation spaces.

(4) Illustrations and instructions in the appropriate languages as prescribed in subregulation (2) shall be posted in passenger cabins and be conspicuously displayed at muster stations and other passenger spaces to inform passengers of—

(a) the passengers' muster station;

(b) the essential actions a passenger must take in an emergency; and

(c) the method of donning lifejackets.

Survival craft

46D. (1) Posters or signs shall be provided on or in the vicinity of survival craft and their launching controls and shall—

(a) illustrate the purpose of controls and the procedures for operating the appliance and give relevant instructions or warnings;

(b) be easily seen under emergency lighting conditions; and

(c) use symbols in accordance with the recommendations of the Safety Convention

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

(3) There shall be a sufficient number of crew members, who may be deck officers or certificated persons, on board for operating the survival craft and launching arrangements required for abandonment by the total number of persons on board.

(4) A deck officer or certificated person shall be placed in charge of each survival craft to be used: Provided, the Authority, having due regard to the nature of the voyage, the number of persons on board and the characteristics of the ship, may permit persons practised in the handling

and operation of liferafts to be placed in charge of liferafts in lieu of a deck officer or certificated person, and in the case of lifeboats, a second-in-command shall also be nominated.

- (5) The person in charge of a survival craft shall have a list of the survival craft crew and shall ensure that the crew they command are acquainted with their duties, and in lifeboats, the second-in-command shall also have a list of the lifeboat crew.
- (6) A motorised survival craft shall have a person assigned who is capable of operating the engine and carrying out minor adjustments.
- (7) The master shall ensure the equitable distribution of persons referred to in subregulations (2), (3) and (4) among the ship's survival craft.
- (8) Lifeboats and liferafts for which approved launching appliances are required shall be stowed as close to accommodation and service spaces as possible.
- (9) Muster stations shall be provided close to the embarkation stations with each muster station having sufficient clear deck space to accommodate all persons assigned to muster at that station, but at least 0.35 m² per person.
- (10) Muster and embarkation stations shall be readily accessible from accommodation and work areas.
- (11) Muster and embarkation stations shall be adequately illuminated by lighting supplied from the emergency source of electrical power as required by regulation II-1/42 or II-1/43 of the Safety Convention, as appropriate.
- (12) Alleyways, stairways and exits giving access to the muster and embarkation stations shall—
 - (a) be lighted and such lighting shall be capable of being supplied by the emergency source of electrical power required by regulation II-1/42 or II-1/43 of the Safety Convention, as appropriate;
 - (b) in addition to and as part of the markings required under regulation II-2/13.3.2.5.1, routes to muster stations shall be indicated with the muster station symbol, intended for that purpose, in accordance with the recommendations of the Safety Convention.

- (13) Davit-launched and free-fall launched survival craft muster and embarkation stations shall be so arranged as to enable stretcher cases to be placed in survival craft.
- (14) An embarkation ladder complying with the requirements of paragraph 6.1.6 of the Code extending, in a single length, from the deck to the waterline in the lightest seagoing condition under all conditions of trim of up to 10° and a list of up to 20° either way shall be provided at each embarkation station or at every two adjacent embarkation stations for survival craft launched down the side of the ship.
- (15) The Authority may permit—
- (a) the ladders in subregulation (14) to be replaced by approved devices to afford access to the survival craft when waterborne, provided that there shall be at least one embarkation ladder on each side of the ship; and
 - (b) other means of embarkation enabling descent to the water in a controlled manner for the liferafts required by regulation 31.1.4.
- (16) Where necessary, means shall be provided for bringing a davit-launched survival craft against a ship's side and holding the craft alongside so that persons can be safely embarked.
- (17) 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 and so that, as far as possible, survival craft, except survival craft specially designed for free-fall launching, can be launched down the straight side of the ship.
- (18) If the launching station referred to in subregulation (17) is positioned forward, they shall be located abaft the collision bulkhead in a sheltered position and, in this respect, the Authority shall give special consideration to the strength of the launching appliance.
- (19) 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 over board launching, in such a position that the survival craft in the embarkation

position is not less than 2 m 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 weather deck 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 min;
- (d) fully equipped as required by chapter III of the Safety Convention and the Code; and
- (e) as far as practicable, in a secure and sheltered position and protected from damage by fire and explosion and in particular, survival craft on tankers, other than the liferafts required by regulation 31.1.4, shall not be stowed on or above a cargo tank, slop tank, or other tank containing explosive or hazardous cargoes.

(20) Where appropriate, the ship shall be so arranged that lifeboats, in their stowed positions, are protected from damage by heavy seas and lifeboats for lowering down the ship' s side shall—

- (a) be stowed as far forward of the propeller as practicable;
- (b) on cargo ships of 80 m in length and upwards but less than 120 m in length, be so stowed that the after end of the lifeboat is not less than the length of the lifeboat forward of the propeller;
- (c) on cargo ships of 120 m in length and upwards and passenger ships of 80 m in length and upwards, 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.

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

(22) A liferaft shall be stowed with its painter permanently attached to the ship.

(23) Each liferaft or group of liferafts shall be stowed with a float-free arrangement complying with the requirements of paragraph 4.1.6 of the Code so that each floats free and, if inflatable, inflates automatically when the ship sinks.

(24) Liferafts shall be so stowed as to permit manual release of one raft or container at a time from their securing arrangements.

- (25) Subregulations (22) and (23) do not apply to liferafts required by regulation 31.1.4 of the Safety Convention.
- (26) 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 subregulation (19)(b) or by ship motion or power failure.
- (27) 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 regulation 31.1 of the Safety Convention to be capable of being launched on either side, are stowed on each side of the ship.
- (28) Unless expressly provided otherwise, launching and embarkation appliances complying with the requirements of section 6.1 of the Code shall be provided for all survival craft except those which are—
- (a) boarded from a position on deck less than 4.5 m above the waterline in the lightest seagoing condition and which have a mass of not more than 185 kg;
 - (b) boarded from a position on deck less than 4.5 m above the waterline in the lightest seagoing condition and which 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;
 - (c) carried in excess of the survival craft for 200% of the total number of persons on board the ship and which have a mass of not more than 185 kg;
 - (d) carried in excess of the survival craft for 200% 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, or
 - (e) provided for use in conjunction with a marine evacuation system, complying with the requirements of section 6.2 of the Code 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.
- (29) A lifeboat shall —
- (a) be provided with an appliance which is capable of launching and recovering the lifeboat; and

- (b) have provision for hanging-off the lifeboat to free the release gear for maintenance.
- (30) Launching and recovery arrangements shall be such that the appliance operator on the ship is able to observe the survival craft at all times during launching and for lifeboats during recovery.
- (31) Only one type of release mechanism shall be used for similar survival craft carried on board a ship.
- (32) 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.
- (33) Falls, where used, shall be long enough for the survival craft to reach the water with the ship in its lightest seagoing condition, under unfavourable conditions of trim of up to 10 degrees and list of up to 20 degrees either way.
- (34) During preparation and launching, the 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 regulation II-1/42 or II-1/43 of the Safety Convention, as appropriate.
- (35) Means shall be available to prevent any discharge of water on to survival craft during abandonment.
- (36) If there is a danger of the survival craft being damaged by the ship' s stabilizer wings, means shall be available, powered by an emergency source of energy, to bring the stabilizer wings inboard; indicators operated by an emergency source of energy shall be available on the navigating bridge to show the position of the stabilizer wings.
- (37) If partially enclosed lifeboats complying with the requirements of section 4.5 of the Code are carried, a davit span shall be provided, fitted with not less than two lifelines of sufficient length to reach the water with the ship in its lightest seagoing condition, under unfavourable conditions of trim of up to 10 degrees and list of up to 20 degrees either way.

Recovery of persons from water

- 46E.** (1) A ship shall have ship-specific plans and procedures for recovery of persons from the water, taking into account the guidelines developed under the Safety Convention.
- (2) The plans and procedures in subregulation (1) shall identify the equipment intended to be used for recovery purposes and measures to be taken to minimise the risk to shipboard personnel involved in recovery operations.
- (3) A ship constructed before 1 July 2014 shall comply with this requirement by the first periodical or renewal safety equipment survey of the ship to be carried out after 1 July 2014, whichever comes first.

Emergency training and drills

- 46F.** (1) Every crew member with assigned emergency duties shall be familiar with the emergency duties before the voyage begins.
- (2) On a passenger ship—
- (a) engaged on a voyage where passengers are scheduled to be on board for more than 24 hours, musters of newly-embarked passengers shall take place prior to or immediately upon departure and passengers shall be instructed in the use of the lifejackets and the action to take in an emergency;
 - (c) whenever new passengers embark, a passenger safety briefing shall be given immediately before departure, or immediately after departure;
 - (d) the briefing in paragraph (b) shall include the instructions required by regulations 8.2 and 8.4 of the Safety Convention, and shall be made by means of an announcement, in one or more languages likely to be understood by the passengers;
 - (e) the announcement in paragraph (d) shall be made on the ship's public address system, or by other equivalent means likely to be heard at least by the passengers who have not yet heard it during the voyage;
 - (f) the briefing in paragraph (b) may be included in the muster required by paragraph (a); and
 - (g) information cards or posters or video programmes displayed on ships video displays may be used to supplement the briefing, but may not be used to replace the announcement in paragraph (d).
- (2) Drills shall, as far as practicable, be conducted as if there were an actual emergency.

- (3) Every crew member shall participate in at least one abandon ship drill and one fire drill every month.
- (4) The drills of the crew shall take place within 24 hours of the ship leaving a port if more than 25% of the crew have not participated in abandon ship and fire drills on board that particular ship in the previous month.
- (5) When a ship enters service for the first time, after modification of a major character or when a new crew is engaged, the drills shall be held before sailing.
- (6) The Authority may accept other arrangements that are at least equivalent for those classes of ships for which this is impracticable.
- (7) Crew members with enclosed space entry or rescue responsibilities shall participate in an enclosed space entry and rescue drill to be held on board the ship at least once every two months.
- (8) Each abandon ship drill shall include—

 - (a) summoning of passengers and crew to muster stations with the alarm required by regulation 6.4.2 of the Safety Convention, followed by drill announcement on the public address or other communication system and ensuring that they are made aware of the order to abandon ship;
 - (b) reporting to stations and preparing for the duties described in the muster list;
 - (c) checking that passengers and crew are suitably dressed;
 - (d) checking that lifejackets are correctly donned;
 - (e) lowering of at least one lifeboat after any necessary preparation for launching;
 - (f) starting and operating the lifeboat engine;
 - (g) operation of davits used for launching liferafts;
 - (h) a mock search and rescue of passengers trapped in their staterooms;
and
 - (i) instruction in the use of radio life-saving appliances.
- (9) Different lifeboats shall, as far as practicable, be lowered in compliance with the requirements of subregulation (8)(e) at successive drills.
- (10) Except as provided in subregulation (8)(d) and (e), each lifeboat shall be launched, and manoeuvred in the water by its assigned operating crew, at least once every three months during an abandon ship drill.

- (11) In the case of a lifeboat arranged for free-fall launching, at least once every three months during an abandon ship drill—
- (a) the crew shall board the lifeboat, properly secure themselves in their seats and commence launch procedures up to but not including the actual release of the lifeboat, where the release hook shall not be released;
 - (b) the lifeboat shall then either be free-fall launched with only the required operating crew on board, or lowered into the water by means of the secondary means of launching with or without the operating crew on board; and
 - (c) in both cases in paragraphs (a) and (b), the lifeboat shall thereafter be manoeuvred in the water by the operating crew.
- (12) At intervals of not more than six months, the lifeboat shall either be launched by free-fall with only the operating crew on board, or simulated launching shall be carried out in accordance with the guidelines developed under the Safety Convention.
- (13) The Authority may allow ships operating on short international voyages not to launch the lifeboats on one side if their berthing arrangements in port and their trading patterns do not permit launching of lifeboats on that side: Provided, all such lifeboats shall be lowered at least once every 3 months and launched at least annually.
- (14) As far as is reasonable and practicable, rescue boats other than lifeboats which are also rescue boats, shall be launched each month with their assigned crew aboard and manoeuvred in the water and in all cases this requirement shall be complied with at least once every 3 months.
- (15) If lifeboat and rescue boat launching drills are carried out with the ship making headway, such drills shall, because of the dangers involved, be practised in sheltered waters only and under the supervision of an officer experienced in such drills.
- (16) If a ship is fitted with marine evacuation systems—
- (a) drills shall include exercising of the procedures required for the deployment of such a system up to the point immediately preceding actual deployment of the system;

- (b) the drills in paragraph (a) should be augmented by regular instruction using the on-board training aids required by regulation 35.4 of the Safety Convention;
 - (c) every system party member shall, as far as practicable, be further trained by participation in a full deployment of a similar system into water, either on board a ship or ashore, at intervals of not longer than 2 years, but in no case longer than 3 years; and
 - (d) the training in paragraph (c) can be associated with the deployments required by regulation 20.8.2 of the Safety Convention.

- (17) Emergency lighting for mustering and abandonment shall be tested at each abandon ship drill.

- (18) Fire drills should be planned in such a way that due consideration is given to regular practice in the various emergencies that may occur depending on the type of ships and the cargo.

- (19) Each fire drill shall include:
 - (a) reporting to stations and preparing for the duties described in the muster list required by regulation 8 of the Safety Convention;
 - (b) starting of a fire pump, using at least the two required jets of water to show that the system is in proper working order;
 - (c) checking of fireman's outfit and other personal rescue equipment;
 - (d) checking of relevant communication equipment;
 - (e) checking the operation of watertight doors, fire doors, fire dampers and main inlets and outlets of ventilation systems in the drill area; and
 - (f) checking the necessary arrangements for subsequent abandoning of the ship.

- (20) The equipment used during drills shall immediately be brought back to its fully operational condition and any faults and defects discovered during the drills shall be remedied as soon as possible.

- (21) Enclosed space entry and rescue drills should be planned and conducted in a safe manner, taking into account, as appropriate, the guidance provided in the recommendations developed under the Safety Convention.

- (22) Each enclosed space entry and rescue drill shall include:
 - (a) checking and use of personal protective equipment required for entry;
 - (b) checking and use of communication equipment and procedures;

- (c) checking and use of instruments for measuring the atmosphere in enclosed spaces;
 - (d) checking and use of rescue equipment and procedures; and
 - (e) instructions in first aid and resuscitation techniques.

- (23) On-board training and instructions on-board training in the use of the ship's life-saving appliances, including survival craft equipment, and in the use of the ship's fire-extinguishing appliances shall be given as soon as possible but not later than 2 weeks after a crew member joins the ship: Provided that if a crew member is on a regularly scheduled rotating assignment to the ship, such training shall be given not later than 2 weeks after the time of first joining the ship.

- (24) Instructions in the use of the ship's fire-extinguishing appliances, life-saving appliances, and in survival at sea shall be given at the same interval as the drills.

- (25) Individual instruction may cover different parts of the ship's life-saving and fire-extinguishing appliances, but all the ship's life-saving and fire-extinguishing appliances shall be covered within any period of 2 months.

- (26) Every crew member shall be given instructions which shall include but not necessarily be limited to:
 - (a) operation and use of the ship's inflatable liferafts;
 - (b) problems of hypothermia, first-aid treatment for hypothermia and other appropriate first-aid procedures;
 - (c) special instructions necessary for use of the ship's life-saving appliances in severe weather and severe sea conditions;
 - (d) operation and use of fire-extinguishing appliances; and
 - (e) risks associated with enclosed spaces and onboard procedures for safe entry into such spaces which should take into account, as appropriate, the guidance provided in recommendations developed under the Safety Convention.

- (27) On-board training in the use of davit-launched liferafts may be conducted on a special liferaft intended for training purposes only, which is not part of the ship's life-saving equipment, conspicuously marked shall—
 - (a) take place at intervals of not more than 4 months on every ship fitted with such appliances; and

(b) whenever practicable the training shall include the inflation and lowering of a liferaft.

(28) The date when musters are held, details of abandon ship drills and fire drills, enclosed space entry and rescue drills, drills of other life-saving appliances and on-board training shall be recorded in such log-book as may be prescribed by the Authority.

(29) If a full muster, drill or training session is not held at the appointed time, an entry shall be made in the log-book stating the circumstances and the extent of the muster, drill or training session held.”.

Substitution of regulation 47 of the Regulations

53. The following regulation is hereby substituted for regulation 47 of the Regulations:

“CHAPTER VI—EQUIVALENTS, CONCESSIONS AND EXEMPTIONS

Equivalents and approval of types of life-saving equipment

47. (1) Where this **[part]Part** requires that a particular fitting, material, appliance or apparatus, or type thereof, shall be fitted or carried in a vessel, or that any particular provision shall be made, the Authority may allow any other fitting, material, appliance, apparatus, or type thereof, to be fitted or carried, or any other provision to be made in that vessel if it is satisfied that such other fitting, material, appliance or apparatus, or type thereof, or provision, is at least as effective as that required by this **[part]Part**.

(2) The Authority may approve any type of life-saving equipment for use on a vessel belonging to the Republic which in its opinion complies with the requirements of this **[part]Part**.”.

Substitution of regulation 48 of the Regulations

54. The following regulation is hereby substituted for regulation 48 of the Regulations:

“Concession regarding davits

48. If it appears to the Authority 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 this **[part]Part**, it may allow 1 or more sets of davits to be dispensed with in that ship subject to such conditions, if any, as it thinks fit: Provided that, in the case of a **[class]Class** II or IIA ship, the number of sets of davits shall, subject to the provisions of regulation 6(1) and (7) read with regulation 7, in no case be less than the minimum number determined by column B of the table set forth in **[annex]Annex 1**.”.

Substitution of regulation 49 of the Regulations

55. The following regulation is hereby substituted for regulation 49 of the Regulations:

“Concession regarding the accommodation provided by lifeboats, liferafts and buoyant apparatus

49. If a **[class]Class** I ship is permitted by the terms of her safety certificate to carry, between specified ports or places abroad, a number of passengers in addition to the number allowed when the ship is proceeding to sea from the Republic, the Authority may, subject to such conditions as it thinks fit, allow as regards the **[part]Part** of the voyage between such specified ports or places, modifications of the provisions of regulation 5(1) and (9) (which relate to lifeboats, liferafts and buoyant apparatus): Provided that where such modifications are allowed, the total number of lifeboats together with such liferafts as are carried, shall always be sufficient for the total number of persons which the ship is certified to carry, and in addition liferafts shall be carried sufficient to support 10 per cent of that number of persons.”.

Substitution of regulation 50 of the Regulations

56. The following regulation is hereby substituted for regulation 50 of the Regulations:

“Exemption in respect of portable radio equipment

50. The Authority may exempt any **[class]Class** II or IIA ship from the requirements of regulation 6(10) read with regulation 7, or any **[class]Class** VII or VIII ship from the requirements of regulation 12(9) read with regulation 14 or any **[class]Class** VIIA ship from the requirements of regulation 13(5), in respect

of portable radio equipment, if the ship is engaged on voyages of such duration that in its opinion such equipment is unnecessary.”.

Substitution of regulation 51 of the Regulations

57. The following regulation is hereby substituted for regulation 51 of the Regulations:

“Concession regarding the size of lifeboats or boats

51. If it is impracticable or unreasonable for a ship to carry a lifeboat or boat of the minimum length prescribed by this **[part]Part**, the Authority may allow a smaller lifeboat or boat to be carried by that ship.”.

Amendment of regulation 52 of the Regulations

58. Regulation 52 of the Regulations is hereby amended by—

(a) the substitution for the heading of regulation 52 of the following heading:

“Exemption in respect of vessel constructed before the coming into force of this **[part]Part”;** and

(b) the substitution for regulation 52 of the following regulation:

“52. The Authority may, on such conditions as it thinks fit, exempt any vessel constructed before the coming into operation of this **[part]Part**, from any of the requirements of this **[part]Part**, if it is satisfied that compliance with that requirement is either impracticable or unreasonable in the case of that vessel.”.

Amendment of regulation 53 of the Regulations

59. Regulation 53 of the Regulations is hereby amended by—

(a) the substitution for subregulations (1) and (2) the following subregulations:

“General exemption in respect of certain vessels

53. (1) The Authority 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 this **[part]Part** provided that it complies with safety requirements which in its opinion are adequate for the voyage which is to be undertaken by the ship.

- (2) The Authority may, on such conditions as it thinks fit, exempt any vessel which does not engage on an international voyage, from any of the requirements of this **[part]Part.**”; and

(b) the addition after subregulation (2) of the following subregulations:

“(3) The Authority may, if it considers that the sheltered nature and conditions of the voyage are such as to render the application of any specific requirements of Chapter III of the Safety Convention unreasonable or unnecessary, exempt from those requirements individual ships or classes of ships which, in the course of their voyage, do not proceed more than 32 kilometers from the nearest land.

(4) In the case of passenger ships which are employed in special trades for the carriage of large numbers of special trade passengers, such as the pilgrim trade, the Authority, if satisfied that it is impracticable to enforce compliance with the requirements of Chapter III of the Safety Convention, may exempt such ships from those requirements, provided that such ships comply fully with the provisions of:

(a) the rules annexed to the Special Trade Passenger Ships Agreement, 1971; and

(b) the rules annexed to the Protocol on Space Requirements for Special Trade Passenger Ships, 1973.”.

Amendment of Part II of the Regulations

60. Part II is hereby amended by the substitution in the Arrangement of Regulations (table of contents) of the following table:

“PART II

FIRE APPLIANCES

CHAPTER I—[SHIPS OF]CLASS I SHIPS

- 54. Fire patrol, alarm and detection systems
- 55. Fire pumps, water service pipes, hydrants, hoses and nozzles
- 56. Portable fire extinguishers in accommodation and service spaces
- 57. Fixed fire smothering arrangements in cargo spaces
- 58. Machinery spaces containing oil-fired boilers or oil burning equipment
- 59. Machinery spaces containing internal combustion type machinery
- 60. Machinery spaces containing steam engines
- 61. Firemen's outfits
- 62. International shore connection

CHAPTER II—[SHIPS OF]CLASS II OR IIA SHIPS

- 63. Requirements

CHAPTER III—[SHIPS OF]CLASS III OR IV SHIPS

- 64. **[Ships of class]**Class III ships
- 65. **[Ships of class]**Class IV ships

CHAPTER IV—[SHIPS OF]CLASS V OR VI SHIPS

- 66. Water pipes, hydrants and fire hoses
- 67. Portable fire extinguishers for passenger and crew spaces
- 68. Machinery spaces: Ships fitted with main or auxiliary oil-fired boilers
- 69. Machinery spaces containing internal combustion type machinery
- 70. Fire pumps
- 71. Ships not fully decked

CHAPTER V—[SHIPS OF]CLASS VII SHIPS

- 72. **[Ships of class]**Class VII of 500 tons or over: Fire pumps, fire main, water service pipes, hydrants, hoses and nozzles
- 73. **[Ships of class]**Class VII of 500 tons or over: Portable fire extinguishers for accommodation and service spaces
- 74. **[Ships of class]**Class VII of 2,000 tons or over: Fixed fire smothering arrangements in cargo spaces
- 75. **[Ships of class]**Class VII of 500 tons or over: Machinery spaces containing oil-fired boilers or oil burning equipment
- 76. **[Ships of class]**Class VII of 500 tons or over: Machinery spaces containing internal combustion type machinery

- 77. **[Ships of class]**Class VII of 500 tons or over: Machinery spaces containing steam engines
- 78. **[Ships of class]**Class VII of 500 tons or over: Firemen's outfits
- 79. **[Ships of class]**Class VII of 1,000 tons or over: International shore connection
- 80. **[Ships of class]**Class VII of less than 500 tons: Fire pumps, fire main, water service pipes, hydrants, hoses and nozzles
- 81. **[Ships of class]**Class VII of less than 500 tons: Portable fire extinguishers for accommodation and service spaces
- 82. **[Ships of class]**Class VII of less than 500 tons: Machinery spaces containing oil-fired boilers or oil burning equipment
- 83. **[Ships of class]**Class VII of less than 500 tons: Machinery spaces containing internal combustion type machinery
- 84. **[Ships of class]**Class VII of less than 500 tons: Firemen's outfits

CHAPTER VI—[SHIPS OF]CLASS VIIA SHIPS

- 85. Requirements

CHAPTER VII—[SHIPS OF]CLASS VIII SHIPS

- 86. **[Ships of class]**Class VIII of 1,000 tons or over
- 87. **[Ships of class]**Class VIII of 500 tons or over but of less than 1,000 tons: Fire pumps, fire main, water service pipes, hydrants, hoses and nozzles
- 88. **[Ships of class]**Class VIII of 500 tons or over but of less than 1,000 tons: Portable fire extinguishers for accommodation and service spaces
- 89. **[Ships of class]**Class VIII of 500 tons or over but of less than 1,000 tons: Machinery spaces containing oil-fired boilers or oil burning equipment
- 90. **[Ships of class]**Class VIII of 500 tons or over but of less than 1,000 tons: Machinery spaces containing internal combustion type machinery
- 91. **[Ships of class]**Class VIII of 500 tons or over but of less than 1,000 tons: Firemen's outfits
- 92. **[Ships of class]**Class VIII of 150 tons or over but of less than 500 tons: Fire pumps, fire main, water service pipes, hydrants, hoses and nozzles
- 93. **[Ships of class]**Class VIII of 150 tons or over but of less than 500 tons: Portable fire extinguishers for accommodation and service spaces
- 94. **[Ships of class]**Class VIII of 150 tons or over but of less than 500 tons: Machinery spaces containing oil-fired boilers or oil burning equipment
- 95. **[Ships of class]**Class VIII of 150 tons or over but of less than 500 tons: Machinery spaces containing internal combustion type machinery

96. **[Ships of class]**Class VIII of 150 tons or over but of less than 500 tons:
Firemen's outfits
97. **[Ships of class]**Class VIII of less than 150 tons: Fire pumps, fire main, water service pipes, hydrants, hoses and nozzles
98. **[Ships of class]**Class VIII of less than 150 tons: Portable fire extinguishers

CHAPTER VIII—[SHIPS OF]CLASS IX OR IXA SHIPS

99. Requirements

CHAPTER IX—[SHIPS OF]CLASS X SHIPS

100. Requirements

CHAPTER X—[SHIPS OF]CLASS XI SHIPS

101. Requirements

CHAPTER XI—[SHIPS OF]CLASS XII SHIPS

102. Requirements

CHAPTER XII—GENERAL REQUIREMENTS REGARDING FIRE APPLIANCES

103. Additional requirements for ships carrying explosives
104. Fire pumps
105. Fire main, water service pipes and hydrants
106. Fire hoses, nozzles[, etc.]
107. International shore connection
108. Fire extinguishers
109. Fire buckets
110. Fixed pressure water spraying systems for machinery spaces
111. Fixed fire smothering gas and steam installations
112. Fixed foam fire extinguishing installations
113. Fire detection systems
114. Firemen's outfits
115. Means for stopping machinery, shutting off oil fuel suction pipes and closing of openings
116. Fire control plans

117. Availability of fire fighting appliances

CHAPTER XIII—EQUIVALENTS AND EXEMPTIONS

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Amendment of Chapter I of Part II of the Regulations

61. Chapter I of Part II is hereby amended by the substitution for the heading of Chapter I of the following heading:

“PART II FIRE APPLIANCES

CHAPTER I—[SHIPS OF]CLASS I SHIPS

Substitution of regulation 54 of the Regulations

62. The following regulation is hereby substituted for regulation 54 of the Regulations:

“Fire patrol, alarm and detection systems

- 54.** (1)(a) (i) In **[every class]** a Class I ship, an efficient patrol system shall be maintained so that any outbreak of fire may be promptly detected.
- (ii) Each member of the patrol shall be trained to be familiar with the arrangement of the ship as well as the location and operation of any equipment **[he]** the member may be called upon to use.
- (b) (i) Manual fire alarms shall be fitted throughout the passenger spaces and crew spaces which will enable the fire patrol to give an alarm immediately to the navigating bridge or fire control station.
- (ii) A special alarm to summon the crew shall be fitted which may be **[part]** Part of the ship’s general alarm system.
- (iii) A public address system or other effective means of communication shall also be fitted throughout the accommodation, public and service spaces.
- (2) In **[every class]** a Class I ship, there shall be provided in any **[part]** Part of the ship which is not accessible to the fire patrol, a fire detection system complying with the requirements specified in regulation 113.”.

Substitution of regulation 55 of the Regulations

63. The following regulation is hereby substituted for regulation 55 of the Regulations:

“Fire pumps, water service pipes, hydrants, hoses and nozzles

- 55.** (1) **[Every class]** A Class I ship shall be provided with appliances in accordance with this regulation whereby at least two jets of water as required by this **[part]** Part, can reach any part of the ship normally accessible to the passengers or crew while the ship is being navigated and any store room and any part of any cargo space when empty.

- (2) (a) **[Every class]** A Class I ship of 4,000 tons or over shall be provided with at least three fire pumps operated by power, and **[every class]** a Class I ship of less than 4,000 tons shall be provided with at least 2 such pumps.
- (b) Each such pump shall be capable of delivering at least one jet simultaneously from each of any 2 hydrants, hoses and nozzles provided in the ship and shall comply with the requirements of regulation 104.
- (3) (a) In **[every class]** a Class I ship of 1,000 tons or over, the arrangement of the sea connections, pumps and the sources of power for operating them, shall be such as will ensure that a fire in any one compartment will not put all the fire pumps out of action.
- (b) (i) If, in any **[class]** Class I ship of less than 1,000 tons, a fire in any one compartment could put all the fire pumps out of action, there shall be provided in a position outside the machinery spaces, an independently driver power-operated emergency fire pump and its source of power and sea connection.
- (ii) **[Such]** The pump referred to in subparagraph (i) shall be capable of producing at least 2 jets of water from any 2 hydrants and hoses through nozzles which shall comply with regulation 106(4)(b), while simultaneously maintaining a pressure of at least **[30 lb]** 13 kg. per square **[inch]** centimetre at any hydrant in the ship.
- (4) In **[every class]** a Class I ship, there shall be provided a fire main, water service pipes, hydrants, hoses and nozzles, which shall be so arranged that they comply with the requirements of regulations 105 and 106 when all watertight doors and all doors in bulkheads constructed in accordance with regulation 50(1) of the Construction Regulations, 1968, are closed.
- (5) In **[every class]** a Class I ship, at least 1 fire hose shall be provided for **[every]** a hydrant fitted in compliance with this **[part]** Part. All such fire hoses shall be connected to fire hydrants at all times.
- (6) (a) In **[every class]** a Class I ship fitted with oil fired boilers or internal combustion type propelling machinery, there shall be provided in each space containing such boilers or machinery, at least 2 fire hydrants, one on the port side and one on the starboard side.

- (b) In addition, in **[any such]** a ship in which there is access to the machinery space by way of a shaft tunnel, a fire hydrant shall be provided in the tunnel at the end adjacent to that space.
- (c) A spray nozzle shall be provided for **[every]** a fire hose at **[every]** a hydrant fitted in such spaces in compliance with this **[part]** Part.
- (d) Spray nozzles or dual purpose nozzles shall be provided at all hydrants outside the machinery spaces which could be readily used for the purpose of fighting a fire inside the machinery spaces.”.

Substitution of regulation 56 of the Regulations

64. The following regulation is hereby substituted for regulation 56 of the Regulations:

“Portable fire extinguishers in accommodation and service spaces

- 56.** (1)(a) In **[every class]** a Class I ship, there shall be provided on each deck a sufficient number of portable fire extinguishers so that at least 2 of these shall be readily available for use in **[every]** an accommodation and service space between watertight bulkheads and bulkheads constructed in compliance with regulation 50(1) of the Construction Regulations, 1968.
- (b) In enclosed accommodation and service spaces above the bulkhead deck, at least one such extinguisher shall be provided for use on each side of the ship in such spaces.
 - (c) In addition, at least 1 portable fire extinguisher and an asbestos blanket shall be provided in **[every]** a galley: Provided that, where the superficial deck area of any galley exceeds **[500 square feet]** 152 meters, at least 2 such extinguishers and 2 such blankets shall be provided.
- (2) In **[every class]** a Class I ship, at least 1 portable fire extinguisher shall be provided for use in each control station.”.

Substitution of regulation 57 of the Regulations

65. The following regulation is hereby substituted for regulation 57 of the Regulations:

“Fixed fire smothering arrangements in cargo spaces

57. In **[every class]** a Class I ship of 1,000 tons or over, there shall be provided a fixed fire smothering gas installation complying with the requirements of regulation 111, which shall be so arranged as to protect **[every]** a cargo space.”.

Substitution of regulation 58 of the Regulations

66. The following regulation is hereby substituted for regulation 58 of the Regulations:

“Machinery spaces containing oil-fired boilers or oil-burning equipment

58. (1) In **[every class]** a Class I ship, there shall be provided for the protection of any space containing any oil-fired boiler, oil fuel settling tank or oil fuel unit, at least 1 of the following fixed fire extinguishing installations:

- (a) **[A]** a pressure water spraying system complying with the requirements of regulation 110;
- (b) a fire smothering gas installation complying with the requirements of regulation 111; or
- (c) a foam fire extinguishing installation complying with the requirements of regulation 112**[. If]**:

Provided that if the engine and boiler rooms are not entirely separated from each other by a bulkhead, or if fuel oil can drain from the boiler room into the engine room, the combined engine and boiler rooms shall, for the purpose of this subregulation, be regarded as a single space.

- (2) In addition to the requirements of subregulation (1), there shall be provided—
 - (a) in each boiler room, one or more foam fire extinguishers each of at least **[30 gallons]**113 litres capacity or carbon dioxide fire extinguishers each of at least **[100 lb]**45 kg. capacity**[. The extinguishers shall be]**, sited so as to be readily accessible in the event of fire, and they shall be sufficient in number to enable foam or carbon dioxide to be directed on to any part of the boiler room and spaces containing any part of the oil fuel installation;
 - (b) in each firing space and in each space which contains any part of any oil fuel installation, at least 2 portable fire extinguishers suitable for extinguishing oil fires; and
 - (c) in each firing space, a receptacle containing at least **[10 cubic feet]**3 cubic feet of sand or other dry material suitable for quenching oil fires together with a scoop for its distribution, or, alternative, an additional portable fire extinguisher suitable for extinguishing oil fires.”.

Substitution of regulation 59 of the Regulations

67. The following regulation is hereby substituted for regulation 59 of the Regulations:

“Machinery spaces containing internal combustion type machinery

- 59.** (1) In **[every class]**a Class I ship, there shall be provided for the protection of any space containing internal combustion type machinery used for main propulsion, or having in the aggregate a total power of not less than 1,000 b.h.p. for auxiliary purposes, at least one of the fixed fire extinguishing installations required by regulation 58(1).
- (2) In addition to the requirements of subregulation (1), there shall be provided in any such space—
- (a) one foam fire extinguisher of at least **[10 gallons]**37 litres capacity or a carbon dioxide fire extinguisher of at least **[35 lb]**15 kg. capacity; and
 - (b) one portable fire extinguisher suitable for extinguishing oil fires for each 1,000 b.h.p. or part thereof of such machinery, but in no event less than 2 such extinguishers: Provided that not more than 6 such extinguishers shall be required in any such space.”.

Substitution of regulation 60 of the Regulations

68. The following regulation is hereby substituted for regulation 60 of the Regulations:

“Machinery spaces containing steam engines

- 60.** In **[every class]**a Class I ship, there shall be provided in spaces containing steam turbines or enclosed pressure lubricated steam engines used either for main propulsion , or having in the aggregate a total power of not less than 1,000 b.h.p. for auxiliary purposes:
- (a) Foam fire extinguishers each of at least **[10 gallons]**37 litres capacity of carbon dioxide fire extinguishers each of at least **[35 lb]**15 kg. capacity, sufficient in number to enable foam or carbon dioxide to be directed on to any part of the pressure lubrication system and on to any part of the casings enclosing pressure lubricated parts of the turbines, engines or associated gearing, if any: Provided that such extinguishers shall not be required if equivalent protection is provided

- in such spaces by a fixed fire extinguishing installation fitted in compliance with regulation 58(1) or 59(1); and
- (b) one portable fire extinguisher for each 1,000 b.h.p. or part thereof of such machinery, suitable for extinguishing oil fires, but in no event less than 2 such extinguishers: Provided that not more than 6 such extinguishers shall be required in any one such space and provided that such extinguishers shall not be required in addition to any provided in compliance with regulation 59(2).”.

Substitution of regulation 61 of the Regulations

69. The following regulation is hereby substituted for regulation 61 of the Regulations:

“Firemen’s outfits

- 61.** (1)(a) **[Every class]** A Class I ship shall carry one fireman’s outfit for each **[100 feet (or part thereof)]** 30 meters of the registered length of the ship, but in no case less than 2.
- (b) **[Every such]** An outfit referred to in paragraph (a) shall comply with the requirements of regulation 114.
- (2) If, in any **[class]** Class I ship which carries firemen’s outfits containing only breathing apparatus of the air hose type, an air hose exceeding **[120 feet]** 36 meters in length would be necessary to reach from the open deck well clear of any hatch or doorway to any part of the accommodation, service, cargo or machinery spaces, at least 2 sets of breathing apparatus of the self-contained type shall be provided in addition.”.

Substitution of regulation 62 of the Regulations

70. The following regulation is hereby substituted for regulation 62 of the Regulations:

“International shore connection

- 62.** **[Every class]** A Class I ship of 1,000 tons or over shall be provided with at least 1 international shore connection to enable water to be supplied from another ship or from the shore to the fire main, and fixed provision shall be made to enable such a connection to be used on the port side and on the starboard side of the ship.”.

Amendment of Chapter II of Part II of the Regulations

71. Chapter II of Part II is hereby amended by the substitution for the heading of Chapter II of the following heading:

“CHAPTER II—[SHIPS OF]CLASS II OR IIA SHIPS”.

Amendment of Chapter III of Part II of the Regulations

72. Chapter III of Part II is hereby amended by the substitution for the heading of Chapter III of the following heading:

“CHAPTER III—[SHIPS OF]CLASS III OR IV SHIPS”.

Amendment of regulation 64 of the Regulations

73. Regulation 64 of the Regulations is hereby amended by—

- (a) the substitution for the heading of regulation 64 of the following heading:

“[Ships of class]Class III Ships”.

Amendment of regulation 65 of the Regulations

74. Regulation 65 of the Regulations is hereby amended by—

- (a) the substitution for the heading of regulation 65 of the following heading:

“[Ships of class]Class IV Ships”.

Amendment of Chapter IV of Part II of the Regulations

75. Chapter IV of Part II is hereby amended by the substitution for the heading of Chapter IV of the following heading:

“CHAPTER IV—[SHIPS OF]CLASS V OR VI SHIPS”.

Substitution of regulation 66 of the Regulations

76. The following regulation is hereby substituted for regulation 66 of the Regulations:

“Water pipes, hydrants and fire hoses

66. (1) [Every]A fully-decked **[class]Class** V or VI ship shall be provided with water pipes and hydrants.

(2) The diameter of the water service pipes shall be sufficient to enable an adequate supply of water to be provided for the operation of at least 1 fire hose and the projection thereby of a powerful jet of water.

(3) The number and position of the fire hydrants referred to in subregulation (1) shall be such that at least 1 such jet may be directed into any part of the ship by means of a fire hose not exceeding **[60 feet]18 meters** in length.

(4) At least 1 fire hose shall be provided for each hydrant.”.

Substitution of regulation 67 of the Regulations

77. The following regulation is hereby substituted for regulation 67 of the Regulations:

“Portable fire extinguishers for passenger and crew spaces

67. [Every]A fully-decked **[class]Class** V or VI ship shall be provided with at least 2 portable fire extinguishers for each of the passenger and crew spaces.”.

Substitution of regulation 68 of the Regulations

78. The following regulation is hereby substituted for regulation 68 of the Regulations:

“Machinery spaces: ships fitted with main or auxiliary oil-fired boilers

68. (1) [Every]A fully-decked **[class]Class** V or VI ship fitted with main or auxiliary oil-fired boilers, shall be provided in the machinery space with at least—

- (a) one fire hydrant and fire hose with a nozzle suitable for spraying water on oil;

- (b) a receptacle containing an adequate quantity of sand or other dry material suitable for quenching oil fires;
 - (c) a scoop for distributing the contents of the receptacle; and
 - (d) two portable fire extinguishers suitable for extinguishing oil fires.
- (2) In addition to the requirements of subregulation (1), there shall be provided in the machinery space a fire smothering carbon dioxide or other gas installation complying with the requirements of regulation 111: Provided that the quantity of gas shall not be less than **[60 lb]27 kg.** in weight contained in at least 2 cylinders which can be discharged separately.”.

Substitution of regulation 69 of the Regulations

79. The following regulation is hereby substituted for regulation 69 of the Regulations:

“Machinery spaces containing internal combustion type machinery

- 69.** (1) **[Every]**A full-decked **[class]**Class V or VI ship fitted with internal combustion type propelling machinery, shall be provided in the machinery space with at least—
- (a) one fire hydrant and fire hose with a nozzle suitable for spraying water on oil; and
 - (b) one portable foam fire extinguisher for each 500 b.h.p. of the machinery or part thereof, but in no event less than 2 such extinguishers: Provided that not more than six such extinguishers shall be required in any ship.
- (2) **[in]**In addition to the requirements of subregulation (1), there shall be provided in the machinery space a fire smothering carbon dioxide or other gas installation complying with the requirements of regulation 111: Provided that the quantity of gas shall not be less than **[60 lb]27 kg.** in weight contained in at least 2 cylinders which can be discharged separately.”.

Substitution of regulation 70 of the Regulations

80. The following regulation is hereby substituted for regulation 70 of the Regulations:

“Fire pumps

70. (1) **[Every]**A fully-decked **[class]Class** V or VI ship shall be provided with at least 1 fire pump operated by power.
- (2) **[Every]**A fully-decked **[class]Class** V or VI ship shall be provided with an additional fire pump which shall not be required to be operated by power and which shall be permanently connected to the water pipes referred to in regulation 66.
- (3) **[Such]**The pump referred to in subregulation (2), and its source of power, if any, shall be situated in a different compartment remote from that containing the pump referred to in subregulation (1).
- (4) If a hand pump is provided in compliance with **[this]** subregulation (2), it shall be of the rotary or semi-rotary **[type. A]type** and a sea suction valve shall be provided which shall be capable of being controlled from outside the machinery space.”.

Substitution of regulation 71 of the Regulations

81. The following regulation is hereby substituted for regulation 71 of the Regulations:

“Ships not fully decked

71. [Every class]A Class V or VI ship which is not fully-decked and is fitted with internal combustion type propelling machinery, shall be provided with at least—

- (a) two fire buckets;
- (b) a hand pump with a hose and a nozzle suitable for spraying water on oil;
- (c) a receptacle containing an adequate quantity of sand or other dry material suitable for quenching oil fires, and a scoop for distributing the contents of the receptacle; and
- (d) foam fire extinguishers and fire extinguishers capable of discharging dry powder or some other substance suitable for quenching oil fires in accordance with the following table:

Length of ship	Foam fire extinguishers		Number of extinguishers discharging dry powder or other
	No.	Minimum capacity of	

		each extinguisher	substance suitable for quenching oil fires
		Gallons	
Not over [30 feet] 9 meters	1	2	2
Over [30 feet] 9 meters, but not over [50 feet] 15 meters	2	2	2
Over [50 feet] 15 meters	2	2	3

Amendment of Chapter V of Part II of the Regulations

82. Chapter V of Part II is hereby amended by the substitution for the heading of Chapter V of the following heading:

“CHAPTER V—[SHIPS OF]CLASS VII SHIPS”.

Amendment of regulation 72 of the Regulations

83. Regulation 72 of the Regulations is hereby amended by—
- (a) the substitution for the heading of regulation 72 of the following heading:
- “[Ships of class]Class VII Ships of 500 tons or over: Fire pumps, fire main, water service pipes, hydrants, hoses and nozzles”;** and
- (b) the substitution for subregulations (1) to (4) of the following subregulations:
- “72. (1) [Every class]A Class VII ship of 500 tons or over shall be provided with appliances in accordance with this regulation whereby at least 2 jets of water, as required by this [part]Part, can reach any part of the ship normally accessible to the passengers or crew while the ship is being navigated, and any store room and any part of any cargo space when empty.**
- (2) (a) **[Every class]A Class VII ship of 1,000 tons or over shall be provided with at least 2 fire pumps operated by power[. Each]with each such**

pump shall be capable of delivering at least 1 jet simultaneously from each of any 2 fire hydrants, hoses and nozzles provided in the ship, and shall comply with the requirements of regulation 104.

- (b) **[Every class]**A Class VII ship of 500 tons or over but of less than 1,000 tons, shall be provided with at least 2 fire pumps operated by power each of which shall be capable of delivering at least 1 jet of water from any hydrant, hose and nozzle provided in the ship, and shall comply with the requirements of regulation 104.

- (3) (a) If, in any **[class]**Class VII ship of 500 tons or over, a fire in any one compartment could put all the fire pumps out of action, there shall be provided in a position outside the machinery spaces, an independently driven power operated emergency fire pump and its source of power and sea connection: Provided that, in any such ship of less than 1,000 tons, the emergency fire pump may be manually operated.
- (b) In **[every]**a ship referred to in paragraph (a) of 1,000 tons or over, the emergency fire pump shall be capable of producing at least 2 jets of water from any of the fire hydrants and hoses through nozzles which shall comply with regulation 106(4)(b) while simultaneously maintaining a pressure of at least **[30 lb]**13 kg. per square inch at any hydrant in the ship.
- (c) In **[every]**a ship referred to in paragraph (a) of 500 tons or over but of less than 1,000 tons, the emergency fire pump shall be capable of producing from any of the fire hydrants and hoses in the ship through a nozzle which shall comply with regulation 106(4)(a), a jet of water having a throw of not less than **[40 feet]**12 meters.

- (4) (a) In **[every class]**a Class VII ship of 500 tons or over, there shall be provided a fire main, water service pipes and hydrants which shall comply with the requirements of regulation 105.
- (b) (i) **[Every class]**A Class VII ship of 1,000 tons or over shall, in addition to any fire hoses provided in the machinery spaces, be provided with at least 1 fire hose for each **[100 feet]**30 meter length of the ship but in no case less than 5 hoses, and such hoses shall have a total length of at least 60 per cent of the length of the ship~~. In~~and in addition to such hoses, there shall be provided 1 spare fire hose.
- (ii) **[Every class]**A Class VII ship of 500 tons or over but of less than 1,000 tons, shall in addition to any fire hoses provided in the machinery spaces, be provided with at least 2 fire hoses having

a total length of at least 60 per cent of the length of the ship and 1 spare fire hose.

- (c) In **[every class]**a Class VII ship of 500 tons or over fitted with oil-filled boilers or internal combustion type propelling machinery, there shall be provided in each space containing such boilers or machinery, at least 2 fire hydrants 1 on the port side and 1 on the starboard side, an in addition where there is access to the machinery space of any such ship by way of a shaft tunnel, a fire hydrant shall be provided in the tunnel at the end adjacent to that space**[. A]**and fire hose and spray nozzle shall be provided at every such fire hydrant.”.

Amendment of regulation 73 of the Regulations

84. Regulation 73 of the Regulations is hereby amended by—

- (b) the substitution for the heading of regulation 73 of the following heading:

“[Ships of class]Class VII Ships of 500 tons or over: Portable fire extinguishers for accommodation and service spaces”; and

- (c) the substitution for regulation 73 of the following regulation:

“73. (1) [Every class]A Class VII ship of 500 tons or over shall be provided with a sufficient number of portable fire extinguishers to ensure that at least one such extinguisher will be readily available for use in any part of the accommodation or service spaces.

(2) The number of [such]the extinguishers referred to in paragraph (a) shall not be less than 5 in a ship of 1,000 tons or over and not less than 3 in a ship of 500 tons or over but less than 1,000 tons.”.

Amendment of regulation 74 of the Regulations

85. Regulation 74 of the Regulations is hereby amended by—

- (d) the substitution for the heading of regulation 74 of the following heading:

“[Ships of class]Class VII Ships of 2,000 tons or over: Fixed fire smothering arrangements in cargo spaces”; and

- (e) the substitution for regulation 74 of the following regulation:

“74. In **[every class]**a Class VII ship of 2,000 tons or over there shall be provided a fixed fire smothering gas installation complying with the requirements of regulation 111 which shall be so arranged as to protect **[every]**a cargo space: Provided that, subject to the provisions of regulation 103(1) and regulation 111, steam may be substituted for fire smothering gas in any such installation and provided further that in any tanker, a fixed installation discharging foam externally and through suitable mobile sprayers internally to the liquid cargo tanks and complying with the requirements of regulation 112(2) may be substituted for the fixed fire smothering gas installation required by this regulation.”.

Amendment of regulation 75 of the Regulations

86. Regulation 75 of the Regulations is hereby amended by—

(f) the substitution for the heading of regulation 75 of the following heading:

“[Ships of class]Class VII Ships of 500 tons or over: Machinery spaces containing oil-fired boilers or oil burning equipment”; and

(g) the substitution for subregulations (1) to (3) of the following subregulations:

“75. (1) In **[every class]**a Class VII ship of 500 tons or over, there shall be provided for the protection of any space containing any oil-fired boiler, oil fuel settling tank or oil fuel unit, at least 1 of the following fixed fire extinguishing installations:

- (a) **[A]**a pressure water spraying system complying with the requirements of regulation 110;
- (b) a fire smothering gas installation complying with the requirements of regulation 111; or
- (c) a foam fire extinguishing installation complying with the requirements of regulation 112:

Provided that in any **[class]**Class VII ship of 500 tons or over but of less than 1,000 tons, a fixed fire smothering steam installation complying with the requirements of regulation 111, may be provided in lieu of any of the above-mentioned installations. If the engine room and boiler rooms are not entirely separated from each other by a bulkhead, or if fuel oil can drain from the boiler room into the engine room, the combined engine and boiler room shall, for the purpose of this subregulation, be regarded as a single space.

- (2) In addition to the requirements of subregulation (1), there shall be provided—
- (a) in each boiler room, one foam fire extinguisher of at least **[10 gallons]**37 litres capacity or a carbon dioxide fire extinguisher of at least **[35 lb]**15 kg. capacity if the number of burners therein is 5 or more. If the number of burners in the boiler room is less than 5, there shall be provided for each burner therein, 1 portable fire extinguisher suitable for extinguishing oil fires;
 - (b) in each firing space and in each space which contains any part of any oil fuel installation, at least 2 portable fire extinguishers suitable for extinguishing oil fires, in addition to any which may be carried in compliance with paragraph (a); and
 - (c) in each firing space, a receptacle containing, in a ship of 1,000 tons or over, 10 cubic feet, or in a ship of 500 tons or over but of less than 1,000 tons, **[5 cubic feet]**1.5 cubic meters of sand or other dry material suitable for quenching oil fires together with a scoop for its distribution, or alternatively, an additional portable fire extinguisher suitable for extinguishing oil fires.
- (3) If, in **[any class]**a Class VII ship of 500 tons or over but of less than 1,000 tons, a fixed smothering steam installation is fitted in compliance with the provision to subregulation (1) and steam is supplied by water-tube boilers, there shall in addition be provided for the protection of the boiler room and spaces containing the oil fuel installation, 1 foam fire extinguisher of at least **[30 gallons]**113 litre capacity or a carbon dioxide fire extinguisher of at least **[100 lb]**45 kg. capacity.”

Amendment of regulation 76 of the Regulations

87. Regulation 76 of the Regulations is hereby amended by—

(h) the substitution for the heading of regulation 76 of the following heading:

“[Ships of class]Class VII Ships of 500 tons or over: Machinery spaces containing internal combustion type machinery”; and

(i) the substitution for subregulations (1) to (2) of the following subregulations:

“76. (1) In [every class]a Class VII ship of 500 tons or over, there shall be provided for the protection of any space containing internal combustion type

machinery used for main propulsion, or having in the aggregate a total power of not less than 1,000 b.h.p. for auxiliary purposes, at least one of the fixed fire extinguishing installation required by regulation 75(1): Provided that in any **[class]**Class VII ship of 500 tons or over but of less than 1,000 tons, a fixed fire smothering steam installation complying with the requirements of regulation 111 may be provided in lieu of any of the said installations.

- (2) In addition to the requirements of subregulation (1), there shall be provided in any space referred to in that subregulation—
- (a) one foam fire extinguisher of at least **[10 gallons]** capacity, or a carbon dioxide fire extinguisher of at least **[35 lb]**15 kg. capacity; and
 - (b) one portable fire extinguisher suitable for extinguishing oil fires for each 1,000 b.h.p. or part thereof of the machinery, but in no event less than 2 such extinguishers: Provided that not more than 6 such extinguishers shall be required in any such space.”.

Amendment of regulation 77 of the Regulations

88. Regulation 77 of the Regulations is hereby amended by—

- (j) the substitution for the heading of regulation 77 of the following heading:

“[Ships of class]Class VII Ships of 500 tons or over: Machinery spaces containing steam engines”;

- (k) the substitution for regulation 77 of the following regulation:

“77. In **[every class]**a Class VII ship of 500 tons or over, there shall be provided in the spaces containing steam turbines or enclosed pressure lubricated steam engines used either for main propulsion, or having in the aggregate a total power of not less than 1,000 b.h.p. for auxiliary purposes—

- (a) foam fire extinguishers each of at least **[10 gallons]**37 litre capacity or carbon dioxide fire extinguishers each of at least **[35 lb]**15 kg. capacity, sufficient in number to enable foam or carbon dioxide to be directed on to any part of the pressure lubrication system and on to any part of the casings enclosing pressure lubricated parts of the turbines, engines or associated gearing, if any: Provided that such extinguishers shall not be required if equivalent protection is provided

- in such spaces by a fixed fire extinguishing installation fitted in compliance with regulation 75(1) or regulation 76(1); and
- (b) one portable fire extinguisher, for each 1,000 b.h.p. or part thereof of such machinery, suitable for extinguishing oil fires, but in no event less than 2 such extinguishers: Provided that not more than 6 such extinguishers shall be required in any one such space and provided further that such extinguishers shall not be required in addition to any provided in compliance with regulation 76(2).”.

Amendment of regulation 78 of the Regulations

89. Regulation 78 of the Regulations is hereby amended by—

- (l) the substitution for the heading of regulation 78 of the following heading:

“[Ships of class]Class VII Ships of 500 tons or over: Firemen’s outfits”; and

- (m) the substitution for subregulations (1) to (2) of the following subregulations:

“78. (1) [Every class]A Class VII ship of 500 tons or over, shall carry firemen’s outfits which shall comply with the requirements of regulation 114, in accordance with the following scale:

<i>Tonnage of ship</i>	<i>Minimum number of lifebuoys</i>
500 or over, but under 2,500	1
2,500 or over	2

- (2) If, in any **[class]Class VII ship of 500 tons or over** which carries firemen’s outfits containing only breathing apparatus of the air hose type, an air hose exceeding **[120 feet]36 meters** in length would be necessary to reach from the open deck well clear of any hatch or doorway to any part of the accommodation, service, cargo or machinery spaces, at least one breathing apparatus of the self-contained type shall be provided in addition.”.

Amendment of regulation 79 of the Regulations

90. Regulation 79 of the Regulations is hereby amended by—

- (n) the substitution for the heading of regulation 79 of the following heading:

“[Ships of class]Class VII Ships of 1,000 tons or over: International shore connection”; and

- (o) the substitution for regulation 79 of the following regulation:

“79. [Every class]A Class VII ship of 1,000 tons or over, shall be provided with at least one international shore connection to enable water to be supplied from another ship or from the shore to the fire main, and fixed provision shall be made to enable such a connection to be used on the port side and on the starboard side of the ship.”.

Amendment of regulation 80 of the Regulations

91. Regulation 80 of the Regulations is hereby amended by—

- (p) the substitution for the heading of regulation 80 of the following heading:

“[Ships of class]Class VII Ships of less than 500 tons: Fire pumps, fire main, water service pipes, hydrants, hoses and nozzles”; and

- (q) the substitution for subregulations (1) to (5) of the following subregulations:

“80. (1) [Every class]A Class VII ship of less than 500 tons, shall be provided with appliances in accordance with this regulation whereby at least one jet of water, as required by this [part]Part, can reach any part of the ship normally accessible to the passengers or crew while the ship is being navigated, and any store room and any part of any cargo space when empty.

(2) [Every class]A Class VII ship of less than 500 tons shall be provided with at least one fire pump operated by power which shall be capable of delivering at least one jet of water from any fire hydrant, hose and nozzle provided in the ship, and which shall comply with the requirements of regulation 104.

(3) In [every class]a Class VII ship of less than 500 tons fitted with oil-fired boilers or internal combustion type propelling machinery, there shall be provided in a position outside the spaces containing such boilers or machinery, an additional fire pump and its source of power and sea

connection, 1 such pump is operated by power, **[it]** shall comply with the requirements of subregulation (2), and if it is manually operated, **[it]** and shall be provided with a hose and dinch diameter nozzle through which **[it]** the pump shall be capable of producing a jet of water having a throw of not less than **[20 feet]** which can be directed on to any part of the ship.

- (4) In **[every class]** a Class VII ship of less than 500 tons, there shall be provided a fire main, water service pipes and hydrants which shall comply with the requirements of regulation 105, and at least three fire hoses.
- (5) In **[every class]** a Class VII ship of less than 500 tons fitted with oil-fired boilers or internal combustion type propelling machinery, there shall be provided a spray nozzle suitable for use with the fire hoses required by subregulation (4).”.

Amendment of regulation 81 of the Regulations

92. Regulation 81 of the Regulations is hereby amended by—

- (r) the substitution for the heading of regulation 81 of the following heading:

“[Ships of class]Class VII Ships of less than 500 tons: Portable fire extinguishers for accommodation and service spaces”; and

- (s) the substitution for regulation 81 of the following regulation:

“81. [Every class]A Class VII ship of less than 500 tons, shall be provided with at least three portable fire extinguishers so situated as to be readily available for use in the accommodation and service spaces.”

Amendment of regulation 82 of the Regulations

93. Regulation 82 of the Regulations is hereby amended by—

- (t) the substitution for the heading of regulation 82 of the following heading:

“[Ships of class]Class VII Ships of less than 500 tons: Machinery spaces containing oil-fired boilers or oil burning equipment”; and

- (u) the substitution for subregulations (1) to (2) of the following subregulations:

- “**82.** (1) In **[every class]**a Class VII ship of less than 500 tons, there shall be provided for the protection of any space containing any oil-fired boiler, oil fuel settling tank or oil fuel unit, at least one of the following fixed fire extinguishing installations:
- (a) **[A]**a pressure water spraying system complying with the requirements of regulation 110;
 - (b) a fire smothering gas or steam installation complying with the requirements of regulation 111; or
 - (c) a foam fire extinguishing installation complying with the requirements of regulation 112. **[. If]:** Provided that if the engine and boiler room are not entirely separated from each other by a bulkhead, or if fuel oil can drain from the boiler room into the engine room, the combined engine room and boiler room shall, for the purpose of this subregulation, be regarded as a single space.
- (2) In addition to the requirements of subregulation (1), there shall be provided—
- (a) in each boiler room and in each space which contains any part of any oil fuel installation, at least two portable fire extinguishers suitable for extinguishing oil fires; and
 - (b) in each firing space, a receptacle containing at least **[5 cubic feet]**1.5 cubic meters of sand or other dry material suitable for quenching oil fires together with a scoop for its distribution, or, alternatively an additional portable fire extinguisher suitable for extinguishing oil fires.”.

Amendment of regulation 83 of the Regulations

94. Regulation 83 of the Regulations is hereby amended by—

- (v) the substitution for the heading of regulation 83 of the following heading:

“[Ships of class]Class VII Ships of less than 500 tons: Machinery spaces containing internal combustion type machinery”; and

- (w) the substitution for regulation 83 of the following regulation:

“83. In **[every class]**a Class VII ship of less than 500 tons there shall be provided in any space containing internal combustion type machinery, one

portable fire extinguisher suitable for extinguishing oil fires for each 100 b.h.p. or part thereof of such machinery, except that not more than six such extinguishers shall be required in any one space and that alternatively there may be provided two such extinguishers together with either—

- (a) one foam fire extinguisher of at least **[10 gallons]**37 litre capacity; or
- (b) one carbon dioxide fire extinguisher of at least **[35 lb]**15 kg. capacity.”.

Amendment of regulation 84 of the Regulations

95. Regulation 84 of the Regulations is hereby amended by—

- (x) the substitution for the heading of regulation 84 of the following heading:

“[Ships of class]Class VII Ships of less than 500 tons: Firemen’s outfits”;
and

- (y) the substitution for regulation 84 of the following regulation:

“84. [Every class]A Class VII ship of less than 500 tons, shall be provided with at least one firemen’s outfit which shall comply with the requirements of regulation 114.”.

Amendment of Chapter VI of Part II of the Regulations

96. Chapter VI of Part II is hereby amended by the substitution for the heading of Chapter VI of the following heading:

“CHAPTER VI—[SHIPS OF]CLASS VIIA SHIPS”.

Substitution of regulation 85 of the Regulations

97. The following regulation is hereby substituted for regulation 85 of the Regulations:

“Requirements

85. Regulations 72 to 84 inclusive, shall apply also to a **[class]Class VIIA** ship.”.

Amendment of regulation 86 of the Regulations

98. Regulation 86 of the Regulations is hereby amended by—

(a) the substitution for the heading of regulation 86 of the following heading:

“[Ships of class]Class VIII Ships of 1,000 tons or over”; and

(b) the substitution for regulation 86 of the following regulation:

“86. Regulations 72 and 73 and regulations 75 to 79 inclusive, shall apply to a **[class]Class VIII** ship of 1,000 tons or over. In addition, regulation 74 shall apply also to a tanker of **[class]Class VIII** of 2,000 tons or over.”.

Amendment of regulation 87 of the Regulations

99. Regulation 87 of the Regulations is hereby amended by—

(z) the substitution for the heading of regulation 87 of the following heading:

“[Ships of class]Class VIII Ships of 500 tons or over but of less than 1,000 tons: Fire pumps, fire main, water service pipes, hydrants, hoses and nozzles”; and

(aa) the substitution for subregulations (1) to (6) of the following subregulations:

“87. (1) [Every class]A Class VIII ship of 500 tons or over but of less than 1,000 tons, shall be provided with appliances in accordance with this regulation whereby at least two jets of water, as required by this **[part]Part**, can reach any part of the ship normally accessible to the passengers or crew while the ship is being navigated, and any store room and any part of any cargo space when empty.

(2) (a) **[Every class]A Class VIII** ship of 500 tons or over but of less than 1,000 tons, shall be provided with at least 2 fire pumps operated by power, 1 of which may be driven by the main engine.

(b) Each [such pump]one of the pumps referred to in paragraph (a) shall be capable of delivering at least 1 jet of water from any fire hydrant, hose and nozzle provided in the ship, and shall comply with the requirements of regulation 104.

- (3) (a) If, in any **[class]**Class VIII ship of 500 tons or over but of less than 1,000 tons fitted with oil-fired boilers or internal combustion type propelling machinery, a fire in any one compartment could put all the fire pumps out of action, there shall be provided in a position outside the machinery spaces, an emergency fire pump and its source of power and sea connection.
- (b) **[Such]**The pump referred to in paragraph (a) may be operated by power or manually, and shall be capable of producing from any of the fire hydrants and hoses provided in the ship, through a nozzle which shall comply with regulation 106(4)(a), a jet of water having a throw of not less than **[40 feet]**12 meters.
- (4) In **[every class]**a Class VIII ship of 500 tons or over but of less than 1,000 tons, there shall be provided a fire main, water service pipes and hydrants which shall comply with the requirements of regulation 105.
- (5) **[Every class]**A Class VIII ship of 500 tons or over but of less than 1,000 tons shall, in addition to any fire hose provided in the machinery spaces, be provided with at least 2 fire hoses having a total length of at least 60 per cent of the length of the ship and one spare fire hose.
- (6) In **[every class]**a Class VIII ship of 500 tons or over but of less than 1,000 tons fitted with oil-fired boilers or internal combustion type propelling machinery, there shall be provided in each space containing such machinery, at least 1 fire hydrant**[. A]**and a fire hose and spray nozzle shall be provided at every such hydrant.”.

Amendment of regulation 88 of the Regulations

100. Regulation 88 of the Regulations is hereby amended by—

- (a) the substitution for the heading of regulation 88 of the following heading:

“[Ships of class]Class VIII Ships of 500 tons or over but of less than 1,000 tons: Portable fire extinguishers for accommodation and service spaces”;

and

- (b) the substitution for regulation 88 of the following regulation:

“88. [Every class]A Class VIII ship of 500 tons or over but of less than 1,000 tons, shall be provided with at least 3 portable fire extinguishers so situated as to be readily available for use in the accommodation and service spaces.”.

Amendment of regulation 89 of the Regulations

101. Regulation 89 of the Regulations is hereby amended by—

- (a) the substitution for the heading of regulation 89 of the following heading:

“[Ships of class]Class VIII Ships of 500 tons or over but of less than 1,000 tons: Machinery spaces containing oil-fired boilers or oil burning equipment”; and

- (b) the substitution for subregulations (1) to (2) of the following subregulations:

“89. (1) In [every class]a Class VIII ship of 500 tons or over but of less than 1,000 tons, there shall be provided for the protection of any space containing any oil-fired boiler, oil fuel settling tank or oil fuel unit, at least 1 of the following fixed fire extinguishing installations:

- (a) **[A]a** pressure water spraying system complying with the requirements of regulation 110;
- (b) a fire smothering gas or steam installation complying with the requirements of regulation 111; or
- (c) (i) a foam fire extinguishing installation complying with the requirements of regulation 112**[. If];**
 - (ii) the engine room and boiler rooms are not entirely separated from each other by a bulkhead, or if fuel oil can drain from the boiler room into the engine room, the combined engine room and boiler room shall, for the purpose of this subregulation, be regarded as a single space**[. If]; and**
 - (iii) if a fixed fire smothering steam installation is fitted in compliance with paragraph (b) and steam is supplied only by water-tube boilers, there shall be provided for the protection of the boiler room and spaces containing the oil fuel installation, one foam fire extinguisher of at least **[30 gallons]113 litres** capacity or a carbon dioxide fire extinguisher of at least **[100 lb]45 kg.** capacity.

- (2) In addition to the requirements of subregulation (1) there shall be provided—
- (a) (i) in each boiler room, if the number of burners therein is 5 or more, one foam fire extinguisher of at least [10 gallons]37 litres capacity or a carbon dioxide fire extinguisher of at least [35 lb]15 kg. capacity[. If]; and
 - (ii) if the number of burners is less than 5, there shall be provided for each burner therein 1 portable fire extinguisher suitable for extinguishing oil fires;
 - (b) in each firing space, and in each space which contains any part of any oil fuel installation, at least 2 portable fire extinguishers suitable for extinguishing oil fires in addition to any such extinguishers which may be carried in compliance with paragraph (a); and
 - (c) in each firing space, a receptacle containing at least [5 cubic feet]1.5 cubic meters of sand or other dry material suitable for quenching oil fires together with a scoop for its distribution, or alternatively, and additional portable fire extinguisher suitable for extinguishing oil fires.”.

Amendment of regulation 90 of the Regulations

102. Regulation 90 of the Regulations is hereby amended by—

- (a) the substitution for the heading of regulation 90 of the following heading:

“[Ships of class]Class VIII Ships of 500 tons or over but of less than 1,000 tons: Machinery spaces containing internal combustion type machinery”;
and

- (b) the substitution for subregulations (1) to (2) of the following subregulations:

“90. (1) In [every class]a Class VIII ship of 500 tons or over but of less than 1,000 tons, there shall be provided in any space containing internal combustion type machinery used for main propulsion, or having in the aggregate a total power of not less than 250 b.h.p. for auxiliary purposes, 1 foam fire extinguisher of at least [10 gallons]37 litres capacity or a carbon dioxide fire extinguisher of at least [35 lb]15 kg. capacity.

- (2) In **[every class]a Class VIII ship of 500 tons or over but of less than 1,000 tons, there shall be provided in any space containing internal combustion**

type machinery, 1 portable fire extinguisher suitable for extinguishing oil fires for each 100 b.h.p. or part thereof of such machinery: Provided that not more than 6 such extinguishers shall be required in any such space.”.

Amendment of regulation 91 of the Regulations

103. Regulation 91 of the Regulations is hereby amended by—

- (a) the substitution for the heading of regulation 91 of the following heading:

“[Ships of class]Class VIII Ships of 500 tons or over but of less than 1,000 tons: Firemen’s outfits”; and

- (b) the substitution for regulation 91 of the following regulation:

“91. [Every class]A Class VIII ship of 500 tons or over but of less than 1,000 tons, shall be provided with at least 1 fireman’s outfit which shall comply with the requirements of regulation 114.”.

Amendment of regulation 92 of the Regulations

104. Regulation 92 of the Regulations is hereby amended by—

- (a) the substitution for the heading of regulation 92 of the following heading:

“[Ships of class]Class VIII Ships of 150 tons or over but of less than 500 tons: Fire pumps, fire main, water service pipes, hydrants, hoses and nozzles”; and

- (b) the substitution for subregulations (1) to (4) of the following subregulations:

“92. (1) [Every class]A Class VIII ship of 150 tons or over but of less than 500 tons, shall be provided with appliances in accordance with this regulation whereby at least 1 jet of water, as required by this **[part]Part, can reach any part of the ship normally accessible to the passengers or crew while the ship is being navigated, and any store room and any part of any cargo space when empty.**

- (2) **[Every class]**A Class VIII ship of 150 tons or over but of less than 500 tons, shall be provided with at least 1 fire pump operated by power which shall be capable of delivering at least 1 jet of water from any fire hydrant, hose and nozzle provided in the ship and which shall comply with the requirements of regulation 104.
- (3) In **[every class]**a Class VIII ship of 150 tons or over but of less than 500 tons, there shall be provided a fire main, water service pipes and hydrants which shall comply with the requirements of regulation 105, and at least 2 fire hoses.
- (4) In **[every class]**a Class VIII ship of 150 tons or over but of less than 500 tons fitted with oil-fired boilers or internal combustion type propelling machinery, there shall be provided a spray nozzle suitable for use with the fire hoses required by subregulation (3).”.

Amendment of regulation 93 of the Regulations

105. Regulation 93 of the Regulations is hereby amended by—

- (a) the substitution for the heading of regulation 93 of the following heading:

“[Ships of class]Class VIII Ships of 150 tons or over but of less than 500 tons: Portable fire extinguishers for accommodation and service spaces”;
and

- (b) the substitution for regulation 93 of the following regulation:

“93. [Every class]A Class VIII ship of 150 tons or over but of less than 500 tons, shall be provided with at least 2 portable fire extinguishers so situated as to be readily available for use in the accommodation and service spaces.”.

Amendment of regulation 94 of the Regulations

106. Regulation 94 of the Regulations is hereby amended by—

- (a) the substitution for the heading of regulation 94 of the following heading:

“[Ships of class]Class VIII Ships of 150 tons or over but of less than 500 tons: Machinery spaces containing oil-fired boilers or oil burning equipment”; and

- (b) the substitution for subregulations (1) to (2) of the following subregulations:

“94. (1) In [every class]a Class VIII ship of 1500 tons or over but not less than 500 tons, there shall be provided for the protection of any space containing any oil-fired boiler, oil fuel settling tank or oil fuel unit, at least one of the following fixed fire extinguishing installations:

- (a) **[A]a** pressure water spraying system complying with the requirements of regulation 110;
- (b) a fire smothering gas or steam installation complying with the requirements of regulation 111; or
- (c) (i) a foam fire extinguishing installation complying with the requirements of regulation 112 **[. If]; and**
(ii) if the engine and boiler rooms are not entirely separated from each other by a bulkhead, or if fuel oil can drain from the boiler room into the engine room, the combined engine room and boiler room shall, for the purpose of this subregulation, be regarded as a single space.

(2) In addition to the requirements of subregulation (1), there shall be provided—

- (a) in each boiler room and in each space which contains any part of any oil fuel installation, at least 2 portable fire extinguishers suitable for extinguishing oil fires; and
- (b) in each firing space, a receptacle containing at least **[5 cubic feet]1.5 cubic meters** of sand or other dry material suitable for quenching oil fires together with a scoop for its distribution, or alternatively, an additional portable fire extinguisher suitable for extinguishing oil fires.”.

Amendment of regulation 95 of the Regulations

107. Regulation 95 of the Regulations is hereby amended by—

- (a) the substitution for the heading of regulation 95 of the following heading:

“[Ships of class]Class VIII Ships of 150 tons or over but of less than 500 tons: Machinery spaces containing internal combustion type machinery”;
and

- (b) the substitution for regulation 95 of the following regulation:

“95. In **[every class]**a Class VIII ship of 150 tons or over but of less than 500 tons, there shall be provided in any space containing internal combustion type machinery, 1 portable fire extinguisher suitable for extinguishing oil fires for each 100 b.h.p. or part thereof of such machinery, except that not more than 6 such fire extinguishers shall be required in any one space and that, alternatively, there may be provided 2 such extinguishers together with either—

- (a) one foam fire extinguisher of at least **[10 gallons]**37 litres capacity; or
(b) one carbon dioxide fire extinguisher of at least **[35 lb]**15 kg. capacity.”.

Amendment of regulation 96 of the Regulations

108. Regulation 96 of the Regulations is hereby amended by—

- (a) the substitution for the heading of regulation 96 of the following heading:

“[Ships of class]Class VIII Ships of of 150 tons or over but of less than 500 tons: Firemen’s outfit”; and

- (b) the substitution for regulation 96 of the following regulation:

“96. **[Every class]**A Class VIII ship of 150 tons or over but of less than 500 tons, shall be provided with at least one firemen’s outfit which shall comply with the requirements of regulation 114.”.

Amendment of regulation 97 of the Regulations

109. Regulation 97 of the Regulations is hereby amended by—

- (a) the substitution for the heading of regulation 97 of the following heading:

“[Ships of class]Class VIII Ships of less than 150 tons: Fire pumps, fire main, water service pipes, hydrants, hoses and nozzles”; and

(b) the substitution for regulation 97 of the following regulation:

“**97.** Regulation 92 shall apply also to a **[class]Class VIII** ship of less than 150 tons, except that the fire pump required by regulation 92(2) may be driven by the main engine.”.

Amendment of regulation 98 of the Regulations

110. Regulation 98 of the Regulations is hereby amended by—

(a) the substitution for the heading of regulation 98 of the following heading:

“**[Ships of class]Class VIII Ships of less than 150 tons: Portable fire extinguishers**”; and

(b) the substitution for subregulation (1) of the following subregulation:

“**98.** (1) **[Every class]A Class VIII** ship of less than 150 tons, shall be provided with portable fire extinguishers suitable for extinguishing oil fires, so situated as to be readily available for use, in accordance with the following table:

<i>Length of ship in [feet]meters</i>	<i>Minimum number of extinguishers</i>
Under [40 feet]12 meters	1
[40 feet]12 meters or over but less than [70 feet]21 meters	2
[70 feet]21 meters or over	3

”.

Amendment of Chapter VIII of Part II of the Regulations

111. Chapter VIII of Part II is hereby amended by the substitution for the heading of Chapter VIII of the following heading:

“**CHAPTER VIII—[SHIPS OF]CLASS IX OR IXA SHIPS**”.

Substitution of regulation 99 of the Regulations

112. The following regulation is hereby substituted for regulation 99 of the Regulations:

“Requirements

99. Regulations 86 to 98 inclusive, shall apply also to a **[class]Class** IX or IXA ship.”.

Amendment of Chapter IX of Part II of the Regulations

113. Chapter IX of Part II is hereby amended by the substitution for the heading of Chapter IX of the following heading:

“CHAPTER IX—[SHIPS OF]CLASS X SHIPS”.

Substitution of regulation 100 of the Regulations

114. The following regulation is hereby substituted for regulation 100 of the Regulations:

“Requirements

100. (1) Regulations 72 and 73 and regulations 75 to 78 inclusive, shall apply to a **[class]Class** X ship of 1,000 tons or over as they apply to a **[class]Class** VII ship of 1,000 tons or over.

(2) Regulation 87(1), (2), (4), (5) and (6) and regulations 88 to 91 inclusive shall apply also to a **[class]Class** X ship of 500 tons or over but of less than 1,000 tons.

(3) Regulations 92 to 95 inclusive shall apply also to a **[class]Class** X ship of 150 tons or over but of less than 500 tons.

(4) Regulations 97 and 98 shall apply to a **[class]Class** X ship of less than 150 tons: Provided that a hand pump may be substituted for a power pump in a ship of less than 25 tons.”.

Amendment of Chapter X of Part II of the Regulations

115. Chapter X of Part II is hereby amended by the substitution for the heading of Chapter X of the following heading:

“CHAPTER X—[SHIPS OF]CLASS XI SHIPS”.

Substitution of regulation 101 of the Regulations

116. The following regulation is hereby substituted for regulation 101 of the Regulations:

“Requirements

101. **[Every class]A Class** XI ship shall be provided with—

- (a) one pump and one fire hose whereby a powerful jet of water can be readily directed into any part of the ship;
- (b) sufficient portable fire extinguishers to ensure that at least one is available for immediate use in each compartment of the crew spaces and of the passenger spaces, if any; and
- (c) fire buckets in accordance with the following table:

<i>Length of ship in [feet]meters</i>	<i>Minimum number of buckets</i>
[50]15 or under	2, one of which shall be fitted with a lanyard
Over [50]15 , but not over [70]21	3, two of which shall be fitted with lanyards
Over [70]21	4, two of which shall be fitted with lanyards

”.

Amendment of Chapter XI of Part II of the Regulations

117. Chapter XI of Part II is hereby amended by the substitution for the heading of Chapter XI of the following heading:

“CHAPTER XI—[SHIPS OF]CLASS XII SHIPS”.

Substitution of regulation 102 of the Regulations

118. The following regulation is hereby substituted for regulation 102 of the Regulations:

“Requirements

102. (1) **[Every class]**A Class XII ship of **[75 feet]**22 meters or over in length shall be provided with a pump and a fire hose whereby a powerful jet of water can rapidly be directed into any part of the ship.

(2) **[Every class]**A Class XII ship shall be provided with fire buckets in accordance with the following table:

<i>Length of ship in feet</i>	<i>Minimum number of buckets</i>
[50] <u>15</u> or under	2, one of which shall be fitted with a lanyard
Over [50] <u>15</u> , but not over [75] <u>22</u>	2, two of which shall be fitted with lanyards
Over [75] <u>22</u>	4, two of which shall be fitted with lanyards

(3) **[Every class]**A Class XII ship of **[75 feet]**22 meters or over in length and fitted with internal combustion propelling machinery shall be provided with a nozzle suitable for spraying water on oil by means of the fire hose referred to in subregulation (1).

(4) **[Every class]**A Class XII ship fitted with internal combustion propelling machinery shall be provided with portable fire extinguishers capable of discharging foam or some other substance suitable for quenching oil fires. The number of such extinguishers shall be in accordance with the following table:

<i>Brake horse power of main engines</i>	<i>Number of extinguishers</i>
Not over 500	2
Over 500	3

(5) **[Every class]**A Class XII ship in which sails are the only means of propulsion shall carry not less than 2 portable fire extinguishers.”.

Substitution of regulation 103 of the Regulations

119. The following regulation is hereby substituted for regulation 103 of the Regulations:

“Additional requirements for ships carrying explosives

103. (1) Where any ship, other than a ship carrying more than 12 passengers, carries explosives of such a nature or in such quantity as are not permitted to be carried in a passenger ship by the relative provisions of the Merchant Shipping (Dangerous Goods) Regulations, 1997, steam shall not be used for fire smothering purposes in any compartment containing explosives, and in any such compartment containing explosive and in **[every]**an adjacent cargo compartment there shall be provided a fire detection system complying with the requirements of regulation 113 or a smoke detection system.

(2) For the purpose of this regulation, “compartment” means all spaces contained between 2 adjacent permanent bulkheads, and includes the lower hold and all cargo spaces above it**[. The]:** Provided the whole of any shelter deck space not subdivided by steel bulkheads the openings in which can be closed by steel closing plates, shall for the purpose of this regulation be considered as a single space**[. Where]** and where steel bulkheads with openings closed by steel closing plates are fitted, the enclosed spaces in the shelter deck shall be considered as part of the compartment or compartments below.”.

Substitution of regulation 104 of the Regulations

120. The following regulation is hereby substituted for regulation 104 of the Regulations:

“Fire Pumps

104. (1)(a) In **[every]**a passenger ship which is required by this **[part]**Part to be provided with fire pumps operated by power, such fire pumps (other than any emergency fire pump) shall together be capable of delivering for fire fighting purposes a quantity of water, under the conditions and at the pressure specified in regulation 105, of not less than two-thirds of the quantity required to be dealt with by the bilge pumps provided in the ship in compliance with chapter III of **[part]**Part I of the Construction Regulations, 1968.

(b) **[in every]**In a ship, other than a passenger ship, which is required by this **[part]**Part to be provided with fire pumps operated by power, such

fire **[pumps (other)]**pump, other than any emergency fire **[pump)]**pump, shall together be capable of delivering for fire fighting purposes a quantity of water, under the conditions and at the pressure specified in regulation 105, which shall not be less than the quantity obtained from the following formula:

Quantity of water in tons per hour = Cd^2

Where—

(i) C = 5 for a ship required to be provided with more than one fire pump (excluding any emergency fire pump) and C = 2.5 for a ship required to be provided with only one fire pump; and

(ii) $d = 1 + \frac{\sqrt{L(B=D)}}{2500}$ to the nearest $\frac{1}{4}$.

Where—

L = length of the ship in feet on the summer load waterline from the foreside of the stem to the afterside of the rudder post. Where there is no rudder post, the length is measured from the foreside of the stem to the axis of the rudder stock. For a ship with a cruiser stern, the length shall be taken as 96 per cent of the total length of the designed summer load waterline, or as the length from the foreside of the stem to the axis of the rudder stock if that be the greater;

B = greatest moulded breadth of the ship in feet; and

D = moulded depth of the ship in feet measured to the bulkhead deck amidships. Provided that in any such ship, the total capacity of the fire pumps for fire fighting purposes shall not be required to exceed 180 tons per hour.

- (2) (a) **[Every]**A fire pump required by this **[part]**Part to be operated by power shall, except as expressly provided otherwise in this **[part]**Part, be operated by a means other than the ship's main engines.
- (b) Fire pumps provided in compliance with this **[part]**Part may be sanitary, ballast, bilge or general service pumps, provided that they are not normally used for pumping oil and that if they are subject to occasional duty for the transfer or pumping of oil, suitable change-over arrangements are fitted and operating instructions conspicuously displayed at the changeover position.

- (3) (a) In **[every]**a ship which is required by this **[part]**Part to be provided with more than one fire pump operated by **[power (other)]**power, other than any emergency [pump)]pump, every such fire pump shall have a capacity of not less than 80 per cent of the total capacity of the fire pumps required by subregulation (1) divided by the number of fire pumps required by this **[part]**Part to be provided in the ship: Provided that when more fire pumps operated by power than are required by this **[part]**Part are provided in any ship, the Authority may permit the capacity of any such additional fire pumps to be less than 80 per cent.
- (b) **[Every]**A fire pump required by this **[part]**Part which is operated by power, shall be capable of producing from any fire hydrant or hydrants in the ship, at least the minimum number of jets of water required by this **[part]**Part as appropriate to the class and tonnage of the ship, while maintaining the pressure required by regulation 105(2).
- (4) (a) Relief valves shall be provided in conjunction with all fire pumps if the pumps are capable of developing a pressure exceeding the design pressure of the fire main, water service pipes, hydrants and hoses.
- (b) **[Such]**The valves referred to in paragraph (a) shall be so placed and adjusted as to prevent excessive pressure in any part of the fire main system.
- (5) **[Every]**A centrifugal pump which is connected to the fire main, shall be fitted with a non-return valve.
- (6) In **[every class]**a Class I, II or IIA ship, any emergency fire pump shall be situated in a position aft of the ship's collision bulkhead.”.

Substitution of regulation 105 of the Regulations

121. The following regulation is hereby substituted for regulation 105 of the Regulations:

“Fire main, water service pipes and hydrants

105. (1) In **[every]**a ship which is required by this **[part]**Part to be provided with fire pumps operated by power, the diameter of the fire main and of the water service pipes connecting the hydrants thereto, shall be sufficient for the effective distribution of the maximum discharge required by this **[part]**Part from—

- (a) where only 1 pump is required by this **[part]**Part, that pump;

- (b) where 2 pumps are so required, both pumps operating simultaneously; or
 - (c) where more than two pumps are so required, the 2 largest of such pumps operating simultaneously: Provided that in any ship, other than a passenger ship, the diameter of the fire main and of the water service pipes shall be required to be sufficient only for the discharge of 140 tons per hour.
- (2) When the fire pumps required by this **[part]Part**, are discharging the quantity of water required by subregulation (1) through adjacent fire hydrants in any part of the ship from nozzles of sizes specified in regulation 106, the following minimum pressure shall be capable of being maintained at any hydrant:
- (a) In any passenger ship—
 - (i) of 4,000 tons or over—**[45 lb]**20 kg. per square **[inch]**centimetre;
 - (ii) of 1,000 tons or over but of less than 4,000 tons—**[40 lb]**18 kg. per square **[inch]**centimetre; and
 - (iii) of less than 1,000 tons—**[30 lb]**13 kg. per square **[inch]**centimetre;
 - (b) in any ship, other than a passenger ship—
 - (i) of 6,000 tons or over—**[40 lb]** 30 lb per square inch.18 kg. per square **[inch]**centimetre;
 - (ii) of 1,000 tons or over but of less than 6,000 tons—**[37 lb]**16 kg. per square **[inch]**centimetre; and
 - (iii) of less than 1,000 tons—**[30 lb]**13 kg. per square **[inch]**centimetre.
- (3) (a) Where any ship is required by this **[part]Part** to provide 2 jets of water under the conditions required by this **[part]Part**, hydrants sufficient in number, shall be so positioned as to enable at least 2 jets of water not emanating from the same hydrant, 1 of which shall be from a single length of hose, to reach any part of the ship normally accessible to the passengers or crew while the ship is being navigated, and to any store room and any part of any cargo space when empty.
- (b) Where any ship is required by this **[part]Part** to provide 1 jet of water under the conditions required by this **[part]Part**, hydrants sufficient in number, shall be so positioned as to enable 1 jet of water from a single length of hose to reach any part of the ship normally accessible to the

passengers or crew while the ship is being navigated, and any store room and any part of any cargo space when empty.

- (4) (a) The fire main shall have no connections other than those necessary for firefighting and washing down.
- (b) (i) Materials readily rendered ineffective by heat, shall not be used for fire mains unless adequately protected.
- (ii) The pipes and fire hydrants shall be so placed that the fire hoses may be easily coupled to them.
- (iii) In a ship which may carry deck cargo, the fire hydrants shall be so placed that they are always readily accessible, and the pipes shall be arranged as far as practicable to avoid risk of damage by such cargo.
- (iv) Unless there is provided 1 fire hose and nozzle for each fire hydrant in the ship, there shall be complete interchangeability of fire hose couplings and nozzles.
- (c) Valves of the screw lift pipe or cocks shall be fitted in such positions on the pipes that any of the fire hoses may be removed while the fire pumps are at work.
- (d) The water pipes shall not be made of cast iron, and if made of iron or steel, shall be galvanised.
- (e) Where wash deck lines are not self-draining, suitable drain cocks shall be fitted to avoid damage by frost.
- (f) In a **[class]**Class I or II ship, water from the fire main shall, so far as practicable, be immediately available, such as by maintenance of pressure or by remote control of fire pumps, which control shall be easily operable and readily accessible.”.

Amendment of regulation 106 of the Regulations

122. Regulation 106 of the Regulations is hereby amended by—

- (a) the substitution for the heading of regulation 103 of the following heading:

“Fire hoses, nozzles[, etc]”; and

- (b) the substitution for subregulations (1) to (4) of the following subregulations:

“106. (1) (a) Fire hoses provided in compliance with this [part]Part, shall not exceed [60 feet]18 meters in length except that in a ship having a

moulded breadth of **[90 feet]**27 meters or more, the length of the fire hoses for exterior locations and for cargo spaces shall not exceed **[90 feet]**27 meters in length.

- (b) Such hoses shall be made of closely woven flax canvas or other suitable material, and shall be provided with couplings, branchpipes and other necessary fittings, and with a plain nozzle in addition to any spray nozzle required by this **[part]**Part.
- (2) **[Every]**A fire hose provided in compliance with this **[part]**Part, together with the tools and fittings necessary for its use, shall be kept in a conspicuous position near the water hydrants or connections with which it is intended to be used.
- (3) Except in a partially decked **[class]**Class V or VI ship or in a **[class]**Class X or XII ship, fire hoses provided in compliance with this **[part]**Part, shall not be used for any purpose other than extinguishing fire or testing with fire appliances.
- (4) (a) **[Every]**A ship which is required by this **[part]**Part to be provided with fire pumps operated by power, shall be provided with nozzles of **[1/2 inch, e inch or 3/4 inch]**1/2 centimetre, or 3/4 centimetre in diameter or as near thereto in diameter as possible. **[Nozzles]:** Provided nozzles larger in diameter may be provided if the requirements of this **[part]**Part relating to the provision of water for fire fighting purposes are otherwise complied with.
- (b) For machinery spaces and exterior locations, the diameter of the nozzles shall be such as to obtain the maximum possible discharge from the minimum number of jets of water and at the pressure required by this **[part]**Part from the smallest fire pump permitted by regulation 104(3)(a): Provided that the diameter of the nozzles shall not be required to be greater than **3/4 inch]**3/4 centimetre.
- (c) For accommodation and service spaces, the diameter of the nozzles shall not be required to be greater than **[1/2 inch]**1/2 centimetre, or 3/4 centimetre.
- (d) **[Every]**A spray nozzle provided in compliance with this **[part]**Part, shall be capable of producing a water spray suitable for extinguishing oil fires and shall be provided in addition to any plain nozzle required by subregulation (1): Provided that a dual-purpose nozzle capable of producing alternately such a spray and a plain water jet, may be provided in substitution.”.

Substitution of regulation 107 of the Regulations

123. The following regulation is hereby substituted for regulation 107 of the Regulations:

“International shore connection

107. Any international shore connection provided in compliance with this **[part]Part**, shall be constructed in accordance with the requirements of **[annex]Annex 18**.”.

Substitution of regulation 108 of the Regulations

124. The following regulation is hereby substituted for regulation 108 of the Regulations:

“Fire extinguishers

108. (1) **[Every]A** fire extinguisher provided in compliance with this **[part]Part**, shall be constructed in accordance with the relative **[annex]Annex** specified in the second column of the following table:

<i>Type of extinguisher</i>	<i>Annex</i>
Non-portable foam	19
Portable or non-portable carbon dioxide	20
Portable foam, water (gas pressure) or water (soda acid)	21
Portable dry powder	22

(2) Subject to the provisions of subregulation (3)—

(a) **[every]a** portable fire **[extinguisher (other)]extinguisher, other** than a carbon dioxide fire **[extinguisher)]extinguisher**, provided in compliance with this **[part]Part** shall, if it is of a type discharging fluid, have a capacity of not more than **[3]11** and not less than **[2 gallons]7 litres**.

- (b) **[every]**a portable carbon dioxide fire extinguisher provided in compliance with this **[part]**Part, shall have a capacity of not less than **[7 lb]**3 kg. of carbon dioxide;
 - (c) **[every]**a portable dry powder fire extinguisher provided in compliance with this **[part]**Part, shall have a capacity of not less than **[10 lb]**4 kg. of dry powder;
 - (d) **[every]**a portable fire extinguisher of any other type provided in compliance with this **[part]**Part, shall be of not less than the fire extinguishing equivalent of a **[2 gallon]**7 litre fluid fire extinguisher;
 - (e) **[every]**a portable fire extinguisher provided in compliance with this **[part]**Part, shall not exceed **[56 lb]**25 kg. in weight in the fully charged service condition and shall be as portable as a **[3 gallon]**11 litres fluid fire extinguisher.
- (3) The Authority may in a **[class]**Class IX, IXA, X, XI or XII ship permit for **[every]**a portable fire extinguisher required to be provided in compliance with this **[part]**Part, the provision of a combination of portable fire extinguishers approved by it having an aggregate capacity of not less than the fire extinguishing equivalent of a **[2 gallon]**7 litre fluid fire extinguisher.
- (4) **[Ever]**A portable fire extinguisher provided in compliance with this **[part]**Part for use in an accommodation or service **[spaces]**space of any ship shall, so far as practicable, have **[an]**a uniform method of operation.
- (5) Where portable dry powder fire extinguishers are provided in compliance with this **[part]**Part in either accommodation and service spaces or in machinery spaces, their number shall not exceed one half of the total number of extinguishers provided in either of those spaces.
- (6) A fire extinguisher provided for use in any ship, shall not contain any extinguishing medium which either itself or when in use, gives off gases harmful to persons.
- (7) For the purpose of this **[part]**Part, the capacity of any fire extinguisher other than a carbon dioxide fire extinguisher, shall be taken to be the greatest volume or weight of extinguishing medium which it can contain when sufficient space is left to ensure the proper operation of the extinguisher.

- (8) For the purposes of this **[part]Part**, the capacity of a carbon dioxide fire extinguisher shall be taken to be the greatest weight of carbon dioxide which it can safely contain in a tropical climate.
- (9) **[Every]A** fire extinguisher provided in compliance with this **[part]Part** shall at all times be kept fully charged.
- (10) A spare charge shall be provided for **[every]a** portable fire extinguisher provided in compliance with this **[part]Part**, except that for each such fire extinguisher which is of a type which cannot readily be recharged while the ship is at sea, an additional portable fire extinguisher of the same type, or its equivalent, shall be provided in lieu of a spare charge.”.

Substitution of regulation 109 of the Regulations

125. The following regulation is hereby substituted for regulation 109 of the Regulations:

“Fire buckets

- 109.** (1) **[Every]A** fire bucket provided in compliance with this **[part]Part**, shall be painted red and shall be clearly and permanently marked with the English word “FIRE” and the Afrikaans word “VUUR”. Except in an open ship, every such fire bucket shall be kept filled with sand or water.
- (2) Except in an open ship, fire buckets provided in compliance with this **[part]Part**, shall not be used for any purpose other than for extinguishing fire.”.

Substitution of regulation 110 of the Regulations

126. The following regulation is hereby substituted for regulation 110 of the Regulations:

“Fixed pressure water spraying systems for machinery spaces

- 110.** (1) **[Every]A** fixed pressure water spraying system fitted in compliance with this **[part]Part** shall be provided with a pump, piping system, control valves and spraying nozzles.

- (2) (a) The spraying nozzles referred to in subregulation (1) shall be of such a type, sufficient in number and so arranged as to ensure distribution of water spray such as will effectively extinguish oil on fire in the spaces protected thereby.
- (b) Spraying nozzles shall be fitted above bilges, tank tops and other areas over which oil fuel is liable to spread and above other main fire hazards in the spaces to be protected.
- (3) The water spraying system may be divided into sections and shall be controlled from distribution manifolds the valves of which shall be capable of being operated from easily accessible positions outside the spaces to be protected and which will not be readily cut off by an outbreak of fire.
- (4) The water spraying system shall be kept charged at the necessary pressure, and the pump supplying the water for the system shall be automatically put into action by a pressure drop in the system.
- (5) (a) The pump referred to in subregulation (4) shall be capable of supplying water at the necessary pressure simultaneously to all sections of the water spraying system in any one compartment to be protected.
- (b) The pump referred to in subregulation (4) and its controls shall be installed outside the space or spaces to be protected.
- (c) **[It]**The installation of the pump referred to in subregulation (4) shall be in such a manner that it shall not be possible for a fire in the space or spaces protected by the water spraying system to put the system out of action.
- (6) Means shall be provided which will prevent nozzles from becoming clogged by impurities in the water or corrosion of piping, nozzles, valves and pump.
- (7) **[The]**A water spraying system shall include mobile sprayers ready for immediate use in the firing area of the boiler or in the vicinity of the oil fuel unit.
- (8) **[No part of the]**A water spraying system or any part thereof shall not be situated forward of the collision bulkhead in any passenger ship.

- (9) Operating instructions, in **[both]**at least two official languages of the Republic, in clear and permanent lettering, shall be affixed to **[every]**a water spraying system or in a position adjacent thereto.”.

Substitution of regulation 111 of the Regulations

127. The following regulation is hereby substituted for regulation 111 of the Regulations:

“Fixed fire smothering gas and steam installations

111. (1) This regulation applies to **[every]**a fixed fire smothering gas or steam installation fitted in compliance with this **[part]**Part.

(2) (a) In **[every]**an installation provided for the injection of gas or steam into machinery or cargo spaces for fire extinguishing purposes, the pipes for conveying the gas or steam shall be provided with control valves or cocks which shall be so placed that they will be easily accessible and not readily cut off from use by an outbreak of fire.

(b) **[Such]**The control valves or cocks referred to in paragraph (a) shall be permanently marked to indicate clearly the compartments to which the pipes are led**[. Suitable]**and provision shall be made to prevent inadvertent admission of the gas or steam to any compartment.

(c) Where a cargo **[spaces]**space fitted with a gas or steam smothering system for fire protection **[are]**is used as a passenger **[spaces]**space, the smothering gas or steam pipe connection shall be blanked during service as a passenger space.

(3) (a) (i) The piping shall be so arranged as to provide effective distribution of fire smothering gas or steam.

(ii) Where steam is used in any hold exceeding **[60 feet]**18 meters in length, there shall be at least 2 pipes one of which shall be fitted in the forward part and one in the after part of the hold.

(iii) Except in a tanker and a ship used for the conveyance of coal, pipes for conveying steam shall be fitted with outlets as low as practicable in the space which they serve and as near as possible to the centre line of the space.

(b) In a tanker, the piping shall be so arranged that the steam or fire smothering gas will be distributed over the surface of the cargo.

- (4) (a) When carbon dioxide is used as the extinguishing medium in cargo spaces, the quantity of gas available shall be sufficient to give a minimum volume free gas equal to 30 per cent of the gross volume of the largest cargo compartment in the ship which is capable of being sealed.
- (b) When carbon dioxide is used as an extinguishing medium for spaces containing boilers or machinery, the quantity of gas carried shall be sufficient to give a minimum quantity of free gas equal to the larger of the following quantities, either—
- (i) 40 per cent of the gross volume of the largest space containing boilers or machinery, such volume being measured up to the level at which the horizontal area of the casing is 40 per cent or less of the gross area of such space; or
 - (ii) 35 per cent of the gross volume of the largest space containing boilers or machinery, including the casing:
- Provided that the aforesaid percentages may be reduced to 35 per cent and 30 per cent respectively for a ship of less than 2,000 tons, not being a passenger ship, and provided that if two or more spaces containing boilers or machinery are not entirely separate, ~~[they]~~the spaces shall for the purpose of this regulation be considered as forming one compartment.
- (c) When carbon dioxide is used as the extinguishing medium for a space containing any oil-fired boiler or oil fuel installation, a quantity of gas which can be discharged without danger to the operator, shall be available for manual application, by means of a suitable applicator, in the firing area of the boiler and in the vicinity of the oil fuel unit.
- (d) When carbon dioxide is used as the extinguishing medium both for cargo spaces and for spaces containing boilers or machinery, the quantity of gas shall not be required to be more than the maximum required either for the largest cargo compartment or machinery space.
- (e) For the purpose of this subregulation, the volume of gas shall be calculated at ~~[9 cubic feet]~~2.7 meters to the ~~[pound]~~kilogram.
- (f) When carbon dioxide is used as the extinguishing medium for any space containing boilers or machinery, the fixed piping system shall be such that 85 per cent of the gas required to provide the concentration referred to in paragraph (b) when applied to the space concerned, can be discharged into that space within 2 minutes.
- (g) Means shall be provided for giving audible warning to persons within the space when carbon dioxide, other than that specified in paragraph (c), is about to be released into any working space.

- (5) When a system producing inert gas is used to provide smothering gas in a fixed fire smothering installation for cargo spaces, it shall be capable of producing hourly a volume of free gas at least equal to 25 per cent of the gross volume of the largest compartment protected in this way for a period of 72 hours.
- (6) (a) When steam is used as the extinguishing medium in cargo spaces, the boiler or boilers available for supplying steam shall have an evaporation of at least **[1 lb]450 grams** of steam per hour for each **[12 cubic feet]3.6 cubic meters** of the gross volume of the largest cargo compartment.
- (b) The arrangements shall be such that steam will be available immediately and will not be dependent on the lighting of boilers and that it can be supplied continuously until the end of the voyage in the quantity required by this subregulation in addition to any steam necessary for the normal requirements of the ship, including propulsion, and that provision is made for extra feed water necessary to meet this requirement.
- (7) **[No part of the]**The control, storage or generating arrangement of any fixed fire smothering gas or steam installation or any part thereof, shall not be situated forward of the collision bulkhead in any passenger ship.
- (8) Operating instructions, in **[both]at least two** official languages of the Republic, in clear and permanent lettering, shall be affixed to **[every]a** fixed fire smothering gas installation or in a position adjacent thereto.”.

Substitution of regulation 112 of the Regulations

128. The following regulation is hereby substituted for regulation 112 of the Regulations:

“Fixed foam fire extinguishing installations

112. (1) (a) [Every]A fixed foam fire extinguishing installation fitted in compliance with this **[part]Part**, shall be capable of discharging through fixed discharge outlets in not more than 5 minutes, a quantity of foam sufficient to cover to a depth of **[6 inches]15 centimetres** the largest single area over which oil fuel is liable to spread.

- (b) **[Such]** The installation referred to in paragraph (a) shall be capable of generating foam suitable for extinguishing oil fires, and means shall be provided for the effective distribution of the foam through a permanent system of piping and control valves or cocks to discharge outlets and for the foam to be effectively directed by fixed sprayers on other main oil fire hazards in the protected space either simultaneously or separately.
- (c) **[Such]** The installation referred to in paragraph (a) installation shall include mobile sprayers ready for immediate use in the firing area of the boiler and in the vicinity of the oil fuel unit.
- (2) (a) **[Every]** A fixed foam fire extinguishing installation fitted in lieu of a fixed fire smothering gas installation required by this **[part]** Part to be provided in the oil cargo spaces of any tanker, shall be capable of distributing on the decks over the oil cargo tanks through fixed discharge outlets in not more than 15 minutes, a quantity of foam sufficient to cover to a depth of at least **[2 inches]** 5 centimetres the whole of the tank deck area.
- (b) **[Such]** The installation referred to in paragraph (a) shall be capable of generating foam suitable for extinguishing oil fires, and means shall be provided for the effective distribution of the foam through a permanent system of piping and control valves or cocks to discharge outlets.
- (c) There shall be sufficient mobile foam sprayers capable of being connected to the installation whereby foam can be directed into any tank.
- (d) For the purpose of this subregulation, "tank deck area" means an area equivalent to the extreme length of the cargo tanks multiplied by the breadth of the ship.
- (3) **[Every]** A fixed foam fire extinguishing installation shall be so arranged that a fire in any of the spaces it protects, will not render the controls inaccessible nor put the installation out of action.
- (4) Operating instructions, in both official languages of the Republic, in clear and permanent lettering, shall be affixed to **[every]** a fixed foam fire extinguishing installation or in a position adjacent thereto."

Substitution of regulation 113 of the Regulations

129. The following regulation is hereby substituted for regulation 113 of the Regulations:

“Fire detection systems

113. (1) (a) ~~Every~~ A fire detection system fitted in compliance with this ~~part~~ Part, shall be capable of automatically indicating the presence or indication of fire and its location.

(b) The indicators shall be centralised either on the navigating bridge or at other control stations which are provided with direct communication with the navigating bridge: Provided that the Authority may in any ship, permit the indicators to be distributed among several stations if it is satisfied that such arrangements are at least as effective as if the indicators were so centralised.

(2) In ~~any~~ a passenger ship, electrical equipment used in the operation of any fire detection system fitted in compliance with this ~~part~~ Part, shall be capable of being supplied from two sources of electric power one of which shall be the emergency source of power required by regulation 42 of the Construction Regulations, 1968.

(3) The indicating system of any fire detection system fitted in compliance with this ~~part~~ Part, shall operate both audible and visible alarms at the stations referred to in subregulation (1).”.

Substitution of regulation 114 of the Regulations

130. The following regulation is hereby substituted for regulation 114 of the Regulations:

“Firemen’s outfits

114. (1) ~~Every~~ A fireman’s outfit carried in compliance with this ~~part~~ Part, shall consist of—

(a) a breathing apparatus complying with the requirements of ~~annex~~ Annex 23; and

(b) personal equipment comprising—

(i) protective clothing of material to protect the skin from the heat radiating from a fire and from burns and scalding by steam[. ~~The~~ the outer surface of which shall be water resistant;

(ii) boots and gloves of rubber or other electrically non-conducting material;

- (iii) a rigid helmet providing effective protection against impact;
 - (iv) a portable self-contained battery-operated safety lamp of the lantern type capable of functioning efficiently for at least three hours; and
 - (v) a firemen's axe with an insulated handle.
- (2) Where more than one of the outfits mentioned in subregulation (1) is provided, they shall be kept in readily accessible and widely separated positions which are not likely to be cut off in the event of fire.”.

Substitution of regulation 115 of the Regulations

131. The following regulation is hereby substituted for regulation 115 of the Regulations:

“Means for stopping machinery, shutting off oil fuel suction pipes and closing of openings

115. (1)(a)___In **[every]**a ship, there shall be provided means for stopping ventilating fans serving machinery, accommodation and cargo spaces.

(b)___For machinery and cargo spaces, there shall be provided means for closing all skylights, doorways, ventilators, annular spaces around funnels and other openings to such spaces.

(c) **[Such]**The closing means referred to in paragraph (b) shall be capable of being operated from positions outside the said spaces which would not be made inaccessible by a fire within such spaces.

(2) (a)___In **[every]**a ship, machinery driving forced and induced draught fans, oil fuel transfer pumps, oil fuel unit pumps and other similar fuel pumps, shall be fitted with remote controls situated outside the spaces in which such machinery or pumps are situated.

(b) **[Such]**The controls referred to in paragraph (a) shall be capable of stopping such machinery or pumps in the event of fire in the said spaces.

(3) In **[every]**a ship, **[every]**a pipe connected to any oil fuel storage, settling, or daily service tank, not being a double bottom tank, which if damaged, would permit discharge or the contents so as to cause a fire hazard, shall be fitted with a valve or cock which shall be secured to the tank to which it is connected and which shall be capable of being closed from a readily

accessible position outside the space in which the tank is situated: Provided that in the case of any inlet pipe to such a tank, a non-return valve similarly secured to the tank may be substituted[. In] and in the case of an oil fuel deep tank traversed by any shaft or pipe tunnel, a valve shall be fitted on the tank but an additional valve or valves may be fitted on the pipe line or lines outside the tunnel or tunnels to enable control to be exercised in the event of fire.”.

Substitution of regulation 116 of the Regulations

132. The following regulation is hereby substituted for regulation 116 of the Regulations:

“Fire control plans

116. (1) In **[every class]** a Class I, II or IIA ship, there shall be permanently exhibited for the guidance of the master and officers of the ship, general arrangement plans showing clearly for each deck—

(a) the position of the control stations[.];

the sections of the ship which are enclosed by fire resisting bulkheads[.];

(b) the sections of the ship which are enclosed by fire retarding bulkheads, together with particulars of the fire alarms, fire detection systems[.];

(c) the sprinkler installations[.];

(d) the fixed and portable fire extinguishing appliances and firemen’s outfits[.];

(e) the means of access to the various compartments and decks in the ship[.];

(f) the ventilating system including particulars of the master fan controls[.];

(g) the position of dampers and identification numbers of the ventilating fans serving each section of the ship[.];

(h) the location of the international shore connection; and

(i) the position of all means of control referred to in regulation 115.

(2) In **[every]** a ship of 500 tons or over, other than a **[class]** Class I, II or IIA ship, there shall be permanently exhibited for the guidance of the master and officers of the ship, general arrangement plans showing clearly the information referred to in subregulation (1) where it is applicable to the ship.

- (3) The general arrangement plans required by this regulation, shall be kept up-to-date and any alterations shall without delay be recorded on such plans.”.

Substitution of regulation 117 of the Regulations

133. The following regulation is hereby substituted for regulation 117 of the Regulations:

“Availability of fire fighting appliances

117. (1) Fire appliances carried in **[every]**a ship, shall be maintained in good order and shall be kept available for immediate use at all times.

(2) All moveable fire appliances, other than firemen’s outfits, carried in compliance with this **[part]Part** shall be stowed where they will be readily accessible from the spaces in which they are intended to be used, and, in particular, 1 of the portable fire extinguishers intended for use in any space shall be stowed near the entrance to that space.”.

Substitution of regulation 118 of the Regulations

134. The following regulation is hereby substituted for regulation 118 of the Regulations:

“CHAPTER XIII—EQUIVALENTS AND EXEMPTIONS

Equivalents and approval of types of fire appliances

118. (1) Where this **[part]Part** requires 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 Authority may allow any other fitting, material, appliance, apparatus, or type thereof, to be fitted or carried, or any other provision to be made in that ship if it is satisfied that such other fitting, material, appliance or apparatus, or type thereof, or provision, is at least as effective as that required by this **[part]Part**.

(2) The Authority may approve of any type of fire appliance for use on a ship belonging to the Republic which in its opinion complies with the requirements of this **[part]Part**.

- (3) All fire-fighting appliances shall be serviced at intervals not exceeding 12 months by a service station, approved for that purpose by the Authority, or by a person of the ship's staff who is qualified to do so.”.

Substitution of regulation 119 of the Regulations

135. The following regulation is hereby substituted for regulation 119 of the Regulations:

“Exemption in respect of fire patrol, alarm and detection systems

119. The Authority may exempt any **[class]Class** I, II or IIA ship from the requirements of regulation 54(2) read with regulation 63, if it is satisfied that to require compliance therewith would be unreasonable on account of the short duration of the voyages on which the ship is engaged.”.

Substitution of regulation 120 of the Regulations

136. The following regulation is hereby substituted for regulation 120 of the Regulations:

“Exemption in respect of fixed fire smothering arrangements in cargo spaces in passenger ships

120. The Authority may exempt any **[class]Class** I, II or IIA ship of 1,000 tons or over from the requirements of regulation 57 read with regulation 63, if it is satisfied that to require compliance therewith would be unreasonable on account of the short duration of the voyages on which the ship is engaged.”.

Substitution of regulation 121 of the Regulations

137. The following regulation is hereby substituted for regulation 121 of the Regulations:

“Exemption in respect of fixed fire smothering arrangements in cargo spaces in ships other than passenger ships

121. The Authority may exempt any **[class]Class** VII or VIIA ship of 2,000 tons or over from the requirements of regulation 74 read with regulation 85 in

respect of the provision of a fixed fire smothering gas or steam installation in the cargo holds of the ship, not being the tanks of a tanker, if it is satisfied that—

- (a) the holds therein are provided with steel hatch covers and effective means of closing all ventilators and other openings leading to the holds;
- (b) the ship is constructed for, and employed solely in, the carriage of ore, coal or grain; or
- (c) to require compliance with the requirements of the said regulation would be unreasonable on account of the short duration of the voyages on which the ship is engaged.”.

Substitution of regulation 122 of the Regulations

138. The following regulation is hereby substituted for regulation 122 of the Regulations:

“General exemption in respect of certain ships

122. The Authority may, on such conditions as it thinks fit, exempt any ship which does not engage on an international voyage, from any of the requirements of this **[part]Part**.”.

Amendment of regulation 123 of the Regulations

139. Regulation 123 of the Regulations is hereby amended by—

- (a) the substitution for the heading of regulation 123 of the following heading:

“Exemption in respect of a ship constructed before the coming into force of this **[part]Part”;** and

- (b) the substitution for subregulations (1) to (6) of the following subregulations:

“123. The Authority may, on such conditions as it thinks fit, exempt any ship constructed before the coming into operation of this **[part]Part**, from any of the requirements of this **[part]Part**, if it is satisfied that compliance with that requirement is either impracticable or unreasonable in the case of that ship.”.

Short title and commencement

140. These regulations are called The Life-Saving Equipment Amendment Regulations, 2021 and shall come into operation on the date of publication thereof in the Government *Gazette*.