# KIRIBATI SHIP REGISTRY

**Non-Convention Safety Regulations for Cargo Ships** 

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#### **GENERAL**

## Regulation 1

# **Application**

- Unless expressly provided otherwise, the present Regulations apply only to new vessels, including barges, engaged in maritime navigation, whose length overall is 12 metres (m) or more and for which the provisions of the Conventions listed in the following paragraph do not apply.
- Where the provisions in force of:
- .1 The International Convention for the Safety of Life at Sea (SOLAS), 1974, as modified by its Protocol of 1988:
- .2 The International Convention on Load Lines (LL), 1966, as modified by its Protocol of 1988;
- .3 The International Convention on Standards of Training, Certification and Watchkeeping (STCW), 1978, as amended;
- .4 The International Convention for the Prevention of Pollution from Vessels (MARPOL), 1973/78; and
- .5 International Regulations for Preventing Collisions at Sea (COLREG), 1972,

apply to the vessels, including barges, subject to the present Regulations, those provisions shall be considered to be part of the present Regulations and shall consequently apply.

#### Regulation 2

#### **Definitions**

Administration means the Government of the Republic of Kiribati.

Approved means approved by the Administration.

Recognised Organisation means an organisation authorised by the Administration for carrying out statutory certification of the vessels flying Kiribati flag.

A passenger ship is a ship which carries more than twelve passengers.

A passenger is every person other than the master and members of the crew.

A vessel is any vessel which is not a passenger ship.

A fishing vessel is a vessel used for the purpose of catching fish, whales, seals, walrus or other living resources of the sea.

New vessel means a vessel with its keel laid or which is at similar stage of construction on or after 1st March 2012.

Existing vessel means a vessel which is not a new vessel.

Barge means a vessel without its own means of propulsion.

Length is the overall length of the vessel's hull.

Freeboard assigned is the distance measured vertically downwards amidships from the upper edge of the deck line to the upper edge of the related load line.

Gross tonnage (GT) means the measure of the overall size of a vessel determined in accordance with the provisions of the International Convention on Tonnage Measurement of Ships, 1969.

International voyage means a voyage between ports in two different countries.

A pleasure craft means a craft not engaged in trade used for tourism or sport.

The present Regulations means the "Non-Convention Safety Regulations for Cargo Ships".

A tanker is a vessel constructed or adapted for the carriage in bulk of liquid cargoes of an inflammable nature.

LSA Code refers to the International Life-Saving Appliance (LSA) Code adopted by the IMO Maritime Safety Committee in Resolution MSC 48(66), as amended.

#### Regulation 3

#### **Exceptions and Exemptions**

- 1 The present Regulations do not apply to:
- .1 existing vessels and barges, unless expressly provided otherwise;
- .2 vessels belonging to the State and used for non-commercial purposes, vessels of war and troop vessels;
- .3 passenger ships;
- .4 pleasure craft not engaged in trade;
- .5 fishing vessels;
- .6 wooden vessels of primitive build; and
- .7 vessels, including barges, whose overall length is less than  $12\ m.$
- The Administration may exempt the vessel from any requirement in these regulations that it regards as either impracticable or unreasonable for any vessel in view of the distance of the vessel's area of operation from its base port, the type of vessel, the weather conditions and the absence of general navigational hazards, provided that it complies with such other requirements which, in the opinion of the Administration, are adequate for the safe service for which it is intended.

## **Regulation 4**

#### **Equivalents**

Where in this Regulations any special type of appliance, equipment, extinguishing medium or arrangement is specified, any other type of appliance, etc., may be allowed if the Administration is satisfied that it is not less effective as required by the Regulations.

## SHIP CERTIFICATION AND SURVEYS

### Regulation 1

# **Surveys and Outside Bottom Inspections**

All vessels to which the present Regulations apply shall be subjected to surveys, carried out by the Administration or Recognised Organisation in accordance with the said Regulations, including outside bottom inspection which includes shafting and propeller, rudder, sea inlets, scuppers, shell valves and other underwater parts. A minimum of two bottom inspections of the outside of the ship's bottom shall be carried out during any five year period and the interval between any two such inspections shall not exceed 36 months.

#### Regulation 2

#### **Issue or endorsement of the Certificate**

- A certificate called a "Cargo Ship Safety Construction Certificate" shall be issued to a vessel that complies with the provisions of Chapter 4, 5, 6 and 7 and any other relevant requirements of the present Regulations after an Initial or a Renewal survey.
- A certificate called a "Cargo Ship Safety Equipment Certificate" shall be issued to a vessel that complies with the provisions of Chapter 4, 5, 6, 7, 8, 9 and 11 and any other relevant requirements of the present Regulations after an Initial or a Renewal survey.
- 3 A certificate called a "Cargo Ship Safety Radio Certificate" shall be issued to a vessel that complies with the provisions of Chapter 10 and any other relevant requirements of the present Regulations after an Initial or a Renewal survey.
- A certificate called a "Load Line Certificate" shall be issued to a vessel that complies with the provisions of the International Convention on Load Lines, 1996, as amended, and Chapter 3, and any other relevant requirements of the present Regulations after an Initial or a Renewal survey.
- When an exemption is granted to a vessel under and in accordance with the present Regulations, a certificate called an "Exemption Certificate" shall be issued in addition to the certificate prescribed in the present Regulations. The "Exemption Certificate" shall be attached to the Certificate.
- After the completion of Initial or Renewal survey, Interim certificates with validity not exceeding 5 months, shall be issued by the Administration or a Recognised Organisation. Full-term certificates shall be issued for a period of not more than 5 years before the expiry of the Interim certificates.
- All vessels are subjected to annual surveys. Upon completion of the annual surveys, the Full-Term certificates shall be endorsed as appropriate.

#### **LOAD LINES**

# Regulation 1

## General

- 1 A Load Line shall be assigned to all vessels, including barges, covered by the present Regulations.
- Vessels covered by the present Regulations are subject to the provisions of the International Convention on Load Line, 1966, as amended, except for vessels less than 24 m shall comply with the provisions of the Convention to an extent as deemed necessary by the Administration with restriction to its voyages.

# Regulation 2

# Freeboard Assignment

1 The following freeboard assignment tabulations, including corrections, shall be applicable to vessels of less than 24 m in length.

Freeboard Assignment Tabulations (including corrections)

Length of Ship (m)	Freeboard (mm)	Length of Ship (m)	Freeboard (mm)
12	340	18	580
13	380	19	620
14	420	20	660
15	460	21	700
16	500	22	740
17	540	23	780

#### CONSTRUCTION - STRUCTURE, SUBDIVISION AND EQUIPMENT

### Regulation 1

#### General

The machinery and electrical installations, mechanical and electrical equipment, boilers and other pressure vessels, pipes, cables and other associated fittings shall be of a design and construction adequate for the service for which they are intended. They shall be so installed and protected as to reduce to a minimum any danger to persons on board and the environment, due regard being paid to moving parts, hot surfaces and other potential hazards. The design shall have regard to materials used in construction, the purpose for which the equipment is intended and the working and environmental conditions in which it will be used.

## Regulation 2

#### Construction

The strength and method of construction of the shell, superstructures, deckhouses, machinery trunks, doors and other structures as well as the equipment shall allow the vessel to withstand any of the conditions foreseeable in the service for which it is intended and shall be considered satisfactory by the Administration. A vessel constructed and maintained in conformity with the standards recognised by the Administration may be considered to comply with the requirements of the present Regulations.

## **Regulation 3**

# **Anchor and Mooring Equipment**

- 1 Every vessel shall be fitted with anchor equipment designed for quick operation which are safe and shall consist of anchor, anchor chains or wire ropes, stoppers and windlass or arrangements for dropping and hoisting the anchor and for holding the vessel at anchor in all foreseeable service conditions.
- 2 Every vessel shall also be fitted with adequate mooring equipment for safe mooring in all operating conditions.
- Anchor and mooring equipment shall comply with the requirements of the Administration or those of a Recognised Organisation authorised by the Administration.

#### STABILITY AND BILGE PUMPING ARRANGEMENTS

### Regulation 1

## **Intact stability**

- 1 The intact stability booklet shall be endorsed by the Administration or by the Recognised Organisation which issues the load line.
- The stability test shall be carried out to the satisfaction of the Administration. The vessel shall be supplied with reliable stability information to enable the Master of the vessel to obtain accurate guidance as to the stability of the vessel under varying conditions of service.
- 3 If there is any alteration or modification made to a vessel, the Administration shall require additional stability information.
- 4 The intact stability booklet shall include the following minimum loading conditions of the vessel:
- .1 Full homogeneous load condition departure with 100% of consumables on board.
- .2 Ballast condition departure with 100% of consumables on board.
- .3 Ballast condition arrival with 10% of consumables on board.
- 5 The following minimum stability criteria shall be met unless the Administration is satisfied that operating experience justifies departure there from:
- .1 The area under the curve of righting levers (GZ curve) shall be not be less than;
- (i) 0.075 meter-radians up to an angle of  $20^{\circ}$  when the maximum righting lever ( $GZ_{max}$ ) occurs at  $20^{\circ}$  and 0.055 meter-radians up to an angle of  $30^{\circ}$  when the maximum righting lever ( $GZ_{max}$ ) occurs at  $30^{\circ}$  or above. Where the maximum righting lever ( $GZ_{max}$ ) occurs at angles between  $20^{\circ}$  and  $30^{\circ}$  the corresponding area under the righting lever curve shall be determined by linear interpolation.
- .2 0.03 meter-radians, between the angle of heel of  $30^{\circ}$  and  $40^{\circ}$  or angle of flooding if this angle is less than  $40^{\circ}$ .
- .3 the righting lever (GZ) shall be at least 200 mm at an angle of heel equal to or greater than 30°.
- .4 the maximum righting lever (GZ<sub>max</sub>) shall occur at an angle of heel of 20° or more.
- .5 the initial metacentric height (GM<sub>0</sub>), after correction for free surface, shall be not less than 150 mm.

# Regulations 2

## Stability plans and data

- 1 The vessel shall be provided with the following approved plans and data:
- .1 Capacity Plan / Deadweight Scale.

The Capacity Plan shall show the distribution of all tanks and holds in the vessel together with their centres of gravity, longitudinal and vertical, and their free surface inertias. Additionally, there should be a Deadweight Scale, tons per centimetre (or tons per inch), etc., plotted against a scale of drafts, ranging between the vessel's light and maximum loaded drafts

.2 Cross Curves of Stability.

The Cross Curves of Stability shall be calculated to include any enclosed structures.

#### .3 Hydrostatic Curves or Particulars

The hydrostatic particulars either in a curve or tabular form shall be available on board the vessel.

2 For Special vessels, additional or alternative stability requirements may be required by the Administration.

## Regulation 3

#### Bilge pumping arrangements

#### 1 General

.1 All vessels shall be provided with appliances or means of draining water from all watertight compartment and bilges. Unless, the Administration is satisfied that the safety of the vessel is not impaired, the bilge pumping arrangements can be dispensed within a particular compartment.

## 2 Bilge pumps

- .1 All vessels shall be provided with at least two independent power operated bilge pumps.
- .2 The bilge main has to be of sufficient size to accommodate the pumping capacity of the bilge pump delivering water at a speed of 2 m/s. However, for vessels of less than 35 m in length, this speed may be reduced to 1.2 m/s.
- .3 Sanitary, ballast, general service and fire pumps may be accepted as the independent power operated bilge pump provided it is connected to the bilge pumping system and its outflow complies with paragraph 2.2.
- .4 The locations of suctions, non-return valves and control spindles and distribution boxes shall comply with requirements as to accessibility and penetration through bulkheads as the Administration may require. Means shall be provided for sounding every compartment which is served by the bilge pumping system and not readily accessible at all times during the voyage.

In any unattended propulsion machinery space, an automatic remote bilge level alarm shall be fitted.

# 3 Direct bilge suction arrangements

- .1 In the machinery compartment, at least one suction duct shall be directly connected to a bilge pump.
- .2 The diameter of this duct shall be at least equal to that of the bilge main.
- .3 Such direct suction may be via a fixed pipe or flexible hose. When the suction is through a fixed pipe, it shall be placed as low as possible. It shall be accessible for cleaning and fitted with a non-return valve.

# MACHINERY INSTALLATIONS (not applicable to unmanned barges)

#### Regulation 1

#### General

- All main and auxiliary machineries including its related systems and their associated fittings shall be designed, constructed and maintained in compliance with acceptable structural, mechanical and electrical standards, where applicable, of the requirements of Administration or rules of Recognised Organisation, as is appropriate to ensure the minimum level of safety and not to cause any harm or danger to any person.
- 2 On the navigation bridge, indicators for propeller speed and direction of rotation shall be fitted.

## Regulation 2

#### Steering gear arrangement

- All vessels shall be provided with a main steering gear arrangement capable of steering the vessel at maximum speed. The main steering gear and rudder shall be so designed as not to suffer damage at maximum speed while going astern.
- All vessels shall be provided with an auxiliary steering gear of adequate strength, capable of steering the vessel at navigable speed and of being brought quickly into action in an emergency. The emergency steering arrangements shall be clearly identified to indicate how the emergency system is being brought into effect with instructions visibly displayed.
- 3 On the navigation bridge, an indicator shall be provided to show the exact position of the rudder. Acceptable means of communication shall be provided between the navigation bridge and the tiller position.

#### **Regulation 3**

#### Communication between navigation bridge and machinery space

- 1 There shall be two means of communication provided between the navigation bridge and the machinery space, one of which shall be an engine room telegraph giving visual indication of the orders and responses both in the machinery space and on the navigation bridge.
- A vessel may be exempt from the installation of an engine-room telegraph as specified in paragraph 1 if the main means of propulsion is directly controlled from the navigation bridge under normal service conditions.
- Wessel of length less than 24 m may be provided with only one of the means specified in paragraph 1 if, to the satisfaction of the Administration, two means of communications are considered unnecessary due to the proximity of the navigation bridge to the position of the controls of the main propulsion machinery.

#### **ELECTRICAL INSTALLATIONS**

## Regulation 1

#### General

- 1 All electrical installations of vessels shall be such that:
- .1 all electrical auxiliary services necessary for maintaining the vessel in normal operational and habitable conditions will be ensured without recourse to the emergency source of power;
- .2 electrical services essential for safety will be ensured under various emergency conditions; and
- .3 the crew and vessel will be protected from electrical hazards.

## Regulation 2

#### Safety precautions

- All vessels shall be provided with protection against electrical shock by an earth system, protection against short circuits and prevention of temperature rises in electrical fittings, etc.
- The hull return and earthed distribution systems shall not be used for any purpose in a tanker or a barge carrying flammable liquids in bulk.
- Where the hull return system is used, all final sub-circuits, i.e. all circuits fitted after the last protective device, shall be two-wire and special precautions shall be taken such as considered satisfactory by the Administration.

# Regulation 3

## **Emergency electrical power**

- All vessels shall be provided with an independent emergency electrical power located above the uppermost continuous deck and outside the machinery space readily accessible from the open deck. The emergency electrical power may be a generator or an accumulator battery provided with an emergency switchboard.
- 2 The emergency electrical power shall be capable of supplying the following services simultaneously:
- .1 Emergency lighting in passage ways, stairways and exits, machinery spaces, generating stations and steering gear spaces, navigational bridge and chartroom, control stations, lifeboats, rescue boat, liferaft stowage position, muster stations and other emergency stations.
- .2 Navigation lights and other lights required by COLREG Convention.
- .3 General alarm, fire detection and alarm system and other alarm systems.
- .4 All means of communication for transmitting distress and safety messages, including the vessel's whistle and internal communication as required in an emergency situation.

#### FIRE PROTECTION, DETECTION AND EXTINCTION

### Regulation 1

#### General

When the nature and conditions of the voyage are such that the application of the present Regulations is neither necessary nor reasonable, the Administration may adopt alternative arrangements if it is satisfied that they are as effective as the measures set out in the present chapter.

#### Regulation 2

#### Fire prevention

- 1 All fire-fighting appliances must be of an approved type in accordance with the International Code for Fire Safety Systems (FSS Code).
- In case of fire, all vessels shall be provided with remote means outside the space concerned, for stopping ventilation fans serving machinery and cargo spaces and for closing all doorways, ventilators, annular spaces around funnels and other openings to such spaces.
- 3 All forced and induced draft fans, oil pumps, purifiers and other oil-handling equipment shall be fitted with remote controls situated outside the space concerned so that they may be stopped in the event of a fire arising in the space in which they are located.
- 4 All oil suction pipes from storage, settling or daily service tanks located above the double bottom shall be fitted with quick closing valve capable of being closed remotely from outside the space in which these tanks are located.

### **Regulation 3**

#### Pressurised water fire-extinguishing systems

1 Any pressurised water fire-extinguishing system, where required to be installed by the present chapter, shall consist of pipes fed by one or more pumps and serving nozzles through hydrants and hoses.

#### 2 Fire pumps

- 1 All vessels shall be provided with two fire pumps:
- .1 One of these pumps shall be power-driven and may be a bilge, ballast or general service pump. The capacity of the power-driven pump shall be such that it can deliver a 12 m jet of water through a 12 mm diameter nozzle and its hose to maintain a pressure of 0.2 N/mm2 at any hydrant.
- .2 The other may be a hand-operated pump or a power pump operated by a means independent from the vessel's main source of power. It shall be located outside the machinery space and be capable of producing a jet of water having a throw of not less than 6 m into any part of the vessel.
- 2 Relief valves shall be fitted to prevent excessive pressure in any part of the fire main. Every fire pump connected to the fire main shall be fitted with a non-return valve.
- Wessels undertaking voyages less than 12 miles from the nearest land shall only be required to have one power-driven fire pump preferably independent of the main source of power.

#### 3 Fire mains, hydrants, hoses, couplings and nozzles

All vessels shall be provided with a fire main with hydrants, hoses with couplings and nozzles. There shall be at least 3 hoses of not less than 10 m long, one of which is to be fitted with a dual purpose jet-spray nozzle and the other two may have normal jet nozzles. The diameter of hoses and hydrants generally shall be at least 4 cm. All nozzles shall be fitted with a shutoff device and the diameter of nozzles shall be not less than 12 mm for vessels of 24 m or more in length and not less than 10 mm for other vessels.

All vessels of 300 GT or more shall be provided with two additional fire hoses.

- For every vessel of 300 GT and more the number and position of the hydrants shall be such that at least two jets of water not from the same hydrant, one of which shall be from a single length of hose, may reach any part of the vessel normally accessible to the crew. For vessel less than 300 GT, one jet of water will be sufficient.
- 3 At least one hydrant shall be provided in the machinery space and one adjacent to the entrance.
- The fire mains shall have no connections other than those necessary for fire-fighting and washing down, Materials that are readily rendered ineffective by heat shall not be used for fire mains. Where the fire-main is not self-draining, drain cocks shall be fitted.
- The hoses couplings shall be either of the bayonet type or instantaneous release type. Hoses shall be stowed in boxes in conspicuous positions near the hydrants with which they are intended to be used.
- All fire fighting equipment shall be maintained in a permanently serviceable condition and are to be painted red and clearly labelled for its specific purpose either in the working language of the crew and in English or by means of IMO symbols.

# Regulation 4

## **Machinery spaces**

- In any unattended propulsion machinery space or oil-fired boiler space, it must be provided with one of the following fixed fire fighting systems:
- .1 a pressurised water spray system or
- .2 a gas smothering system or
- .3 a fixed low expansion foam smothering system or
- .4 a fixed high-expansion foam-smothering system.

The detailed requirements for the above system shall be in accordance with the size of the vessel.

The Administration may exempt the fixed fire fighting system for vessels engaged in voyages of less than 12 miles from the nearest land.

#### **Regulation 5**

### Fixed fire detection and alarm systems in unattended propulsion machinery spaces

For unattended propulsion machinery spaces, a fire detection and alarm system is to be fitted.

#### Fire extinguishers

- 1 All vessels shall be provided with a sufficient number of approved portable fire extinguishers for use in accommodation and service spaces with at least one on each deck.
- 2 For oil-fired boiler space, at least three portable fire extinguishers suitable for use on oil fires shall be provided. One of the fire extinguishers may be substituted by a receptacle containing at least 0.15 m3 of sand and a scoop.
- For each space containing internal combustion type machinery, it shall be provided with one foam fire extinguisher of not less than 45 litres capacity or one carbon dioxide fire extinguisher of at least 30 kg capacity. In addition, one portable foam extinguisher for each 750 KW of engine power output part thereof and the total number of portable extinguishers shall not be less than two.
- All extinguishers shall be charged every year and there shall be a spare charge provided for each portable fire extinguisher capable of being recharged or additional spare portable fire extinguisher if not. When the strength of the containers appears suspicious, it shall be pressure tested.
- 5 All extinguishers intended for use in a particular space shall be stowed near the entrance to that space.
- Vessels sailing not more than 12 miles from the nearest land shall be provided with an appropriate number of portable extinguishers, at least one of which shall be appropriate to extinguish an oil fire. At least three portable extinguishers shall be provided.

# Regulation 7

#### Fireman's outfit

1 Vessels of 35 m or more in length shall be provided with at least one fireman's outfit completely equipped in accordance with FSS Code, as amended.

#### **Regulation 8**

#### **Emergency escape breathing devices**

1 Vessels of more than 300 GT shall carry at least one emergency escape breathing devices within accommodation spaces and one in the engine room.

## **Regulation 9**

## Fire alarm system, fire drills and muster lists

- 1 Vessels of 35 m or more in length shall have a fire alarm system comprising of manually operated call points effectively placed throughout the vessel to ensure a readily accessible means of notification of a fire.
- Vessels of 24 m or more in length shall have permanently and conspicuously displayed muster lists containing all specific tasks for the crew during a fire on board the vessel. It shall show call signals and the station to which each crew shall report and the tasks he shall perform in the event of fire.
- Fire drills shall be conducted at least once a month in order to maintain the emergency preparedness of the crew and to ensure that the fire-fighting equipment are maintained in good condition and to train the crew in its use.

## Fire control plans

1 Vessels of 24 m or more in length shall have a fire control plan permanently and conspicuously displayed on board the vessel.

# **Regulation 11**

# Ready availability of fire-extinguishing appliances

- 1 All fire-extinguishing appliances shall be maintained in good condition and be available for immediate use at all times.
- 2 Fire-extinguishing equipment and systems shall be subject to periodic inspections to ensure that they are in good working condition at least once a year, and to record the date and purpose of such inspections in a maintenance and test log, and in the ship's log.

#### LIFE-SAVING APPLIANCES AND ARRANGEMENTS

## Regulation 1

#### General

- 1 The provisions on life-saving appliances and arrangements under the present chapter shall comply with the LSA Code.
- When the nature and conditions of the voyage are such that the application of the present Regulations is neither necessary nor reasonable, the Administration may adopt alternative arrangements if it is satisfied that they are as effective as the measures set out in this chapter.

#### Regulation 2

#### Approval of life-saving appliances and arrangements and their equipment

The life-saving appliances and arrangements, and their equipment shall be approved by the Administration after ensuring that such life-saving appliances and arrangements and their equipment comply with the requirements of the LSA Code and are to be clearly labelled in the working language of crew and in the English language or by means of IMO symbols.

## **Regulation 3**

#### **Communications**

- 1 In addition to the means of alarm and communications set out in the present Regulations, any vessel or manned barge shall have on board:
- .1 An emergency means shall be provided for two-way communication between emergency control stations, muster and embarkation stations and strategic positions on board.
- .2 An emergency general alarm system capable of giving the signal for the crew to go to muster stations consisting of seven or more short blasts followed by a long blast on the vessel's siren or whistle supplied by the main or emergency electrical power. The system shall be capable of being controlled from the navigation bridge and shall be audible throughout the vessel, in all accommodation, machinery and spaces used by the crew.

#### Regulation 4

## Line-throwing appliances

1 Vessels engaged on voyages of more than 12 miles from the nearest land shall have a line-throwing appliance.

#### **Regulation 5**

#### Personal life-saving appliances

### 1 Lifebuoys

.1 Each lifebuoy shall be marked in capital letters in the Roman alphabet with the vessel's name and port of registry "TARAWA".

- .2 Lifebuoys shall be installed on board at readily accessible positions for all persons on board. They shall be capable of being rapidly cast loose for immediate use and not permanently secured in any way.
- .3 While the vessel is in port or at anchorage, one of the lifebuoys provided with a lifeline shall be placed permanently at the gangway or the embarkation ladder.
- .4 Vessels of 24 m or more in length shall have at least 4 lifebuoys, two of which shall be fitted with an automatic light, and one of the buoys also fitted with an automatic smoke signal.

Two lifebuoys, one on each side located on the main deck nearest to the waterline, shall be provided with a buoyant lifeline of 20 m in length.

- .5 Vessels of less than 24 m in length shall have at least two lifebuoys, one of which shall be fitted with an automatic light.
- .6 For vessels of 300 GT and more, on each side of the bridge wings, one lifebuoy with self-activating light and smoke signals shall be fitted in quick-release chutes for immediate release into the water below it at the side of the vessel.

#### 2 Life jackets

All vessels or manned barges shall have on board a sufficient number of life jackets for every person on board. In addition, they shall have sufficient number of lifejackets for persons on watch. Each lifejacket shall be provided with a whistle and a light.

# Regulation 6

#### Training and abandon ship drills

- 1 Every crew member shall be trained in launching and manoeuvring of life-saving appliances.
- The instructions for the use of life-saving appliances and arrangements shall be exhibited at muster stations, embarkation stations and common crew areas.
- 3 Muster stations and embarkation stations for lifeboats shall be provided with sufficient lighting supplied by the emergency electrical power.
- Every crew member shall participate in at least one abandon ship drill and one fire drill every month. Each drill shall be the occasion of a training session on the use of the corresponding equipment. In addition, these drills shall take place within 24 hours of leaving port whenever 25 percent of the crew has been replaced since the last drill. In vessels fitted with lifeboats, different boats shall be swung out at successive drills. The lifeboats shall, where practicable, be lowered into the water at least once every four months at which time checks shall be carried out for the condition of all apparatus and system and the watertight integrity of the boats, as well as operation of the releasing devices. The drills shall be so arranged as to ensure that the crew thoroughly understand and is practiced in the duties he or she has to perform including instructions in the handling and operation of liferafts, where these are carried.
- 5 The conduct of the above drills and corresponding training shall be recorded in the ship's log, subject to inspection by the Administration.

# Regulation 7

#### Survival craft

1 Cargo vessels other than oil tankers, chemical tankers and gas carriers, and manned barges, shall comply with the following requirements:

- .1 they shall carry, on each side, one or more survival craft conforming to the above-mentioned LSA Code, and have a total capacity sufficient to carry all the persons on board.
- .2 except where the survival craft required by paragraph 1.1 can be rapidly transferred from one side of the vessel to the other to be launched, additional survival craft shall be provided such that the total capacity on each side is sufficient to accommodate 125% of the total number of persons on board.
- Any tanker carrying oil or petroleum products with a flashpoint less than 60°C, any tanker carrying chemical products and any gas carrier shall, in addition to complying with the requirements of paragraph 1, carry at least one rigid power-driven rescue boat unless:
- .1 all the required survival craft consist of lifeboats, or
- .2 at least one of the required lifeboats is a rescue boat as defined in the LSA Code.
- 3 The equipment of the survival craft shall be to the satisfaction of the Administration, taking into account:
- .1 the area of navigation,
- .2 the distance from the nearest safe haven, and
- .3 the search and rescue services available in the area
- For vessels undertaking voyages of less than 12 miles from the nearest land, only throwoverboard inflatable liferafts sufficient for all persons on board need to be provided on each side of the ship. If the liferaft is of a mass of less than 185 kg and stowed in a position for easy side-to-side transfer at a single open deck level, one or more liferaft of such aggregate capacity as will accommodate the total number of persons on board is sufficient.
- 5 The Administration may give dispensation from the above requirements based on the particular conditions of the vessel and the nature of its voyage.

#### Stowage, launching and recovery of survival craft

- 1 Survival craft shall be stowed such that:
- .1 neither the survival craft nor its launching gear will interfere with the operation of any other survival craft at any other launching station,
- .2 they are to be as near to the water surface as it is safe and practicable, and
- .3 they are kept in a state of continuous readiness and two members of the crew can carry out preparations for embarkation and launching in less than five minutes.
- 2 The arrangements for the recovery of survival craft shall be to the satisfaction of the Administration.
- 3 Survival craft which are not stowed under davits or equivalent systems shall be stowed such that they are secured to the vessel by hydrostatic release units.

#### Marking of survival craft

- All survival craft shall be marked in capital letters in the Roman alphabet with:
- .1 the name of the vessel and its port of registry,
- .2 the name of the authority which approved the craft, and
- .3 the maximum number of persons for which it is approved.

#### Regulation 10

#### Operational readiness, maintenance and inspections

## 1 Operational readiness

All vessels' life-saving appliances shall be in working order and ready for immediate use at all times.

#### 2 Maintenance

Instructions for maintenance on board of rigid survival craft shall be exhibited and such maintenance shall be effected in accordance with such instructions

## 3 Weekly inspection

The following tests and inspections shall be carried out weekly:

- .1 all survival craft and launching appliances shall be visually inspected to ensure that they are ready for use; and
- .2 the emergency general alarm system shall be tested.

#### 4 Monthly inspections

Inspection of the life-saving appliances, including lifeboat equipment, shall be carried out monthly using a checklist to ensure that they are complete and in good order. A report of the inspection shall be entered in the ship's log.

#### 5 Servicing of inflatable liferafts and inflated rescue boats

Every inflatable liferaft and inflated rescue boat shall be serviced at intervals not exceeding twelve months in a servicing station approved by the Administration. In case of unavailability of service station, the Administration may authorise up to a maximum of seventeen months interval.

# 6 Servicing of hydrostatic release units

Hydrostatic release units shall be serviced at intervals not exceeding twelve months in a servicing station approved by the Administration. In case of unavailability of service station, the Administration may authorise up to a maximum of seventeen months interval.

#### RADIOCOMMUNICATIONS

## Regulation 1

## General

- 1 Vessel of 100 GT or more not fitted with a radiotelegraph station shall be provided with a radiotelephone station according to Chapter IV of SOLAS 74 Convention, as amended.
- Vessel not fitted with a radiotelephone or radiotelegraph station shall have a VHF radiotelephone station according to Chapter IV of SOLAS 74 Convention, as amended.
- Wessel engaged on voyage of more than 12 miles from the coast, shall be fitted with a radar transponder and a NAVTEX receiver according to Chapter IV of SOLAS 74 Convention, as amended.

# Regulation 2

# **Exemptions**

1 The Administration may permit exemptions from any of the above requirements for vessels engaged on voyages of less than 12 miles from the nearest land or having regard to the search and rescue facilities in the vessel's area of operation.

#### SAFETY OF NAVIGATION

## Regulation 1

#### General

1 The provisions of Chapter V of the SOLAS Convention, as amended, on safety of navigation and the following provisions shall apply to vessels covered by the present Regulations.

#### Regulation 2

#### Shipborne navigational equipment, safety equipment and nautical publications

- Vessels subject to the present Regulations shall carry the following equipment, instruments and nautical documents, unless the Administration may exempt any of them if it is satisfied that they are neither reasonable nor necessary for the safety of the vessel:
- .1 a properly adjusted standard magnetic compass to determine the vessel's heading and display the readings at the main steering position;
- .2 nautical charts and publications to plan and display the vessel's route for the intended voyage and to plot and monitor positions throughout the voyage;
- a Global Navigation Satellite System suitable for use at all times throughout the intended voyage to establish and update the vessel's position by automatic means;
- .4 for vessels of less than 150 GT and if practical, radar reflector, or other means, to enable detection by vessels navigating by radar at both 9 and 3 GHz;
- .5 a radar capable of operating in the 9 GHz frequency band;
- .6 for vessels above 300 GT to provide an echo-sounding device to measure and display the available depth of water, and vessels of less than 300 GT to have a hand sounding lead of at least 50 m;
- .7 6 parachute distress signals and 2 floating smoke signals of an approved type;
- .8 first aid equipment with medical guide;
- .9 a list of coastal stations;
- a copy of Regulations for the Prevention of Collisions at Sea;
- .11 a copy of current laws and regulations in force on safety of maritime navigation and International Convention on Safety of Life at Sea if the vessel is engaged in international navigation;
- .12 gangway and pilot ladder, if applicable;
- signalling lamps, and other visual and audible means of signalling required by the regulations to prevent collisions at sea. Vessels of over 150 GT shall have on board an efficient daylight signalling lamp which shall not be solely dependent upon the vessel's main source of electrical power.

#### Plans and documents to be carried on board

- 1 Vessels shall carry the following plans and documents in the working language of the crew; if not in English then an English translation shall also be available:
- .1 an overall plan of the ship (General Arrangement)
- .2 a plan or diagram of capacities
- .3 a stability booklet
- .4 an engine room plan
- .5 a plan or diagram of the bilge-pumping systems
- .6 a plan or diagram of the various systems for main propulsion and auxiliary systems
- .7 a plan or diagram of the electrical installations
- .8 a plan or diagram of the fire and safety systems
- The list of plans and documents required on board for vessels not navigating more than 12 miles from the nearest land shall be determined by the Administration.

## **Regulation 4**

#### Ship's log

- Vessel shall maintain a ship's log, with numbered pages and initialled with all entries being made in ink and signed each day by the Master. The navigation log, the engine-room log and the radio log shall constitute the ship's log.
- 2 Matters relating to the safety of the vessel, in all circumstances, shall be entered in chronological order in the ship's log, as well as meteorological conditions and any incidents relating to safety of life at sea.
- 3 On vessels of less than 24 m in length which do not navigate more than 12 miles from the nearest land, the navigational, engine room and radio logs may be replaced by a single ship's log in which shall be recorded the main events relating to the voyage and safety of life at sea.

#### PREVENTION OF POLLUTION

### Regulation 1

#### Certificates

- Vessels of 400 gross tonnage and upwards, engaged in international voyages and subject to the present Regulations, shall be issued with the following certificates according to the relevant provisions of the International Convention for the Prevention of Pollution from Vessels, 1973, as amended by the Protocol of 1978, hereinafter referred to as MARPOL:
- .1 an International Oil Pollution Prevention Certificate,
- . 2 an International Air Pollution Prevention Certificate,
- .3 for the vessels certified to carry noxious liquid substances in bulk, an International Pollution Prevention Certificate for the carriage of Noxious Liquid Substances in Bulk.
- Vessels of more than 200 gross tonnage and those of less than 200 gross tonnage which is certified to carry more than 10 persons, engaged in international voyages shall be issued an International Sewage Pollution Prevention Certificate.
- 3 Oil tankers of 150 gross tonnage and above shall be issued an International Oil Pollution Prevention Certificate.
- Every vessel subject to certification under paragraphs 1 to 3 complies with all the relevant requirements of the relevant Annex to MARPOL.

#### Regulation 2

#### Discharge at sea

- 1 Any discharge into the sea of oil or oily mixtures from vessels shall be prohibited, except when the following provisions are satisfied:
- .1 the vessel is proceeding en route;
- .2 the vessel has in operation equipment of a design approved by the Administration that ensures that the oil content of the effluent without dilution does not exceed 15 parts per million;
- .3 the oily mixture does not originate from cargo pump room bilges on oil tankers; and
- .4 the oily mixture, in case of oil tankers, is not mixed with oil cargo residues.
- 2 Disposal of garbage at sea is prohibited, except food waste at a distance of more than 12 miles from the nearest land.

#### **Regulation 3**

#### Retention on board

Vessels shall be provided with a tank or tanks of adequate capacity, having regard to the type of machinery and length of voyage, to receive the oil residues (sludge) which cannot be dealt with, such as those resulting from the purification of fuel and lubricating oils and oil leakages in the machinery spaces.

2 The crew shall be notified, by placards or another information mode, of the garbage disposal prohibition. They shall be informed on the locations where garbage they could retain or generate, may be stored on board.

# Regulation 4

# Disposal ashore and record keeping

- 1 Substances or garbage that is retained on board shall be disposed of ashore in accordance with the relevant national or local regulations.
- 2 Record shall be kept on the ship's log of any discharge of oil or oily substances, either:
- .1 at sea in accordance with Regulation 2.1, with indication of the amount discharged and conditions; or
- .2 in a shore reception facility, the receipt shall be kept on board the vessel for inspection by the Administration.