# **TUVALU SHIP REGISTRY**

Non-Convention regulations for vessels of more than 12 metres in length

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#### **CHAPTER 1**

#### **GENERAL PROVISIONS**

#### **Regulation 1**

## Application

1 Unless expressly provided otherwise, the present Regulations apply to new vessels, including non-self-propelled vessels, engaged in maritime navigation, whose length overall is 12 metres or over and for which the provisions of the Conventions listed in the following paragraph do not apply.

2 Where the provisions in force of the:

.1 International Convention for the Safety of Life at Sea (SOLAS), 1974, as modified by its Protocol of 1988, as amended;

.2 International Convention on Load Lines (LL), 1966, as modified by its Protocol of 1988, as amended;

.3 International Convention for the Prevention of Pollution from Ships (MARPOL), 1973/78, as amended;

.4 International Regulations for Preventing Collisions at Sea (COLREG), 1972, as amended;

.5 International Convention on the Control of Harmful Anti-Fouling Systems on Ships, 2001, as amended; and

.6 International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004, as amended,

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

3 The Regulations are applicable to existing vessels as far as practicable and reasonable, ensuring their safety and the protection of the marine environment.

## **Regulation 2**

#### Definitions

Administration means the Government of the Republic of Tuvalu.

Approved means approved by the Administration of the Tuvalu as applicable.

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

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

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

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.

Length is the overall length of the vessel's hull, unless expressly provided otherwise in the relevant Conventions.

New vessel means a vessel the keel of which is laid or which is at similar stage of construction on or after 1st July 2011.

Non-self-propelled vessel means a vessel without its own means of propulsion.

Passenger ship is a ship which carries more than twelve passengers.

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

Recognized Organization means an organization officially authorised by the Republic of Tuvalu for carrying out statutory surveys and issuing applicable statutory certificates on its behalf.

Regulations refers to the present regulations for non-Convention regulations for vessels of more than 12 metres in length

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

#### **Regulation 3**

#### **Exceptions and Exemptions**

1 The present Regulations do not apply to:

- .1 vessels belonging to the State and used for non-commercial purposes, vessels of war and troopships;
- .2 passenger ships;
- .3 pleasure craft not engaged in trade;
- .4 fishing vessels;
- .5 wooden ships of primitive build; and
- .6 vessels whose overall length is less than 12 metres.

2 The Administration may exempt 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 service for which it is intended.

#### **Regulation 4**

#### Equivalents

1 Where in this Regulations any special type of appliance, apparatus, 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.

## **CHAPTER 2**

## SURVEY AND CERTIFICATION

## **Regulation 1**

## Surveys and Bottom Inspections

1.1 All new and existing vessels to which the present Regulations apply shall be subjected to surveys carried out by the Administration or Recognized Organization in accordance with the said Regulations, including bottom inspection of the outside of the vessel's bottom, propeller and shafting, rudder, sea inlets, scuppers, shell valves and other underwater parts.

1.2 A minimum of two bottom inspections of the outside of the vessel's bottom shall be carried out during any five year period and the interval between any two such inspections shall not exceed 36 months.

1.3 Inspection of the outside of the vessel's bottom should normally be carried out with the vessel in dry-dock.

## **Regulation 2**

## Issue or endorsement of the Certificate

1 A certificate called a "Non-Convention Cargo Ship Safety Construction Certificate" shall be issued to a vessel that complies with the provisions of Chapter 1, 2, 4, 5, 6 and 7 and any other relevant requirements of the present Regulations after an Initial or a Renewal survey.

2 A certificate called a "Non-Convention Cargo Ship Safety Equipment Certificate" shall be issued to a vessel that complies with the provisions of Chapter 1, 2, 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 "Non-Convention Cargo Ship Safety Radio Certificate" shall be issued to a vessel that complies with the provisions of Chapter 1, 2 and 10 and any other relevant requirements of the present Regulations after an Initial or a Renewal survey.

4 A certificate called a "Non-Convention Load Line Certificate" shall be issued to a vessel that complies with the provisions of Chapter 1, 2, 3, 4 and 5 and any other relevant requirements of the present Regulations after an Initial or a Renewal survey.

5 When an exemption is granted to a vessel in accordance with the present Regulations, a certificate called an Exemption Certificate shall be issued by the Administration or a Recognized Organization, in addition to the certificate prescribed in the present Regulations. The Exemption Certificate shall be attached to the Certificate.

6 After the completion of Initial, Renewal or Change of Flag surveys, Interim certificates shall be issued by the Administration or a Recognized Organization which has been approved by the Administration. Normally, the Interim certificates would be valid for a period of 5 months. Before the expiry of the Interim certificates, Full term certificates shall be issued by the Administration or Recognized Organization for a period of not more than 5 years from the date of completion of the survey.

7 All vessels are subjected to an annual survey. Upon the completion of the annual surveys, the Full-Term certificates shall be endorsed as appropriate, by the Administration or a Recognized Organization.

8 In special circumstances and with approval from the Administration, existing vessels may not be required to be issued with above certificates. However, such vessels shall be subjected to the relevant surveys or inspections as far as practicable and reasonable in accordance with the requirements of the Regulations.

## **CHAPTER 3**

## LOAD LINES

#### **Regulation 1**

#### General

1 A Load Line shall be assigned to all vessels covered by the present Regulations.

2 Vessels covered by the present Regulations are subject to the provisions of the International Conference 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 practicable and reasonable by the Administration with restriction imposed on its voyages.

#### **Regulation 2**

#### Freeboard Assignment Table

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

Length of Vessel (m)	Freeboard (mm)	Length of Vessel (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

Freeboard Assignment Table (including corrections)

## CHAPTER 4

## STRUCTURE, SUBDIVISION AND EQUIPMENT

## **Regulation 1**

## General

1 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 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.

## Construction

1 The strength and method of construction of the hull 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 recognized by the Administration may be considered to comply with the requirements of the present Regulation.

## **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.

3 Anchor and mooring equipment shall comply with the requirements of the Administration or Recognized Organization.

## CHAPTER 5

## STABILITY AND BILGE PUMPING ARRANGEMENTS

## **Regulation 1**

## Intact stability

1 The intact stability booklet shall be endorsed by the Administration or by the Recognized Organization which assigns the load line.

2 The stability test shall be carried out to the satisfaction of the Administration. The vessel shall be supplied with reliable stability information to enable its Master 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 from the requirements:

.1 The area under the curve of righting levers (GZ curve) shall not be less than:

(i) 0.075 metre-radian up to an angle of  $20^{\circ}$  when the maximum righting lever (GZ<sub>max</sub>) occurs at  $20^{\circ}$  and 0.055 metre-radian up to an angle of  $30^{\circ}$  when the maximum righting lever (GZ<sub>max</sub>) occurs at  $30^{\circ}$ 

or above. Where the maximum righting lever  $(GZ_{max})$  occurs at angles between 20° and 30° the corresponding area under the righting lever curve shall be determined by linear interpolation.

(ii) 0.03 metre-radian, between the angle of heel of  $30^{\circ}$  and  $40^{\circ}$  or angle of flooding if this angle is less than  $40^{\circ}$ .

.2 righting lever (GZ) shall be at least 200 mm at an angle of heel equal to or greater than 30°.

.3 maximum righting lever (GZ<sub>max</sub>) shall occur at an angle of heel of 20° or more.

.4 initial metacentric height (GM<sub>0</sub>), after correction for free surface, shall be not less than 150 mm.

## **Regulation 2**

## Stability 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 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 may 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 suction by pumps

.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.

## **CHAPTER 6**

#### MACHINERY INSTALLATIONS

#### **Regulation 1**

#### General

1 All main and auxiliary machineries, boilers, steering gear, fuel oil system, air compressors and air bottles, electrical system / piping and pumping arrangements and refrigeration system shall be designed, constructed and installed in accordance with marine standards acceptable by the Administration or rules of Recognized Organisation, adequate for the intended service. The above machineries and equipment shall be so installed, protected and maintained as not to cause any harm or danger to any person or the marine environment.

2 Indicators shall be fitted on the navigation bridge for propeller speed and direction of rotation.

## **Regulation 2**

#### **Steering Gear**

1 All vessels shall be provided with a main steering gear 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 ahead or astern.

2 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 bridge, an indicator shall be provided to show the exact position of the rudder. Appropriate means of communication shall be provided between the bridge and the tiller position.

## **Regulation 3**

#### Communication between navigation bridge and machinery space

1 Two means of communication should be provided between the bridge and the engine room, one of which will be an engine room telegraph giving visual indication of the orders and responses both in the engine room and on the navigating bridge.

2 A vessel may be exempted 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. 3 Any vessel of length less than 24 m may, instead of the provisions of paragraph 1, 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 bearing in mind the proximity of the navigation bridge to the position of the control of the main propulsion machinery.

## **CHAPTER 7**

#### **ELECTRICAL INSTALLATIONS**

#### **Regulation 1**

## General

1 All vessels shall be provided with a source of electrical power, a distribution switch board and a system of electric wiring well protected to provide power to machinery, heating, lighting, ventilation, equipment, communication, alarms and other circuits required on board for vessel's intended operations, without posing as electrical hazards to the crew and vessel.

#### **Regulation 2**

## Safety precautions

1 All vessels shall be provided with precautions against shock by an earthing system, protection against short circuits and prevention of temperature rises in electrical fittings, etc.

2 The hull return system of distribution shall not be used for any purpose in a tanker or a vessel carrying flammable liquids in bulk.

3 Where the hull return electrical 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 source of electrical power**

1 All vessels shall be provided with an independent emergency source of electrical power located above the uppermost continuous deck and outside the machinery space readily accessible from the open deck. The emergency source of electrical power may be a generator or an accumulator battery provided with an emergency switchboard installed nearby.

2 The emergency power shall be capable of supplying the following services simultaneously:

.1 Lighting in passage ways, stairways, main machinery, generating and steering gear spaces, navigation bridge and chartroom, fire control station, lifeboats, rescue boat, liferaft stowage position and other emergency stations.

.2 Navigation lights.

.3 General alarm, fire alarm, fire detection 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.

## **CHAPTER 8**

## FIRE PROTECTION

## **Regulation 1**

## General

1 When the nature and conditions of the voyage are such that the application of the present Regulations is neither practicable 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.

2 All fire-fighting appliances must be of an approved type, either by Administration or Recognized Organization.

3 In case of fire, all vessels shall be provided with remote means outside the space concerned, for stopping ventilating fans serving machinery and cargo spaces and for closing all doorways, ventilators, annular spaces around funnels and other openings to such spaces.

4 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.

5 Oil suction pipes from storage, settling or daily service tanks having a capacity of 500 litres and above, 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 2**

## 1 Pressurized water fire-extinguishing systems

1 Any pressurized 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 metres 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-driven pump operated by a means independent from the vessel's main source of electrical 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 metres into any part of the vessel.

2 Relief values 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 value.

3 Vessels 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 electrical power.

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

1 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 metres 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 metres 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.

2 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 with a hose of not more than 15 m and one hydrant adjacent to the entrance.

4 The fire mains shall have no connection 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.

5 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.

6 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 3**

#### **Machinery spaces**

1 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 pressurised water spray system;

.2 gas smothering system;

.3 fixed low expansion foam smothering system; or

.4 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 4**

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

1 For unattended propulsion machinery spaces, a fire detection and alarm system shall 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 0.1 m3 of sand and a scoop.

3 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 fire extinguishers shall not be less than two.

4 All fire 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. The extinguisher container with fittings shall be inspected and maintained against deterioration, it may be subjected to pressure test as deemed required.

5 All fire extinguishers intended for use in a particular space shall be stowed near the entrance to that space and of the appropriate type of fire extinguisher required to fight the type of fire in the space or equipment contained within.

6 Vessels sailing not more than 12 miles from the nearest land shall be provided with an appropriate number of portable fire extinguishers, at least one of which shall be appropriate to extinguish an oil fire. At least three portable fire extinguishers shall be provided.

## **Regulation 6**

## Fireman's outfit

1 Vessels of 35 metres or more in length shall be provided with at least one fireman's outfit completely equipped in accordance with SOLAS 74 Convention, as amended.

## **Regulation 7**

#### **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 machinery space.

## **Regulation 8**

#### Fire alarm system, muster lists, fire patrols and fire drills

1 Vessels of 35 metres 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 raising an alarm immediately upon the detection of a fire.

2 Vessels of 24 metres or more in length shall have a fire duty roster, drawn up and updated before sailing. The muster lists shall contain all specific tasks. In particular, it shall show call signals and the station to which each man shall report and the tasks he shall perform in the event of fire. It shall be permanently displayed in several parts of the vessel, especially in places frequently used by the crew. 3 Fire drills shall be conducted monthly to ensure the emergency preparedness and proficiency of the crew to fight a fire and in rescue operation, and to check the fire alarm system, mustering of crew at fire muster station and training of crew to use fire-fighting appliances.

## **Regulation 9**

#### Fire control plans

1 Vessels of 24 metres or more in length shall have a fire control plan permanently exhibited to the satisfaction of the Administration.

#### **Regulation 10**

#### Ready availability and maintenance of fire-extinguishing appliances

1 Fire-extinguishing appliances shall be kept in good order and be available for immediate use at all times.

2 Equipment and systems shall be subject to periodic checks to ensure that they are in good working order at least once a year. The date and purpose of such inspections shall be recorded in a maintenance and test log, and noted in the vessel's log.

## CHAPTER 9

## 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 SOLAS LSA Code.

2 When the nature and conditions of the voyage are such that the application of the present Regulations is neither practicable nor reasonable, the Administration may allow 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

1 The life-saving appliances and arrangements and their equipment required by this chapter shall be approved by the Administration. Before granting approval to life-saving appliances and arrangements and their equipment, the Administration shall ensure that such life-saving appliances and arrangements and their equipment comply with the requirements of SOLAS 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 Apart from the means of alarm and communications set out in the present Regulations, every manned vessel shall have on board:

.1 An emergency means comprising either fixed or portable equipment or both shall be provided for two-way communication between emergency control stations, muster and embarkation stations and strategic positions on board.

.2 A general emergency alarm system capable of giving the signal 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 source of power. The system shall be capable of being controlled from the vessel's bridge and shall be audible in all accommodations, engine room and spaces used by the crew.

## **Regulation 4**

#### Line-throwing appliances

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

## **Regulation 5**

#### Personal life-saving appliances

#### 1 Lifebuoys

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

.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 and not permanently secured in any way.

.3 Vessels of 24 metres 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 metres in length.

.4 Vessels of less than 24 metres in length shall have at least two lifebuoys, one of which shall be fitted with an automatic light.

.5 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.

.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 fitted.

#### 2 Life jackets

All manned vessels shall have on board a sufficient number of life jackets for every person on board. In addition, they shall have a 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 survival craft.

2 The method and instructions for use of survival craft and its launching arrangement shall be exhibited at muster stations and common crew areas.

3 Muster stations and embarkation stations for survival crafts shall be provided with lighting supplied by the emergency source of power.

4 Every crew member shall participate in at least one abandon ship drill every month. Each drill shall be the occasion of a training session on the use of the related 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 and propulsion arrangements. The drills shall be so arranged as to ensure that the crew thoroughly understand and is practiced in the duties they have to perform including instructions in the handling and operation of liferafts, where these are carried.

5 The conduct of the above drills and related training shall be recorded in a log, subject to inspection by the Administration.

## **Regulation 7**

#### Survival craft

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

.1 they shall carry, on each side, one or more survival craft conforming to the SOLAS 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.

2 Any tanker carrying oil or petroleum products with a flashpoint less than 60°C, tanker carrying chemical products and 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 SOLAS LSA Code.

3 The equipment of the survival craft shall be to the satisfaction of the Administration, taking into account the followings:

.1 area of navigation,

.2 distance from the nearest safe haven, and

.3 search and rescue services available in the area

4 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 vessel. If the liferaft is of a mass of less than 185 kg and stowed centrally in a position for easy side-toside 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 grant 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 other survival craft at other launching station;

.2 they are as near to the water surface as safe and practicable; and

.3 they are kept in a state of continuous readiness and two members of the crew shall carry out preparations for embarkation and launching in less than five minutes.

2 The arrangement 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.

## **Regulation 9**

## Marking of survival craft

All survival craft shall be marked in capital letters in the Roman alphabet with:

.1 name of the vessel and its port of registry "FUNAFUTI";

.2 name of the authority which approved the craft; and

.3 maximum number of persons for which it is approved.

## **Regulation 10**

## Operational readiness, maintenance and inspections

## 1 **Operational readiness**

Before the vessel leaves port and at all times during the voyage, and in the case of barges, at any time when they are manned, all life-saving appliances shall be in working order and ready for immediate use.

## 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 survival craft and launching appliances shall be visually inspected to ensure that they are ready for use; and

.2 general emergency 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 logbook.

#### 5 Service 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 non-availability of service station, the Administration may authorize a seventeen months service interval.

#### 6 Service 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 non-availability of service station, the Administration may authorize a seventeen months interval.

## CHAPTER 10

#### RADIOCOMMUNICATIONS

#### **Regulation 1**

#### General

1 Vessel of 100 GT or more shall be provided with a radiotelephone station according to Chapter IV of SOLAS 74 Convention, as amended.

2 Vessel not fitted with a radiotelephone station, shall have a VHF radiotelephone station according to Chapter IV of SOLAS 74 Convention, as amended.

3 Vessel 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 grant exemption from the above requirements for vessels engaged on voyages of less than 12 miles from the nearest land or having regards to the availability of search and rescue facilities in the vessel's area of operation.

## **CHAPTER 11**

#### SAFETY OF NAVIGATION

#### **Regulation 1**

## General

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

#### **Regulation 2**

#### Shipborne navigational equipment and nautical publications

1 Vessels subject to the present Regulations shall carry the equipment, instruments and nautical documents shown in tables 1, 2, 3 and 4 below.

2 The Administration may exempt vessels from carrying the equipment, instruments and nautical publications if it is satisfied that they are neither practicable nor reasonable for the safety of the vessel.

3 Equipment for vessels navigating exclusively in ports, waterways and sheltered bays shall be determined by the Administration during the inspection prior to entry into service.

Table 1. Navigation instruments

Item	Remarks
1 radar	Capable of operating in the 9 GHz frequency band.
1 GPS receiver	-
1 echo sounder	For vessels above 300 GT to provide an echo-sounding device to measure and display the available depth of water under the keel, and vessels of less than 300 GT to have a hand sounding lead of at least 50 metres long.

Table 2. Miscellaneous equipment

Item	Remarks
distress signals: 6 red hand flares 6 parachutes	These distress signals shall be stowed in watertight containers placed within or close to the bridge.
2 floating smoke signals	Emitting smoke for a period of not less than 3 minutes.
First aid equipment with medical guide	-

## Table 3. Nautical publications and documents

Item	Remarks
List of coastal stations	Available for the vessel to have
	communications during its voyages.
International Regulations for Preventing Collisions at	As applicable
Sea, 1972	
Current laws and regulations on safety of maritime	As applicable
navigation	
International Convention for the Safety of Life at Sea,	As applicable
1974	
International Convention on Load Lines, 1966, as	As applicable
modified by its Protocol of 1988	
International Convention for the Prevention of	As applicable
Pollution from Ships (MARPOL), 1973/78	
International Convention on the Control of Harmful	As applicable
Anti-Fouling Systems on Ships, 2001	
International Convention for the Control and	As applicable
Management of Ships' Ballast Water and	
Sediments, 2004	

Table 4. Vessel's gangway and pilot ladder

Item	Remarks
Gangway ladder	-
Pilot Ladders	-

#### **Magnetic compass**

1 Every magnetic compass required by Chapter V of the SOLAS 74 Convention, as amended, shall be properly compensated and its table or curve of residual deviations shall be available at all times.

2 The Administration may, when it considers if necessary, require the adjustment of the magnetic compass to be calibrated regularly.

#### **Regulation 4**

#### Means of signalling to prevent collisions at sea

#### **Signalling Lamps**

1 Vessels shall be provided with the signalling lamps and other visual and audible means of signalling required by the COLREG regulations to prevent collisions at sea, applicable to their type and size. Signalling lamps and audible means of signalling shall be of an approved type and their positioning on board shall comply with the requirements of the COLREG regulations.

Vessels of over 150 GT shall have on board an efficient daylight signalling lamp which is not solely dependent upon the vessel's main source of electrical power.

## **Regulation 5**

#### 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 General arrangement plan
- .2 Construction plan
- .3 Capacity plan
- .4 Stability booklet
- .5 Engine room plan
- .6 Bilge pumping system
- .7 Steam and fuel system
- .8 Electrical installations
- .9 Fire and safety plan
- .10 Other relevant plans

2 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 6**

#### Ship's log

1 Every 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, pollution to the marine environment, etc.

3 On vessels of less than 24 metres 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, safety of life at sea, pollution to the marine environment, etc.

## **CHAPTER 12**

## **PREVENTION OF POLLUTION**

#### **Regulation 1**

#### Certificates

1 Vessels of 400 gross tonnage and upwards, and subject to the present Regulations, shall be issued the following certificates according to the relevant provisions of the International Convention for the Prevention of Pollution from Ships, 1973, as amended by the Protocol of 1978, hereinafter referred to as MARPOL:

.1 International Oil Pollution Prevention Certificate;

.2 International Air Pollution Prevention Certificate; and

.3 International Pollution Prevention Certificate for the carriage of Noxious Liquid Substances in Bulk.

2 Vessels of less than 400 gross tonnage and certified to carry more than 15 persons 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.

4 Every vessel subject to certification under paragraphs 1 to 3 shall comply with the 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 vessel is proceeding en route;

.2 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 oily mixture does not originate from cargo pump room bilges on oil tankers; and

.4 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 nautical miles from the nearest land.

## Retention on board

1 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 of the garbage disposal prohibition. The garbage generated may be processed, segregated, retained and stored on board.

## **Regulation 4**

## Disposal ashore and record keeping

1 Garbage that is retained on board shall be disposed ashore in accordance with the relevant national or local regulations, and recorded on the ship's log with receipt kept.

2 Record shall be kept on the ship's log book 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 to a shore reception facility, the receipt shall be kept on board for inspection.

## **Regulation 5**

## Pollution prevention control measures

1 Every vessel shall implement pollution prevention control measures on board and comply with the applicable requirements of MARPOL Convention, to ensure the prevention of pollution to the marine environment.

## **Regulation 6**

## Other Conventions for the prevention of pollution to the marine environment

In addition to MARPOL Convention, every vessel is required to comply with the requirements of the following Conventions as applicable:

## **1** International Convention on the Control of Harmful Anti-Fouling Systems.

Every vessel of 24 metres or more in length, but less than 400 gross tonnage engaged in international voyages shall carry a Declaration on the anti-fouling system applied to its hull in accordance to the requirements of the Convention and signed by the owner. Such Declaration shall be accompanied by the appropriate supporting documents.

## 2 International Convention for the Control and Management of Ships' Ballast Water and Sediments.

Every vessel of less than 400 gross tonnage constructed with ballast water tank, shall comply with the requirements of the Convention upon its entry into force.