

CHAPTER 236**REGISTRATION OF MERCHANT SHIPS
(VESSELS UNDER 500 GRT IN SERVICE OUTSIDE THE
TERRITORIAL WATERS OF BELIZE) REGULATIONS****ARRANGEMENT OF REGULATIONS**

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CHAPTER 236

147 of 1991.
82 of 1997.
Act 32 of 1989.

REGISTRATION OF MERCHANT SHIPS
(VESSELS UNDER 500 GROSS REGISTER TONS,
IN SERVICE OUTSIDE THE
TERRITORIAL WATERS OF BELIZE) REGULATIONS
(Section 24)

[16th November, 1991.]

WHEREAS, it is necessary for the efficient operation of the International Merchant Marine Registry of Belize to make rules to ensure that all Belizean cargo vessels of less than 500 Gross register tons (GRT) which are in service outside the territorial waters of Belize are so constructed, equipped, operated and inspected as to attain the highest standards of safety of life and property at sea;

NOW, THEREFORE, IT IS HEREBY PROVIDED AS FOLLOWS:-

Short title.

1. These Regulations may be cited as the

REGISTRATION OF MERCHANT SHIPS (VESSELS
UNDER 500 GROSS REGISTER TONS, IN SERVICE
OUTSIDE THE TERRITORIAL WATERS OF
BELIZE) REGULATIONS

Application.

2. These Regulations shall apply to all Belizean flag cargo vessels less than 500 GRT in the international service with the exception listed in Section 4

Interpretation.

3. For the purpose of these Regulations-

“approved” means approved by IMMARBEL;

“cargo ship” means any ship which is not a passenger ship;

“existing ship” means a ship which is not a new ship;

“fishing vessel” means a vessel used for the purpose of catching fish or other living resources of the sea;

“IMMARBE” means the International Merchant Marine Registry of Belize established under Section 3 of the Act;

“new ship” means a ship the keel of which is laid or which is at a similar stage of construction on or after January 1st, 1991.

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

“recognized organization” means an organization officially authorized by IMMARBE for issuing certificates or performing inspections, as applicable;

“tanker” means a cargo ship constructed or adapted for the carriage, in bulk, of liquid cargoes of an inflammable nature.

A ship is engaged in “coastwise trade” if in the course of its voyages, it does not proceed more than 20 nautical miles from the nearest land.

A ship is engaged in “coastal trade” if in the course of its voyages, it does not proceed more than 100 nautical miles from the nearest land and is not engaged in coastwise trade.

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A ship is engaged in “unrestricted trade” if it cannot fit into either of the above two categories.

A ship is in the “International Service” if it makes voyages between ports at least one of which is outside the jurisdiction of Belize.

In these Regulations the words “ship” and “vessel” shall mean one and the

Exceptions and
exemptions.

same.

4. (1) These Regulations shall not apply to

- (a) ships under 150 GRT or 79 feet in length, as defined by the 1966 Load Line Convention;
- (b) ships not propelled by mechanical means;
- (c) pleasure yachts not engaged in trade; and
- (d) fishing vessels.

(2) IMMARBE may in such conditions as it thinks fit, exempt any existing vessels from any requirements of these Regulations if it is satisfied that the requirements are either impracticable or unreasonable in the case of that vessel.

Alternatives.

5. Where these Regulations require that a particular material, appliance or apparatus, or type thereof, shall be fitted or carried, or a particular provision is to be made on a vessel, other appliances or apparatus may be carried or other provisions can be made in that vessel if IMMARBE is satisfied that the alternatives are as effective as those required by these Regulations.

Required
documents.

6. All vessels shall be required to comply with the following:

- (a) A valid load line certificate or exemption certificate issued by a recognized organization shall be carried on board. This certificate is subject to the provisions of the International Conference on Load Lines, 1966, and taking into consideration the application of Section 4 and the exceptions of Section 5 of the Convention.

Vessels less than 150 GRT shall comply with the

provisions of the ICLL 66 to an extent as deemed necessary by IMMARBE. The certificate shall state any restricted service limits required either by the Government of Belize or relevant classification society if a vessel is classed. It shall be verified that the vessel does not proceed beyond or outside any such limits. Where special service limits have been assigned, their extent shall be clearly established and related to the vessel's actual service.

- (b) A Belizean tonnage certificate issued by a recognized organization shall be on board stating up-to-date values of GRT and NRT computed according to rules for measurement presently in force in Belize. The tonnage certificate shall be complemented by annexed calculation.
- (c) An up-to-date patent (provisional or permanent), shall be on board. Current receipts for Belizean annual and inspection taxes shall also be on board.
- (d) An up-to-date radio permit or license shall be on board for all vessels fitted with a radio station.
- (e) An up-to-date and valid VHF radio, radio telephony or radio telegraphy certificate issued by a recognized organization shall be on board vessels fitted with a VHF radio telephone station or a radio telegraph station, as applicable. The certificates for ships above 300 GRT shall be issued under the provisions of SOLAS 74 Convention and shall be valid for one year.
- (f) An up-to-date and valid cargoship safety equipment

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certificate issued by a recognized organization shall be on board together with a check list of safety items. The validity of the certificate shall be for two years subject to an intermediate endorsement.

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(g) An up-to-date and valid cargoship safety construction certificate issued by a recognized organization shall be on board and shall be valid for three years subject to annual endorsements.

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(h) An up-to-date and valid International Oil Pollution Prevention (IOPP) certificate issued by a recognized organization shall be on board and shall be valid for five years subject to annual endorsements.

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(i) An up-to-date and valid Shipboard Oil Pollution Emergency Plan (SOPEP) shall be on board and shall be valid for five years.

Survey and
drydocking.
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7. The issuance and endorsement of the cargoship safety certificate shall be subject to the successful completion of a survey carried out by IMMARBE and covering all the provisions of the present Regulations. Two times during the three year period the vessel shall be put in drydock or on slipway and undergo a thorough examination of all underwater and overside parts. The interval between these examinations shall not exceed two years.

The examinations shall include rudders, shafting and propellers, bottom plating, sea inlets, scuppers, shell valves and other items, which would normally be inspected during a class drydocking survey. Vessels over 16 years old, unless exempted by IMMARBE, shall also undergo this examination annually. Vessels classed and current with class societies requirements may be partially or totally exempted by IMMARBE from the above surveys and examination.

8. An annual safety inspection of the vessel, regarding the enforcement of Regulations in force and the granting of exemptions therefrom, shall be carried out by IMMARBE or by inspectors nominated for the purpose or by organizations recognized by IMMARBE.

Inspection.

9. Every ship shall have sufficient structural strength for the draft corresponding to the freeboard assigned to the satisfaction of IMMARBE. Ships built and maintained in conformity with the requirements of a classification society recognized by IMMARBE shall be regarded as meeting this requirement.

Construction.

10. (1) Every ship shall be inclined upon its completion and the elements of its stability determined to the satisfaction of IMMARBE. The master shall be supplied with reliable information as is necessary to enable him by rapid and simple processes to obtain accurate guidance as to the stability of the ship under varying conditions of service, and this information shall be forwarded to IMMARBE.

Stability.

(2) Where any alterations are made to a ship, IMMARBE may require additional stability information.

(3) The trim and stability data shall include at least the following:

- (a) Full homogeneous load, departure with 100% of all consumables on board.
- (b) Full homogeneous load, arrival with 10% of consumables on board.
- (c) Ballast departure with 100% of consumables on board.
- (d) Ballast arrival with 10% of consumables on board.

(4) Where cargo is expected to be carried on weather deck, full load conditions shall be prepared both with and without the deck cargo. Consumables shall include all oil fuel tanks all fresh water tanks, the necessary lube oil, and provision for the crew. The weight of the crew and its effects shall be taken into account in all conditions.

The loading conditions shall be in the usual tabular form with small plans of the ship showing distribution of liquids, cargo, etc., and resulting draft, metacentric height (after free surface correction), with stability curves adjacent.

(5) The stability characteristics of the vessel in the foregoing conditions shall meet at least the following criteria:

- (a) The area under the curve of righting levers (GZ CURVE) shall be not less than:
 - (i) 0.075 meter-radians up to an angle 20 when the maximum righting lever (GZ) occurs at 20 and 0.055 meter-radians up to an angle of 30 when the maximum righting lever (GZ) occurs at 30 or above. Where the maximum righting lever (GZ) occurs at angles between 20 and 30 the corresponding requisite area under the righting lever curve shall be determined by linear interpolation.
 - (ii) 0.03 meter-radians, between the angle of heel of 30 and 40 or angle of flooding if this angle is less than 40.
- (b) The righting lever (GZ) shall be of 0.2m or more at an angle of heel equal to or greater than 30.

- (c) The maximum righting lever (GZ) shall occur at an angle of heel of 20 or more.
- (d) The initial metacentric height (GM), after correction for free surface shall be not less than 0.15m.
- (6) The master shall be provided with approved plans and data as follows:
- Other stability date.
- (a) The Capacity Plan/Deadweight Scale shall show distribution of all tanks and holds in the ship together with their centers of gravity, longitudinal and vertical, and their free surface inertias. Additionally, either separately or attached to the capacity plan, there shall be a deadweight, tons per cm (or tpi), etc., plotted against a scale of drafts, ranging between the ship's light and loaded drafts.
- (b) Cross curves of stability shall also be available calculated to include any enclosed structures which may be considered to be realistically buoyant when the ship is heeled to the specific angle.
- (c) With regard to the curves or particulars, the usual hydrostatic particulars either in curve or tabular form shall also be available for the master.
- Compliance with IMO Resolutions A.167 (ESIV) and A.206 (VII) will generally be regarded as equivalent to the above requirements.
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- (6:01) At periodical intervals not exceeding five years, a lightweight survey shall be carried out on all passenger ships to verify any changes in lightship

displacement and longitudinal center of gravity in accordance with SOLAS 74, Chapter II-1, Regulation 22,3.

(7) Additional or alternative stability requirements shall be required by IMMARBE for special ships as follows:

- (a) Tugs.
- (b) Supply ships.
- (c) Timber deck cargo ships.
- (d) Heavy lift ships.
- (e) Floating crane.
- (f) Pontoon barges.
- (g) Vessels of novel design.

Machinery and
electrical
installations.

11. (1) Boilers, main and auxiliary machinery, steering gear, fuel oil systems, air compressors and air bottles, electrical systems, piping and pumping arrangements and refrigeration systems shall be designed, constructed and installed in accordance with good marine practice invoking, where applicable, the requirements of IMMARBE or rules of recognized classification societies, as is appropriate. The above machinery and equipment shall be so installed, protected and maintained so as not to constitute a danger to any person.

(2) Indicators shall be fitted in the wheelhouse for propeller speed and direction in the case of fixed propellers and for propellers speed and pitch position in the case of controllable pitch propellers.

(3) Two means of communication shall be provided between the ship's bridge and the engine room, one of which shall be an engine room

telegraph giving visual indication of the orders and responses both in the engine room and on the navigating bridge.

(4) Every ship shall be provided with an efficient plant capable of pumping from and draining any watertight compartment which is neither a permanent oil tank nor a water tank. Provided that the administration is satisfied that the safety of the ship is not impaired, the bilge pumping arrangements can be dispensed within particular compartments.

(5) Every ship shall be provided with two independent power operated bilge pumps capable of giving a speed of not less than 122 meters per minute through the bilge main whose internal diameter should be not less than 5 cm.

(6) Where the bilge main is less than 5cm., IMMARBE may accept a declaration from a recognized organisation as indicating satisfactory compliance.

(7) A ballast or general service pump may be accepted as the independent power operated bilge pump provided it is fitted the necessary connections to the bilge pumping system.

(8) The disposition of suctions, non-return valves and control spindles and distribution boxes shall comply with requirements as to accessibility and passage through bulkheads as IMMARBE may require. A declaration from an organization recognized by IMMARBE may be accepted as indicating compliance with this requirement. 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.

(9) An automatic remote bilge level shall be fitted in any unattended propulsion machinery space.

(10) Every ship shall be provided with a source of electrical power, a distribution switchboard and a system of electric wiring suitably protected to

provide power to machinery, heating, lighting, ventilation, alarms and other circuits required on board.

(11) Every ship shall include an emergency source of electrical power situated above the uppermost continuous deck and outside the machinery casings in addition to the principal source of electrical power. This emergency source of electrical power may be a generator or an accumulator (storage) battery provided with an emergency switchboard installed as near to the emergency generator as possible or in the case of the accumulator battery in a different but nearby space.

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(12) Emergency power shall be provided by

- (a) lighting in alley-ways, stair-ways, main machinery space and main generating space, navigation bridge, chartroom, lifeboats, rescue boat, liferaft stowage positions and oversides;
- (b) navigation lights;
- (c) steering-gear space lights;
- (d) alarm signal circuits, especially the general alarm;
- (e) one fire pump; and
- (f) one emergency bilge pump.

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(13) Where hull return is used, special precautions shall be taken to the satisfaction of IMMARBE. Hull return is not acceptable on new vessels or on tankers of any age.

(14) Every ship shall take precautions against the following:

- (a) Shock by earthing machines and equipment and metal sheaths of cables.
- (b) Short circuits.
- (c) Temperature rises in light fittings, etc.

12. (1) Each vessel shall be provided with anchor equipment designated for quick and safe operation which equipment shall consist of anchors, anchor chains or wire ropes, stoppers and windlass or other arrangements for dropping and hoisting the anchor and for holding the vessel at anchor in all foreseeable service conditions. Each vessel shall also be provided with adequate mooring equipment for safe mooring in all operating conditions.

Anchor and mooring equipment.

(2) Anchor and mooring equipment shall comply with the requirements of IMMARBE or those of a classification society recognized by IMMARBE.

13. (1) Each ship shall be provided with a main steering gear capable of guiding the ship at maximum service speed. The main steering gear and rudder stock shall be so designed as not to suffer damage at maximum speed going astern.

Steering gear.

(2) Every ship shall be provided with an auxiliary steering gear of adequate strength, capable of steering the ship at navigable speed and of being brought speedily into action in an emergency. The emergency steering arrangements shall be marked to indicate how the system is brought into effect.

(3) An indicator shall be provided on the bridge to show the exact position of the rudder.

14. This paragraph applies to all vessels irrespective of keel laying date except where stated otherwise.

Fire appliances.

Fire pumps.

(1) All fire-fighting appliances shall be of an approved type. Appliances approved by the government of a country signatory to the SOLAS 74 Convention shall generally be accepted by IMMARBE.

(2) Every vessel shall be provided with two fire Pumps, one of these pumps shall be power-driven (preferably independently of the main engine), and may be a bilge, ballast or general service pump. The other may be a hand-operated pump or a power pump operated by a mean independent from the vessel's main source of power; it should be located outside the machinery space and be capable of producing a jet of water having a throw of not less than 6 meters into any part of the ship.

(3) The capacity of the power-driven pump shall be such that it can deliver a 12 meters jet of water through a 12mm diameter nozzle or maintain a pressure of 2.05 kg/cm at any hydrant.

(4) Ships undertaking coastal or coastwise trades shall only require to have one power-driven fire pump preferably independent of the main source of power. Every centrifugal pump which is connected to the fire main shall be fitted with a non-return valve.

(5) Fire pumps may be sanitary, bilge or general service pumps but must be ensured so that in the case of fire-fighting a blocking system automatically prevents the spraying of oil. Relief valves shall be provided in conjunction with all fire pumps so placed and adjusted as to prevent excessive pressure in any part of the fire main.

Fire main
hydrants, hoses,
nozzles.

(6) All vessels shall be provided with a fire main and hydrants and at least 3 hoses (15 meters long), one of which is to be fitted with a dual purpose jet-spray nozzle. The other two may have normal 12mm diameter jet nozzles. The diameter of hoses and hydrants generally should be of the order of 4 to 5cm. Every ship of 300 GRT or more shall be provided with two additional firehoses of the same characteristics.

(7) IMMARBE may require an increased number of hoses in accordance with the nature of the trade, manning of the engine room or for any other reason. The hoses shall be of closely woven flax canvas or other suitable material.

(8) In spaces containing oil-fired boilers or internal-combustion type propelling machinery one of the nozzles shall be a spray or dual-purpose nozzle.

(9) In every ship of 300 GRT or more the number and position of the hydrants shall be such that at least two jets of water not emanating from the same hydrants, one of which shall be from a single length of hose, may reach any part of the ship normally accessible to the passengers or crew while the ship is being navigated.

For ships less than 300 GRT one jet of water will be sufficient under the above-mentioned conditions. At least one such hydrant is to be provided in the machinery space and one adjacent to the entrance thereto.

(10) The fire main shall have no connections other than those necessary for fire-fighting and washing down. Materials rendered ineffective by heat shall not be used for fire-mains. Where the fire-main is not self draining, suitable drain-cocks shall be fitted.

(11) Couplings shall be either bayonet-type or instantaneous release type. Hoses shall be kept in a conspicuous position near hydrants with which they are intended to be used.

(12) Hydrants and hose stowage boxes shall be suitably labeled and painted red.

(13) In any oil fired boiler room and in any unattended propulsion, machinery space shall be provided either by:

Fixed fire
fighting system.

- (a) a pressure water-spray system; or
- (b) a gas-smothering system; or
- (c) a fixed low-expansion foam-smothering system;
or
- (d) a fixed high-expansion foam-smothering system.

Due regard shall be taken of the vessel's size in assessing the detailed requirements of the above system.

(14) For vessels solely engaged in coastal or coastwise trade, the exemption from the fixed fire fighting means shall be considered individually in each case, by IMMARBE.

Fire
extinguishers.

(15) Unless otherwise required by IMMARBE, every vessel shall be provided with a sufficient number of approved portable fire extinguishers for use in accommodation and service spaces with at least one provided at each deck level.

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(16) In every space containing oil-fired boilers, 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 cubic meters of sand and a scoop.

(17) There shall be in each space containing internal combustion type machinery one foam fire extinguisher of not less than 45 liters capacity or one carbon dioxide fire extinguisher of at least 30 kg capacity and also one portable foam extinguisher for each 750KW of engine-power output or part thereof, but the total number of portable extinguishers so supplied shall be not less than two.

(18) A spare charge shall be provided for every portable fire extinguisher capable of being readily recharged or an additional portable fire

extinguisher.

(19) Extinguishers specially intended for use in a particular space shall be stowed near the entrance/exit to the space. All extinguishers shall be recharged yearly and pressure-tested to maintain their strength.

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(20) Every vessel shall be provided with at least one fireman's outfit completely equipped as given in SOLAS 74, Chapter 11-2, Regulation 17.

(21) All fire-fighting equipment shall be clearly labeled for its specific purpose either in the predominant language of the ship's personnel and in English or by means of self-explanatory diagrams.

Remote controls
and alarms.

15. (1) Every ship shall be provided with means for stopping ventilating fans serving machinery and cargo spaces and for closing all doorways, ventilators and annular spaces around funnels and other openings to these spaces. These means shall be capable of being operated from outside the spaces in case of fire.

(2) 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 and secured in the event of a fire arising in the space which they are located.

(3) Every oil-fuel suction pipe from a storage, settling or daily tank located above the double bottom shall be fitted with a cock or valve capable of being closed from outside the space in which such tanks are located. In the special case of deep tanks located in a shaft or pipe tunnel, valves on the tanks shall be fitted, but control in event of fire may be effected by means of an additional valve on the pipeline outside the tunnel.

(4) An automatic remote fire alarm shall be fitted in any unattended propulsion machinery space.

Fire control
plans.
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16. There shall be permanently exhibited and available in an accessible position guidance of the ship's officers and crew, general arrangement plans showing clearly for each deck, the control stations, the various fire sections enclosed by "A" Class divisions, together with particulars of the fire alarm, detecting system, fire-extinguishing appliances, means of access to different compartments, decks, etc. and the ventilating system. A duplicate set of fire control plans or a booklet containing such plans shall be stored in a prominently marked weathertight enclosure outside the deckhouse for the assistance of shoreside fire-fighting personnel. Alternatively, at the discretion of IMMARBE, the aforementioned details may be set out in a booklet, a copy of which shall at all times be available on board in an accessible position. Plans and booklets shall be kept up to date, any alterations being recorded thereon as soon as practicable. Descriptions in such plans and booklets shall be in the national language of the crew. Where the language is not English, a translation into English shall be included. In addition, instructions concerning the maintenance and operation of all the equipment and installations on board for the fighting and containment and installations on board for the fighting and containment of fire, shall be kept under the cover readily available in an accessible position.

Life-saving
appliances.

17. (1) All vessels shall be provided with sufficient lifeboats of adequate construction on each side, to accommodate all persons on board, plus liferaft capacity to accommodate 50% of the personnel on board, or, alternatively, the following arrangements may apply:

- (a) On each side of the ship one or more inflatable liferaft of sufficient aggregate capacity to accommodate the total number of persons on board, each liferaft being of approximately the same capacity.
- (b) A liferaft, which can readily be placed in the water on either side of the ship, of sufficient capacity to accommodate at least one-half of the total number

of persons on board, except that when the liferafts required at (a) above can be readily placed in the water on either side of the ship, consideration may be given to a relaxation from this requirement.

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- (c) In new ship, where the distance from the embarkation deck to the water in the lightest seagoing condition exceeds 4.5 meters, the rafts required at (a) above shall be of the davit-launched type and at least one launching appliance shall be provided on each side of the ship for every two (2) rafts.

- (d) An accepted lifeboat, Class C boat or inflatable boat (the rescue boat), in each case fitted with an accepted engine and capable of being launched on one side of the ship.

(2) For vessels undertaking coastwise trade, only throw overboard inflatable liferafts sufficient for all persons on board need to be provided on each side of the ship.

(3) Lifeboats shall generally not be less than 7.3 m. (24 ft.) in length except where, owing to the vessel's size this is impracticable, then a minimum of 4.9 m (16 ft.) length could be accepted. Lifeboats shall be attached to davits of approved type.

(4) Lifeboats, liferafts and launching gear shall be of an approved design and construction meeting SOLAS requirements applicable according to the date of construction of the vessel. Skates or other suitable means shall be provided to facilitate launching.

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(5) Lifeboat equipment and provisions shall be inspected or renewed as required annually. Inflatable liferafts equipment and provisions shall

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Lifeboat
equipment.

be inspected or renewed as required every 12 months.

(6) Equipment for lifeboats fitted to vessels undertaking unrestricted trade shall be as follows:

- (a) A single-banked complement of buoyant oars, two spare buoyant oars, and a buoyant-steering oar; one set and a half of thole pins or crutches, attached to the lifeboat by lanyard or chain; a boat hook.
- (b) Two plugs for each plug hole (except where proper automatic valves are fitted attached to the lifeboat by lanyards or chains); a bailer and two buckets.
- (c) A rudder attached to the lifeboat and a tiller.
- (d) A lifeboat which is not self-righting, a lifeline becketed round the outside of the lifeboat; means to enable persons to cling to the lifeboat if upturned, in the form of bilge keels or keel rails, together with grab lines secured from gunwale to gunwale under the keel.
- (e) A locker conspicuously marked as such, suitable for the stowage of small items of equipment.
- (f) Two hatchets, one at each end of the lifeboat.
- (g) On an enclosed lifeboat, a lamp (not oil burning) shall be fitted to provide illumination for not less than 122 hours.
- (h) Tools for minor adjustments to the engine.

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- (i) A searchlight capable of 3 hours of continuous working. 82 of 1997.
- (j) A compass in a binnacle.
- (k) A sea anchor.
- (l) Two painters of sufficient length and size. One shall be secured to the forward end of the lifeboat with strap and toggle so that it can be released, and the other shall be firmly secured to the stem of the lifeboat and be ready for use.
- (m) a portable fire extinguisher for extinguishing oil fires. 82 of 1997.
- (n) Four parachute distress rocket signals.
- (o) Two buoyant smoke signals.
- (p) A first-aid outfit.
- (q) A waterproof electric flashlight suitable for signaling in the Morse Code together with one spare set of batteries and one spare set of bulb in a water proof container.
- (r) A daylight-signaling mirror.
- (s) A jack-knife attached to the boat by a lanyard. 82 of 1997.
- (t) Two light buoyant-heaving lines.
- (u) A manual pump.

- 82 of 1997. (v) A whistle.
- (w) A set of fishing tackle.
- (x) A cover of highly-visible color capable of protecting the occupants against injury by exposure.
- (y) A copy of the lifesaving signal table.
- (z) Means to enable persons in the water to climb into the lifeboat (short ladder)
- 82 of 1997. (aa) six hand flares.
- 82 of 1997. (bb) six doses of antiseasickness medicine and one seasickness bag for each person.
- 82 of 1997. (cc) An efficient radar reflector.
- 82 of 1997. (dd) Thermal protection aids for 10% of the persons, but not less than 2 (may be omitted if vessel operates in tropical waters only.)
- 82 of 1997. (ee) Three tin openers.
- Vessels undertaking coastal or coastwise trade may omit item (i) above.
- Inflatable liferaft equipment. (7) All liferafts shall have the following equipment:
- (a) One buoyant rescue quoit, attached to at least 30 meters (100 ft.) of buoyant line.

- (b) For liferafts which are fit to accommodate not more than 12 persons, one safety knife and one bailer; for liferafts which are fit to accommodate 13 persons or more, two safety knives and two bailer.
- (c) Two sponges.
- (d) Two sea anchors, one permanently attached to the liferaft and one spare.
- (e) Two paddles.
- (f) One repair outfit capable of repairing punctures in buoyancy compartments.
- (g) One topping-up pump or bellows.
- (h) Three safety tin openers.
- (i) A first-aid outfit.
- (j) One waterproof electric flashlight suitable for signaling in the Morse Code together with one spare set of batteries and one spare bulb in a water-proof container.
- (k) One daylight signaling mirror and one signaling whistle.
- (l) Four parachute distress rocket signals.
- (m) Six hand-held distress flare signals.

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Provisions on
lifeboats and
liferafts.

- (n) One set of fishing tackle.
- (o) Six anti-seasickness tablets for each person which the liferaft is permitted to accommodate.

- (p) Instructions (printed in the crew's native language and in English language) on how to survive in the liferaft.

- (q) One copy of the lifesaving signal table.

- (r) Thermal protective aids for 10% of the number of persons the liferaft is permitted to accommodate or two, whichever is the greater.

(8)

- (a) Each lifeboat and liferaft shall be provided with 1/2 kg (1 lb.) of approved rations for each person it is certified to carry. Rations are to be packed in airtight containers stowed in a watertight box. Rustproof dippers and drinking vessels shall be provided.

The above requirements do not apply to lifeboats of ships engaging in coastwise trade.

- (b) Each lifeboat shall carry watertight receptacles containing 3 liters (6 pints) of fresh water for each person the lifeboat is certified to carry.

The quantity of water may be reduced by one half in ships engaging in coastal or coastwise trade.

- (c) Each liferaft shall carry watertight receptacles containing 1½ liters (3 pints) of fresh water for each person the liferaft is certified to carry.

The quantities of water indicated in (b) and (c) may be reduced by ½ liter per person if they are replaced by a suitable de-salting apparatus capable of producing an equal amount of fresh water.

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(9) All items of lifesaving equipment shall be readily available for use in an emergency. All boats and rafts shall be stowed so that they can be put in the water quickly and safely even if the ship is listed 20 degrees and with 10 degrees trim. They shall be stowed clear of the vessel's propeller where practicable.

(10) All liferafts shall be stowed in float-free positions. Where they are secured to prevent movement in inclement weather, they shall be fitted in their securing arrangements of a hydrostatic release to allow the rafts to rise to the surface if carried down by a sinking ship.

(11) Detailed instructions for operating and survival in liferafts shall be conspicuously displayed in the crew accommodations and on the bridge.

(12) All lifeboats and rescue boats shall be preferably of a highly visible color (eg. orange), and have the name of the parent ship, port of registry, principal dimensions and carrying capacity clearly marked on both bows.

Davits for
lifeboats and
liferafts.

(13) Every lifeboat or rescue boat shall be attached to a set of davits.

(14) All gravity davits shall be so designed that there is a positive turning out moment during the whole of the davit travel from the inboard stowed position to the outboard position under the conditions of list and trim specified above. For this purpose the turning out load of the boat shall be taken as the weight of the boat with the addition of the equipment by excluding the launching crew.

(15) When luffing-type davits are installed the operating gear shall

be such as to enable the lifeboats to be turned out quickly and in full control under the above specified conditions of list and trim, fully equipped and manned by the launching crew only, from the inboard to the outboard position. The force needed on the crank handle should not exceed 20 kg. (44 lbs.) and the radius of the crank handle should not exceed 40 cm. (16 in.)

(16) Mechanically-controlled single arm davits may be used for rescue boats and liferafts only. The turning-out gear shall enable the boat to be turned out quickly and under full control from inboard to outboard position under the above specified conditions of list and trim. Steps to locate the arm at the inboard and outboard positions shall be provided.

The force needed on the crank handle shall not exceed 20 kg (44 lbs.) and the radius of the crank handle shall not exceed 30 cm (12 in.). The direction of rotation of the crank handle to turn out the arm shall be clearly marked. Acceptable means of releasing the boat or raft shall be provided.

(17) Davits, falls, blocks and associated lowering gear shall be of sufficient strength so that a boat with its full equipment and manned by a launching crew of not less than two persons or a liferaft with its full equipment and complement can be turned out and then safely lowered to the water from the embarkation deck when the ship has the conditions of list and trim as specified above.

(18) Winches shall be efficient hand-gear for the recovery of lifeboats and where davits are recovered by the action of the falls by power, an automatic stop shall be installed in order to prevent the gear from being overstressed when the davits meet with the stops.

(19) A rope ladder shall be provided in way of each set of davits secured to boat deck and capable of reaching light water line.

Boat and raft preparation and overboard lights shall be provided with supplies from emergency sources.

(20) All vessels shall carry approved-type lifejackets for all personnel on board plus 10% extra. They shall be of a highly visible color and not be adversely affected by oil or oil products. All lifejackets shall be fitted with a non-corrosive whistle attached to a cord and be equipped with a light.

Lifejackets.
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(21) All lifejackets shall be stowed in readily accessible places on board the ship, and if stowed on weather decks they shall be in racks and/or labeled lockers in suitably protected locations.

(22) All vessels shall be provided with six lifebuoys as follows:

Lifebuoys.

(a) One on each side of the bridge in quick-release chutes fitted with self-activating light-and-smoke signals.

(b) One on each side about amidships provided with a 27.5m (15 fathom) buoyant line and fitted in clips/brackets.

(c) One on each side about at aft end of open deck nearest to the waterline in clips or brackets.

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(d) One on each side with self-igniting lights.

(e) Lifebuoys shall be of an approved-type and of circular shape with an inside diameter of 46 cm (18 in.), fitted with a grab line securely sized, and shall be marked in block letters with the name and port of registry of the ship.

(23) All vessels shall carry 6 parachute distress rocket signals capable of producing a single bright red star at a high altitude; and in addition, at least 6 hand-held flares.

Distress
signals.

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(24) All distress signals shall be of robust construction, be contained in a water resistant casing and have instructions or diagrams illustrating the use of the rocket parachute flare printed on its casing.

(25) All pyrotechnic distress signals shall be renewed within the period required by the approved documents.

(26) Where rocket signals are provided that are not of the hand-held type it shall be necessary for two firing brackets to be fitted, one on each side of the ship, to provide a means of launching.

(27) No hand-flares shall be allowed on oil tankers or other ships carrying oil products. Instead, these vessels shall be provided with 12 parachute distress rockets.

Line throwing
appliances.

(28) All ships operating on unrestricted trade shall have a line throwing appliance with two lines and two projectiles capable of throwing a line over a minimum distance of 230 meters (250 yards).

(29) The line-throwing appliances shall be of an accepted type and manufacture. The rockets and cartridges shall be renewed as required by the approved document.

(30) Life-saving appliances shall be clearly labeled in the predominant language of a ship's personnel and in the English language or by means of self-explanatory graphic designs.

(31) All life-saving appliances shall be of an approved type. Appliances approved by the government of a country subscribing to the SOLAS 74 Convention shall generally be accepted by IMMARBEL.

Drills.

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18. (1) A muster of the crew for one abandon ship and one fire drill shall take place at intervals of not more than once a month. In addition, these

musters shall take place within 24 hours of leaving port whenever 25 percent of the crew has been replaced since the last muster.

(2) When holding musters, the life-saving, fire-fighting and other safety equipment shall be examined to ensure that they are complete and in satisfactory working order.

(3) The dates on which musters are held shall be recorded in the official log book and if no muster is held within the prescribed interval or a part muster only is held, an entry shall be made stating the circumstance and extent of the muster held. A report of the examination of the life-saving equipment shall be entered in the log book, together with a record of boat used.

(4) In ships fitted with lifeboats, different boats shall be swung out at successive drills.

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The lifeboats shall, where practicable, be lowered into the water at least once every three 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.

(5) The musters shall be so arranged as to ensure that the crew thoroughly understands and is drilled in the duties it has to perform including instructions in the handling and operation of liferafts, where these are carried.

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(6) Instructions in the form of a training manual covering the topics presented in SOLAS, Chapter II, Regulation 52, shall be available on board. This presentation may include audio visual aids as part of or *in lieu* of the manual.

First-aid.

19. (1) Every ship shall be provided with first-aid equipment on a scale to be determined by IMMARBEL taking into account the length and intended service of the ship.

- (2) A stretcher shall be included in the equipment and shall be capable of enfolded the patient and being transferred from the lowest cargo hold to the deck or from the ship to the shore or a boat.
- Radio installations.
20. (1) Every ship of 100 GRT or more not fitted with a radio-telegraph station, shall be provided with a radiotelephone station according to Chapter IV, Regulation 4 of SOLAS 74 Convention.
- (2) Every vessel not fitted with a radiotelephone or radiotelegraph station shall have a VHF radiotelephone station according to Chapter IV, Regulation 17 of SOLAS 74 Convention.
- (3) Every ship of 300 GRT or more shall carry a portable radio apparatus suitable for survival craft which shall meet the specification laid down in Chapter IV, Regulation 14, SOLAS 74 Convention.
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- (4) Vessels shall carry an emergency position indicating radio beacon (EPIRB) located in such a way as to be automatically released to the surface and operated in the event of the ship's sinking.
- (5) Any shipboard radio station, whether fitted on a compulsory or on a voluntary basis, shall conform to the relevant SOLAS 74 regulations and to the International Telecommunications Union regulations.
- (6) IMMARBE may permit exemptions from the above requirements having regard to the search and rescue facilities in the ship's area of operation.
- Signalling lamps.
21. All ships of over 100 GRT shall have on board an efficient daylight signaling lamp which shall not be solely dependent upon the ship's main source of electrical power.
- Pilot ladders.
22. (1) All vessels shall carry a pilot ladder. The ladder shall be

efficient for the purpose of enabling pilots to embark and disembark safely, shall be kept clean and in good order and may be used by officials and other persons while a ship is arriving at or leaving a port.

(2) Whenever the distance from sea level to the point of access to the vessel is more than 9 m., access from the pilot ladder to the vessel shall be by means of an accommodation ladder or other equally safe and convenient means.

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(3) Steps of pilot ladders shall be not less than 48 cm long, 11.4 cm wide and 2.5 cm in depth. Steps shall be joined in a manner which will provide a ladder of adequate strength whose treads are maintained in horizontal position and not less than 30.5 cm or more than 38 cm apart.

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(4) The side ropes of the ladder shall consist of two uncovered manila ropes not less than 60 mm in circumference. Each rope shall be continuous with no joints below the top step. Two manropes and a safety line shall be kept at hand ready for use if required.

(5) Handholds shall be provided to assist pilots to pass safely and conveniently from the head of the ladder into the vessel or on to the vessel's deck.

(6) Where necessary, spreaders shall be provided at intervals which will prevent the ladder from twisting.

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(7) Adequate lighting shall be provided at night for both the pilot ladder overside and the vessel boarding position.

(8) A vessel with rubbing bands or whose construction makes it impossible to comply fully with the provision that the ladder should be secured at a place where each step will rest firmly against the vessel's side shall comply with this provision as closely as possible.

Navigation
equipment.

23. (1) Every vessel shall be provided with a magnetic compass for steering purposes and a good second magnetic compass outside the bridge for use in taking bearing or azimuths. Alternatively, a single magnetic compass may be provided outside the bridge steering position with a reflector inside for steering purposes.

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(1:01) A spare magnetic compass shall be carried unless there is a gyro compass on board. Means must be provided to relay heading information to the emergency steering position.

(2) Every vessel shall be provided with a means of obtaining the depth of water at the ship. This may be an echo sounder or a handlead properly marked and graduated up to 45 meters, (25 fathoms).

(3) Every vessel shall be provided with charts and navigational publications suitable for the voyage it is to undertake. IMMARBE shall decide in cases of doubt what additional publications and instruments should be provided on Board.

(4) Every vessel shall keep on board a log-book for the bridge, the engine room and the radio station, respectively as follows:

- (a) A bridge log-book for entering the daily routine of navigation and ship's operation.
- (b) An engine room log-book for entering the daily routine of engine and auxiliary machinery operation.
- (c) A radio log-book, if fitted with a radio station.

(5) The following codes shall be carried on board:

- (a) International Regulations for Preventing Collisions at Sea, 1972.
- (b) International Code of Signals.
- (c) Manual for use by the Maritime Mobile and Maritime Satellite services-international Telecommunications Union (ITU), if fitted with a radio station.

24. Every vessel shall conform to the requirements of the International Regulations for Preventing Collisions at Sea, 1972.

Collision
regulations.

25. Every vessel shall conform as far as practicable to the requirements of the International Labour Organization (ILO/OIT) Conventions concerning Crew Accommodation on Board Ships ratified by the Government of Belize. Additionally, electric heaters, if fitted, shall be of a fixed type and located away from readily ignitable materials. Open-flame heaters shall not be permitted. Gas or kerosene stoves and water heaters, if fitted, shall be installed in well-ventilated rooms with low-level air exhaust. Gas bottles or reservoirs shall be located in the open air. Gas-piping shall be of copper or steel. Special care shall be taken to avoid the danger of fire or explosion.

Accommodation
regulations.

26. Every tanker of 150 GRT and above, shall comply with the International Convention for the Prevention of Pollution from ships (MARPOL 73/78). In this case, an Official Oil Record Book shall be carried on board and the proper entries made therein.

Anti-pollution
regulations.

MADE by the Attorney General this 7th day of November, 1991.

(GLENN D. GODFREY)

Attorney General