MERCHANT SHIPPING (LICENSING OF GAMBIAN VESSELS UNDER 24 METRES OR FIFTEEN GROSS TONS AND VESSELS ENGAGED SOLELY IN INLAND AND NEAR COASTAL VOYAGES IN THE GAMBIA) REGULATIONS, 2014

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regulation

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MERCHANT SHIPPING (LICENSING OF GAMBIA VESSELS UNDER 24 METRES OR FIFTEEN GROSS TONS AND VESSELS OPERATING SOLELY IN AND NEAR COASTAL VOYAGES IN THE GAMBIA) REGULATIONS, 2014.

IN EXERCISE of the powers conferred on the Minister under section 55 of the Gambia Merchant Shipping Act, 2013, these Regulations are made.

PART I - PRELIMINARY

1. Application

(1) Subject to sub-regulation (2), these Regulations apply to -

(a) a Gambian vessel under 24 metres in length or fifteen gross tons in weight; and

(b) a vessel of whatever length or tonnage trading or operating solely within the coastal and inland waters of The Gambia unless exempted by sub-regulation (2).

(2) These Regulations do not apply to -

(a) a naval vessel;

(b) a vessel belonging to the Government of The Gambia used for non-commercial purpose and a vessel belonging to a foreign Government but not plying for freight or fares;

(c) such class of vessels as may be exempted by the Administration from licensing under section 53 (2) of the Act;

(d) non propelled canoes and other open boats used solely for the purpose of fishing; and

(e) canoes and other open boats not exceeding five metres in length; and

(f) pleasure crafts

(3) These Regulations shall apply to a barge only when it is specifically stated in the text of a regulation.

(4) An existing vessel shall comply with the requirements existing prior to coming into force of these Regulations.

(5) Where no such requirements are applicable, a vessel shall comply with these Regulations to the extent that the Administration considers it reasonable and practicable.

(6) An existing vessel which undergoes a replacement of equipment or out fitting related thereto shall comply with the requirements specified in these Regulations as far as it is considered reasonable and practicable by the Administration.

2. Interpretation

For the purpose of these Regulations and the Schedules thereto.

"Act" means the Merchant Shipping Act, 2013;

"accommodation" means any space intended for use of persons normally living on board, as of passengers and includes the gallery, storage space for provisions, toilets and working facilities, landing facilities, landings and gangways, but not the wheelhouse;

"approved" means approved by the Administration;

"Administration" means the Gambia Maritime Administration;

"barge" means a vessel that is not fitted with any means of propulsion;

"breath" means the maximum breath of the hull measured to the outermost edge of the plating as planking, excluding rubbing strakes, paddle wheels and similar fittings, at the mid length of a vessel;

"bulkhead deck" means the uppermost deck to which transverse watertight bulkheads are carried;

"cargo-passenger vessel" means a cargo vessel that is approved to carry more than twelve passengers on identified services and that meets safety requirements set out in these Regulations for

that type of vessel and any such other safety requirements specified by the Administration as are deemed necessary to provide a satisfactory level of safety;

"classification society" means an organisation that complies with the standards adopted by the Organization and is recognised, or otherwise authorised, by the Administration for the purpose of conducting inspections and surveys in accordance with these Regulations on behalf of the Administration;

"Company" means the owner of a vessel or any other organisation or person such as the manager who has assumed responsibility for operation of the vessel from the owner of vessel and who on assuming such responsibility has agreed to take over all the duties and responsibilities connected with vessel safety and the prevention of pollution;

"depth" means where not otherwise defined, the distance from the top of the keel to the top of the deck plating or planking of the uppermost continuous deck at side, measured at the point of mid-length of the vessel; In the case of an open or partially decked vessel, it means the distance from the top of the keel to a straight line drawn between gunwales or the top of the partial deck at side, measured at the point of mid-length of the vessel;

"engine room" means the space in which the propulsion machinery and auxiliaries are installed;

"existing vessel" means a vessel that is not a new vessel;

"fishing vessel" has the same meaning assigned to it by section 3 of the Act;

"floating equipment" means any floating structure carrying mechanical installations and intended for work on waterways or in a port (e.g. a dredger, elevator, sheer-legs or crane;

"floating installation" means a raft or any other structure, object or assembly capable of navigation not being a vessel or floating equipment;

"freeboard" means the distance between the plane of maximum draught and a parallel plane passing through the lowest point of the side deck or, in the absence of a side deck, the lowest point of the upper edge of the full planking or plating;

"inland waters" has the meaning assigned to it by section 3 of the Act.

"length" means the distance measured from the forward edge of the bow along the centerline of the uppermost continuous deck to the outer edge of the planking or plating attached to that deck at the stern. In the case of a vessel having a pointed stern the length shall be measured from the forward edge of the bow to the aftermost edge of the sternpost and, in the case of a vessel having a transom stern, the length shall be measured from the forward edge of the bow to the outer edge of the transom plating or planking;

"margin line" is a line drawn 76mm below the upper surface of the deck from which freeboard is measured as defined in these Regulations;

"master" has the meaning assigned to it by section 3 of the Act;

"Minister" has the meaning assigned by section 3 of the Act;

"new vessel" means a vessel the keel of which is laid or that is at a similar stage of construction on or after promulgation of these Regulations;

"Organization" means the International Maritime Organization;

"passenger" has the meaning given to it by section 3 of the Act;

"passenger vessel" means any vessel built and operated to carry more than 12 passengers and that is not a cargo passenger ship;

"plane of maximum draught" means the waterplane corresponding to the maximum draught at which the vessel is authorised to navigate;

"pleasure craft" has the meaning given to it by section 3 of the Act;

:recognised standards" are standards accepted by the Administration, which may include applicable international or national standards or standards adopted by a classification society;

"short voyage" means a voyage of less than 30 nautical miles;

"territorial sea" means that area extending beyond the land

territory and inland waters to the belt of sea adjacent thereto the breadth of which is twelve nautical miles measured from the baseline being the low waterline along the coast of The Gambia as marked on large scale official charts.

"vessel" has the meaning assigned to it by section 3 of the Act, but for the purposes of these Regulations does not include a floating installation or a floating equipment;

"wheel house" means the space in which all the equipment necessary for navigating and controlling the vessel is installed.

"Gambian waters" has the meaning given to it by section 3 of the Act.

3. Exemptions

(1) The Administration may exempt from the application of all or part of the Regulations-

(a) a vessel or a class of vessels operating on navigable waterways as designated by the Administration, where it considers that the sheltered nature and conditions of such operations are such as to render the application of any specific provisions of the Regulations unreasonable or unnecessary; and

(b) a vessel the keel of which was laid before the entry into force of these Regulations.

(2) The Administration may authorise, in respect of navigation in Gambian waters, exemptions from one or more provisions of the Regulations for limited local voyages or in harbour areas provided that it complies with such other requirements that are, in its opinion, adequate for the intended voyage.

(3) Such exemptions and the voyages or areas to which they apply shall be specified in the vessel's Certificate of Survey.

(4) Where a vessel is exempted from these Regulations pursuant to sub-regulation (1)(a), the Administration may require compliance with the provisions of these Regulations as far as is practicable and reasonable.

(5) The Administration may exempt a vessel that embodies features of a novel kind from any of the provisions of these Regulations, the

application of which might seriously impede research into development of such features and their incorporation in vessels.

(6) Any such vessel referred to in sub-regulation (5) shall comply with such safety requirements that in the opinion of the Administration are adequate for the service for which it is intended and are such as to ensure the overall safety of the vessel.

4. Licensing of vessels

(1) Unless otherwise exempted by the Act or these Regulations, every Gambian vessel under twenty four metres in length or fifteen gross tonnage in weight and every Gambian vessel of whatever length or weight trading or operating solely within inland waters of The Gambia shall be licensed by the Administration

(2) An application for licence shall be made to the Administration by the owner of the vessel or a person duly authorized by him or her on a form prescribed by Schedule 10 of these Regulations.

(3) Such an application shall be accompanied by a Certificate of Survey in respect of the vessel issued by the Administration or by a surveyor authorized by it or a classification society recognized by it.

5.Equivalents

(1) Where these Regulations require that a particular fitting, material, appliance, apparatus or type thereof, shall be fitted or carried in a vessel, or that particular provision shall be made, the Administration may allow any fitting, material, appliance, apparatus or type thereof to be fitted or carried, or any other provision to be made in that vessel if it is satisfied by trials thereof or otherwise that such fitting, material, appliance, apparatus or type thereof is at least as effective as that required by these Regulations.

(2) A person who contravenes sub-regulation (1) commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

6. Standards

(1) The construction, installation, structural strength, fittings, material, appliance and apparatus of a vessel unless expressly provided by these Regulations, shall be of recognised standard.

(2) In addition to the requirements and standards referred to in these

Regulations, other requirements and standards recommended by the Organization may be applied whenever the Administration considers such requirements and standards to be appropriate.

(3) A person who contravenes this regulation commits an offence and is liable on summary conviction to a fine not exceeding three million dalasis.

7. Carriage of passengers

(1) A vessel not propelled by mechanical means shall not carry any passengers unless specifically authorised by the Administration.

(2) The maximum number of passengers carried on board a passenger vessel or a cargo-passenger vessel shall not, on any occasion, exceed the number stipulated on the Certificate of Survey.

(3) A notice showing the maximum number of passengers permitted to be carried on specific decks and in specific spaces, calculated in accordance with regulation 34 shall be conspicuously displayed at the access to each such deck or space.

(4) A person who contravenes any of the provisions of this regulation commits an offence and is liable on conviction to a fine not exceeding five million dalasis.

8. Classification of inland waters and coastal waters

For the purposes of these Regulations, “inland waters” and “near coastal waters” shall be defined as follows-

(a) inland waters has the meaning assigned to it by regulation 2 of these Regulations; and

(b) near coastal waters have the meaning assigned to it by Schedule 3(1) of the Merchant Shipping Training, Certification, Manning and Watchkeeping Regulations, 2014.

9. Plans, signs, instruction manuals, name plates and language

(1) Every name plate, sign, instruction, notice, plan and document on board a vessel, relating to safety and operation of the vessel and its machinery shall be drawn up in English or in a language readily understood by the persons on board the vessel.

(2) A vessel propelled by mechanical means shall carry adequate information including drawings, plans, and instruction manuals necessary for the safe operation and safety of life.

(3) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

10. Casualties and incidents

(1) In the event of a casualty or incident involving the vessel resulting in loss of life or the vessel being materially damaged, stranded, abandoned or lost, the master or the Company shall inform the Administration within twenty four hours.

(2) Where it is not possible to inform the Administration directly, information on the casualty or incident shall be provided to the nearest surveyor of vessels, Registrar of Ships, harbour master, or a police officer, who shall immediately notify the Administration;

(3) In the event of the death or disappearance of any person on or from the vessel, the information notified to the Administration shall include at least-

(a) the date, time and location of the accident or occurrence;

(b) the name of each person that died or disappeared;

(c) the identification number, name, flag and licence number of the vessel; and

(d) the name and address of the Company.

(4) The Company shall submit a report to the Administration when as a result of a casualty or incident that involves the vessel or its equipment-

(a) a person dies;

(b) a person is injured and requires medical treatment beyond first aid;

(c) a person disappears from a vessel in circumstances that indicate probable death or injury; or

(d) damage occurs to the vessel or other property.

(3) The report required by sub-regulation (4) shall be made-

(a) within forty eight hours of the casualty or incident if a person dies or within twenty four hours of the occurrence, if a person requires medical treatment beyond first aid or disappears from a vessel; or

(b) within ten days of the occurrence if an earlier report is not required by paragraph (a).

(4) The report required by sub-regulation (4) shall be in writing, dated and signed on completion by the person or persons that prepared it.

(5) Guidance on the information that shall be included in such a report is provided by Schedule 6.

(6) The Administration shall conduct an investigation into any occurrence meeting the criteria specified in sub-regulations (1), (2), (3) and (4) that occurs to, or on board a vessel licensed by it.

(7) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

11. Vessel Design, Construction and Maintenance

A vessel designed, constructed and maintained in compliance with the structural, mechanical and electrical requirements of a classification society may be accepted as complying with the relevant requirements of Parts III, V and VI of these Regulations.

12. Management of safety and environmental protection

(1) The Company and the master of a vessel shall be responsible for compliance with the applicable provisions of these Regulations and for management of the vessel so as to achieve safety in operations and protection of the environment.

(2) A basic safety management shall be observed by the company and the master of a vessel.

(3) A Company or a master who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding

three million dalasis.

13. Vessel identification

The identification number of a vessel required by section 42 (2) (d) of the Act shall be entered on the Certificate of Survey required by regulation 15.

14. Official log book

(1) The master of a vessel which is 10 metres and above in length shall keep an official log book in the form required by the Administration and shall make or cause to be made, such entries in that log book as are required.

(2) The Administration may exempt a vessel from keeping a log book if it deems it appropriate to do so.

(3) An entry in an official log book shall be-

(a) made as soon as possible after the occurrence to which it relates; and

(b) made and dated so as to show the date of the occurrence and the entry.

(4) Every vessel to which these Regulations apply shall not attempt to leave a terminal or leave a terminal without having in place a log book, manifest of passengers and cargo on board such a vessel.

(5) A master who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

PART II - CERTIFICATION AND SURVEYS

15. Certification

(1) A vessel operating on the waterways identified in regulation 8 shall carry a Certificate of Survey attesting to compliance with the technical requirements of these Regulations.

(2) The Certificate of Survey shall be drawn up following the model given in Schedule 1 of these Regulations and shall be issued in accordance with the procedures specified by this Part.

(3) The record of equipment and vessel information where appropriate, shall form part of the Certificate of Survey and shall be attached to the Certificate.

(4) The Administration may adopt technical requirements additional to those of the Regulations for vessels operating in Gambian waters.

(5) Such additional requirements shall be specified in the Certificate referred to in sub-regulation (1).

(6) Where appropriate, in the context of a bilateral or multilateral agreement on vessel safety and pollution prevention, such additional requirements shall be communicated to other relevant Authority, at least, six months before their entry into force.

(7) A vessel to which these Regulations apply shall not proceed on a voyage or attempt to proceed on a voyage unless there is in force in respect of such vessel a valid Certificate of Survey.

(8) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis. In addition to the fine, the vessel may also be detained by the Administration or an officer authorised by it.

16. Conditions and procedures for issuing Certificate of Survey

(1) On the payment of appropriate fees determined by the Administration, a Certificate of Survey shall be issued to a new vessel following a survey carried out prior to the vessel being put into service.

(2) The survey referred to in paragraph (1) of this regulation shall ensure that the vessel complies fully with the technical requirement set out in these Regulations.

(3) A Certificate of Survey shall after appropriate survey, be issued to a vessel in service on the date of entry into force of these Regulations upon the payment of appropriate fees determined by the Administration.

(2) In respect of a vessel laid up before that date, the Certificate of Survey shall be issued to such a vessel following a survey carried out by a date designated by the Administration to ensure that the vessel complies with the technical requirement set out in these Regulations.

(4) The Certificate shall only be issued upon the payment of appropriate fees determined by the Administration.

(5) A Certificate of Survey shall be issued by the Administration.

(6) The Administration may where appropriate, in the context of a bilateral or multilateral agreement on vessel safety and pollution prevention, request the competent authority of another country to issue the Certificate of Survey.

(7) The Administration may request the competent authority of another country, in the context of a bilateral or multilateral agreement on vessel safety and pollution prevention, to issue a Certificate of Survey in respect of a vessel registered in, or having its home port in that country, or owned by persons or companies established in that country.

(8) The period of validity of a Certificate of Survey shall not exceed one year from the date of issue or such lesser period as may be specified therein.

(9) A Certificate of Survey shall be renewed on the expiry of its period of validity upon the same terms and conditions under which it was initially issued to a vessel.

(10) The validity of a Certificate of Survey may in exceptional circumstances, be extended by the Administration for a maximum period of three months.

(11) Any such extension shall be indicated on the Certificate.

(12) A valid Certificate of Survey may be withdrawn by the Administration if a vessel ceases to comply with the requirements specified in the Certificate of Survey.

(13) The Administration may lay down the conditions under which a valid Certificate of Survey that has been lost or damaged may be replaced;

(14) A decision to refuse to issue or renew a Certificate of Survey shall state the grounds for the refusal.

(15) The person concerned shall be notified of the grounds for the refusal and may appeal against the decision to the Minister.

(16) The Administration may conduct unscheduled inspections to

ensure that a vessel is carrying a valid Certificate of Survey in accordance with the provisions of these Regulations and the conditions set out in the Certificate of Survey.

(17) A person who navigates or attempts to navigate a vessel within Gambian waters without a valid Certificate of Survey in respect of that vessel commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

17. Surveys and inspections

(1) The owner, agent, master or person in charge of a vessel shall present the vessel for inspection in an unladen, cleaned and equipped condition and is required to lend such assistance as is necessary for the inspection.

(2) Such assistance may include supplying a boat appropriate for the use of the surveyor, making personnel available and facilitating the examination of parts of the hull or installations that are not directly accessible or visible.

(3) Where the Administration considers it necessary, it may require-

(a) inspection of the vessel out of the water;

(b) operational trials;

(c) proof by calculation of the strength of the hull; and

(d) proof by calculation of stability, where necessary, on the basis of an inclining experiment.

(4) The survey referred to in regulation 16 shall be carried out by the Administration or by organisations or individuals authorised by the Administration.

(5) A surveyor may refrain from subjecting the vessel in whole or in part to survey where it is evident from a valid attestation, issued by a classification society, that the vessel satisfies in whole or in part the technical requirements of these Regulations.

(6) In the event of major alterations or repairs that modify the structural soundness or characteristics of a vessel, the vessel shall undergo, prior to any further voyage, the survey provided in regulation 16.

(7) Following this survey, a new Certificate of Survey consistent with the modified technical characteristics of the vessel shall be issued by the Administration.

(8) A person who contravenes the provisions of this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

18. Refusal to issue or withdrawal of a Certificate of Survey

(1) If a surveyor or other authorised person determines on inspection that a Certificate of Survey is invalid or that the vessel does not satisfy the requirements set out in the Certificate of Survey, but that such invalidity or the failure to satisfy the requirements does not constitute a manifest danger, a master, agent or the person in charge of the vessel shall be required to take all necessary measures to remedy the situation.

(2) If on making the inspection referred to in sub-regulation (1), it is found that the Certificate of Survey is not being carried or that the vessel constitutes a manifest danger, the Administration may prevent the vessel from proceeding until the necessary steps have been taken to remedy the situation.

(3) The Administration may also prescribe measures that will enable the vessel to proceed safely where appropriate, on termination of its transport operations, to a place where it will either be inspected or repaired.

(4) Any decision to interrupt the passage of a vessel, taken pursuant to measures adopted in implementing these Regulations, shall state in detail the reasons on which the decision is based.

(5) Such decision shall be notified to the master and the company.

(6) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

PART III - CONSTRUCTION AND EQUIPMENT

19. General

A vessel shall be designed, constructed and maintained in compliance with the structural, mechanical or the electrical

requirements of these Regulations and with the approval of the Administration.

20. Construction of vessels

(1) The hull of a vessel shall be sufficiently strong to withstand all stresses to which it is subjected in service under normal conditions.

(2) The person responsible for the construction of the vessel shall submit to the Administration for approval, plans and specifications showing the construction materials and scantlings of the hull.

(3) In the case of new structures fitted to existing vessels or major conversions of existing vessels affecting vessel strength, adequate strength shall be demonstrated by the presentation of proof in the form of design calculations.

(4) A certification of the vessel's strength by a classification society recognised by the Administration may be taken by it to demonstrate compliance with sub-regulations (1), ((2), and (3).

(5) A watertight bulkhead extending to the deck or, in the absence of a deck, to the upper edge of the hull planking or plating shall be installed, consistent with the construction and type of the vessel as follows-

(a) collision bulkhead at an appropriate distance from the bow; and

(b) in vessel 25m above in length, a stern bulkhead at an appropriate distance from the stern.

(6) The accommodation and engine room and any working space forming part of the engine room shall be separated from each other and from the holds by means of watertight bulkheads.

(7) Such a bulkhead shall be watertight to the top of the engine room or the hold, as the case may be, and shall be-

(a) made of steel and insulated to provide an effective fire division where appropriate; or

(b) if made of any other material, so insulated and/or treated as to provide an effective barrier to heat and flame for at least 15 minutes.

(8) Any compartment not capable of being sealed during a voyage shall be capable of being pumped dry and it shall be possible to pump out each compartment separately.

(9) Accommodation shall not be fitted forward of the collision bulkhead.

(10) Accommodation shall be directly accessible from the deck, except where the construction or the type of vessel makes it impracticable, and where there is no such access there shall be an emergency exist leading directly from the accommodation onto the deck.

(11) No opening shall be fitted in the bulkheads and other partitions between spaces required by sub-regulations (5) to (7) inclusive but a manhole is permitted in a bulkhead other than the collision bulkhead, on condition that it is bolted in a watertight manner.

(12) A hatchway in the stern bulkhead and an opening for a propeller shaft, piping, etc., are permitted when they are constructed in such a manner as to not affect the effectiveness of the bulkheads and other partitions between spaces.

(13) Notwithstanding the requirements of sub-regulation (8) to (12) inclusive, the stern compartment may communicate with an engine room by means of a readily accessible, self closing drain installation.

(14) Every penetration of the hull and piping connected to such penetrations shall be constructed so as to prevent the accidental admission of water into the vessel.

(15) A water intake and an outlet and a pipe connected to them are considered watertight if they are made in such a way that any unintentional ingress of water into the vessel is impossible.

21. Anchors, chains and anchor cables

(1) The bow of a vessel less than 15m in length shall be equipped with one anchor having a mass determined in accordance with sub-regulation (4).

(2) The bow of a vessel of 15m and above shall be equipped, with two anchors having a combined mass determined in accordance with sub-regulation (4).

(3) In a vessel of less than 45m in length which, owing to its design and intended purpose, is only used on predetermined short-haul sections, the Administration may accept bow anchors having a mass two-thirds of that determined in accordance with sub-regulation (4).

(4) The anchor required by sub-regulations (1) to (3) inclusive is-

$$P = K. \times B. \times T \text{ (kg)}$$

where:

B is the breath of the vessel;
T is the depth of the vessel; and
K is a co-efficient given by $45 \times (L/8B)^{0.5}$

Where L = length of the vessel.

Where a vessel is required to be fitted with anchors, the total mass should be distributed so that the mass of the lightest anchor is not less than 45% of that total mass.

(5) The anchor mass established in accordance with sub-regulation (4) may be reduced for certain special anchors as permitted by the Administration.

(6) A cast iron anchor shall not be fitted.

(7) The mass of each anchor shall be marked on the anchor so that it stands out in relief in a durable manner.

(8) A windlass or windlasses shall be fitted where a vessel carries any single anchor having a mass in excess of 50 kg. A powered windlass shall be capable of being operated by hand.

(9) Each anchor shall be fitted with a chain having a length of

at least 40m in a less than 30m in length;
at least 10m longer than the vessel in a vessel 30m and above and less than 50m in length;

at least 60m in a vessel 50m and above in length.

(10). The minimum tensile strength of the anchor chains shall be calculated as follows-

(a) anchors of a mass of 0-500 kg-

$$R = 0.35P \text{ (kN)};$$

(b) anchors of a mass of more than 500kg and not exceeding 2,000 kg:

$$R = (0.35\ P^1 - 500\ )\ (\ 15\ 000\ )\ x\ P^1 \text{ (kN); and}$$

(c) anchors of a mass more than 2,000 kg:

$$R = 250\ P^1 \text{ (kN).}$$

(11) In the above formulae P^1 is the mass of each anchor determined in accordance with sub-regulation (1) to (5) inclusive.

(12) Where the anchors have a mass greater than that required by sub-regulations (1) to (5) inclusive, the tensile strength of the anchor chain shall be determined as a function of that greater anchor mass.

(13) The attachments between anchor and chain shall withstand a tensile load which is twenty percent higher than the tensile strength of the corresponding chain.

(14) A cable may be fitted instead of an anchor chain provided that a cable has the same tensile strength as that required for a chain and is 20% longer than the required chain.

(15) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

22. Cranes, derricks and winches

(1) A winch shall be designed in such a way as to enable work to be carried out in complete safety.

(2) It shall be fitted with a device that prevent unintentional load release.

(3) A winch that does not lock automatically shall be fitted with a brake that is adequate to deal with its attractive force.

(4) A hand-operated winch shall be fitted with a device to prevent kick-back of the crank.

(5) A winch that is both power and manually-driven shall be designed in such a way that the motive-power control cannot actuate the manual control.

(6) A crane, a derrick and a winch shall be manufactured in accordance with good engineering practice and maintained in accordance with manufacturer's instructions.

(7) A vessel's supporting structure shall take account of the forces arising during their use.

(8) A manufacturer's plate shall be affixed to a crane, a derrick and a winch and shall show-

(a) the manufacturer's name and address;

(b) the year of manufacture;

(c) series or type of reference; and

(d) where appropriate, serial number

(9) The maximum permissible loading shall be permanently marked in a clearly legible manner.

(10) A crane, a derrick and a winch on a new and an existing vessel shall be inspected annually by officers duly authorised by the Administration to verify their continued fitness for use and an appropriate certificate shall be issued to attest to this.

(11) A device shall be fitted to protect against crushing or shearing accidents.

(12) The outer parts of any crane or derrick shall have a safety clearance of 0.5 upwards, downwards and to the sides, between them and all surrounding objects except that the safety clearance to the sides is not required outside the work and access area.

(13) A mechanical crane shall be protected against unauthorised use so that it shall only be possible to start this up from the crane's driving position.

(14) The control shall be of the automatic-return type (buttons without stops) and its operating direction shall be unambiguously clear.

(15) An appropriate device shall be fitted to prevent the load from dropping if the motive power of a crane or derrick fails.

(16) An appropriate device shall be fitted so as to stop any upward movement of the hoisting device and to prevent the safe load being exceeded.

(17) Any downward movement of the hoisting device shall be stopped if there are less than two cable windings on the drum.

(18) The tensile strength of the cables for mobile loads shall correspond to five times the cable's permissible loading.

(19) A person who contravenes this Regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

23. Towing vessels and barges

(1) A craft intended for pushing or towing operations shall be capable of remaining manouverable and stable when towing.

(2) A craft intended for pushing or towing shall be fitted with a tow hood that is capable of safe release from within the wheelhouse.

(3) A towing device shall be installed forward of the propeller plane unless the vessel is steered by its drive units such as cycloidal propulsion units or swiveling propellers.

(4) A winch or a tow hook that can be released from within the wheelhouse shall constitute towing devices.

(5) The towing equipment shall be arranged in such a way that its use does not compromise the safety of the vessel, crew or cargo and its strength and arrangement appropriate to the towing operation.

(6) A deflector hoop shall be fitted where there is a risk of the towing cables snagging on the stern of the vessel.

(7) The propulsion machinery shall be able to be operated and controlled from within the wheelhouse.

(8) The surface of a deck, a side deck and hatch cover of a barge shall have an anti-slip finish and where necessary, sloping surface shall be fitted with raised slats.

(9) Where the deck or a side deck of a barge form an angle with the side plating or planking, a toe nail or stringer bar shall be fitted and shall be at least 30mm high.

(10) A guard rail shall be fitted and be at least 900 mm high.

(11) A guard rail may be removable and may not be required at the bow.

(11) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

24. Miscellaneous equipment

(1) A vessel shall be provided with at least the following equipment-

(a) mooring ropes consistent with the function of the vessel;

(b) a collision mat;

(c) a gangway at least 400m wide and of an appropriate length in relation to the dimensions of the vessel, having its sides marked by a light coloured stripe and fitted with handrails;

(d) bouyant fenders or floating wood fenders;

(e) a boat-hook;

(f) a first aid kit and instructions for its use

(g) binoculars;

(h) fireproof container with a cover for storing oily rags and similar solid wastes and a fire-resistant marked container with a cover for storing oil and similar liquid wastes;

(i) heaving line;

(j) axe; and

(k) waterproof electric hand torch

(2) A vessel which has a deck over 1.5m above the waterline equivalent to the maximum operational freeboard shall be fitted with a companion way or accommodation ladder.

(3) A vessel which is propelled by an outboard motor shall carry emergency propulsion in the form of oars or a paddle.

(4) A person who contravenes this Regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

25. Heating, cooking and refrigeration appliances

(1) A heating, cooking and refrigeration equipment, together with its accessories shall be so designed and installed that -

(a) it is not dangerous even in the event of overheating; and

(b) it cannot overturn or be moved accidentally.

(2) When an equipment referred to in sub-regulation (1) uses a liquid fuel, it may be operated only with a fuel with a flashpoint above $55^{o}C$, except that a cooling appliance and a heating and refrigeration appliances fitted with burners with wick and working on commercial paraffin may be permitted in the accommodation and wheelhouse, subject to the capacity of the fuel tank not exceeding twelve litres.

(3) An installation referred to in sub-regulation (1) may not be installed in spaces or engine room in which volatile substances are stored or used, and any flue from such an installation shall not be routed through such spaces or engine rooms.

(4) The intake of air necessary for combustion shall be ensured and a closing device shall not be fitted in a duct served by a ventilation fan.

(5) A heating and a cooking appliance shall be securely connected to a flue and the flue pipe shall be maintained in good condition and fitted with a suitable cap or a device affording protection from the wind.

(6) A flue of a heating installation shall be arranged in such a manner as to limit the possibility of obstruction by a combustion product and to permit cleaning.

(7) A vent shall be fitted above an outlet of a refrigeration appliance working on liquid fuel.

(8) A person who contravenes this regulation commits an offence

and is liable on conviction to a fine not exceeding three million dalasis.

26. Openings and penetrations in watertight or weathertight structures, coamings or exterior openings and freeing ports.

(1) An engine exhaust outlet that penetrate the hull below the deck shall be provided with an effective means to prevent back flooding into the hull through the exhaust system.

(2) An access opening in weathertight superstructure, deckhouse or deck shall be fitted with a weathertight door or a hatch that opens outward and that is generally hinged on the forward or outboard sides.

(3) An exterior opening through which down flooding into the hull can occur shall be fitted with a coaming of equivalent strength to the structure in which it is located.

(4) A coaming shall be constructed as high as is practicable and its height shall be less than the following-

Location	Area of operation	
	Open waters	Sheltered waters
Door sills and companion ways on the main deck	380 mm	230mm
Hatches	450mm	300mm
Ventilators	760mm	300mm
Air pipes	600mm on freeboard deck and 300mm on superstructure deck	300mm or as approved the Authority

(5) The minimum area of a freeing port or any deck fitted with a bulwark shall not be less than ten per cent of the area of each continuous portion of the bulwark.

(6) A hatchway cover shall be of appropriate strength and stiffness and shall be fitted with means of securing and maintaining weathertightness.

(7) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million

dalasis.

PART IV - FREEBOARD AND STABILITY

27. Minimum Freeboard

(1) The minimum freeboard shall be that freeboard at which a vessel in the maximum condition of loading meets the stability requirements as determined by stability proof test, carried out in accordance with regulation 32 or other requirements that the Administration considers appropriate in relation to the type of vessel, its service and its area of operation.

(2) The minimum freeboard shall be the greater of-

(a) 250mm; or

(b) 300 + 44 (L – 4.5) mm
where L = the length of the vessel.

(3) Where the minimum freeboard of a loaded vessel occurs abaft a point 75% of the length of the vessel from the foreside of the foremost part of the vessel, excluding guard rails, the minimum freeboard shall be taken to be the freeboard measured at the 75% of the length point.

(4) The Administration may accept a lesser value of freeboard where the construction or the type of vessel makes it impracticable to achieve the above freeboard calculated as above.

(5) When demonstrating compliance with regulation 33, the freeboard shall be taken as the vertical distance between the waterline at which the vessel is floating with maximum load on board and shall be measured-

(a) for a flush deck or well deck vessel, to the top of the weather deck at the side of the vessel;

(b) for a partially decked vessel, to the top of the deck or to the top of the gunwale, whichever is the less; and

(c) for a cockpit vessel or for an open vessel, to the top of the gunwale.

(6) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million

dalasis.

28. Loading Marks

(1) A vessel shall have permanent loading marks placed on each side, forward, amidships and aft to indicate the maximum allowable draft and trim corresponding to the minimum freeboard determined in accordance with regulation 27.

(2) Such a loading mark shall be a horizontal line of at least 200mm in length forward and aft and 300mm amidships and 2.5mm in height, with its upper edge passing through the point of maximum draft.

(3) The loading mark shall be painted in a contrasting colour to the side shell paint.

29. Loading of vessel

(1) The loading marks of a vessel shall not be submerged at any time when it departs on a voyage, during a voyage or on arrival.

(2) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

30. Stability Information for Operating Personnel

(1) Stability information shall be provided on a vessel which is 24m and above in length to enable the master to rapidly and easily determine the stability of a vessel in various loading conditions in relation to accepted standards.

(2) Guidance on stability information to be provided is given in Schedule 4.

(3) The Administration may require stability information to be provided on a vessel less than 24m in length.

(4) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding two hundred penalty units.

31. General requirements relating to intact stability

(1) The Company or operator of a vessel which is 24m and above in length shall submit to the Administration for approval, the following

information and the necessary calculations used to determine that information-

(a) allowable number of passengers and crew on each deck;

(b) maximum cargo permitted on the vessel;

(c) deepest waterline drafts and freeboard;

(d) location of watertight bulkheads and openings in watertight bulkheads;

(e) location, type and amount of fixed ballast;

(f) location and details of any foam flotation material fitted; and

(g) maximum weight of portable equipment permitted on a vessel

(2) The Administration may require a vessel which is 24m and above in length to undergo a stability proof test.

(3) A vessel less than 24m in length shall undergo a stability proof test in accordance with regulation 32 in the presence of a surveyor of the Administration to determine that the vessel as built and operated, has the appropriate level of initial stability.

(4) A passenger vessel and a cargo passenger vessel may be required by the Administration to have stability determined by calculation.

(5) The Administration may prescribe additional or different intact stability requirements for broad, shallow draft vessels with little or no ballast outside the hull.

(6) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

32. Conduct of stability proof test

(1) A vessel shall be in the condition specified in sub-regulations (2) to (13) inclusive when a stability proof test is performed.

(2) A vessel shall be moored in a quiet, sheltered area free from

extraneous forces such as propeller wash from a passing vessel or a sudden discharge from a shore-side pump, and in a manner that allows unrestricted heeling.

(3) The location of the test shall be chosen so that the density of water during the test is not greater than that on the route for which a vessel is to be certificated.

(4) The construction of a vessel shall be complete in all respects.

(5) Ballast where necessary, shall be on board and in place and shall be in compliance with sub-regulation …..-

(6) Each fuel and water tank shall be approximately three-quarters full.

(7) A weight equal to the total weight of all passengers, crew, and other loads permitted on a vessel shall be on board and distributed so as to provide normal operating trim and to simulate the vertical centre of gravity causing the least stable condition that is likely to occur in service.

(8) For this purpose, the crew shall be counted as passengers and if a vessel carries passengers on diving excursions, the total weight of the diving gear shall be included in a loaded condition.

(9) The heel of a vessel prior to the commencement of the stability proof test shall not exceed two degrees.

(10) Unless otherwise specified, weight and vertical centre of gravity shall be as follows-

(a) the weight of primary lifesaving equipment shall be simulated at its normal location, if not on board at the time of the test;

(b) the weight of one person shall be taken as 75 kg, Except that where a vessel operates exclusively on sheltered waters or when passenger loads invariably consist of a mix of adults and children, the weight of one person may be taken as 65kg; and

(c) the vertical centre of gravity of the simulated weight of passengers, crew and other loads shall be at least 760mm above the deck.

(11) On a vessel having one upper deck available to a passenger above the main deck, the vertical weight distribution shall not be less than the following-

Weight on Upper Deck = (Number of passengers located on upper deck) x (weight per passenger) x .1.33

Weight on Main Deck = Total Test Weight – Weight on Upper Deck

(12) On a vessel where more than one deck is available to a passenger above the main deck, the vertical weight distribution used for the calculation shall be approved.

(13) A non-return closure or a cockpit scrupper or weather deck drain shall be kept open during the test.

(14) Guidance on the conduct of the stability proof test and the associated calculations is given in Schedule 2.

(15) Any person who contravenes this Regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

33. Stability and freeboard requirement

(1) A heeling moment to be applied in order to demonstrate the stability of a vessel by means of calculation or a stability proof test shall be the greater of-

Mp = (W) x (Bp) 15; and
Mw = P x A x H

Where Mp = passenger heeling moment (kg – m)
W = the total passenger weight using 75 kg. per passenger or,

Where the vessel operates exclusively on sheltered waters, 65 kg per passenger;

Bp = the maximum transverse distance (m) of a deck that is accessible to passengers;
Mw = wind heeling moment (kg – m);
P = wind pressure of:

i. 36.6 kg/m^2 for operation on sheltered waters; or

ii. 73.3 kg/m^2 for operation on open waters;

A = area (m^2) of the projected lateral surface of the vessel above the waterline, including each projected area of the hull, superstructure and area bounded by a railing and structural canopy. For a sailing vessel this is the bare pole area, or, where the vessel has no auxiliary power, with a storm sail set; and
H = height (m) of the centre of area (A) above the waterline, measured up from the waterline.

(2) In a stability proof test, the moment determined in accordance with sub-regulation (1) shall be applied by means of a weight or weights placed at a transverse distance from the centreline of a vessel so that the product of the weight(s) and distance(s) is equal to the required moment.

(3) Where a vessel is subjected to this heeling moment, the immersion of the loading mark shall not exceed the percentage of the freeboard as follows-

(a) on a flush deck vessel, 50 per cent;

(b) on a well deck vessel 50 per cent; or
100 per cent where the vessel operates on sheltered waters, has a non-return scrupper or a freeing port and the minimum freeboard is not more than one-quarter of the vertical distance from the waterline to the gunwale;

(c) on a cockpit vessel, the percentage is calculated from the following:
on open waters: $(2L - 1{,}5\ L_N) / 4L$
on sheltered waters: $(2L - L_N) / 4L$
where:
L = length of the weather deck; and
L_N = length of cockpit in the same units as L;

(d) on an open boat, 25 per cent; and

(e) on a flush deck sailing vessel, 100 per cent

(4) Notwithstanding the percentages specified in sub-regulation (2), when a vessel is subject to the greater of the heeling moments determined according to sub-regulation (1), the immersion shall not exceed a value equivalent to one-eight of the breadth of the vessel measured at the point of minimum freeboard as defined in regulation 27(1).

(5) Where during a stability proof test a vessel fails to meet the requirements of sub-regulation (2) or (3), the entire test shall be repeated with a reduced load equivalent to a reduced number of passengers or a reduced weight of cargo or by utilising any other corrective measures available to enable the vessel to meet the requirements of sub-regulation (2) or (3).

(6) Following the application of the greater of the heeling moments determined according to sub-regulation (1), where any portlight is located at a vertical distance above the waterline of 100mm or less, such portlight on each side shall be closed in a permanent manner. An appropriate notice shall be fixed inside the relevant compartment, close to each such portlight.

(7) Following the application of the greater of the heeling moments determined according to sub-regulation (1), where any scrupper or drain is found to be below the waterline so as to permit entry of water into the vessel or onto the deck, such opening on each side shall be fitted with an automatic non-return valve.

(8) A vehicle ferry shall also be tested by using equivalent weights, by calculation, or other method acceptable to the Administration to determine that the trim or heel during loading or unloading shall not submerge the deck edge.

(9) The criterion for this test is that the deck edge shall not be submerged during loading or unloading of the vessel with the total number of passengers and the maximum weight of vehicles and cargo permitted on board in the most unfavourable location.

(10) A person who contravenes that regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

34. Maximum number of Passengers

(1) The maximum number of passengers permitted to be carried on a passenger vessel or a cargo-passenger vessel is the number

shown by calculation or by means of a stability proof test, as appropriate, that results in a minimum freeboard meeting the requirements of regulation 32(2) or (3).

(2) The maximum number of passengers shall be entered on the Certificate of Survey and the maximum number of passengers permitted to be carried on a specific deck and in a specific space shall be entered on the Record of equipment and vessel information.

(3) A combination of passengers and cargo in respect of which a vessel complies with the requirements of regulation 32(2) or (3) shall be entered on the Record of equipment and vessel information.

(4) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

35. Subdivision of passenger vessels and certain cargo – passenger vessel

(1) On-

(a) a passenger vessel 24m and above in length; and

(b) a passenger vessel and a cargo passenger vessel of less than 20m in length that are certified to carry fifty passengers or more and to operate in open waters;

transverse watertight bulkheads extending from side to side of the vessel shall be fitted so that, when a vessel is damaged from the keel to the deck in any way of any one compartment in the length of the vessel, but not extending to damage to a transverse bulkhead bounding the longitudinal limits of the damage, the vessel may be demonstrated to float in a stable condition having the margin line above the still water level and to float in a stable condition in intermediate stages of flooding.

(2) A vessel specified in sub-regulation (1) may as an alternative to meeting the requirements of that sub-regulation, be fitted with a transverse watertight bulkhead extending from side to side of the vessel having a position of a bulkhead calculated in accordance with sub-regulation (3).

(3) The maximum distance between an adjacent main transverse watertight bulkhead on a vessel, required to comply with this

regulation by sub-regulation (2) shall not be more than the lesser of-

(a) one third of the length of the bulkhead deck; or

(b) the distance d given by:

$$\frac{F \times f \times L}{D}$$

Where:

F = the floodable length factor from regulation 35(1) at the appropriate value of 1/L;

f = the effective freeboard (m) calculated for each pair of bulkheads in accordance with regulation 35(4);

L = length over deck (m) measured over the bulkhead deck, excluding fishing and other platforms, bowsprits, railings, guards and similar fittings;

l = distance (m) from the midpoint of the compartment to the forward most point on the bulkhead excluding sheer; and

D = the depth (m) at amidships at a point one-quarter of the breadth as defined in Regulation 2 from the centreline, measured vertically from the inside of the bottom planking or plating to the level of the top of the deck. See (Regulation 35(1)) corrected where appropriate as shown in Schedule 3.

regulation 35(1). Table of length factors.

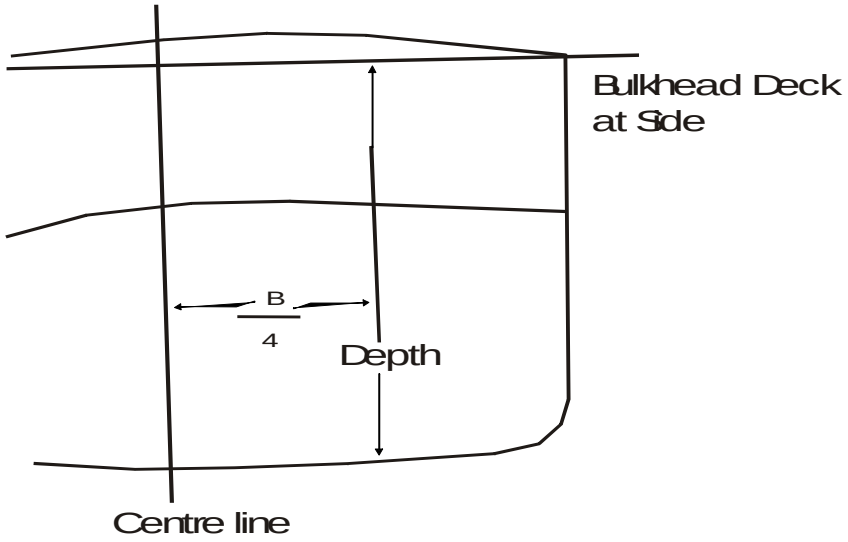
(l/L)x100	F^2	(l/L)x 100	F
0.15	0.33	55	0.63
20	0.34	60	0.58
25	0.36	65	0.53
30	0.38	70	0.48
35	0.43	75	0.44

40	0.48	80	0.40
45	0.54	85	0.37
50	0.61	90-100	0.34

Note to regulation 35 (1)

(1) Symbols are as defined in regulation 35(3)
(2) Intermediate values of floodable length factor shall be obtained by interpolation.

regulations 35(1). Transverse location for measuring depth



(4) The effective freeboard for each compartment shall be calculated from-

$$f = 0.5 (a + b)$$

where:

f = the effective free board;

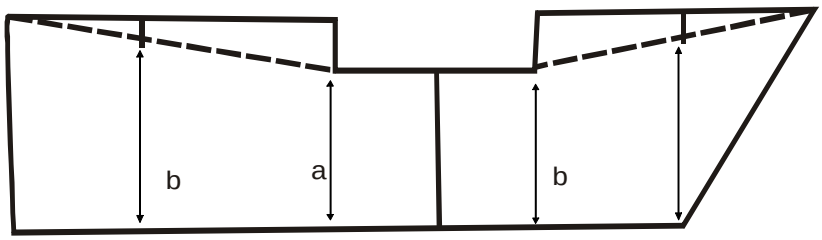
a = the freeboard at the forward most main transerve watertight bulkhead of the compartment; and

b = the freeboard at the aftermost main transerve bulkhead of

the compartment;
the freeboards and b being calculated from the deepest waterline to;

i. the top of the bulkhead deck where a vessel has a flush deck; or
ii. to the line shown in Regulation 35(3) where a vessel has a stopped bulkhead deck; or
iii. to the line shown in Regulation 35(3) where a vessel has an opening scuttle (porthole) below the bulkhead deck; or
iv. to the corrected bulkhead deck line, calculated as shown in Schedule 3 where the vessel has a deck of the configuration shown in Schedule 3; or
v. as determined by the Administration where a vessel has a deck of a configuration not identified above.

Regulation 35(2): Freeboard measurement -- vessel with stepped bulkhead deck



Note to Regulation 35(2): a and b are shown for two sample compartments.

Regulation 35(3): Freeboard measurement – vessel with stepped bulkhead deck and a porthole below the bulkhead deck.

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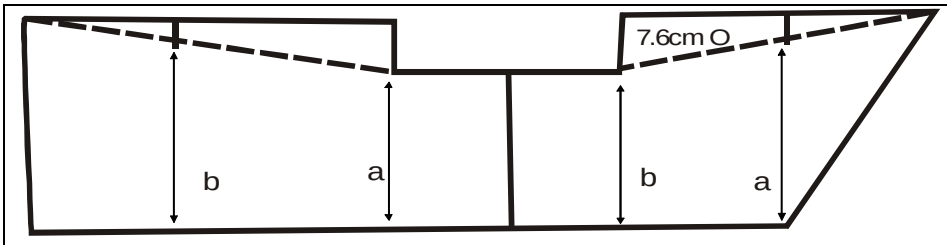

Note to Regulation 35(3): a and b are shown for two sample compartments.

(5) Guidance or the subdivision calculation is given in Schedule 3 to these Regulations.

(6) The calculations may be performed on the basis of plans or on a completed vessel, following the methodology detailed in Schedule 3.

(7) Where calculations are performed for a completed new vessel on the basis of a practical test or where the Administration requires such calculations to be performed on an existing vessel, and the actual compartment length exceeds the permissible length or 0.333 L, whichever is the lesser, the Administration may require that an additional bulkhead be fitted as the amount of cargo or number of passengers to be reduced as it considers appropriate.

36. Stability of open boats

(1) An open boat when fully loaded and having the vertical height of the centre of gravity of cargo and passengers carried at the highest position likely to be encountered in service shall, when totally flooded, have sufficient buoyancy to be able to remain afloat in a stable condition.

(2) An open boat shall be deemed by the Administration to have sufficient buoyancy by practical test or where detailed calculations show-

(a) that the buoyancy of the boat is greater than the total weight of the vessel and its load; and

(b) that the boat is stable in a loaded, flooded condition.

(3) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

37. Foam flotation material

(1) A foam shall only be installed as flotation material on a vessel when approved by the Administration.

(2) Where foam is installed as flotation material, the following requirements shall be met to the satisfaction of the Administration-

(a) a foam shall not be installed in a void space that contains ignition sources;

(b) a foam shall not be installed adjacent to a fuel tank unless the boundary between the tank and the space has a double continuous fillet weld;

(c) the structure enclosing any foam installed shall be strong enough to accommodate the buoyancy of the foam;

(d) a piping and a cable shall not pass through a space containing a foam unless it is within a piping and a cableway accessible from both ends; and

(e) a blocked foam shall be used in each area that may be exposed to water; and shall have a protective cover, approved by the Administration, to protect it from damage.

(3) A foam used as flotation material shall be-

(a) impervious to water absorption;

(b) structurally stable under service conditions;

(c) chemically inert in relation to other medium with which it may be in contact;

(d) properly secured in place; and

(e) easily removable for inspection of the void space.

(4) A foam used as flotation material shall be subjected to a water submergence test for a period of at least seven days to demonstrate to the satisfaction of the Administration that the foam has adequate strength to withstand a hydrostatic head equivalent to submergence of a vessel to its bulkhead deck.

(5) The density of the installed foam shall be determined from a sample foam specimen obtained during the installation of the foam and recorded in the Record of equipment and vessel information.

38. Intact stability requirements for a sailing vessel

(1) Subject to sub-regulation (3), a sailing vessel shall undergo a stability proof test in accordance with regulation 32.

(2) A sailing vessel certificated to operate in open waters shall be equipped with a self-bailing cockpit.

(3) For a vessel certificated to operate in sheltered waters, the Administration may perform an operational test to determine whether the vessel has adequate stability and satisfactory handling characteristics under sail in lieu of, or in addition to, conducting a stability proof test.

(4) For a sailing vessel the heeling moment used in a stability proof test shall be the greater of the following-

(a) passenger heeling moment from Regulation 33(1);

(b) wind heeling moment from Regulation 33 (1); and

(c) Wind heeling moment calculated from the wind heeling moment equation in Regulation 33(1); as

$M_w = P \times A \times H$

Where M_w = wind heeling moment in Kg – m;

P = 4 9 kg/m^2

A = the windage area (m) of the vessel with all sails set and trimmed flat;

H = height (m) of the centre of the effort of area (A) above the waterline, measured up from the waterline.

(5) The Administration may exempt a vessel from any or all the provisions of this Part.

PART IV - MACHINERY AND BILGE PUMPING ARRANGEMENTS

39. General

(1) A machinery and any associated installation shall be designed, constructed and installed in accordance with good engineering practice.

(2) An engine shall be installed and fitted in such a way as to be adequately accessible for operation and maintenance and shall not present any danger to a person assigned to such a task.

(3) An engine shall be secured against inadvertent starting.

(4) A power plant, an ancillary, a boiler and a pressure vessel together with its accessory, shall be fitted with a safety device.

(5) A fitness or other certificate to a boiler and other pressure vessel shall be issued in accordance with conditions set by the Administration.

(6) A main and secondary machinery shall operate on fuel with a flashpoint above 55^0C may be used in starting aids.

(7) An engine providing power for a winch, a boat and a portable motor pump may operate on fuel with a flashpoint below 55^0C.

(8) In a vessel of 25m and above in length, a means of communication shall be provided between the engine room, wheel house and emergency steering position.

(9) Where an inboard engine is not fitted within a machinery space, it shall be enclosed within a weathertight enclosure.

(10) Such an enclosure shall be constructed of steel or if so required by the design of the vessel, in any equivalent material in terms of fireproofing.

(11) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

40. Engine exhaust system

(1) An exhaust gas shall be ducted out of the vessel.

(2) A suitable measure shall be taken to avoid ingress of the exhaust gas into any compartment.

(3) An exhaust pipe passing through accommodation or the wheelhouse shall, within such a space be covered by protective gas-tight sheathing.

(4) The gap between the exhaust pipe and such sheathing shall be open to the outside air.

(5) An exhaust pipe shall be arranged and protected in such a way that it cannot cause fire.

(6) An exhaust pipe shall be suitably insulated or coded in an engine room.

(7) Subject to sub-regulation (3) and (4), an outside engine room exhaust pipe may be located or protected to prevent physical contact.

(8) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

41. Engine and boiler rooms

(1) An engine and a boiler room shall be arranged in such a way that the equipment therein may be operated, serviced and maintained safely and easily.

(2) An engine and a boiler room and any other area in which inflammable or a toxic gas may be evolved shall be adequately ventilated.

(3) It shall be possible where so needed, to shut down the motor driving the blower and suction fans from outside the space in which it is located, and from outside the engine room.

(4) A companionway and a ladder providing access to an engine and a boiler room shall be permanently affixed and made of steel or an alternative, equally strong and fire-resistant, material.

(5) An engine and a boiler room shall have two exits, one of which may be an emergency exit, unless it is demonstrated to the Authority that such arrangement is not practicable.

(6) A person who contravenes this regulation commits an offence

and is liable on conviction to a fine not exceeding three million dalasis.

42. Propulsion machinery

(1) It shall be possible to start, stop and reverse propulsion machinery quickly and safely.

(2) Where propulsion machinery is not controlled from the wheelhouse whilst a vessel is underway, a reliable two-way communication system shall be provided between the wheelhouse and the engine room.

(3) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

43. Fuel tanks, pipes and accessories

(1) Liquid fuel shall be stored in a steel tank or, if so required by the design of the vessel, in any equivalent material in terms of fireproofing.

(2) Such a tank shall form part of the hull or be firmly attached to it.

(3) Such a requirement shall not apply to a tank having a capacity of no more than twelve litres that have been incorporated in an ancillary at the factory.

(4) A fuel tank shall not have a common surface with a drinking water tank.

(5) A tank and its pipework and any other accessory shall be laid out and arranged in such a way that neither fuel nor gas may accidentally reach the inside of the vessel.

(6) A tank valve intended for fuel sampling or water drainage shall close automatically.

(7) A fuel tank shall not be located ahead of the foremost transverse watertight bulkhead.

(8) A liquid fuel or a lubricating oil tank shall be rigidly installed and may not have a common boundary with an accommodation space.

(9) A daily supply tank and its fitting shall not be located above an

engine as an exhaust pipe

(10) An orifice for liquid-fuel tank filler neck shall be located on the deck, except for the daily supply tank.

(11) Each such filler neck shall be fitted with a cap.

(12) A liquid fuel tank shall be fitted with a breather pipe terminating in the open air above the deck and arranged in such a way that water ingress is not possible.

(13) A breather pipe shall have a sectional area at least 1.25 times the cross section area of the corresponding filler neck.

(14) A filler orifice for a fuel tank shall be marked to show clearly the tank to which it is connected.

(15) A pipework for the distribution of a liquid fuel shall be fitted with a shut-off device at the tank outlet that can be operated from the deck.

(16) Such a shut-off device shall be protected against unauthorised operation.

(17) This requirement shall not apply to tanks mounted directly on the engine.

(18) A fuel pipe, its connection, a seal and a fitting shall be made of a material that is able to withstand the mechanical, chemical and the thermal stress to which it is likely to be subjected in operation.

(19) A fuel pipe shall not be subjected to any damaging effect of heat and it shall be possible to monitor it throughout its length.

(20) A fuel tank shall be provided with a capacity-gauging device that is legible up to the maximum filing level.

(21) Such a device shall be effectively protected against any impact, shall be fitted with automatic closing taps at its base and shall be attached to its upper part to the tank above its maximum filling level.

(22) Any material used in the manufacture of such device shall not deform at normal ambient temperature where it is located.

(23) A liquid-fuel tank shall be provided with an opening having a leak-proof closure that permit cleaning and inspection.

(24) A fuel tank directly supplying a power plant and an engine needed for navigation purposes shall be fitted with a device emitting both visual and audible signals in the engine room if its level of filling is not sufficient to ensure reliable operation.

(25) A battery shall not be fitted under a fuel tank, a fuel cock and a fuel filler.

(26) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

33. Steering gear

(1) A vessel shall be equipped with a reliable steering gear that ensures good manoeuverability, having regard to the operation and characteristics of the vessel.

(2) A steering gear shall be capable of putting the rudder over it not more than thirty seconds from hand on one side to hand on the other.

(3) A powered steering system shall be designed in such a way that the rudder cannot change position unexpectedly.

(4) The steering system as a whole shall be designed for permanent lists of up to 15 degrees and ambient temperatures up to 50^{o}C.

(5) The component parts of the steering system shall be constructed and arranged so as to be able to withstand the stresses to which they may be subjected during normal operation.

(6) The steering equipment and its controls shall be designed and constructed so that its operation is not impaired when external forces are applied to the rudder.

(7) The steering system shall incorporate a powered steering control if so required by the forces needed to actuate the rudder.

(8) A power-actuated steering device shall be protected against an overload by means of a system that restricts the torque applied by the control.

(9) A penetration for a rudder stock shall be designed so as to

prevent the spread of water polluting lubricants.

(10) A rudder angle indicator shall be fitted in the wheelhouse where it can be seen by the person steering the vessel.

(11) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

45. Steering gear control system

(1) Where a steering system is power-actuated, a second control system or manual control shall be fitted and it shall be demonstrated that the second system may be brought into use within five seconds if the primary steering control system fails or malfunctions.

(2) Where the second control system or manual control is not designed to come into operation automatically, it shall be possible to do so immediately by means of a single simple, quick action by the helmsman.

(3) Where fitted, a second control system or manual shall be demonstrated to achieve good manoeuverability.

(4) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

46. Steering system hydraulic drive

(1) A hydraulically-actuated device shall not be connected to the hydraulic actuating system for the steering system.

(2) Where two independent steering controls are installed, such a connection to one of the systems is acceptable if such device is connected to the return line and is able to be disconnected from the steering control by means of an isolating mechanism.

(3) Where two hydraulic systems are fitted, a separate hydraulic reservoir shall be provided for each of the two systems.

(4) A double reservoir arrangement shall be deemed to meet this requirement.

(5) A hydraulic reservoir shall be fitted with a warning system that monitors any drop in the oil level below the lowest content level

needed for reliable operation.

(6) Where a steering system cannot be actuated from the wheelhouse manually or by a manually-controlled hydraulic system, a second steering system shall be fitted.

(7) The dimensions, design and arrangement of pipework shall as far as possible, ensure that it is protected from damage as a result of mechanical factors or fire.

(8) In a hydraulically-driven system, provided that the two control systems are designed to operate independently and if the pipework system is able to withstand a pressure at least 1.5 times that of the maximum designed service pressure a separate pipework system is not required for the second steering system.

(9) A flexible piping shall only be fitted where its use is essential to damp vibrations or to allow freedom of movement of components.

(10) Such piping shall be designed for a pressure of at least twice the maximum service pressure.

(11) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

47. Power source for steering system

(1) A steering system fitted with two powered actuators shall be fitted with at Least two power sources.

(2) If the second power source for the power-driven steering system is not constantly available while a vessel is underway, a buffer device shall be fitted having adequate capacity to provide back-up during the period needed for start-up of the second power source.

(3) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three thousand dalasis.

48. Manual actuation of steering system

(1) A hand-operated steering wheel shall not be driven by the power actuation system.

(2) Regardless of rudder position, the mechanism shall prevent hand wheel kickback when the manually-operated wheel is engaged

automatically.

49. Rudder systems

(1) Where the thrust vectoring of a rudder-propeller, water jet, cycloidal propeller or bow thruster system is remotely actuated by electric, hydraulic or pneumatic power, two independent actuation systems shall be fitted between the wheelhouse and the system.

(2) Where a multiple rudder-propeller, water jet, cycloidal propeller or a bow thruster system is fitted that is independent of each other the second actuation system is not necessary if the vessel, in the case of failure of one of the systems, is demonstrated to retain acceptable manoeuverability.

50. Bilge pumping systems

(1) Subject to sub-regulation (2), a vessel shall be provided with a pumping system capable of pumping from and draining any watertight compartment in a vessel.

(2) A watertight compartment less than seven percent of the total underdeck volume may be drained into the adjacent compartment by means of a self-closing valve or cock.

(3) The valve or cock shall be fitted outside the compartment to be drained and shall be operable from a readily accessible position.

(4) In a passenger vessel 15m and above in length the system shall permit pumping and draining from every space in a vessel whilst any one watertight compartment is flooded.

(5) A vessel shall be provided with a fixed bilge pump as follows-

Length of vessel (m)	*Manual pumps* **Discharge capacity As installed**		*Power pumps* **Discharge capacity as Installed**	
	No.	Capacity in Kilolitres/hr.	No.	***Capacity in*** Kilolitres/hr.

10m and above and less than 12.5m	1	5.5	1	5.5
12.5m and above and less than 17.5m	1	5.5	1	11.0
17.5m and above and less than 20m	1	8.0	1	11.0
20m and above and less than 25m	Not permitted	permitted	2	11.0
25m and above and less than 35m	Not permitted		2	15.0

(6) An open vessel 7.5m and above and less than 10m in length shall be fitted with one hand-operated pump and two bailers.

(7) An open vessel less than 7.5m in length shall be fitted with two bailers.

(8) A partially-decked vessel less than 10m in length shall be fitted with one hand-operated pump and two bailers and the hand-operated pump may be a portable pump.

(9) In sub-regulations (6), (7) and (8), one of the bailers may be replaced by a ten litre bucket.

(10) In every vessel-

(a) a power pump may be substituted for a manually operated pump;

(b) a power pump may be driven by a main engine, an auxiliary engine or by an electric motor, but where two power pumps are required, each pump shall not be dependent on the same source of power;

(c) where a vessel is required by sub-regulation (5) to be fitted with two power pumps and the capacity of one of those pumps is less than that specified by not more than twenty percent, the deficiency may be made good by an excess of capacity in the other power pump;

(d) a bilge pump shall be of the self priming type or be provided with a suitable priming device; and

(e) a manually operated bilge pump may be fitted to a watertight compartment under 4m in length.

(11) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

51. Bilge piping

(1) A bilge piping diameter shall be calculated as follows-

(a) the inside diameter (d) of the bilge pipe shall be at least:

$$d = 1.5 (L (B + D))^{0.5} + 25 (mm);$$

(b) the inside diameter (db) of the branch pipes connecting at the various suction strainers shall be at least:

$$db = 2.0 (1 (B + D))^{0.5} + 25 (mm)$$

where:
L is the length of the vessel (m);
1 is the length of the relevant watertight compartment
(m)
B is the moulded breath of the vessel (m); and
D is the moulded depth up to the main deck (m).

(2) A flat-bottomed compartment over 5m wide, shall be fitted with at least one suction strainer on either side.

(3) Where an engine room is over 5m long at least two suction strainers shall be fitted at opposite ends.

(4) A branch drain pipe from a compartment shall be connected to a main by means of a closable non-return valve.

(5) A compartment or any other space fitted out for ballast need only be connected to the draining system by means of a simple shut-off device.

(6) The rearmost compartment may be drained via the main engine room by means of an easily accessible, automatically closable set of pipes.

(7) The drainage spurs for each compartment shall be linked to the main drain by means of a lockable non valve.

(8) A ballast compartment or any other ballast space shall be linked to the drainage system by means of a single closing device.

(9) Notwithstanding the provisions of sub-regulation (8), a hold used for ballast shall be filled by means of a permanently installed ballast piping independent of a drainage pipe or by means of spurs consisting of flexible pipes or intermediate pipes connected to the main drain.

(10) A hold used for water ballast shall be filled by means of other than water intake valves located in the base of the hold.

(11) Such a hold shall be fitted with a depth gauge.

(12) Where the drainage system incorporates permanently fixed pipework, a bilge bottom drainage pipe intended to extract oily water shall be equipped with a closure that has been sealed in position.

(13) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

52. Storage of oil-water and drained oil

(1) Any water contaminated with oil by operations on board shall be stored on board.

(2) The engine-room bilge is considered to be a store for this purpose.

(3) Such water shall be discharged in accordance with regulation 113.

(4) An engine room shall contain one or more dedicated containers for the storage of waste oil, the capacity of which corresponds to at least 1.5 times the quantity of waste oil from any of the internal combustion engine end of the equipment installed and a hydraulic fluid from the hydraulic fluid reservoir.

(5) A connection used to empty such a container shall be fitted to the Authority's requirements.

(6) A waste oil from such a container shall be discharged in accordance with regulation 122.

(7) Where a vessel operates exclusively on short voyages, the

Administration may grant exemptions from the requirement of sub-regulations (5) and (6) subject to an arrangement for the discharge of a waste oil complying with regulation 122.

(8) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

PART VI - ELECTRICAL INSTALLATIONS

53. General

(1) Every electrical installation shall comply with the requirements of this Part.

(2) The following shall be carried on board a vessel of 25m and above in length-

(a) a circuit and an installation diagram specifying the type and the make of an electrical machinery and an appliance on board, the type and the cross-section of a cable and any other information necessary for an assessment of the safety of an electrical installation; and

(b) operating instructions for every electrical installation.

(3) An electrical installation shall be designed, constructed and installed to withstand a permanent transverse list of up to 15 degrees and ambient temperatures up to 50C.

(4) An electrical cable shall be flameproof or, for applications where flameproof cable is not available, shall be protected from fire as far as is reasonable and practicable.

54. Maximum permissible voltages

(1) The voltages specified in this sub-regulation shall not be exceeded -

Sub-regulation (1): Maximum permissible voltages and current ratings

Nature of Installation	Permissi maximum voltage

	Direct current	Single phase alternating current	Three phase alternating
A. Power and heating installations, including relevant sockets	250V	250V	500V
B. Lighting installations, including relevant sockets	250V	250V	
C. Sockets for current supply to hand held appliances used on open decks or in confined or damp metal enclosed spaces other than boilers and tanks:			
1. in general	50V	50V	
2. where an isolating transformer serves a single appliance[1]		250V	
3. where appliances with reinforced or double insulation are used	250V	250V	
4. where ≤ 30mA default circuit breakers are used		250V	500V
D. Sockets for supply to hand held equipment used in boilers and tanks	50V	50V	

Note to sub-regulation (1)

(1). Both wires of such systems shall be insulated from earth.

(2) Subject to compliance with appropriate safety measures a higher voltage than that specified in sub-regulation (1) is permissible as follows:

(a) in an installation for a battery charging equipment, as the charging process requires;
(b) for machinery the capacity of which so requires; or
(c) for a special shipboard installation (e.g. radio installation and ignition equipment).

(3) The current ratings is shown in this sub-regulation shall not be exceeded-

Sub-regulation 3 – Current ratings shown in amperes for cable run open or enclosed

Cable **mat' 1**		*pvc* **insulation**		*butyl, EP or silicone*[2] **insulation**		
Cross Section Mm	Single core	Twin core	3 or 4 core	Single core	Twin Core	3 o cor
1.0	10	8	7	15	12	10
1.5	13	11	8	21	18	15
2.6	17	14	12	27	23	19
4.0	23	19	16	36	31	25
6.0	30	25	21	46	39	32
10	41	35	29	62	53	43
16	54	46	38	83	70	58
25	71	60	50	110	93	77
25	86	73	60	135	115	94
50	100	85	70	160	135	110
70	130	91	91	205	175	145
95	160	110	110	250	210	175
120	185	130	130	190	245	205
150	210	145	145	330	280	230
185	240	170	170	375	320	260
240	285	200	200	445	380	310
300	330	230	230	510	355	355
	DC	DC		DC		
400	AC	AC	265	AC		
500	390	330		610		
650	380	325		590		
	450			690		
	430			640		
	520			790		
	470			690		

Notes to sub-regulation (3)

1. Nominal current ratings are shown for dc. Single phase ac or 3-phase ac Installations
2. Silicone ratings are to single core cable only

55. Shore connections

(1) Where an electrical installation is powered by an on shore source of current, the cables shall have a fixed connection on board or be equipped with permanent connection or with a current take off device.

(2) Care shall be taken to ensure that a cable and its connection is not subject to tensile load.

(3) Only a flexible cable insulated by oil-resistant and flame retardant sheating shall be used for a shore connection.

(4) Where the lead-in voltage exceeds 50V, the hull shall be effectively earthed and the plug-in socket on the hull shall be marked accordingly.

(5) The main switchboard shall be fitted with an indicator showing whether the connection to the shore network is carrying current.

56. Generators and motors

(1) A generator and a motor shall be readily accessible for inspection, measurement and repair and shall be located so as to protect the windings from water and oil.

(2) A terminal box shall be readily accessible.

(3) A generator driven by a main engine, a propeller shaft and an auxiliary set intended for another function shall be designed for the range of the rotational speed expected to occur in service.

(4) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

57. Batteries

(1) A battery shall be accessible, fitted and arranged so as not to shift with the movement of a vessel.

(2) When in service, it shall not be placed in a place where it will be exposed to excessive, extreme heat or cold, spray, steam or vapour.

(3) It shall not be installed in a wheelhouse accommodation or a hold.

(4) This requirement shall not apply to a battery for a portable appliance, or to a battery requiring a charging power of less than 0.2 kw.

(5) A battery requiring a charging power of more than 2kw (calculated on the basis of the maximum charging current and the nominal voltage of the battery and taking into account the characteristic charging curve of the charging appliance) shall be installed in a special room.

(6) If located on deck it shall be enclosed in a cabinet.

(7) A battery requiring a charging power not exceeding 2 kw may be installed below a deck in a cabinet or chest.

(8) Provided that it is protected against a falling object and dripping water, such a battery may be installed in an engine room or in any other well-ventilated space.

(9) The interior surface of a room, a cabinet or a box or any other built-in feature intended for a battery shall be protected against the harmful effect of electrolyte.

(10) Provision shall be made for effective ventilation when a battery is installed in a closed compartment, cabinet or chest.

(11) A forced-draught ventilation shall be provided for a nickel-cadmium battery requiring a charging power of more than 2 kw and for a lead-acid battery requiring a charging power of more than 3 kw.

(12) The air shall enter at the bottom and be discharged at the top so as to ensure total gas extraction.

(13) A ventilation duct shall not include any device that obstructs the air flow such as a step valve.

(14) The required air throughput (Q) in m^3 / h shall be calculated from-

$$Q = 0.11 \times I \times n$$

Where:

I = one quarter of the maximum current admissible by the charging device (A)

n = the number of cells.

(15) In the case of emergency or a standby battery within the onboard network, any other method of calculation taking into account the characteristic charging curve of the charging device may be accepted by the Administration provided that this method is based on the standards of a classification society or a recognised standard.

(16) Where a natural ventilation is used, the cross-section of the ducts shall be sufficient for the required air throughout on the basis of an air-flow velocity of 0.5 m/sec.

(17) The cross-section shall be at least 8,000 mm^2 for a lead-acid battery and 12,000 mm^2 for a nickel cadmium battery.

(18) Where a forced-draught ventilation is used, a fan preferably of the suction type shall be provided, the motor of which shall be clear of the gas or air stream.

(19) A fan shall be designed to preclude the generation of sparks through contact between a blade and the fan casing and to avoid electrostatic charges.

(20) A 'no smoking' sign having a minimum diameter of 100 mm shall be affixed to a door or a cover of a compartment, a cabinet and a chest containing a battery.

(21) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

58. Electrical switch boards

(1) An appliance, a switch, a protective device and a switchboard instrument shall be arranged so as to be clearly visible and shall be accessible for maintenance and repair.

(2) A terminal for a voltage up to 50V, and that for a voltage higher than 50V shall be kept separate and marked appropriately.

(3) A marker plate identifying the circuit of a switch and an appliance shall be affixed to the switchboard.

(4) The current rating and a circuit for a protective device shall be identified.

(5) A live component of an appliance with an operating voltage

greater than 50V installed behind a door shall be protected against accidental contact when a door is open.

(6) The material of a switchboard shall have suitable mechanical strength and be durable, non-flammable and self-extinguishing.

(7) The material shall not be hygroscopic.

(8) An accessory and an equipment for bodily protection shall be available for installing and removing fuse with a high breaking capacity in an electrical switchboard.

(9) A switchboard shall be located in an accessible and a well-ventilated space and be protected against water and mechanical damage.

(10) A piping and an air duct shall be arranged so that a switchboard cannot be damaged in the event of a leakage.

(11) If installation near an electrical switchboard is unavoidable, a pipe in the vicinity shall be fitted with a detachable connection.

(12) A cabinet and a wall recess in which unprotected circuit-breaking equipment is installed shall be of a non inflammable material or be protected by metal or other non-inflammable sheathing.

(13) An insulating grating or mat extending across the front of the main switchboard shall be placed at the operator's position when the voltage is greater than 50V.

(14) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

59. Switches, protective devices and circuits

(1) A generator circuit and a consumer circuit shall be protected against a short circuit and an over current on every non-earthed conductor.

(2) An overload circuit-breaker or a fuse may be used for this purpose.

(3) A circuit supplying power to the steering gear motor and its control circuit shall be protected only against a short circuit.

(4) Where a circuit includes a terminal circuit breaker it shall be neutralised or set at not less than twice the normal current rating.

(5) An output from the main switchboard to an appliance operating at more than 16 ^{A} shall include a load or a power switch.

(6) A propulsion system, a steering system, a rudder position indicator, a navigation system and an appliance with a nominal current rating greater than 16 ^{A}, shall be supplied by a separate circuit.

(7) A circuit of an appliance required for propulsion and manoeuvering shall be supplied directly by the main switchboard.

(8) .A circuit-breaking equipment shall be fitted on the basis of current rating, a thermal or a dynamic and a breaking capacity

(9) A switch shall simultaneously cut off every live conductor.

(10) The switching position shall be identifiable.

(11) An emergency circuit breaker for an oil burner, a fuel pump, a fuel separator and an engine-room ventilator shall be installed outside every space containing the equipment.

(12) A fuse shall be of the enclosed melt type and be made of porcelain or an equivalent material.

(13) An arrangement for changing a fuse shall minimise the danger of operator contact.

(14) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

60. Measuring and monitoring Devices and Lighting

(1) A generator, battery and a distribution circuit shall be equipped with a measuring and a monitoring device where the safe operation of the installation so requires.

(2) A non-earthed network where the voltage is higher than 50V shall include an earth-insulation checking device equipped with a visual and an audible alarm.

(3) Such a device is not required in a secondary installation such

as a control circuit.

(4) An appropriate earth detector equipment shall be provided for any un-earthed circuit of over 50V.

(5) A lighting appliance shall be installed so that an emitted light cannot set fire to any nearby inflammable object or unit.

(6) A lighting appliance in an enclosed space in which a battery is installed or a paint and any other inflammable substance is stored shall be of a type that minimises the risk of explosion.

(7) A lighting appliance in an engine and a boiler room shall be distributed between at least two circuits.

(8) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

61. Signal lights

(1) A switchboard for the control of the lights required by regulation 88 and Schedule 7 shall be installed in the wheel house and shall be powered by a separate cable from the main switchboard.

(2) Each light shall be supplied separately from the light-control switchboard and be separately protected and controlled.

(3) A light forming a group may be applied by a single circuit provided that the switchboard is arranged so that failure of any light activates the alarm in the monitoring equipment.

(4) Where a signal light cannot be monitored directly from the wheelhouse, it shall be monitored by means of an indicator light or a similar device, fitted on the control panel in the wheelhouse.

(5) A fault in the indictor light shall not affect the operation of the light that it monitors.

(6) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

62. Earthing

(1) A metal part that is not intended to carry a current when in use, such as a machine frame and a casing or appliance, a fitting and any accessory, shall be earthed if it is not already mounted in an effective metallic contact with the hull.

(2) In a direct current system, a metal fitting and an accessory and a metal sheath of cable and a duct shall be earthed at both ends at least.

(3) Where a cable is mounted on wood or a plastic substance, only one earth connection need be fitted.

(4) In an alternating current operation, a single-conductor cable and a duct shall not be earthed at more than one point.

(5) An earthing is not required in a circuit less than 50V.

(6) Where the voltage exceeds 50V, the casing of a mobile current-consuming appliance, if not made of an insulating material or not protected, shall be earthed through the feeder cable by means of an additional conductor not normally carrying a current.

(7) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

63. Emergency source of power

(1) A vessel 10m and above in length shall be equipped with an emergency source of power complying with sub-regulation (5) to supply power to the electrical installations listed in sub-regulations (3) and (4).

(2) The emergency source of power and its switchboard shall be installed outside the main engine room and the space where the main switchboard is located and shall be separated from those spaces by fire-resistant and watertight bulkhead.

(3) In a vessel of 25m and above in length, an auxiliary power source shall be capable of supplying simultaneously at least the following electrical installations where they have no independent power supply-

(a) a signal light;

(b) an audible warning device;

(c) an emergency lighting of the following spaces and stations-

(i) an evacuation route,

(ii) a space where life-saving equipment is stored and deployed including the areas identified in regulation 78 (5)(b),

(iii) an engine room and its exit,

(iv) a wheelhouse,

(v) space in which the emergency source of power and switchboard are located,

(vi) the location of a fire extinguisher, a fire pump and the controls of a fixed fire extinguishing system, and

(vii) an area in which passengers and crew are assembled for evacuation;

(d) a radio telephone equipment;

(e) an alarm and loudspeaker system;

(f) an emergency floodlight;

(g) a fire alarm system;

(h) a fire pump, a bilge pump and a fire extinguishing system; and

(i) any other safety installation.

(4) A vessel of 10m and above and less than 25m in length shall be fitted with a source of auxiliary power to the electrical installations listed in sub-regulation 3(a) to (f) inclusive.

(5) The emergency source of power may be-

(a) an emergency set, the fuel supply system and cooling

system which is independent of the main power plant and that in the event of a network failure can provide the entire power supply within 30 seconds and-

(i) is started automatically, or

(ii) can be started manually if it is installed in the immediate vicinity of the wheelhouse or other station that is manned continuously by qualified crew members;

(b) a battery that in the event of a network failure, can provide the equipment listed with power for the required amount of time without being recharged and without any unacceptable fall in voltage and-

(i) is automatically phased to the line, or

(ii) can be connected manually if it is installed in the immediate vicinity of the wheelhouse or other station that is manned continuously by qualified crew members.

(6) The operating time for the emergency source of power shall be determined in accordance with the intended use of the vessel, but shall not be less than thirty minutes.

(7) Failure of main or emergency power equipment shall not adversely affect the operational safety of the electrical installations that it serves.

(8) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

PART VII - FIRE PROTECTION

64. General

(1) A vessel shall be fitted with a fire extinguishing system required by this Part.

(2) A vessel of 50m and above in length shall be fitted with a fixed fire extinguishing system in the engine room which complies with regulation 66 (2), (3) or (4).

(3) The details of a fire extinguishing system shall be entered in the Record of equipment and vessel information.

(4) Where a fire fighting appliance is installed so as to be concealed from view, the partition covering it shall be marked with a red letter “F” at least 100mm high.

(5) In a vessel of 10m and above in length, a fire control plan shall be displayed in the wheelhouse showing the fire division on the vessel, particulars of any fire extinguishing system and the position of a fire pump, a fire hydrant and fire hose and a fire extinguisher.

(6) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

65. Portable fire extinguisher

(1) A power-driven vessel shall carry adjacent to, but clear of, the engine room or engine enclosure-

(a) a box containing sand together with a scoop; or

(b) if required by the Administration, an asbestos blanket.

(2) A portable extinguisher shall be provided on board a vessel as follows-

Length	**Extinguisher type**
Less than 10m	Sand box or bailer
Less than 10m	1 x 4 litre chemical foam
10m to less than 12.5m	1 x 6kg dry powder
10m to less than 12.5	1 x 4 litre chemical foam 2 x 6kg dry powder
12.5m to less than 15m	2 x 6kg dry powder
12.5m to less than 15m	2 x 9 litre chemical foam 2 x 6kg dry power
15m and above	2 x 6kg dry power
15m and above	2 x 9 litre chemical foam 3 x 6kg dry powder

(3) A vessel required by regulation 82 to carry a communication equipment shall in addition to the requirement of sub-regulation (2), carry a portable fire-extinguisher suitably located close to such

equipment, of a type suitable for fighting electrical fires.

(4) A vessel in which the total power output exceeds 110KW shall in addition to complying with the requirements of this regulation, carry a portable fire extinguisher suitable for fighting oil fires located in a suitable place in the engine room.

(5) A passenger vessel and a cargo passenger vessel 12.5m and above in length shall carry twice the number of extinguishers required by sub-regulation (2) for a vessel of its length and type of propulsion.

(6) Any decision on the location of a portable fire extinguisher required by sub-regulation (2) shall be the following recommended locations-

(a) in the wheelhouse;

(b) near points of access from deck to accommodation;

(c) at the point of access to service areas not accessible from the accommodation and in which are installed heating, cooking or refrigerating equipment running on solid or liquid fuel;

(d) in a galley, if an extinguisher in sub-regulation (6c) is not readily accessible from a galley; and

(e) near an engine or at the entrance to an engine room.

(7) A portable fire extinguisher fitted in a vessel, where the size is not specified in sub-regulation (2) shall comply with the following requirements-

(a) the capacity of a portable chemical foam extinguisher shall not be more than 13.5 litres or less than 9 litres, and the contents of a portable dry-powder extinguisher shall be at least 6 kg.

(b) the extinguishing agent shall be suitable for putting out the type of fire most likely to occur in the space or spaces for which the fire extinguisher is chiefly provided.

(c) on a vessel where the operating voltage of the

electrical installation exceeds 50V the extinguishing agent shall also be suitable for a fighting fire in an electrical installation.

(d) any instruction for use shall be clearly shown on each portable extinguisher.

(e) the extinguish substance shall not be Halon or contain a substance that is likely to release a toxic gas during use, such as carbon tetrachloride.

(f) a portable extinguisher using Co^2 may only be used to fight a fire at a specific location such as a control panel and a kitchen;

(g) the quantity of Co^2 in the extinguisher shall not constitute a health hazard; and

(h) an extinguisher which is sensitive to extreme cold or heat shall be so installed or protected as to ensure its continued effectiveness.

(8) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

66. Fire extinguishing system

(1) A fire extinguishing system required by regulations 67 and 68 shall satisfy the following requirements-

(a) the fire pump or pumps shall not be installed forward of the collision bulkhead;

(b) the water pressure in the hydrants shall be maintained at not less than $0.25N/mm^2$;

(c) piping and hydrants shall be so designed that the hoses can easily be connected;

(d) every piping through which flooding of the vessel could occur shall be fitted with a non-return valve;

(e) every nozzle shall be fitted with a device for regulating the water jet at high pressure or spray and for stopping

the flow; and

(f) the entire system shall conform to recognised standards.

(2) A fixed fire extinguishing system fitted in compliance with sub-regulation (1) and using Co^2 as the fire extinguishing medium shall comply with the following requirements -

(a) the Co^2 extinguishing system shall only be actuated in an engine room, a boiler room and a pump room;

(b) a device shall be installed that enables all of the orifices to be protected that are likely to allow air to enter or Co^2 to exit the spaces concerned;

(c) a triggering device shall be installed in such a way that its actuation is possible even in the event of a fire; or

(d) an automatic release of Co^2 shall not be permitted;

(e) the combustion air needed for an internal combustion engine intended for a vessel propulsion shall not be drawn from an engine room, a boiler room or a pump room;

(f) very permanently-installed Co^2 extinguishing system shall be fitted with a warning device having a clearly audible signal even under the noisiest possible operation condition on every space that can be flooded with Co^2 gas and that can be clearly distinguished from all other audible warning devices on board;

(g) such a Co^2 alarm shall also be clearly audible in the adjoining room with any communicating door closed and under an operating condition corresponding to the greatest amount of noise possible, where escape may be affected via the space that is flooded with a Co^2 gas;

(h) the Co^2 alarm shall operate for a suitable period before the release of the Co^2;

(i) a panel containing the following message in red letters on a white background shall be affixed at a suitable point at the exit and entrance of all of the spaces likely to be affected by Co^2. Immediately leave this area on hearing the Co^2 signal (description of signal), “Danger of suffocation”;

(j) the instructions for use shall be affixed in a clearly legible and durable manner to every Co^2 extinguisher actuator;

(k) the pipework reaching every space that is likely to be affected by Co^2 shall be fitted with a shut-off device;

(l) before the extinguishing system is triggered, the alarm required by sub-regulation 2(c) shall previously be activated automatically;

(m) a Co^2 container shall be placed in a room or cabinet that is separate from any other space and is proof against a gas leak;

(n) the door of this room or cabinet shall open outwards, be lockable and bear the legend "Co^2" in red on a white background;

(o) a space for the storage of Co^2 located below the deck shall only be accessible directly from outside;

(p) no direct link with any other space shall be permitted;

(q) a space located beneath the deck shall have adequate stand-alone ventilation that is completely separate from the other on-board ventilation system;

(r) the ventilation aperture shall be arranged in such a way that if there is a leak from the Co^2 container the gas cannot reach the inner part of the vessel;

(s) a cabinet or a lock for the storage of Co^2 shall only be permitted on the deck if it is firmly attached and outside the accommodation area;

(t) if there is a leak from the Co^2 container, it shall not be possible for the gas to reach the inner part of the vessel;

(u) a cabinet or a locker shall protect a container against heat, cold and humidity;

(v) the temperature within any space, cabinet or locker in which Co^2 is stored shall not exceed 50^{oc} ;

(w) a space protected against fire by Co^2 extinguish system shall be equipped with a suitable extinguishing substance extractor;

(x) it shall not be possible to activate the extractor during the extinguishing process;

(y) the piping system installed in an engine room shall enable 85% of the quantity of gas determined in accordance with sub-regulation (2) (1) to be fed into the space within a two-minute period;

(z) the minimum quantity of Co^2 needed for the space or spaces to be protected shall be at least 40% of the gross volume of the space or spaces;

(aa) the volume of Co^2 released shall be taken as $0.56m^3/kg$;

(bb) the filling rate of a Co^2 container shall not exceed 0.75 kg/litre;

(cc) a Co^2 container shall be placed upright and protected against falling;

(dd) a pressurised container, a Co^2 fitting and pipe work shall meet recognised standards; and

(ee) any alarm required by sub-regulation 2 (c) and the fire extinguishing equipment shall be checked annually.

(3) A fixed foam fire extinguishing system-

(a) a fixed fire extinguishing system fitted in compliance with sub-regulation (1) and using foam as the extinguishing medium shall be capable of discharging through a fixed discharge outlet in not more than five minutes a quantity of foam sufficient to cover to a depth of 150mm the largest single area over which oil fuel is liable to be spread;

(b) such installation shall be capable of generating foam suitable for extinguishing an oil fire and means shall be provided for the effective distribution of a foam through a permanent system of piping and a control valve as a cock to a discharge outlet and for a foam to be effectively directed by a fixed sprayer or other main oil fire hazard in the protected space either simultaneously or separately;

(c) such installation shall include a mobile sprayer ready for immediate use in the firing area of the boiler and in the vicinity of the fuel unit;

(d) a fixed foam fire extinguishing installation fitted in an oil cargo space of a tanker shall be capable of distributing on the deck over an oil cargo tank through a fixed discharge outlet in not more than fifteen minutes a quantity of foam sufficient to cover to a depth of at least 50 mm the whole of the tank deck area;

(e) an installation required by sub-regulation (3) (d) shall be capable of operating foam suitable for extinguishing an oil fire and means shall be provided for the effective distribution of the foam through a permanent system of piping and a control valve or cock to a discharge outlet;

(f) there shall be sufficient mobile sprayers capable of being connected to the installation whereby foam can be directed into any tank; and

(g) for the purpose of sub-regulation (3) (d), "tank deck area" means an area equivalent to the overall length of a cargo tank multiplied by the breadth of the vessel;

(4) A fixed fire extinguishing system using an extinguishing substance not specified in these Regulations shall be fitted in accordance with the requirements of the Administration.

(5) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

67. Fire pumps

(1) Every fire pump required to be operated by power shall be operated by a means other than the main engine, except that in the case of a vessel less than 15mm in length fitted with main engines that can be operated independently of the propeller shafting, one of the power fire pumps may be operated from the main engines.

(2) A bilge, ballast and a general service pump of suitable capacity and pressure may be accepted as a fire pump but a pump connected so that it may be used for pumping oil shall not be

accepted as a fire pump.

(3) The water pressure in the hydrants shall be able to be maintained at not less than 0.25N/mm and a power fire pump shall be capable of producing a throw of at least 12m from every nozzle;

(4) The throw may be reduced by the Administration on consideration of the size and type of vessel.

(5) A fire pump shall not be installed forward of the collision bulkhead.

(6) A piping and a hydrant shall be so designed that the hose can be easily connected.

(7) Every piping through which flooding of the vessel could occur shall be fitted with a non-return valve.

(8) The entire system shall conform to recognised standards.

(9) A power-driven vessel 15m and above and less than 30m in length shall be fitted with at least one hand operated fire pump of the rotary type or centrifugal type that shall either be self-priming or be fitted with an effective priming device.

(10) A power-driven vessel 30m and above in length shall be fitted with-

(a) at least one mechanically operated fire pump;

(b) an additional fire pump, that shall not be required to be operated mechanically; and

(c) any additional water pumps as may be required by the Administration having regard to the safety of the vessel, its cargo and passengers.

(11) The additional pump required by sub-regulation (5) shall-

(a) be permanently connected to a fire water-service pipe, if any;

(b) together with its source of power, if any, not situated in the same compartment as the pump required by sub-regulation (3)(d); and

(c) if a hand pump, be of the rotary type.

(12) In a vessel equipped with a water pump, a water-suction valve shall be fitted, operated from outside the machinery space.

(6) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

68. Hydrants and hoses

(1) A power-driven vessel of 15m and above in length shall be provided with a hydrant and fire hose as follows-

(a) the number and position of a fire hydrant shall be such that at least one jet of water may be directed into any part of the vessel by means of a fire hose, which fire hose shall not exceed 18m in length;

(b) at least one hose shall be provided for each hydrant;

(c) a nozzle shall be fitted with a device for regulating the water jet at high-pressure or spray and for stopping the flow;

(d) the interval diameter of the conductor nozzles shall be not less than 13mm;

(e) deck cargo shall not hinder access to a hydrant and a water pipe shall be protected from potential damage by the cargo;

(f) a valve fitted to a water pipe shall be designed to open with an anti-clockwise rotation of the hand wheel;

(g) every fire hydrant shall be equipped with a hose spanner, secured by light chain;

(h) a broad water service pipe and a hydrant shall be of one standard size in any vessel and shall comply with the requirements of the Administration; and

(i) a valve shall be so fitted to water pipe and shall be so arranged that any fire hose coupled thereto may be removed while a fire pump is in operation.

(2) A water service pipe shall be fitted with a means for draining when a pipe is on an exposed deck.

(3) In a vessel 45m and above in length, a hydrant shall be fitted on both port and starboard sides of the deck.

(4) The Administration may as an alternative to a fire hose, approve the provision of a water-service pipe where this is of a sufficient diameter, to enable an adequate supply of water to be provided for the efficient operation of at least one fire hose.

(5) A fire hose required by sub-regulation (1) shall be made of leather, seamless hemp, closely woven flax, canvas or other suitable material and shall be provided with a coupling, a conductor, any other necessary fitting and a nozzle suitable for dealing with every fire.

(6) A fire hose shall be stored so as to be protected against damage.

(7) A fire-fighting equipment shall be kept available and in good order so as to be ready for use at all times.

(7) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

69. Inspections

A fire-fighting arrangement and appliances required by this Part and Part XV shall be inspected annually by service stations authorized by the Administration.

70. Engine room access

(1) A door fitted in a machinery space bulkhead required by regulation 20 (6) and (7) shall as far as practicable, be equivalent in resisting fire to such a bulkhead.

(2) If such a door is not weathertight or watertight it shall be fitted with a self-closing device.

PART VIII - LIFE-SAVING ARRANGEMENTS AND APPLIANCES

71. Interpretation

In this Part, unless the context otherwise requires-

"float free arrangement" means an arrangement that provides for a survival craft to be released automatically from a sinking vessel and be made ready for use;

"launching appliance" means an appliance that provides for a survival craft to be put in the water safely from its stowed location;

"rescue boat" means a boat suitable for rescuing persons in distress from the water and marshalling survival craft;

"rigid" in respect of a rescue boat, means constructed of rigid materials or a combination of rigid materials and inflatable compartments that does not rely wholly on inflatable compartments or spaces for buoyancy and form; and

"survival craft" means a lifeboat, a buoyant apparatus, a life raft, a rescue boat, a flotation device, or a boat suitable for performing the functions of a survival craft.

72. General requirement

(1) Unless expressly provided otherwise, this Part applies to new a vessel.

(2) A life saving appliance on an existing vessel shall be in compliance with recognised standards.

(3) A new and an existing vessel shall have displayed in a prominent place instructions for saving and resuscitating drowning persons.

(4) A survival craft and its launching appliance shall provide capacity for 100% of the total number of persons that a vessel is certificated to carry.

(5) Where the life-saving appliance and its launching appliance, where applicable, is not accessible from both sides of the vessel, an additional life-saving appliance shall be fitted as required by the Administration.

(6) An existing vessel shall, not later than the date these Regulations come into force comply with the requirements of this Part and Part 9 in respect of the following lifesaving equipment-

(a) a lifejacket;

(b) a life buoy

(c) a radar transponder or a radar reflector as and when required by the Administration in the light of the characteristics of the waterway and the equipment carried by a potential rescue vessel operating on the waterway;

(d) a life raft and other buoyant apparatus and a hydrostatic release unit; and

(e) equipment for locating the vessel and survivors in an emergency.

(7) The Administration may in respect of an equipment required by this Part and despite sub-regulation (6), require that an existing vessel comply with the requirements of these Regulations.

(8) The Administration shall approve a fitting, a design and the construction of a lifeboat, a life raft, an open reversible flotation device, a buoyant apparatus and a lifebuoy as appropriate, depending on the size, service characteristic of a vessel and the area within which it is certificated to undertake a voyage, the proximity of the proposed route to a rescue facility and prevailing weather conditions in order to provide an appropriate level of safety for survivors.

(9) Unless otherwise approved by the Administration a vessel 25m and above in length shall be fitted with a lifeboat and a life raft and a vessel less than 25m in length shall be fitted with a flotation device.

(10) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

73. Approval of lifesaving appliances and arrangement

(1) A life-saving appliance required by this Part shall be type approved and any arrangement required by the Part shall be approved by the Administration or by any other Administration or a classification society as determined by the Administration.

(2) In approving a life-saving appliance and any arrangement, the Administration shall ensure that such a life-saving appliance and any arrangement have regard to the recommendations of the Organization or to the provisions of any other national or international standards considered appropriate by the Authority.

(3) Where a novel life-saving appliance or any arrangement is to be approved, the Administration shall ensure that it provides the same safety standard as specified in this Part and where appropriate, such an appliance and any arrangement are evaluated and tested in accordance with the recommendations of the Organization.

74. Emergency communications equipment

(1) In addition to the radio-communications equipment required by Part IX of these Regulations, the Administration may require that the following equipment be carried-

(a) at least 4 rocket parachute flares and 4 hand flares located in the wheel house of the vessel;

(b) parachute flare which complies with the requirements of the LSA Code;

(c) a hand flare which complies with the Administration's requirements;

(d) at least two orange smoke signals which comply with the Administration's requirements; and

(e) an effective emergency means of communication for a two-way communication between a control station, assembly and an embarkation station and a strategic position on board.

(2) Taking into consideration the nature and conditions of a voyage, the Administration may accept a hand flare in lieu of a rocket parachute flare and may specify that a different number of flares be carried.

(3) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

75. Personal life-saving appliances

(1) A vessel of 25m and above in length shall carry at least four lifebuoys complying with the requirements of sub-regulation (9).

(2) A vessel less than 25m in length shall carry at least two such lifebuoys.

(3) The Administration may require more lifebuoys to be carried on a

passenger vessel or a cargo-passenger vessel.

(4) As far as is practicable, a lifebuoy shall be equally distributed on both sides of the vessel.

(5) At least one of the lifebuoys carried shall be provided with a self-igniting and one shall be fitted with a buoyant lifeline.

(6) On a vessel of 25m and above in length, two of the buoys carried shall be fitted with a self-activating smoke signal and shall be capable of quick release from the wheelhouse.

(7) A vessel shall carry lifejacket, complying with the Administration's arrangements for every person on board.

(8) Where the Administration approves the carriage and use of an inflatable life jacket, it shall have a provision for inflation by mouth.

(9) A vessel shall carry in unlocked and clearly marked, dry storage conditions a sufficient number of life jackets as required by the Administration for a person on watch or on duty and for use of a remotely-located survival craft station

(10) On a passenger and a cargo-passenger vessel, ten percent of children's life jackets shall be carried in addition to the number required by sub-regulation (9).

(11) A life jacket shall be located on a vessel so as to be readily accessible and its position shall be plainly indicated;

(12) A life jacket shall be fitted with a retro-reflective material and shall be provided with a whistle firmly secured by a cord.

76. Manning and survival procedures

(1) The provisions of sub-regulation (2) and sub-regulations (6) to (14) inclusive shall apply to new and an existing vessel.

(2) Every person manning a vessel subject to these Regulations shall be trained in launching and operating every type of a survival craft carried on the vessel.

(3) Any illustration and instruction relating to the use of a life-saving appliance in English and shall be exhibited at assembly stations and in crew spaces.

(4) A poster or a sign shall be provided in the vicinity of the stored location of a survival craft and its launching control illustrating the launching and a boarding procedure for a survival craft.

(5) An assembly station and an embarkation station shall be adequately illuminated by a floodlight supplied from the emergency source of electric power.

(6) Each member of the crew shall participate in at least one abandon ship drill and one fire drill every month; and on-board training in the use of a life-saving appliance including a survival craft equipment shall be provided at such a drill.

(7) Every lifeboat, where carried, shall be launched with its assigned operating crew aboard and manoeuvered in the water at least once every three months during an abandon ship drill required by sub-regulation (6).

(8) A rescue boat other than a lifeboat that is also a rescue boat shall be launched with its assigned operating crew aboard and manoeuvered in the water, where reasonable and practicable every month, but in no case less than once every three months.

(9) An emergency instruction, giving a clear instructions to be followed in case of an emergency, shall be provided and exhibited in a conspicuous place within the vessel including the wheelhouse, a machinery space and an accommodation space.

(10) The instructions shall specify details of the general emergency alarm required by regulation (8) and action to be taken by the crew and any other person on board when an alarm is sounded.

(11) An instruction on action to be taken subsequent to the signal for fire on board and the order to abandon the vessel shall also be provided.

(12) The attention of every passenger shall be drawn to the emergency instructions before a vessel departs on a voyage by means of a broadcast over a vessel's public address system or by any other appropriate means.

(13) On a passenger vessel and a cargo-passenger vessel the use of a lifejacket shall be demonstrated either before a vessel departs on the voyage or immediately thereafter.

(14) A record relating to abandon ship drill, fire drill and on-board

training shall be entered in the official log book required by regulation 14.

(15) Any person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding four million dalasis.

77. Survival craft

(1) The arrangement and stowage of a survival craft required by this Part shall be approved by the Administration, having regard to-

(a) the arrangement and stowage of the survival craft in positions providing for demonstrated easy side-to-side transfer at a single open deck level or the provision of additional survival craft to ensure the effective evacuation of the vessel;

(b) the need for carriage of a rescue boat or dinghy in place of one or more survival craft; and

(c) an alternative arrangement that may be adopted, as agreed by the Administration.

(2) An oil tanker shall, in addition to complying with the requirements of regulation 72(4) and (5) carry at least one rigid rescue boat unless-

(a) all of the required survival craft are lifeboats; or

(b) at least one of the required survival craft is a lifeboat complying with the requirements for a rescue boat.

(3) The equipment to be provided in a survival craft shall be determined by the Administration, taking into account the areas within which the vessel is certificated to operate, distance from the nearest ports of refuge and search and rescue services available in the area.

(4) A vessel of 25m and above shall carry a rescue boat which complies with the Administration's requirements, the capacity of which may be substituted for a survival craft required by regulation 72(4) and (5).

(5) If a rescue boat also functions as a work boat, its capacity shall not be counted towards the total capacity required on board the vessel by regulation 72(4) and (5).

(6) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

78. Stowage, launching and recovery arrangements for survival craft

(1) A survival craft shall be stowed-

(a) so that neither the survival craft nor its stowage arrangement shall interfere with the operation of any other survival craft or a rescue boat at any launching station;

(b) as near the water surface as is safe and practicable;

(c) so that a life boat and any other rescue boat required can easily be launched from the vessel; and

(d) in a state of continuous readiness so that two crew members can carry out preparations for embarkation and launching in less than five minutes.

(2) Where a life-raft is not provided with a launching appliance, it shall be stowed with its pointer permanently attached to the vessel by a hydrostatic release unit, a disposable hydrostatic release unit or any other arrangement demonstrated to be no less effective than a hydrostatic release unit.

(3) A survival craft embarkation arrangement shall be so designed that, as far as possible, a lifeboat and davit-launched life-raft can be boarded and launched from the embarkation deck.

(4) A suitable arrangement shall be made for embarkation into a survival craft that shall include-

(a) one or more embarkation ladder or other approved means to provide access to waterborne survival craft;

(b) means for illuminating the stowage position of a survival craft and its launching appliance during preparation for and the process of launching, and also for illuminating the water into which the survival craft is launched until the process of launching is completed, the power for which is to be supplied from the emergency source of power required by regulation 63;

(c) an arrangement for warning every person on board that vessel is about to be abandoned; and

(d) means for preventing the discharge of water into the survival craft.

(5) A rescue boat embarkation and a launching arrangement shall be such that the rescue boat can be boarded and launched in the shortest possible time.

(6) An arrangement shall be provided to enable a rescue boat to be readily recovered.

(7) Where a rescue boat is one of the vessel's survival craft, an embarkation arrangement and a launching station shall comply with the relevant requirements for a survival craft of sub-regulations (1), (4) and (5).

(7) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding four million dalasis.
Marking of survival

79. craft

(1) A survival craft shall be marked in capital letters of the Roman alphabet with-

(a) the name and the Licence number of the vessel;

(b) the name of the Administration or other approving administration; and

(c) the number of persons it is permitted to accommodate.

(2) A label shall be fixed to each inflatable life-raft showing the date of the last service and the date by which the next service is required.

(3) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

80. Operational readiness maintenance and inspection

(1) Before a vessel leaves port and at all times during a voyage every life-saving appliance on board shall be in working order and

ready for immediate use.

(2) Any instruction for on-board maintenance of a life-saving appliance shall be easily understood and illustrated where possible.

(3) A survival craft, a rescue boat and a launching appliance shall be visually inspected weekly to ensure that they are ready for use.

(4) The general emergency alarm system required by regulation 81 shall be tested weekly.

(5) An inspection of a life-saving appliance including a lifeboat equipment shall be carried out monthly using a check list to ensure that such equipment is complete and in good working order;

(6) A report of the inspection shall be entered in the official log-book.

(7) An inflatable life-raft, inflated rescue boat and a hydrostatic release unit shall be serviced at intervals of not more than twelve months at an approved servicing station.

(8) Where service of a vessel and the location of an approved service station makes it impossible to comply with the requirement of sub-regulation (7), the Administration may allow this period to be extended but in no case shall this period be greater than eighteen months.

(9) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

81. General emergency alarm and public address systems

(1) A vessel shall be provided with a general emergency alarm system for summoning any passenger and crew to an assembly station, operated from the wheelhouse and powered from the main and emergency power.

(2) The system shall be capable of operation from any other location required by the Administration and shall be audible throughout all accommodation and normal working spaces.

(3) A passenger vessel shall be provided with a public address system which meets the Administration’s requirements.

(4) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million

dalasis.

PART IX – COMMUNICATIONS EQUIPMENT

82. Radio communications equipment

(1) A vessel of 10m and above in length, a passenger vessel and a cargo-passenger vessel regardless of length shall carry a VHF apparatus capable under normal conditions of transmitting and receiving on a frequency designated by the Administration over distance of 50 nautical times.

(2) This apparatus shall consist at least, of a VHF set operating on Channel 16.

(3) Where the vessel trades outside the VHF range, it shall comply with the appropriate requirements of GMDSS.

(4) In respect of a vessel which operates on a near coastal voyage, such a vessel shall in addition to above, have in place an Automatic Identification System (AIS).

(3) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

83. Emergency position indicating radio beacon

(1) A vessel of 10m and above in length shall carry an emergency position indicating radio beacon (EPRIB) on a frequency of 406 MH_z, VHF, EPIRB, or personal locator beacon. Every EPIRB shall be registered with the Administration.

(2) The Administration may exempt a vessel from the provisions of sub-regulation (1) where it deems it unreasonable and impracticable.

84. Radar reflector and transponder

(1) A passenger vessel shall be fitted with a radar transponder where required by the Administration in the light of the characteristics of the waterway and the equipment carried by a potential rescue vessel operating on the waterway.

(2) A radar transponder, where required by sub-regulation (1) or regulation 72(6) (c) shall operate in the $9GH_z$, band.

(3) The radar transponder shall be stowed on the vessel so that it can be rapidly placed in any survival craft.

(4) A vessel of less than 10m shall where required by the Administration, carry a radar reflector fitted as high on the vessel as is practicable in place of a transponder.

(5) The Administration may accept a radar reflector in lieu of the radar transponder required by sub-regulation (1) or regulation or regulation 72(6) (c).

(6) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

PART X – SAFETY OF NAVIGATION

85. Application

This Part applies to every vessel irrespective of size or length.

86. Safety obligations and avoidance of collisions

(1) A master and any person in charge of a vessel shall comply with the requirements of Schedule 7 in relation to the prevention and avoidance of collisions.

(2) No provision of this Part or Schedule 7 shall exonerate any vessel or the owner, master, skipper or crew thereof from the consequences of any failure to comply with these Regulations or of the neglect of any precaution which may be required by the ordinary practice of seamanship, or by the special circumstances of the case.

(ii) In construing and complying with this Part or Schedule 7, due regard shall be had to all dangers of navigation and collision and to any special circumstances including the limitations of the vessel involved, which may make a departure from the Regulations necessary to avoid immediate danger.

(2) A master or a person in charge of a vessel shall not navigate such vessel in a manner or at a speed likely to -

(a) endanger the safety of any person in that or any other vessel; or

(b) cause damage to any other vessel or to any mooring,

jetty or other property;

(3) A person shall not-

(a) endanger the safety of any person in any vessel; or

(b) cause damage to any vessel or to any moorings, jetty or other property.

(5) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

87. Compasses and Navigation

(1) Where required by the Administration, a power-driven vessel of 5m and above and less than 25m in length shall be provided with at least one compass.

(2) Where required by the Administration, power-driven vessel of 10m and above in length may be fitted with-

(a) a standard magnetic compass, except as provided in sub-regulation (5).

(b) a steering magnetic compass, unless handling information provided by the standard compass required in accordance with paragraph (a) is made available and is clearly readable by the helmsman in the wheelhouse;

(c) adequate means of communication between the standard compass position and the normal navigation control position to the satisfaction of the Administration; and

(d) means for taking bearings as nearly as practicable over an arc of the horizon of 360^0.

(3) A magnetic compass required by sub-regulation (2) shall be properly adjusted to the Administration's requirements and their table or curve of a residual deviation shall be available on board at all times.

(4) A vessel of 25m and above in length shall carry a spare magnetic compass, interchangeable with the magnetic compass, unless the steering compass required by sub –regulation 2 (a) or a

gyro-compass is fitted.

(5) The Administration may, if it considers it unreasonable or unnecessary to require a standard magnetic compass to be fitted, exempt an individual vessel or a class of vessels from this requirement if the nature of the voyage, the proximity of the route to land or the type of vessel does not warrant carriage of a standard compass.

(6) If a vessel is so exempted, a suitable steering compass shall be carried with means for taking bearings to recognised standards.

(7) A vessel of 10m and above in length shall be fitted with a Global Positioning System receiver where required by the Administration.

(8) A passenger vessel and a cargo passenger vessel 15m and above in length shall be fitted with a radar installation capable of operating in the 9 GH_Z frequency band;

(9) A vessel may be exempted from compliance with this requirement at the discretion of the Administration, provided that in the case of a seagoing vessel the equipment fitted is fully compatible with the radar transponder for search and rescue required by regulation 85.

(10) Where required by the Administration, a passenger vessel and a cargo passenger vessel of 15m and above in length shall be fitted with an echo sounder.

(11) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

88. Navigation and other lights and sound signals

(1) A vessel shall be fitted with the lights and sound signals specified Schedule 7.

(2) The master or a person in charge of a vessel, in any vessel under the command of that person, shall be responsible for-

(a) displaying the lights and shapes prescribed by Part 10 and Schedule 7;

(b) making the signal prescribed by Part 10 and Schedule 7; and

(c) taking the actions required by Part 10 and Schedule 7;

(3) Where in Schedule 7, a certain action is expressed as being required to be taken by the vessel, it shall be taken by the master or the person in charge of the vessel.

(4) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

89. Action on receipt of distress signal

(1) The master or a person in charge of a vessel, on receiving a signal of distress, or information from any source that a vessel or an aircraft is in distress, shall proceed with all speed to the assistance of such vessel or, informing it and any monitoring station, if possible, of this action, unless-

(a) it is not possible to do so;

(b) in the special circumstances of the case, it is unreasonable to do so; or

(c) the master is released under the provisions of sub-regulation (2).

(2) The master or a person in charge of a vessel shall be released from the obligation imposed by sub-regulation (1) when informed by any monitoring station or a vessel that the services are no longer required.

(3) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

90. Distress signals and equipment

(1) A vessel shall not proceed on a voyage or attempt to proceed on a voyage without being equipped with a means of making a distress signal, in the form of equipment and apparatus specified in Schedule 7, which shall be efficient and kept in working order.

(2) The minimum equipment to be provided to comply with sub-regulation (1), where not otherwise specified by Schedule 7 shall be an electric torch or a lantern and a hand flag.

(3) The signals that shall be used or displayed when a vessel is in distress and requires assistance are specified in Schedule 7.

(4) A person shall not use any of the signals referred to in sub-regulation (3) or any signals that may be confused with such a signal, except for the purpose of indicating that a vessel is in distress.

(5) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

91. Nautical Publications

(1) Where required by the Administration, every vessel, shall carry adequate, proper, and up-to-date charts, sailing directions, lists of navigational aids, notice to mariners, tide tables and all other nautical publications necessary for the intended voyage.

(2) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

92. Proximity to booms

(1) A vessel shall not proceed nearer than a point 90m upstream from a boom above any dam wall.

(2) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

93. Instructions and notice to mariners

(1) A company, a master and a person in charge of a vessel shall comply with any instruction or notice published by the Administration for the purpose of enhancing maritime safety.

(2) A company, a master or a person in charge of a vessel who fails without reasonable cause to comply with sub-regulation (1) commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

PART XI - HEALTH AND SAFETY IN THE CREW'S ACCOMMODATION AND WORKING STATIONS

94. General

(1) The Administration may accept a vessel or a class of vessels operating solely in coastal and inland waters of The Gambia from some of the provisions of this Part.

(2) A vessel shall have accommodation for a person normally living on board, and at least for the number of persons identified in the Certificate of Manning required by Part XIII.

(3) Accommodation shall be so designed, arranged and fitted out as to meet the health, safety and comfort needs of those on board.

(4) The Administration may authorise an alternative to the requirements of Schedule 11 if the health and safety of those on board are ensured by other means.

(5) This Part does not apply to a fishing vessel, except to the extent so required by the Administration.

95. Vessel design requirements for health and safety

(1) Accommodation shall be adequately ventilated even when a door is closed.

(2) Where there is deck level access to the accommodation and the difference in level is 300mm or more, the accommodation shall be accessible by means of a companionway.

(3) Every living and sleeping quarters shall have at least two exists that are as far apart from each other as possible and that serve as an escape route.

(4) An exit may be designated as an emergency exit.

(5) Sub-regulation (4) shall not apply to an area with an exit leading directly onto the deck or onto a corridor that serves as an escape route, provided the corridor has two exists at a distance from each other and giving out the part and starboard sides of a vessel.

(6) An emergency exist, that may include "skylight and a glazing, shall have a clear opening of at least 0.36^{m2} and a shortest side no less than 500mm and permit a rapid evacuation in an emergency.

(7) An escape route shall be fixed and insulated with a fire-resistant material and its usability assured at all times by appropriate means such as a ladder or a step.

(8) Every accommodation shall be protected against noise and vibration.

(9) A headroom in the accommodation shall not be less than 2m.

(10) A vessel shall have at least one day room partitioned off from the sleeping quarters except where the construction or the type of vessel makes it impracticable.

(11) The free floor area of the living quarters shall not be less than 2 ^{m2} per person, and in any event not less than 8 ^{m2} in total (not counting furniture except tables and chairs).

(12) The cubic capacity of each unit in the living and sleeping quarters shall not be less than 7 ^{m3}

(13) The volume of air per person shall be, at least, 3.5m^3 in living quarters.

(14) In a sleep quarters, it shall be at least 5 ^{m3} for the first occupant and at least 3 ^{m3} for each additional occupant (not counting the volume of furniture).

(15) A sleeping cabin shall, as far as possible, be intended for no more than two persons.

(16) A berth shall be no less than 300mm above the floor; and where one berth is placed over another, the headroom above each berth shall be not less than 600mm;

(17) A door shall have a total height, a coaming included of at least 1900mm and clear width of at least 600mm.

(18) The prescribed height may be achieved by means of a sliding or a hinged cover or a flap and it shall be possible to open a door from either side.

(19) A coaming shall comply with the requirements of regulation 26.

(20) A companionway shall be permanently fixed and safely negotiable and it shall be deemed to be safely negotiable when-

(a) it is at least 600mm wide;

(b) the thread is at least 150mm deep;

(c) the step is non-ship; and

(d) a companionway with more than three steps shall be fitted with at least one handrail or handle.

(21) A pipe carrying a dangerous gas or liquid, and particularly a pipe under high pressure in which a leak could pose a danger to human beings shall not be located in the accommodation or in a corridor to the accommodation.

(22) A stream pipe and a hydraulic system pipe may be so located, provided it is fitted in metal sleeves.

(23) A liquefied gas piping may be located in the accommodation or in corridors leading to the accommodation when it is connected to an installation for a domestic purpose.

(24) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

96. Sanitary installations

(1) The minimum sanitary installation provided in a vessel with accommodation shall include-

(a) one toilet per accommodation unit as per six crew members ventilated with fresh air;

(b) one wash basin with a waste pipe, connected to hot and portable water per accommodation unit or per four crew members;

(c) one shower or bath connected to hot and cold portable water per accommodation unit as per six crew members;

(d) a shower base with a non slip surface;

(e) If water supplying a shower is not supplied through a controlled temperature device, a suitable notice shall be provided to warn against the risk of scalding.

(2) A sanitary installation shall be in close proximity to the accommodation.

(3) A toilet shall not have direct access to a gallery, a mess room or a combined day room/gallery.

(4) A toilet compartment shall have a floor space of at least $1m^2$ and shall be not less that 750mm wide and 1100 mm long.

(5) A toilet compartment in a cabin for no more than two persons may be smaller.

(6) Where a toilet contains a wash basin and/or shower and/or bath, the surface area shall be increased at least by the surface area occupied by its wash basin and/or shower and/or bath.

(7) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

97. Galleys

(1) A vessel shall be fitted with a galley except where the construction or the type of vessel makes it impracticable.

(2) A galley may be combined with a day-room.

(3) A galley shall contain-

(a) a cooker;

(b) a sink with waste connection;

(c) a supply of portable water;

(d) a refrigerator; and

(e) a storage and working space adequate for the functions for which the galley is designed.

(4) The eating area of a combined galley/day-room shall be large enough to accommodate the number of crew normally using it at the same time.

(5) A seat shall be not less than 600mm wide.

98. Portable water

(1) A vessel with accommodation shall be fitted with one or more portable water tanks.

(2) A portable water tank filling an aperture and a portable water pipe shall be marked as being intended exclusively for portable water.

(3) A portable water filler neck shall be installed above the deck.

(4) A portable water tank shall-

(a) be protected against excessive heating;

(b) have a capacity of at least 150 litres per person normally living on board and at least 150 litres per person identified in the Certificate of Safe Manning required by regulation 121;

(c) be made of a material that resists corrosion and poses no physiological danger;

(d) have a suitable, lockable opening to enable the inside to be cleaned;

(e) have a water level indicator; and

(f) have a ventilation cap to the open air or be fitted with an appropriate filler.

(5) A portable water tank shall not share a wall with another tank.

(6) A portable water pipe shall not pass through a tank containing any other liquid.

(7) A connection shall not be permitted between the portable water supply system and any other pipe.

(8) A pipe carrying gas or liquid other than portable water shall not pass through a portable water tank.

(9) A portable water pressure vessel shall operate only on uncontaminated compressed air.

(10) Where it is produced by means of a compressor, an

appropriate air filter and an oil separator shall be installed directly in front of the pressure vessel unless the water and the compressed air are separated by a diaphragm.

(11) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

99. Heating, cooling and ventilation

(1) Every accommodation shall be heated or cooled as appropriate in accordance with its intended use and the area of operation of a vessel.

(2) A heating and cooling installation shall be appropriate for the climatic conditions in that area.

(3) A living and a sleeping quarters shall be adequately ventilated even when a door is closed.

(4) The inflow and the evacuation of air shall ensure adequate air circulation in every climatic condition in which a vessel operates.

(5) The ventilation system shall provide at least three changes of volume per hour.

(6) The accommodation shall be so designed and arranged as to prevent as far as possible the penetration of foul air from any other area of the vessel such as an engine room or a hold.

(7) Where forced-air ventilation is used, the intake vents shall be so placed as to satisfy the requirement of sub-regulation (6).

(8) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

100. Other accommodation requirements

(1) Every crew member living on board shall have an individual berth and an individual clothes locket fitted with a lock.

(2) A suitable place for storing and drying work clothes shall be provided, but in the sleeping quarters, except it is demonstrated to the Authority that a location in the sleeping quarters is the only one practicable for storing or drying work clothes.

(3) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

101. Means of access in the accommodation

(1) A means of access to the accommodation shall be so arranged and of such a dimension that it can be used without danger or difficulty, and this requirement shall be deemed to be fulfilled when-

(a) there is enough space in front of the opening to the access to permit unimpeded entrance;

(b) means of access are clear of any installation that present a hazard such as a winch, towing or hauling gear and loading gear;

(c) the clear width is at least 600mm and the total height of the access plus coaming is at least 1900mm;

(d) the height required by sub-paragraph (c) may be achieved by using a hood or a cover; and

(e) the means of access at an emergency exit is insulated and covered with a fire resistant material.

(2) A door and a hinged cover shall be fitted with a means of closure that can be operated from either side and shall be arranged such that an accidental opening or closing of a door is not possible.
.
(3) Where there is no deck level access to the accommodation, and the difference in levels is 300mm or more, the accommodation shall be accessible by means of a companionway meeting the requirements of regulation 95(20).

(4) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

102. Accommodation floors, walls and deckheads

(1) A floor, wall and a deckhead shall be fitted and arranged so that they may be cleared easily.

(2) A floor covering shall be non-slip.

(3) A surface cladding shall not be harmful to health.

(4) The accommodation, including a passage in the part of the vessel used for crew accommodation shall be insulated against cold and heat from outside or from a nearby or an adjacent compartment.

(5) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding two hundred penalty units.

103. Daylight and lightning in the accommodation and working areas

(1) Every part of the accommodation and any working space shall be adequately lit by electric lighting.

(2) A living quarter, a sleeping quarter and a galley shall receive daylight and if practicable, look on to the outside of the vessel.

(3) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

104. Safety devices

(1) A vessel shall be so fitted out that the crew can move about and work easily.

(2) A moving part and an opening in the deck shall be protected by a safety device, plating a guard rail and a handrail as appropriate.

(3) A winch and a towing hook shall be designed to ensure safe operation.

(4) Any installation required for work on board shall be so designed, sited and protected as to make on-board manoeuvres, maintenance and repairs safe and easy.

(5) The following areas shall be treated or covered so as to present a non-slip surface-

(a) a deck in the vicinity of a winch and a bollard;

(b) an engine-room floor;

(c) a landing and a companionway; and

(d) a top of a bollard.

(6) The top of a bollard, any obstacle in areas where crew move about and the treads of a companionway shall be marked by light-coloured paint.

(7) An appropriate device shall be provided for preventing the accidental movement of a stacked hatch cover.

(8) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

105. Safety of working stations

(1) A working station shall be readily and safely accessible.

(2) A companionway, a ladder, a step or a similar arrangement shall be provided where there is a difference of over 500mm in the level of an access, an exit and passenger way.

(3) A companionway meeting the requirements of regulation 95 (20) shall be provided where the level of a permanently manned working station differsby more than 1m from the levels from which access is to be gained.

(4) An emergency exit shall be already marked.

(5) The number, design and dimensions of an exit including an emergency exit, shall be consistent with the purpose and size of the compartments.

(6) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

106. Dimensions of working stations

(1) A working station shall be dimensions such that each crew member working in them has adequate freedom movement.

(2) A permanently manned working station shall be of sufficient dimensions to ensure-

(a) a net value of air not less than $7m^3$ except for the

wheelhouse of a vessel less than 40m in length; and

(b) a free floor area and headroom for each working station that gives adequate freedom of movement for operation and inspection and for ordinary maintenance and repair work.

(3) The clear width of a side-deck shall be not less than 600 mm. This width may be reduced around bollards.

(4) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

107. Protection against falling

(1) A working station close to the water or in a position involving a difference in level of more than 1m shall be equipped so as to prevent crew slipping or falling.

(2) On a crewed vessel, protection against slipping or falling overboard shall be provided by a guardrail comprising a handrail, an intermediate protection at knee level and a toe rail.

(3) An uncrewed vessel shall be provided with such protection by means of a handrail.

(3) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

108. Access, door and companionway of working stations

(1) The size and arrangement of a passageway, an access and a corridor for the movement of a person and cargo shall be such that they may be negotiated without the risk of accident, and the minimum requirements are deemed to be fulfilled when-

(a) the space in front of an access opening permits unimpeded movement;

(b) an opening is located clear of an installation that might present a source of danger;

(c) the clear width of the passageway is consistent with the purpose of the working station and is not less than

600mm, except where the construction, or the type of vessel makes it impracticable, in which case a width of no less than 500mm shall be provided; and

(d) the headroom is not less than 1900mm.

(2) The design and the layout of a door shall be such as not to endanger the person opening or closing it.

(3) A structure for passage from one level to another particularly a companionway, a ladder and a step shall be such that its use if free of hazard.

(4) A minimum requirement is fulfilled when-

(a) a companionway and a ladder are permanently fixed or secured against slipping and overturning;

(b) a companionway is not less than 500mm wide, the width between a handrail is not less than 600mm and a ladder and a step are not less than 300mm wide;

(c) the depth of the tread is not less than 150mm;

(d) a ladder and a step can be safely negotiated, with no risk of slipping due to the configuration of the ladder or step;

(e) a companionway with more than four steps are fitted with a hand-rail;

(f) a vertical ladder is fitted with a hand-hold above the exit;

(g) a portable ladder, whenever used, is secured against over turning and slipping and is long enough when inclined at an angle of 60 from the horizontal, to extend 1m beyond the rim of a hatchway or the upper landing of the ladder;

(h) a portable ladder shall be at least 400mm wide and shall be 500mm wide at the base; and

(i) a rung forming part of a ladder is fixed in the upright so that itcannot turn or become detached

and the maximum distance between a rung is 300mm.

(5) An emergency exit and a port or a skylight designed for use as an emergency exit shall have an area of clear opening of at least 0.36m^2 and the smallest dimension shall be at least 500mm.

(6) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

109. Deck surfaces, walls, deckhands and openings

(1) A floor and a hold flooring at an internal working station, a deck surface at an external working station and every surface on which personnel may move about shall be strongly constructed and designed to prevent slipping and falling.

(2) An opening in a deck or a floor shall, at all times when it is open be provided with protection against falling.

(3) A floor, a deck surface, a hold flooring, a wall and a deckhand shall be designed and arranged so as to easily be cleared.

(4) A port and a skylight shall be arranged and fitted so that they can be handled and cleaned without risk.

(5) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

110. Ventilation and heating of working stations

(1) A closed space in which work is carried out, with the exception of a storeroom shall be ventilated.

(2) The ventilation device shall be arranged so as not to cause a draught and shall provide an adequate and a regularly renewed supply of air to a working station for the persons in it.

(3) Where the natural rate of air renewed is less than five changes of volume per hour, mechanical ventilation shall be provided.

(4) The operation of combustion or ventilation equipment shall not result in a deterioration of the quality of the air in any working station.

(5) A heating or a cooling equipment capable of maintaining an adequate temperature in a permanent working station shall be installed in a vessel where required by the Administration.

(6) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

111. Natural light and lightning of working stations

(1) Where practicable, a working station shall receive adequate natural light even when a door is closed.

(2) A permanently manned working station shall look out directly on to the outside of the vessel in so far as operating or design requirements make this practicable.

(3) A lightning shall be arranged so as to eliminate dazzle as far as practicable.

(4) A light switch in a working station shall be installed in a readily accessible position near a door.

(4) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

112. Protection against noise and vibration

(1) A permanent working station and any installation in them shall be designed and sound-proofed so that the safety and health of any crew member is protected against noise and vibration.

(2) The ambient noise level in a permanently manned working station shall not exceed 90 d B (A) at head level.

(4) A clearly worded warning shall be fixed near each of the means of access to a space in which a high noise level occurs.

(4) If 90 d B (A) is exceeded in the space specified in sub-regulations (1), (2) and (3) inclusive, an individual noise device shall be provided for each person working in such a space.

(5) A working station shall be located, fitted out and designed in such a way that a crew member is not exposed to harmful vibration.

(6) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

PART XII - CARRIAGE OF CARGOES AND DANGEROUS GOODS

113. Provisions of the Act to apply

Except otherwise stated in this Part, the provisions of sections 337 to 344 inclusive of the Merchant Shipping Act 2013 and any Regulations made under the said provisions shall mutatis mutandis apply to these Regulations.

114. Signal to be displayed when handling explosives

The master of a vessel loading, discharging or transferring an explosive shall hoist, where it can best be seen, the International Code flag "B" and shall display an all-round red light during the hours of darkness.

115. Carriage of livestock

(1) Any livestock on board a vessel or a voyage longer than one hour shall be carried in compliance with Schedule 5.

(2) The area where livestock is carried shall be segregated from living and working spaces.

(3) Livestock shall not be carried in a passenger ship or a cargo passenger ship.

PART XIII - CERTIFICATES OF COMPETENCY AND MANNING

116. Interpretation

In this Part, unless the context otherwise requires –

"chief engineer officer", "oil tanker", "propulsion power" and

"rating" have the meanings assigned to them by regulation 37 of the Merchant Shipping (Training Certification, Manning and Watchkeeping) Regulations 2014.

117. Certificates of competency – mandatory minimum requirements for certification

Unless otherwise expressly indicated, the provisions of schedules 8, 9, 10, 11, 12 and 13 of the Merchant Shipping (Training, Certification, Manning and Watchkeeping) Regulations shall apply to a vessel to which these Regulations apply.

118. Standards of competence for Certification as Deck Officer in charge of near Coastal vessels

Regulation 118

Column 1	**Column 2**	Column 3
Master Ferries	2 years as holder of a Mate Ferries Certificate including 1 year as an officer in charge of a navigational watch whilst holding that certificate on vessels of a size and type as determined by the Administration.	20 years
Mate Ferries	2 years as Quarter master in any capacity up to boatswain on vessels of a size and type as determined by the Administration.	18 years
Standard of Competency for a Quartermaster	Syllabus for an efficient deckhand including the qualification requirements for ratings forming part of a navigational watch.	16 years

Note to Regulation 118

1. The qualifying experience shown here is for guidance and is not mandatory unless specified or otherwise required by the Administration.

119. Standards of competency for certification as engineer

Regulation 119

Column 1	Column 2	Column 3
Chief Engineer Ferries	2 years as holder of an OOW (certificate) including 1 year as an officer in charge of an engineering watch on vessels of a propulsion power and type as determined by the Administration.	20 years
OOW (Limited)	2 years as apprentice or engine attendant on vessels of a propulsion power and type as determined by the Administration.	18 years

Note to Regulation 119

1. The qualifying experience shown here is for guidance and is not mandatory unless specified or otherwise required by the Administration.

120. Safe manning

(1) In establishing the minimum safe manning for a vessel, the Administration shall observe the broad principles set out in sub-regulation (2) and (3) and shall as far as is practicable and reasonable, take into account the guidelines set out in Annex 1 of the principles agreed by the Organisation.

(2) In all cases the Administration shall ensure the capability to-

(a) maintain a safe navigational, engineering and a radio watches in accordance with Schedule 63 of the Merchant Shipping (Training, Certification, Manning and Watchkeeping) Regulations 2014;

(b) moor and unmoor the vessel safely;

(c) manage the safety functions of the vessel when employed in a stationary or near stationary mode;

(d) perform operations, as appropriate for the prevention

of damage to the marine environment;

(e) maintain the safety arrangements and the cleanliness of all accessible spaces to minimise the risk of fire;

(f) provide for medical care on board the vessel;

(g) ensure safe carriage of cargo during transit; and

(h) inspect and maintain, as appropriate, the structural integrity of the vessel.

(3) In addition to the above, the Administration shall ensure the ability to-

(a) operate every watertight close arrangement and maintain it in effective condition and also deploy a competent damage control;

(b) operate all on-board fire-fighting and emergency equipment and life-saving appliances, carry out such maintenance of this equipment as is required to be done at sea, and muster and disembark all persons on board; and

(c) operate the main propulsion and auxiliary machinery and maintain the machinery in a safe condition to enable the vessel overcome the foreseeable perils of the voyage.

(4) In applying the principles set out in sub-regulations (2) and (3), the Administration shall also take account of Gambian laws which cover -

(a) watchkeeping;

(b) hours of work or rest;

(c) safety management;

(d) certification of seafarers;

(e) training of seafarers;

(f) occupational health and hygiene; and

(g) crew accommodation.

(5) The following on-board functions, when applicable, shall also be taken into account when determining safe manning-

(a) on going training requirements for all personnel including the operation and use of fire fighting and equipment, life saving appliances and watertight closing arrangements;

(b) specialised training requirement for a particular type of vessel;

(c) provision of proper food and drinking water;

(d) need to undertake emergency duties and responsibilities; and

(e) need to provide training opportunities for entrant seafarers to allow them to gain the training and experience needed.

121. Safe manning certificate

(1) A vessel unless exempted by the Administration shall carry a Certificate of Safe Manning issued by the Administration containing the information set out in the form of the Certificate of Safe Manning in Schedule 1.

(2) Guidance on the number and grade of certificated persons to serve as masters and chief engineers on a particular type and size of vessel is tabulated in sub-regulations (3) and (4) respectively.

(3) Sub-regulation (3): Master

Description of vessels Vessel	**Passenger vessels and cargo-passenger**			
No. of certificated officers to be carried				
Length	Quartermaster	Mate	Quarter Master	Mate
less than 10m				1
above 10m and less than 20m				
above 20m			1	

and less than 35m		
above 35m and less than 50m	1	1
above 50m	1	1

Sub-regulation (4) Chief Engineer

Description of Vessel	**All vessels except fishing vessels**		
No. of certificated engineer officers to be carried			
Propulsion Power	**Chief Engineer**	**OOW**	**E/R Hand**
less than 200KW			1
Above 200KW and Less than 350KW			
Above 350KW and less than 750KW	1		
Above 750kW	1	1	

PART XIV - POLLUTION PREVENTION

122. Provisions of Marine Pollution Legislation to apply

Except where otherwise stated, the provisions of any legislation on Marine Pollution in force in The Gambia shall apply to a vessel to which these Regulations apply.

123. Precautions relating to the load or discharge of oil or oily mixtures

(1) The following precautions shall be observed when loading or transferring oil, bunkering or discharging oil mixtures-

(a) the vessel shall be securely moored at a berth or jetty by means of ropes or wires that are in good condition and of appropriate size for the loads to which they are

likely to be subjected;

(b) prior to the commencement of any operation involving oil or oil mixture all valves through which oil could be discharged into a waterway shall be inspected to ensure that they are closed and, if not in operation they shall be secured to ensure that they cannot be opened;

(c) every scrapper hole to which oil or oil mixture would have access in the event of a spillage shall be plugged tight for the duration of any operation involving oil or oil mixture;

(d) dry material, such as sand or an oil absorbent, shall be available at all times during any operation involving oil or oil mixture to deal with any small spill that may occur;

(e) any oil that is spilled shall be immediately cleaned up and contained for subsequent disposal. Spilled oil or oil mixture shall not be washed, or otherwise discharged over board;

(f) a hose and any other equipment used in any operation involving oil or oil mixture shall be inspected so before the commencement of the operation and at regular intervals during such operation to ensure the early detection of leakage from or damage to the hose or equipment; and

(g) when transferring fuel oil within a vessel any overboard discharge valve from the oil transfer pump shall be properly closed and secured against accidental opening.

(2) A properly qualified person, specifically appointed for the purpose shall supervise all bunkering operations on the vessel.

(3) A close co-operation and continuous communication shall be maintained with shore staff throughout all bunkering operations.

(5) A vessel shall be fitted with a means of preventing fuel oil from escaping into a machinery space bilge.

(6) This may be effected by means of a special oil bilge, a gutterway and a tray beneath an oil pump, a heater and a similar equipment.

(7) Such an arrangement shall be inspected regularly and any

accumulation of oil transferred to a storage tank before the risk of overflow into a machinery space bilge may arise.

(8) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding three million dalasis.

124. Oily water separating equipment

A vessel 35m and above in length shall be fitted with an oily water separating equipment or a filtering system that complies with the applicable international standards for such equipment and that is capable of producing an effluent having an oil content of less than 100 parts per million by volume or such lesser oil content as is required by the Administration.

125. Training and equipment

(1) An appropriate vessel and shore personnel shall receive training in responding to and cleaning up of spillage.

(2) An appropriate equipment to deal with and clean up an oil spill shall be available in a location designated by the Administration.

126. Contingency plan

(1) The Administration shall ensure that a contingency plan is in place in each port and harbour located in a designated waterway to facilitate response to an accidental spillage of oil.

(2) The contingency plan shall-

(a) identify the authority designated to command and co-ordinate response to a spillage;

(b) be integrated, as appropriate, with any other contingency plan in place in relation to pollution response or other waters;

(c) be approved by appropriate officials;

(d) contain a list of key response personnel and their contact information; and

(e) establish the procedures whereby, through the designated authority, all relevant government and industry agencies

may contribute to an effective response to the spillage.

PART XV - FISHING VESSELS

127. Fire protection

(1) A fishing vessel less than 10m in length shall be equipped with-

(a) one fire bucket fitted with a lanyard not less than 2m in length; and

(b) one portable four litre chemical foam extinguisher.

(2) In addition to the requirements of sub-regulation (1), a power-driven fishing vessel shall be equipped with one portable fire extinguisher suitable for extinguishing an oil fire.

(3) A fishing vessel of 10m and above and less than 15m in length shall be equipped with-

(a) one portable four litre chemical foam fire extinguisher;

(b) one portable fire extinguisher suitable for extinguishing an oil fire; and

(c) one hand fire pump and one fire bucket fitted with a lanyard not less than 2m in length, or two fire buckets, one fitted with a lanyard not less than 2m in length.

(4) A fishing vessel 15m and above in length shall, as required by the Administration, be equipped with the fire fighting equipment required by Part VII for a cargo vessel of equivalent length.

128. Life-saving arrangement and appliances

(1) A fishing vessel less than 10m in length shall be equipped with-

(a) a life-jacket for each person on board, fitted with a whistle and a retro-reflective tape;

(b) one life buoy fitted with no less than 18m of buoyant line;

(c) two hand flares; and

(d) one orange smoke signal.

(2) A fishing vessel of 10m and above and less than 15m in length shall be equipped with-

(a) a life-jacket for each person board, fitted with a whistle and a retro-reflective tape;

(b) two lifebuoys, each fitted with no less than 18m of buoyant line;

(c) three hand flares; and

(d) one orange smoke signal.

(3) A fishing vessel of 15m and above in length shall, as required by the Administration be equipped with a life saving arrangement and an appliance required by Part 8 for a cargo vessel of equivalent length.

(4) A person on board a fishing vessel shall wear the life jacket required by Part XV or Part VIII at all times when so directed by the skipper or a person in charge of a fishing vessel.

129. Safety of navigation

(1) A fishing vessel of less than 7m in length that is not power-driven shall have ready at hand an electric torch or a lantern showing a white light that shall be displayed in sufficient time to avoid a collision.

(2) Lights and shapes shall be displayed by a fishing vessel of 7m and above in length in compliance with Part X.

(3) In relation to the prevention of collision, a fishing vessel shall comply with Part X.

130. Crews of fishing vessel and manning

(1) A fishing vessel of less than 12.5m in length shall carry sufficient appropriately qualified crew as determined by the Administration to-

(a) navigate the vessel effectively;

(b) conduct fishing and related operations; and

(c) maintain a look out for other vessels.

131. Health and safety in crew's accommodation and working stations

A fishing vessel on which a crew is engaged to perform work overnight shall be fitted with-

(a) weather proof shelter with an adequate seating arrangement and a storage space; and

(b) a proper and adequate lavatory facility providing for the storage, treatment and disposal of human wastes.

PART XVI - VESSEL SECURITY

132. Application

The regulations of this Part shall apply to new and existing ships, taking into account the security environment and the risk area related to the operating area and the security risk that may be encountered during the intended voyage, as evaluated by the Administration.

133. Searching

(1) Vessels shall be searched after having been left unattended to ensure that nothing has been place abroad while the vessel was unattended and for the purpose of concealing trespassing persons and articles placed on board for illegal purposes.

(2) To the extent possible, checks shall include all spaces accessible to non-authorized persons while the vessel was unattended, e.g., any crew area stores, holds, under-water hull, if concern prevails and areas that could conceal persons or articles that may be used for illegal purposes.

134. Securing

(1) With due regard to the need to facilitate escape in the event of an emergency, where possible external doors, hatches and storage areas shall be kept locked and windows secured while the vessel is left unattended.

(2) If the vessel is left unattended for a lengthy period of time such as overnight, it is recommended that the engine is disabled to prevent theft or unauthorized use.

135. Prevention of Unauthorized access to vessels

(1) Measures preventing unauthorized access to ships shall be implemented and maintained and such measures may be-

.(a) over-the-side lighting which gives an even distribution of light on the whole hull and waterline;

.(b) keeping a good watch from the deck;

.(c) challenging all approaching boats; if unidentified, they shall, where possible, be prevented from coming alongside;

.(d) all visitors and contractors shall report to the master, or other responsible person to notify them of their arrival;

(2) The Administration may request, when circumstances justify it, specific measures to be taken with regard to the admission of passengers on board.

136.Contingency Measures for Security Alerts

(1) Contingency measures shall be in place for dealing with emergency navigational and health and safety alerts on board vessels. These plans may be adapted to include procedures for security alerts and incidents.

(2) if a suspicious device or package is found while a ship is at sea, the master shall take into account-

(a) the size and location of the device;

(b) the credibility of the threat;

(c) the vessel's location and the time it will take for security services and other assistance to arrive;

(d) the need to keep everyone well clear of the suspect device; and

(e) the need for all on board to keep clear of all doors, trunks and hatches leading from the space containing the device to avoid possible blast injuries.

137. Reporting Security Incidents

(1) Procedures and processes for reporting and recording security incidents shall be implemented.

(2) The master shall be provided with contact information for authorities responsible for emergency response, the national response centre(s) (if appropriate) and any other authorities that may need to be notified.

(3) Reports of security incidents on board a vessel shall be reported to the master or the person designated by him or her.

(4) In the event of a security incident occurring while the vessel is at sea, the master shall, in addition to activating an appropriate response, alert the nearest coastal State or authorities and vessels in vicinity and provide details of the incident.

138. Training

(1) The master shall be made aware of basic security requirements contained in Merchant Shipping (Ship & Port Facility) Regulations 2014.

(2) Every new member of the crew, when embarking on board the ship for the first time, shall be briefed on security risks and how to report any suspicious situation he may encounter.

139. Penalty

A person who does anything or omits to do anything in contravention of the provisions of these Regulations for which no penalty is provided elsewhere than in this regulation, is liable to a fine not exceeding two million dalasis.

140. Licensing of existing vessel

(1) An existing vessel to which these Regulations apply which is registered with any body or organisation under any repealed law shall, within one month of the coming into force of these Regulations, be licensed with the Administration.

(2) A person who contravenes sub-regulation (1) commits an offence and is liable on summary conviction to a fine not exceeding two million dalasis.

DATED THIS ……. DAY OF …….. 2014

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BALLA GARBA JAHUMPA
MINISTER OF WORKS, CONSTRUCTION AND INFRASTRUCTURE