



REPUBLIC OF CYPRUS
SHIPPING DEPUTY MINISTRY

Circular No. 17/2021

13 April 2021

SDM 5.13.09
SDM 16.17.10

To: Registered Owners, Registered bareboat charterers,
Managers and Representatives of Ships
under the Cyprus flag

To all Recognised Organisations (ROs),

Subject: Technical Standards for certain categories of vessels issued under the Government Policy on the Registration of Vessels in the Cyprus Register of Ships

1. The Shipping Deputy Ministry (SDM) establishes technical requirements for certain categories of vessels with respect to their registration in the Registry of Cyprus Ships, through the Technical Standards attached to this Circular. The purpose of the Standards is to specify technical requirements on areas not currently covered by National, European Union, or International Legislation, as well as to inform parties interested in the registration of vessels to whom the Standards apply in the Registry of Cyprus ships, of the available options offered by the SDM.

2. These Technical Standards have been determined by the Shipping Deputy Minister to the President as part of the Government Policy on the Registration of Vessels in the Cyprus Register of Ships pursuant to the provisions of **section 14B** of the *Merchant Shipping (Registration of Ships, Sales and Mortgages) Laws of 1963-2020 (Law 45/1963 as amended)*. Thus, this Circular is **supplementary** to the relevant Circular currently in force, i.e **Circular No. 10/2019**, and any future Circular amending and/or replacing Circular No. 10/2019.

3. In particular, and in accordance with the categorization established within the Standards, these are applicable to the following categories of vessels:

- **Category A** - Cargo ships of more than 24 metres in load line length and below 500GT.
- **Category B** - Motor or sailing vessels used for pleasure and engaged in trade, of more than 24 metres in load line length and below 500GT carrying up to 12 passengers. Sail training vessels are also included in this category.



- **Category C** - Motor or sailing vessels of more than 24 metres in load line length and below 500GT carrying up to 12 passengers, which at the time, are considered to be pleasure vessels not engaged in trade.
- **Category D** - Vessels used for pleasure and engaged in trade carrying from 13 up to 36 passengers.

In particular it is highlighted that the said technical Standards apply to **Yachts and Mega Yachts**.

4. The said Technical Standards will apply as from the **15th of April 2021**. In essence, the Standards will apply to vessels for which the application for their registration in the Registry of Cyprus ships, will be made on or after the **15th of April 2021**.

Any queries in relation to the Technical Standards should be addressed to the following email address: shipsafety@dms.gov.cy.



Neophytos Papadopoulos
Registrar of Cyprus Ships,
Permanent Secretary,
Shipping Deputy Ministry

Cc: - Permanent Secretary, Ministry of Foreign Affairs
- Maritime Offices of the Shipping Deputy Ministry abroad
- Diplomatic and Consular Missions of the Republic
- Honorary Consular Officers of the Republic
- Cyprus Shipping Chamber
- Cyprus Union of Shipowners
- Cyprus Bar Association



Cyprus Vessels Technical Standards

Τεχνικά Πρότυπα Κυπριακών Σκαφών

Applicable to:

- 1.** vessels of more than 24 meters in load line length and below 500 GT which:
 - [a] are in commercial operation as cargo ships (Category A) or
 - [b] vessels used for pleasure and engaged in trade, carrying up to 12 passengers (category B), or
 - [c] pleasure vessels not engaged in trade carrying up to 12 passengers (category C)

- 2.** Vessels used for pleasure and engaged in trade, carrying from 13 up to 36 passengers (category D).

v 06 April 2021

TABLE OF CONTENTS AND APPLICABILITY PER ARTICLE				
Category:	A	B	C	D
Article				
[1] Foreword	x	x	x	x
[2] Definitions	x	x	x	x
[3] Application & Interpretation	x	x	x	x
[4] Construction & Strength			x	
[5] Rigging on Sailing Vessels		x	x	x
[6] Machinery	x	x	x	
[7] Electrical Installation	x	x	x	
[8] Steering Gear	x	x	x	
[9] Bilge Pumping	x	x	x	
[10] Intact and Damage Stability		x	x	
[11] Life-Saving Appliances		x	x	
[12] Fire Safety		x	x	
[13] Fire Appliances		x	x	
[14] Radio		x	x	
[15] Navigation Lights, Shapes & Sound Signals	x	x	x	
[16] Navigational Equipment	x	x	x	x
[17] Anchors and Cables	x	x	x	x
[18] Maritime Labor	x	x	x	x
[19] Medical Stores	x	x	x	x
[20] Specialized Crafts/Equipment	x	x	x	x
[21] Marine Environment	x	x	x	x
[22] Safe Manning	x	x	x	x
[23] Survey & Certification	x	x	x	x
[24] Accident Investigations	x	x	x	x
[25] Safety Management System	x	x	x	
[26] Serious Discrepancy / failure of compliance with the standards	x	x	x	x
Annex 1: Minimum Safe Manning	x	x	x	x

Annex 2: Indicative list of Certificates	x	x	x	x
Annex 3: Conduct in case of maritime accident / incident	x	x	x	x
Annex 4: Safety Management System, SMS	x	x	x	
Annex 5: Specimen of the Statement of Compliance	x	x	x	x

1 FOREWORD

The present technical standards apply to motor or sailing vessels in commercial use for sport or pleasure including training ships, and to pleasure vessels as prescribed.

The Competent Authority may decide to apply certain or all the provisions of these technical standards to vessels outside their range of applicability as it may be deemed necessary.

The Competent Authority may decide on equivalent arrangement standards to any provision of these technical standards. For such an equivalent arrangement or exemption to be issued an application shall be submitted to the Competent Authority.

Compliance with the present technical standards will entitle a vessel to be issued with certification as prescribed and/or required upon satisfactory completion of the corresponding surveys and inspections.

All parties involved are reminded of the contents of Law 23(I)/2017 enacted for the purpose of harmonization with the European Union Act titled "Directive 2014/90/EU on marine equipment. This Law contains provisions on marine equipment placed or to be placed on board a Cyprus ship and for which the approval of the Competent Authority is required by the international instruments, regardless of whether the ship is situated in the Union at the time when it is fitted with the equipment.

2 DEFINITIONS

"Competent Authority", means the Shipping Deputy Ministry of the Republic of Cyprus.

"Commercial vessel", means a vessel which is not a pleasure vessel.

"A" class divisions are those divisions formed by bulkheads and decks which comply with the following criteria:

- .1 they are constructed of steel or other equivalent material;

.2 they are suitably stiffened;

.3 they are insulated with approved non-combustible materials such that the average temperature of the unexposed side will not rise more than 140 degrees C above the original temperature, nor will the temperature, at any one point, including any joint, rise more than 180 degrees C above the original temperature, within the time listed below:

class "A-60" 60 min

class "A-30" 30 min

class "A-15" 15 min

class "A-0" 0 min

"B" class divisions are those divisions formed by bulkheads, decks, ceilings or linings which comply with the following criteria:

.1 they are constructed of approved non-combustible materials and all materials used in the construction and erection of "B" class divisions are non-combustible, with the exception that combustible veneers may be permitted provided they meet other appropriate requirements of this chapter;

.2 they have an insulation value such that the average temperature of the unexposed side will not rise more than 140 degrees C above the original temperature, nor will the temperature at any one point, including any joint, rise more than 225 degrees C above the original temperature, within the time listed below:

class "B-15" 15 min

class "B-0" 0 min

.3 they are constructed as to be capable of preventing the passage of flame to the end of the first half hour of the standard fire test; and

.4 the Competent Authority has required a test of a prototype division in accordance with the Fire Test Procedures Code to ensure that it meets the above requirements for integrity and temperature rise.

"Existing vessel" means any vessel, the keel of which was laid or was at a similar stage of construction prior to the date of entry into force of these technical standards.

"Tonnage Length" means 96% of the total length on a waterline of a ship at 85% of the least moulded depth measured from the top of the keel, or the length from the fore-side of the stem to the axis of the rudder stock on that waterline, if that be greater. In ships designed with a rake of keel the waterline on which this is measured should be parallel to the designed waterline.

"Loadline Length" means 96 % of the total length on a waterline at 85 % of the least moulded depth measured from the top of the keel, or the length from the fore-side of the stem to the axis of the rudder stock on that waterline, if that be greater. Where the stem contour is concave above the waterline at 85 % of the least moulded depth, both the forward terminal of the total length and the fore-side of the stem respectively shall be taken at the vertical projection to that waterline of the after most point of the stem contour (above that waterline). In ships designed with a rake of keel the waterline on which this length is measured shall be parallel to the designed waterline.

"Lifebuoy" means a lifebuoy complying with the requirements of the IMO International Life-Saving Appliances Code.

"Lifejacket" means a lifejacket complying with the requirements of the IMO International Life-Saving Appliances Code.

"Liferaft" means a liferaft complying with the requirements of the IMO International Life-Saving Appliances Code.

"Machinery spaces" are all machinery spaces of category A and all other spaces containing propelling machinery, boilers, oil fuel units, steam and internal combustion engines, generators and major electrical machinery, oil filling stations, refrigerating, stabilizing, ventilation and air conditioning machinery, and similar spaces, and trunks to such spaces.

"Machinery spaces of category A" are those spaces and trunks to such spaces which contain, (a) internal combustion machinery used for main propulsion; or (b) internal combustion machinery used for purposes other than main propulsion where such machinery has in the aggregate a total power output of not less than 375Kw; or (c) any oil-fired boiler or oil fuel unit.

"MARPOL" means the International Convention for the Prevention of Pollution from Ships, 1973, as amended.

"Major conversion" means a conversion of a vessel:

- (a) that substantially alters the dimensions of a vessel, carrying capacity or engine of the ship; or
- (b) which changes the type of the ship; or
- (c) the intent of which in the opinion of the Administration is substantially to prolong its life; or
- (d) which otherwise so alters the ship that, if it were a new ship, it would become subject to relevant provisions of the present technical standards not applicable to it as an existing vessel.

"Shipping Deputy Ministry" (SDM) means the Shipping Deputy Ministry of the Republic of Cyprus, established pursuant to the provisions of Law 123(I)/2017.

"Mile" means a nautical mile of 1852 metres.

"Motor vessel" means a vessel which is described in the register, and which has a sole means of propulsion either one or more power units.

"Multihull vessel" means any vessel, which in any normally achievable operating trim or heel angle, has a rigid hull structure which penetrates the surface of the sea over more than one separate or discrete area.

"New vessel" means a vessel to which these technical standards apply.

"Passenger" is every person other than: (i) the master and the members of the crew or other persons employed or engaged in any capacity on board a ship on the business of that ship; and (ii) a child under one year of age

"Passenger ship" means a ship carrying more than 12 passengers.

"Person" means a person over the age of one year.

"Pleasure vessel" means any vessel which at the time is being used:

(i) in the case of a vessel wholly owned by an individual or individuals, used only for the sport or pleasure of the owner or the immediate family or friends of the owner; or

(ii) in the case of a vessel owned by a body corporate, used only for sport or pleasure and on which the persons on board are employees or officers of the body corporate, or their immediate family or friends;

"Position 1" means upon exposed freeboard and raised quarter decks and upon exposed superstructure decks situated forward of a point located a quarter of the ship's length from the forward perpendicular;

"Position 2" means upon exposed superstructure decks situated abaft a quarter of the ship's length from the forward perpendicular;

"Authorized Organization" is an organization which signed an agreement with the Republic of Cyprus under the provisions of Law 128(I)/2011 to provide statutory certification and services on its behalf and has been duly authorized to perform services and issue certificates under the provisions of these standards.

"Rescue boat" means a boat complying with the requirements of the IMO International Life-Saving Appliances Code and designed to rescue persons in distress and for marshalling liferafts.

"Safe haven" means a harbour or shelter of any kind which affords entry, subject to prudence in the weather conditions prevailing, and protection from the force of the weather.

"Sailing vessel" means a vessel designed to carry sail, whether as a sole means of propulsion or as a supplementary means.

"Sail training vessel" means a sailing vessel which, at the time, is being used either (a) to provide instruction in the principles of responsibility, management and to advance education in the art of seamanship; or (b) to provide instruction in navigation and seamanship;

"Short Range Vessel" means a vessel which is:

[1] restricted to operating in forecast or actual wind of a maximum Beaufort Force 4, for a motor vessel, and Beaufort Force 6 for a sailing vessel; or

[2] operates within 60 nautical miles of a safe haven. (The Administration may permit operation on specified routes up to 90 nautical miles from a safe haven as appropriate)or

[3] any other operational restrictions specified by the Administration as appropriate.

"Similar stage of construction" means at a stage which (a) construction identifiable with a specific vessel begins; or (b) assembly of that vessel, comprising at least 1% of the estimated mass of all structural material has commenced; or (c) the Administration was notified about its construction and vessel under construction was surveyed by the Administration and issued a statement of stage of construction.

In the case of vessels constructed of FRP or GRP, this will be considered as the date when more than 5% of the hull resin and reinforcement has been laid.

"SOLAS" means the International Convention of Safety of Life at Sea, 1974, as amended.

"Submersible Craft" means any description of manned mobile submersible apparatus which is designed to maintain some or all of its occupants at or near atmospheric pressure including free, self-propelled, tethered, towed or bottom contact propelled apparatus and atmospheric diving suits.

A diving bell is not a submersible craft for the purposes of these technical standards; and "diving bell" means any compression chamber which is capable of being manned and is used or designed for use under the surface of water in supporting human life being a chamber in which any occupant is or may be subjected to a pressure of more than 300 millibars above the ambient pressure during normal operation;

"Survival craft" means a craft capable of sustaining the lives of persons in distress from the time of abandoning the ship.

"Training Ship" Training Ship which may be either a sailing or motor vessel, means a vessel which is operated to provide instruction in the principles of responsibility, resourcefulness, team management; and/or provide instruction in navigation and seamanship, marine engineering or other shipboard related skills. A training ship may carry a combination of passengers and trainees but their total number should not exceed 12.

"Watertight" means capable of preventing the passage of water in any direction.

"Weather deck" means the uppermost complete weather tight deck fitted as an integral part of the vessel's structure and which is exposed to the sea and weather.

"Weathertight" has the meaning given in annex I of ICLL. Weathertight means that in any sea conditions water will not penetrate into the ship.

"Wheelhouse" means the control position occupied by the officer of the watch who is responsible for the safe navigation of the vessel.

"Window" means a ship's window, being any window, regardless of shape, suitable for installation aboard ships.

3 APPLICATION AND INTERPRETATION

3.1 Application

These standards apply to vessels which:

1. are registered in the Registry of Cyprus Ships after the adoption -issuance of the present Standards and fall under the below description, or
2. to all vessels irrespective of their date of registration, not falling under the below description but which are structurally converted and / or alter their operation after the adoption-issuance of the present Standards, so as to fall under the below description

3.1.1 To cargo ships of more than 24 metres in load line length and below 500GT (**Category A**). Those vessels shall comply with IACS Recommendations for the Safety of Cargo vessels of less than convention size, No.99 with regards to safety issues covered by the said instrument. The competent Authority might consider applications for equivalent arrangements with those requirements.

3.1.2 To motor or sailing vessels used for pleasure and engaged in trade of more than 24 metres in load line length and below 500GT **carrying up to 12 passengers (Category B)**. Sail training vessels are also included in this category.

3.1.3 To motor or sailing vessels of more than 24 metres in load line length and below 500GT which, at the time, are considered to be pleasure vessels not engaged in trade, carrying up to 12 passengers (**Category C**). Vessels with load line length less than 24m and at the same time of length as defined in ISO 8666:2016 of more than 24m, (and therefore not falling within the scope of 'Directive 2013/53/EU on recreational craft and personal watercraft'), will be construed as falling within the provisions of the present standards.

3.1.4 To vessels used for pleasure and engaged in trade, carrying from 13 and up to 36 passengers (**Category D**). Those vessels fall within the scope of the International Convention on Safety of Life at Sea and they should therefore comply with the applicable requirements of SOLAS and

any other International Conventions as the case may be. The Competent Authority however, might on a case-by-case basis and upon application by the owner, examine and approve equivalent arrangements based on vessels' compliance with equivalent regulations established by other Administrations, which have been notified to IMO. The approved equivalences and any conditions thereof will be included in the vessels' Statement of Compliance.

3.1.5 Vessels undergoing refit or modification are encouraged to comply with the provisions of these technical standards as far as is reasonable and practicable.

3.1.6 The Administration may decide to apply certain or all the provisions of these technical standards to vessels outside the range of their applicability as it may be deemed necessary.

3.1.7 The present technical standards do not apply to:

- Fishing vessels
- Governmental vessels not engaged in commercial activities
- Historical Ships or Wooden Ships of primitive built

3.2 Area of Operation

3.2.1 Vessels subject to the provisions of these technical standards may conduct voyages of unrestricted geographical operation outside Polar Regions. Short Range Vessels subject to the provisions of these regulations may only operate within the geographical area prescribed subject to the environmental conditions that prevail.

3.2.2 Vessels subject to the provisions of these technical standards, in order to operate in Polar Regions, must meet the requirements of one of the Authorized Organizations, appropriate for the intended area of operation. Category D vessels operating in Polar Regions should comply with the Polar Code.

3.3 Equivalent Arrangements and Exemptions

Proposals for the application of equivalent arrangements/exemptions for new and existing vessels should be submitted to the Administration for approval.

Alterations on existing vessels should be subject to compliance as if the vessel is new. Any alterations that affect the provisions of these technical standards should be communicated to the Administration.

Notwithstanding any arrangements made under the present standards with regards delegation of authority, the approval of equivalent arrangements / exemptions is not delegable and remains with the Competent Authority.

4. CONSTRUCTION AND STRENGTH

4.1. General Requirements

- 4.1.1. All vessels should have a freeboard deck.
- 4.1.2. All vessels should be fitted with a weather deck

throughout the length of the vessel and be of adequate strength to withstand the sea and weather conditions likely to be encountered in the declared area(s) of operation.

4.1.3. Where a considerable risk of lightning strike is identified, vessels should have lightning strike protection.

4.2. Structural Strength

4.2.1. All vessels must be constructed in accordance with the construction rules and requirements of an Authorized Organization.

4.3. Watertight Bulkheads

4.3.1. The subdivision and damage stability requirements of the technical standards will determine the required number and positioning of watertight bulkheads, as defined below.

4.3.2. Watertight bulkheads should be fitted in accordance with the following requirements:

4.3.2.1. The strength of watertight bulkheads and their penetrations, and watertight integrity of the division should meet the requirements of the rules of an Authorized Organization.

4.3.2.2. Generally, openings in watertight bulkheads should comply with the standards required for passenger vessels, as defined in SOLAS Chapter II-1. Hand operation from above the bulkhead deck and a hydraulic accumulator may be omitted if each door has its own individual power-pack electrically driven via the emergency switchboard, and control voltage from emergency battery, and each door can be operated manually at the door. Edge strips which stop the door closing on contact are not permitted.

4.3.2.3. Approved hinged doors may be provided for infrequently used openings in watertight compartments, where a crew member will be in immediate attendance when the door is open at sea. Audible and visual alarms should be provided in the wheelhouse.

4.3.2.4. Unless otherwise required by section 4.4, watertight doors may be approved hinged doors provided that there is an audible and visual alarm on the Bridge indicating when the door is open. The doors are to be kept closed at sea and marked accordingly. A time delay for the alarm is acceptable.

4.3.2.5. Procedures for the operation of watertight doors should be agreed with the Administration and posted in suitable locations. Watertight doors should be normally closed, with the exception of sliding watertight doors providing the normal access to frequently used living and working spaces. Additionally when an access is unlikely to be used for lengthy periods, the door should also be closed. All watertight doors should be operationally tested before a ship sails and once a week.

- 4.4. Enclosed Compartments (enclosed compartments within the Hull and below the Freeboard Deck provided with Access through Openings in the Hull)
- 4.4.1. Compartment(s) below the freeboard deck, provided for recreational purposes, oil fuelling/fresh water reception or other purposes to do with the business of the vessel and having access openings in the hull, should be bounded by watertight divisions without any opening (i.e. doors, manholes, ventilation ducts or any other opening) separating the compartment(s) from any other compartment below the freeboard deck, unless provided with sliding watertight doors complying with 4.3.2.3 or hinged doors complying with 4.4.2.
- 4.4.2. Openings from any other compartment below the freeboard deck may be fitted with hinged watertight doors provided:
- 4.4.2.1. after flooding through the shell opening of the space containing the shell opening, the resultant waterline is below the sills of the internal openings in that space; or
- 4.4.2.2. (a) bilge alarms are fitted in the compartment containing the shell opening, with a visual and audible warning on the bridge; and (b) any hinged door opens into the compartment containing the shell opening; and (c) "open" door alarms, both visual and audible fitted on the bridge; and (d) the door is to be fitted with a single closing mechanism; and (e) sill height of the internal door should be higher above the deepest loaded waterline than the sill height of the shell opening.
- 4.4.3. Openings in the hull should comply with SOLAS regulation II-1/15-1 - External openings in cargo ships. Provision should be made to ensure that doors may be manually closed and locked in the event of power or hydraulic failure. Openings are generally to be fitted with a sill not less than 600mm above the Design Waterline.
- 4.4.3.1. Openings in the hull with a sill height below, or less than 600mm above the Design Waterline may be specially considered by the Administration. This consideration may include but is not limited to (a) doors from the space providing internal access are to have a sill height at least 600mm above the Design Waterline, (b) the effect of flooding on stability is considered, (c) operational controls and limitations on when and where opening may be used.

4.5. Weathertight Integrity

4.5.1. Virtual Freeboard Deck

- 4.5.1.1. For the purposes of this section only, where actual freeboard to the weather deck exceeds that required by ICLL 66 by at least one standard superstructure height, openings on that deck, abaft of the forward quarter, may be assumed to be in position 2. This is to be taken, unless otherwise stated, as defined in ICLL 66. A standard superstructure height is to be taken as 1.8m.

4.5.2. Hatchways and Skylight Hatches

4.5.2.1. General Requirements

- 4.5.2.1.1. All openings leading to spaces below the weather deck not capable of being closed weathertight, must be enclosed within either an enclosed superstructure or a weathertight deckhouse of adequate strength meeting with the requirements of the Load Line Assigning Authority.
- 4.5.2.1.2. All exposed hatchways which give access from position 1 and position 2 are to be of substantial weathertight construction and provided with efficient means of closure. Weathertight hatch covers should be permanently attached to the vessel and provided with adequate arrangements for securing the hatch closed.
- 4.5.2.1.3. Hatches which are designated for escape purposes should be provided with covers which are to be openable from either side and in the direction of escape they are to be openable without a key. All handles on the inside are to be non removable. An escape hatch should be readily identified and easy and safe to use, having due regard to its position.

4.5.2.2. Hatchways Which are Open at Sea

- 4.5.2.2.1. In general, hatches should be kept closed at sea. However, hatchways which may be kept open for access at sea are to be as small as practicable (a maximum of 1 square metre in clear area), and fitted with coamings of at least 300mm in height in positions 1 and 2 Hatchways should be as near to the centreline as practicable, especially on sailing vessels. Covers of hatchways are to be permanently attached to the hatch coamings and, where hinged, the hinges are to be located on the forward side.

4.5.3. Doorways and Companionways

4.5.3.1. Doorways Located Above the Weather Deck

- 4.5.3.1.1. External doors in deckhouses and superstructures that give access to spaces below the weather deck are to be weathertight and door openings should have coaming heights of at least:

Location	Unrestricted Vessels	Short Range Vessels
A	600mm	300mm
B	300mm	150mm
C	150mm	75mm

Location A The door is in the forward quarter length of the vessel and is used when the vessel is at sea.

Location B The door is in an exposed forward facing location aft of the forward quarter length.

Location C The door is in a protected location aft of the forward quarter length, or an unprotected door on the first tier deck above the weather deck.

4.5.3.1.2. Weathertight doors should be arranged to open outwards and when located in a houseside, be hinged at the forward edge. Alternative closing arrangements will be considered provided it can be demonstrated that the efficiency of the closing arrangements and their ability to prevent the ingress of water will not impair the safety of the vessel.

4.5.3.1.3. An access door leading directly to the engine room from the weather deck should be fitted with a coaming of height of at least:

Location	Unrestricted Vessels	Short Range Vessels
Position 1	600mm	450mm
Position 2	380mm	200mm

4.5.3.1.4. Coaming height, construction and securing standards for weathertight doors which are provided for use only when the vessel is in port or at anchor in calm sheltered waters and are locked closed when the vessel is at sea, may be considered individually.

4.5.3.2. Companion Hatch Openings

4.5.3.2.1. Companionway hatch openings which give access to spaces below the weather deck should be fitted with a coaming, the top of which is at least 300mm above the deck, or 150mm in the case of Short Range Vessels.

4.5.3.2.2. Washboards may be used to close the vertical opening. When washboards are used, they should be so arranged and fitted that they will not be dislodged readily. Whilst stowed, provisions are to be made to ensure that they are retained in a secure location.

4.5.3.2.3. The maximum breadth of an opening in a companion hatch should not exceed 1 metre.

4.5.4. Skylights

4.5.4.1. All skylights should be of efficient weathertight construction and should be located on or as near to the centreline of the vessel as practicable.

- 4.5.4.2. If they are of the opening type they should be provided with efficient means whereby they can be secured in the closed position.
- 4.5.4.3. Skylights which are designated for escape purposes should be openable from either side, and in the direction of escape they are to be openable without a key. All handles on the inside are to be non-removable. An escape skylight should be readily identified and easy and safe to use, having due regard to its position.
- 4.5.4.4. The skylight glazing material and its method of securing within the frame should meet an appropriate national or international standard. Authorized Organizations rules for "ships" are considered to meet these requirements.
- 4.5.4.5. A minimum of one portable cover for each size of glazed opening should be provided which can be accessed rapidly and efficiently secured in the event of a breakage of the skylight.

4.5.5. Portlights

- 4.5.5.1. Portlights should be of strength appropriate to location in the vessel and meet an appropriate national or international standard. Authorized Organizations rules for "ships" are considered to meet these requirements.
- 4.5.5.2. In general, all portlights fitted in locations protecting openings to spaces below the weather deck or fitted in the hull of the vessel should be provided with a permanently attached deadlight which is to be capable of securing the opening watertight in the event of a breakage of the portlight glazing. Proposals to fit portable deadlights will be subject to special consideration and approval by the Competent Authority, having regard for the location of the portlights and the ready availability of deadlights. Consideration should be given to the provision of operational instructions to the Master as to when deadlights must be applied to portlights.
- 4.5.5.3. Portlights fitted in the hull of the vessel below the level of the freeboard deck should be either non-opening or of a non-readily openable type and be in accordance with a standard recognised by the Administration. The lower edge of the portlights should be at least 500mm or 2.5% of the breadth of the vessel, whichever is the greater, above the all-seasons load line assigned to the vessel. Portlights of the non-readily opening type must be secured closed when the vessel is in navigation and indication provided on the bridge that they are closed.
- 4.5.5.4. Proposals to fit large portlights (i.e. greater than 0.16 M₂) in the main hull below the level of the freeboard deck will be subject to special consideration and approval by the Administration, having regard for their location and strength and their supporting structure and, the availability of strong protective covers for them. One item of the special consideration should be operational

instructions to the Master as to when the strong protective covers must be fitted.

4.5.5.5. Portlights should not be fitted in the hull in the way of the machinery space.

4.5.6. Windows

4.5.6.1. Windows should be of strength appropriate to their location in the vessel and meet the requirements of an Authorized Organization rules.

4.5.6.2. For all vessels where the glazing material, glazing thickness, or fixing of the windows does not meet the requirements of a recognised standard, windows may be tested, to the satisfaction of the Administration, at a minimum of 4 times the required design pressure derived from an appropriate national or international standard. Additionally, as a minimum, calculated thicknesses should meet an Authorized Organization requirements for pleasure vessels or yachts. For Short Range Vessels, test pressures may be reduced to 2.5 times the derived design pressure.

4.5.6.3. In general, windows fitted in superstructures or weathertight deckhouses are to be substantially framed and efficiently secured to the structure. The glass is to be of the toughened safety glass type.

4.5.6.4. Where chemically toughened safety glass is used, windows are to be of the laminated type, the minimum depth of chemical toughening to be 30 microns on exposed faces. Regular inspections of the windows, with particular reference to the surface condition, should form part of the operational procedures and annual survey by the Competent Authority.

4.5.6.5. Windows should not be fitted in the main hull below the level of the freeboard deck.

4.5.6.6. Storm shutters (strong protective covers with fittings) are required for all windows in the front and sides of first tier and front windows of the second tier of superstructures or weathertight deckhouses above the freeboard deck.

4.5.6.7. When storm shutters are interchangeable port and starboard, a minimum of 50% of each size should be provided.

4.5.6.8. Side and front windows to the navigating position should not be constructed of polarised or tinted glass.

4.5.7. Ventilators and Exhausts

4.5.7.1. Adequate ventilation is to be provided throughout the vessel. The accommodation is to be protected from the entry of gas and/or vapor fumes from machinery, exhaust and fuel systems, where machinery exhaust systems pass through accommodation they should be fitted in a gas tight trunk or each space should be fitted with a carbon monoxide detector, having an alarm provided locally and at a continuously manned station.

4.5.7.2. Ventilators are to be of efficient construction and provided with permanently attached means of weathertight closure. Generally, ventilators serving any space below the freeboard deck or an enclosed superstructure should have a coaming of minimum height of:

Location	Unrestricted Vessels	Short Range Vessels
Forward quarter length	900mm	450mm
Elsewhere	760mm	380mm

4.5.7.3. Ventilators should be kept as far inboard as practicable and the height above the deck of the ventilator opening should be sufficient to prevent the ingress of water when the vessel heels.

4.5.7.4. The ventilation of spaces such as the machinery space, which must remain open, requires special attention with regard to the location and height of the ventilation openings above the deck, taking into account the effect of down flooding angle on stability standard.

4.5.7.5. The means of closure of ventilators serving the machinery space should be selected with regard to the fire protection and extinguishing arrangements provided in the machinery space.

4.5.7.6. Engine exhaust outlets which penetrate the hull below the freeboard deck should be provided with means to prevent back flooding into the hull through a damaged exhaust system. For vessels operating on unrestricted service a positive means of closure should be provided. The system should be of equivalent construction to the hull on the outboard side of the closure. For Short Range Vessels, where the fitting of a positive closure is not practicable, the exhaust should be looped up above the waterline on the outboard side of the system, to a minimum height of 1000mm, and be of equivalent construction to the hull.

4.5.8. Air Pipes

4.5.8.1. Air pipes serving fuel and other tanks should be of efficient construction and provided with permanently attached means of weathertight closure. Means of closure may be omitted if it can be shown that the open end of an air pipe is afforded adequate protection by other structure(s) which will prevent the ingress of water.

4.5.8.2. Where located on the weather deck, air pipes should be kept as far inboard as practicable and be fitted with a

coaming of sufficient height to prevent inadvertent flooding. Generally, air pipes to tanks should have a minimum coaming height of:

Location	Unrestricted Vessels	Short Range Vessels
On weather deck	760mm	380mm
Elsewhere	450mm	225mm

4.5.8.3. Air pipes to fuel tanks should terminate at a height of not less than 760mm above either, the top of the filler pipe for a gravity filling tank or the top of the overflow tank for a pressure filling tank.

4.5.9. Scuppers, Sea Inlets and Discharges and Other Hull Penetrations

4.5.9.1. The standards of ICLL should be applied to every discharge led through the shell of the vessel as far as it is reasonable and practicable to do so, and in any case, all sea inlet and overboard discharges should be provided with efficient shut-off valves arranged in positions where they are readily accessible at all times.

4.5.9.2. Underwater lights and associated penetrations fitted in the hull should be approved by the Authorized Organization.

4.5.10. Materials for Valves and Associated Piping

4.5.10.1. Valves which are fitted below the waterline should be of steel, bronze or other material having a similar resistance to impact, fire and corrosion. Non metallic valves will not normally be considered equivalent.

4.5.10.2. The associated piping should, in areas as indicated above, be of steel, bronze, copper or other equivalent material. Non metallic piping will not normally be considered equivalent.

4.5.10.3. Where the use of plastic piping is proposed, it will be considered and full details of the type of piping, its intended location, and use, should be submitted for approval; with regard to watertight integrity, any plastic piping should be above the waterline. Due regard should be paid to the IMO Fire Test Procedures Code.

4.5.10.4. The use of flexible piping in any location should be kept to a minimum compatible with the essential reason for its use. Flexible piping and the means of joining it to its associated hard piping system should be approved as fit for the purpose.

4.5.11. General Equivalence

4.5.11.1. Where vessels cannot fully comply with the requirements of this section, equivalent arrangements may be considered by the Competent Authority. Such proposals should take into account the following, although this should not be considered as an exhaustive list:

1. Openings to be kept closed at sea
2. Enhanced Bilge Pumping capacity and additional bilge alarms
3. Compliance with damage stability if not already a requirement
4. Provision of dorade boxes or baffle systems to prevent direct ingress of water
5. Alternative ventilation for use in bad weather
6. Consideration of downflooding angle and reduced risk of green sea loads, i.e. protected position
7. Enhanced survey inspection regime
8. Operational Limitations

4.5.12. Water Freeing Arrangements

4.5.12.1. Water Freeing Standard

4.5.12.1.1. The standards for water freeing arrangements should comply with ICLL as far as it is reasonable and practicable to do so in order to achieve a standard of safety which is at least equivalent to the standard of ICLL.

4.5.12.1.2. On sailing vessels, where the solid bulwark height does not exceed 150mm, specific freeing ports, as defined above, are not required.

4.5.12.2. Alternative Arrangements

4.5.12.2.1. In individual cases, when the Administration considers that the requirements of ICLL cannot be met, the Administration may consider and approve alternative arrangements to achieve adequate safety standards. Freeing arrangements may take account of a reduced permeability and volume of the well, when compared to a full size well.

4.5.12.2.2. For Short Range Yachts it is considered that the requirement for freeing port area for a forward or after well may be reduced by a form factor equal to the ratio of (actual area well) divided by (length of well x breadth of well). Dimensions should be taken at half height of the bulwark. This may be reduced by 50% providing it can be shown that the intact stability of the yacht remains acceptable if the well is flooded to any level up to the bulwark height and that area provided will allow the well to drain in less than 3 minutes.

4.5.12.2.3. In considering an individual case, the Competent Authority will take into account the vessels past performance in service and the declared area(s) of operation and any other conditions which restrict the use of the vessel at sea which will be recorded on the load line certificate issued to the vessel.

4.5.13. Recesses

- 4.5.13.1. Any recess in the weather deck should be of weathertight construction and should be self draining under all normal conditions of heel and trim of the vessel.
- 4.5.13.2. A swimming pool or spa bath, open to the elements, should be treated as a recess.
- 4.5.13.3. The means of drainage provided should be capable of efficient operation when the vessel is heeled to an angle of 10° in the case of a motor vessel, and 30° in the case of a sailing vessel.
- 4.5.13.4. The drainage arrangements should have the capability of draining the recess (when fully charged with water) within 3 minutes when the vessel is upright and at the load line draught. Means should be provided to prevent the backflow of sea water into the recess.
- 4.5.13.5. When it is not practical to provide drainage which meets the requirements as stated above, alternative safety measures may be proposed for approval by the Administration. Where the above requirements for quick drainage cannot be met, the effect on intact and damage stability should be considered taking into account the mass of water and its free surface effect.

4.6. PROTECTION OF PERSONNEL

4.6.1. Deckhouses and Superstructures

- 4.6.1.1. The structural strength of any deckhouse or superstructure should comply with the requirements of an Authorized Organization, as appropriate to the vessel and its areas of operation.

4.6.2. Bulwarks and Guardrails

- 4.6.2.1. Bulwarks and/or guardrails on all accessible decks should be 1000mm. Any opening should not exceed 380mm. Where no bulwarks are fitted, or bulwark height is less than 230mm, the lowest opening should not exceed 230mm. They should be supported at intervals not exceeding 2.2 metres. Intermediate courses of rails or wires should be evenly spaced.
- 4.6.2.2. Satisfactory means (in the form of guard rails, life lines, gangways or underdeck passages, etc.) should be provided for the protection of the crew in getting to and from their quarters, the machinery space and all other areas used in the necessary work of the craft.
- 4.6.2.3. Where the function of the vessel would be impeded by the provision of bulwarks and/or guard rails as specified above, alternative proposals should be submitted to the Administration for approval.

4.7. FREEBOARD

4.7.1. Freeboard Assignment

- 4.7.1.1. The freeboard for the vessel and its marking should

be approved by the Competent Authority. The freeboard assignment should correspond to the deepest loading condition included in the stability information booklet for the vessel.

4.7.2. Freeboard Mark and Loading

4.7.2.1. The freeboard mark applied should be positioned port and starboard at amidships on the load line length and may be an all-seasons mark. The mark should be a permanent disc and be of contrasting colour to the hull of the vessel in way of the mark. A vessel should not operate in any condition which will result in its appropriate freeboard marks being submerged when it is at rest and upright in calm water.

4.7.3. Datum Draught Marks

4.7.3.1. Datum draught marks should be provided at the bow and stern, port and starboard, in accordance to Article 8 of the Cyprus Law 45 / 1963 as amended.

5. RIGGING ON SAILING VESSELS

5.1. General

5.1.1. The condition of the rig should be monitored in accordance with a Maintenance Manual and a planned maintenance schedule. The schedule should include, in particular, regular monitoring of all the gear associated with safe work aloft and on the bowsprit.

5.2. Masts and Spars and Standing Rigging

5.2.1. Dimensions and construction materials of masts and spars and dimensions of standing rigging including connection to chain plates should be in accordance with the requirements or recommendations of one of the Authorized Organizations or a recognised national or international standard.

5.2.2. The associated structure for masts and spars (including chainplates, fittings, decks and floors) should be constructed to effectively carry and transmit the forces involved.

5.2.3. Compliance with 5.2.1 and 5.2.2 should be confirmed by a design review and approval by one of the Authorized Organizations (e.g. Rig Design Certificate) which is assigned with the review of the rig.

5.2.4. The Maintenance Manual provided by the mast manufacturer should be reviewed and approved by the Authorized Organization which is assigned to review the rig design.

5.2.5. A physical survey on the rig stepping procedure and the rig behavior during sea trials is to be carried out by or on behalf of the Authorized Organization that is involved with the classification of the vessel's hull.

5.2.6. Annual surveys on the vessel should include reviewing records and history of rig maintenance measures against the specifications provided by the maintenance manual.

5.3. Rigging Fittings

5.3.1. The strength of all blocks, shackles, rigging screws, cleats and associated fittings and attachment points should exceed the breaking strain of the associated running or standing rigging.

5.4. Sails

5.4.1. Adequate means of reefing or shortening sail should be provided.

5.4.2. Sailing vessels operating as Short Range Yachts need not carry storm canvas.

5.4.3. All other vessels should either be provided with separate storm sails or have specific sails designated and constructed to act as storm canvas.

6. MACHINERY

6.1. General Requirements

6.1.1. The machinery and its installation should in general, meet with the requirements of an Authorized Organization. The Class Survey or Notation should include, as a minimum, propulsion and electrical generation machinery and shafting. For existing and new vessels which operate with periodically unattended machinery spaces, the machinery and its installation should meet the standards of SOLAS Chapter II-1/Part E - "Additional requirements for periodically unattended machinery spaces, so far as is reasonable and practicable to do so".

6.1.2. The requirements for main propulsion are based upon the installation of diesel powered units. When other types of main propulsion are proposed, the arrangements and installation should be specially considered. Installation of gas turbines should take into account the guidance contained within the IMO High Speed Craft Code and should be to the satisfaction of the Administration.

6.1.3. Notwithstanding the requirements of paragraph 7.1.1, in a fuel supply system to an engine unit, where a flexible section of piping is provided, connections should be of a screw type or equivalent approved type. Flexible pipes should be fire resistant/metal reinforced. Materials and fittings should be of a suitable recognized national or international standard.

6.2. Installation

6.2.1. Notwithstanding the requirements referred to in 6.1, the machinery, fuel tanks and associated piping systems and fittings should be of a design and construction adequate for the service for which they are intended, and should be so installed and protected as to reduce to a minimum any danger to persons during normal movement about the vessel, with due

regard being made to moving parts, hot surfaces, and other hazards.

- 6.2.2. Means should be provided to isolate any source of fuel which may feed a fire in an engine space. A fuel shut-off valve(s) should be provided which is capable of being closed from a position outside the engine space. The valve(s) should be fitted as close as possible to the fuel tank(s).
- 6.2.3. All external high-pressure fuel delivery lines between the high pressure fuel pumps and fuel nozzles should be protected with a jacketed tubing system capable of containing fuel resulting from a high-pressure line failure. The jacketed tubing system should include means for collection of leakage and arrangements should be provided for an alarm to be given in the event of a fuel line failure.
- 6.2.4. When a glass fuel level gauge is fitted it should be of the "flat glass" type with self closing valves between the gauge and the tank.

7. ELECTRICAL INSTALLATIONS

7.1. Installation

- 7.1.1. Particular attention should be paid to the provision of overload and short circuit protection of all circuits, except engine starting circuits supplied from batteries.
- 7.1.2. Electrical devices working in potentially hazardous areas, into which petroleum vapor or other hydrocarbon gas may leak, should be of a type certified safe for the hazard.

7.2. Lighting

- 7.2.1. Lighting circuits, including those for emergency lighting, should be distributed through the spaces so that a total blackout cannot occur due to failure of a single protective device.
- 7.2.2. An emergency source of lighting should be provided which should be independent of the general lighting system. This source should be sufficient for up to 3 hours duration and should include navigation light supplies. The lighting is to provide sufficient lighting for personnel to escape from the accommodation or working spaces to their muster station, and launch and board survival craft. Additionally, this light, supplemented by torches, should be sufficient to permit emergency repairs to machinery etc.

7.3. Batteries

- 7.3.1. Batteries of a type suitable for marine use and not liable to leakage should be used. Areas in which batteries are stowed should be provided with appropriate ventilation to prevent an accumulation of gas which is emitted from batteries of all types.

7.4. Emergency Power

- 7.4.1. Emergency power should be readily available to supply the required emergency lighting, radio installation and navigation aids for a minimum of 3 hours. As a minimum, the

navigation aids to be supplied by emergency power to include GPS, echo sounder and AIS. The emergency power supply should be adequate to also supply any electrical emergency equipment fitted, such as fire pumps, bilge pumps, watertight doors, and rescue boat davit.

7.4.2. The emergency source of power should be independent of the main power supply, external to the engine room, and with separate distribution.

7.4.3. The emergency generator, if fitted, should be located above the uppermost continuous deck but may be located below this deck provided it is protected from the effects of fire and flooding. In all cases, the emergency generator should be separated from main generators and main switchboard by a division capable of ensuring its continued operation. The emergency generator should be self contained (independent of a sea water suction) and readily accessible from the open deck.

7.4.4. Cables and wiring serving essential or emergency power, lighting, internal communications or signals should be routed clear of galleys, machinery places of Category A and their casings, spaces for storage of petrol, and other high risk fire areas.

8. STEERING GEAR

8.1. General Requirements

8.1.1. The steering gear and its installation should in general, meet with the requirements of one of the Authorized Organizations. In the event that the above requirements cannot be met on an existing vessel, the Administration may be requested to consider and approve alternative arrangements to achieve adequate safety standards. When the steering gear is fitted with remote control, arrangements should be made for emergency steering in the event of a failure of such control.

9. BILGE PUMPING

9.1. General Requirements

9.1.1. The bilge pumping equipment and its installation should, in general, meet the requirements of an Authorized Organization.

9.2. Alternative Arrangement

9.2.1. In the event that the above requirements cannot be met on an existing vessel, the Administration may be requested to consider alternative arrangements to achieve adequate safety standards.

9.3. Required Number of Bilge Pumps

9.3.1. All vessels should be provided with at least two

fixed and independently powered bilge pumps, with suction pipes so arranged that any compartment can be effectively drained when the vessel is heeled to an angle of 10°. For Short Range Yachts, the second pump and suction pipes may be portable.

9.4. Capacity of Bilge Pumps

9.4.1. The location of pumps required by 10.2, their individual power supplies and controls, including those for bilge valves should be such that, in the event of any one compartment being flooded at least one of those pumps is capable of removing water from the flooded space and adjacent compartments and discharging this via a dedicated discharge overboard.

9.5. Bilge Level Alarm

9.5.1. In the case of a vessel where the propulsion machinery space may be unmanned at any time, a bilge level alarm should be fitted. The alarm should provide an audible and visual warning in the Master's cabin and in the wheelhouse. The audible and visual alarm may be accepted elsewhere if it is considered that such a location may be more appropriate.

9.6. Pumping and Piping Arrangements

9.6.1. Pumping and piping arrangements for bilges into which fuel or other oils of similar or higher fire risk could collect, under either normal or fault conditions, should be kept clear of accommodation spaces and separate from accommodation bilge systems. Bilge level alarms meeting the requirements of 10.5 should be fitted to all such bilges.

10. INTACT AND DAMAGE STABILITY

10.1. All Intact and Damage Stability calculations should be conducted in compliance with the applicable rules of Authorized Organizations and International Conventions.

10.2. Permanent Ballast

10.2.1. If used, permanent ballast should be located in accordance with a plan approved by the Competent Authority and in a manner that prevents shifting of position. Permanent ballast should not be removed from the ship or relocated within the ship without the approval of the Administration. Permanent ballast particulars should be noted in the ship's stability booklet. Attention should be paid to local or global hull strength requirements from the point of view of the fitting of additional ballast.

10.3. Intact Stability

10.3.1. Motor vessels

10.3.1.1. Stability Criteria

10.3.1.1.1. For Monohull, and multihulls, the curves of statical stability for seagoing conditions should meet the provisions of the Intact Stability Code, Res.MSC.267(85) as amended. If unable to comply with the Code, the Administration may be consulted for the purpose of specifying alternative but equivalent criteria.

10.3.1.2. Loading Conditions

10.3.1.2.1. For the purpose of assessing whether the stability criteria are met, GZ curves should be produced for the loading conditions applicable to the operation of the vessel. The Administration may impose additional loading conditions to be considered, taking into account the operation of the vessel.

10.3.2. High Speed Vessels

10.3.2.1. In addition to the criteria above designers and builders should address the following hazards which are known to affect vessels operating in planing modes or those achieving relatively high speeds:

1. directional instability, often coupled to roll and pitch instabilities;
2. bow diving of planing vessels due to dynamic loss of longitudinal stability in calm seas;
3. reduction in transverse stability with increasing speed in monohulls;
4. porpoising of planing monohulls being coupled with pitch and heave oscillations;
5. generation of capsizing moments due to immersion of chines in planing monohulls (chine tripping).

10.4. Sailing vessels

10.4.1. Curves of statical stability (GZ curves) for similar loading conditions as for motor vessels should be produced. The GZ curves should have a positive range for not less than 90 degrees. For vessels of more than 45m, a range of less than 90° may be considered but may be subject to agreed operational criteria.

10.4.2. The angle of steady heel should be greater than 15 degrees.

10.4.3. All regularly used openings for access and for ventilation should be considered when determining the downflooding angle. No opening regardless of size which may lead to progressive flooding should be immersed at an angle of heel of less than 40°. Air pipes to tanks can, however, be disregarded.

10.4.4. The vessel should be capable of withstanding a wind gust equal to 1.4 times the actual wind velocity (i.e. twice the actual wind pressure) without immersing the down-flooding openings, or heeling to an angle greater than 60°.

10.5. Damage Stability

10.5.1. It should be noted that vessels in compliance with Loadline convention, are considered in full compliance with

damage stability requirements of the standards.

- 10.5.2. The following requirements are applicable to all vessels, other than those operating as Short Range Vessels. [Whilst Short Range Vessels are not required to meet the damage stability criteria defined above, ultimate survivability after minor damage or flooding is recommended.]
- 10.5.3. The watertight bulkheads of the vessel should be so arranged that minor hull damage that results in the free flooding of any one compartment, will cause the vessel to float at a waterline which, at any point, is not less than 75mm below the weather deck, freeboard deck, or bulkhead deck if not concurrent.
- 10.5.4. Minor damage should be assumed to occur anywhere in the length of the vessel, but not on a watertight bulkhead.
- 10.5.5. Standard permeabilities should be used in the damage stability assessment should use percentage permeabilities for space (a) stores, 60%, (b) accommodation, 95%, and (c) machinery, 85%.
- 10.5.6. In the damaged condition, considered above, the residual stability should be such that any angle of equilibrium does not exceed 10° from the upright, the resulting righting lever curve has a range to the downflooding angle of at least 15° beyond any angle of equilibrium, the maximum righting lever within that range is not less than 100mm and the area under the curve is not less than 0.015 metre radians.

10.6. **Elements of Stability**

- 10.6.1. Unless otherwise specified, the lightship weight, vertical centre of gravity (KG) and longitudinal centre of gravity (LCG) of a vessel should be determined from the results of an inclining experiment.
- 10.6.2. An inclining experiment should be conducted in accordance with a detailed standard which is approved by the Administration and, in the presence of an authorized surveyor.
- 10.6.3. The report of the inclining experiment and the lightship particulars derived should be approved by the Administration prior to its use in stability calculations.
- 10.6.4. At the discretion of the owner(s)/managing agent(s) and prior to approval of the lightship particulars by the Administration, a margin for safety may be applied to the lightship weight and KG calculated after the inclining experiment. Such a margin should be clearly identified and recorded in the stability booklet.
- 10.6.5. A formal record should be kept in the stability booklet of alterations or modifications to the vessel for which the effects on lightship weight and vertical centres of gravity are offset against the margin.
- 10.6.6. When sister vessels are built at the same shipyard, the Administration may accept a lightweight check on subsequent vessels to corroborate the results of the inclining experiment conducted on the lead vessel of the class.

10.7. Stability Documents

- 10.7.1. A vessel should be provided with a stability information booklet for the Master, that is to be approved by the Competent Authority. The content of the stability booklet should conform to the requirements specified by the Intact Stability Code, Res.MSC.267(85) as amended.
- 10.7.2. A vessel with previously approved stability information which undergoes a major conversion or alterations should be subjected to a complete reassessment of stability and provided with newly approved stability information.
- 10.7.3. A major refit or major alteration is one which results in either a change in the lightship weight of 2% and above and/or the longitudinal centre of gravity of 1% and above (measured from the aft perpendicular) or as described by SOLAS 2017 Amendment (98th)/Chapter II-1/Reg.5.5.
- 10.7.4. Additionally, unless it can be clearly demonstrated that no major change has occurred, a lightweight check should be carried out at the renewal survey required.
- 10.7.5. Sailing vessels should have, readily available, a copy of the 'Curves of Maximum Steady Heel Angle to Prevent Downflooding in Squalls', or in the case of a multihull, the values of maximum advised mean apparent wind speed, for the reference of the watchkeeper. This should be a direct copy taken from that contained in the approved stability booklet.
- 10.7.6. The overall sail area and spar weights and dimensions should be as documented in the vessel's stability information booklet. Any rigging modifications that increase the overall sail area, or the weight/dimensions of the rig aloft, must be accompanied by an approved updating of the stability information booklet.

11. LIFE-SAVING APPLIANCES

11.1. General Requirements

- 11.1.1. Life-Saving Appliances should be provided in accordance with Table 1 - Life-Saving Appliances. ALL LSA equipment on board the vessel should be in compliance with IMO Life-Saving Appliances Code and IMO Resolution MSC.81(70) as amended and should be in working order and be ready for immediate use at all times.

Table 1 - LIFE-SAVING APPLIANCES	Short Range Vessels	All Other Vessels
LIFERAFTS	YES	YES
MANOVERBOARD RECOVERY SYSTEM	YES	-
RESCUE BOAT	-	YES
LIFEJACKETS	YES	YES
IMMERSION SUITS	YES	YES
LIFEBUOYS (TOTAL)	4	4
LIFEBUOYS WITH LIGHT AND SMOKE	2	2
LIFEBUOYS WITH BUOYANT LIFELINE	2	2
SET OF LINE THROWING APPLIANCES (4 lines plus 4 charges)	1	1
ROCKET PARACHUTE FLARES	2	3
TWO-WAY RADIOTELEPHONE SETS	2	2
EPIRB	1	1
SART	1	1
GENERAL ALARM	YES	YES
LIGHTING	YES	YES
POSTERS AND SIGNS SHOWING SURVIVAL CRAFT AND EQUIPMENT OPERATING INSTRUCTIONS YES	YES	YES
TRAINING MANUAL	YES	YES
INSTRUCTIONS FOR ONBOARD MAINTENANCE	YES	YES
LIFESAVING SIGNALS AND RESCUE POSTER - SOLAS No 1 IN WHEELHOUSE	YES	YES

11.1.2. When personal safety equipment is provided on board the vessel for recreational purposes, they should be stored appropriately and signage used, in order NOT to be confused and misused as appropriate LSA in case of evacuation of the vessel.

11.1.3. All life-saving equipment carried should be fitted with retro-reflective material in accordance with the recommendations of IMO Resolution A.658(16) as amended.

11.2. Embarkation Ladder

11.2.1. When the embarkation deck is more than 1 meter above still water level when the vessel is in its lightest condition, an embarkation ladder is to be provided which is readily available to be used at all times. A means of fastening should also be provided. When the embarkation deck is more than 4 meters above still water level when the vessel is in its lightest condition, davit launched liferafts should

be used in combination with at least one launching appliance for launching.

11.3. Falls for Launching Devices

11.3.1. ALL Falls for launching devices to be used on board the vessel should be in compliance with the IMO Life-Saving Appliances Code and should be renewed at intervals not exceeding the service life recommended by the manufacturer.

11.4. Service and Maintenance

11.4.1. Every inflatable or rigid inflatable rescue boat, inflatable liferaft and hydrostatic release unit other than a disposable hydro static release unit should be serviced, at intervals not exceeding 12 months at a manufacturers approved service station.

11.4.2. All repairs and maintenance of permanently inflated rescue boats should be carried out in accordance with the manufacturers' instructions;

11.5. Maintenance and Stowage

11.5.1. Maintenance of equipment should be carried out in accordance with the instructions for onboard maintenance. The stowage and installation of all life-saving appliances is to be to the satisfaction of the Administration. Safe evacuation of the vessel should NOT be obstructed by any hull projections on the side of the vessel.

11.6. Liferafts

11.6.1. The liferafts carried are to be stowed in GRP containers and must contain the necessary "emergency pack". For Short Range Vessels, or vessels operating within 60 miles from a safehaven, liferafts provided may be equipped with a "SOLAS B PACK". For all other vessels, liferafts should be equipped with a "SOLAS A PACK".

11.6.2. Liferaft approval includes approval of their stowage, launching and float-free arrangements.

11.6.3. All vessels should have a sufficient number of liferafts so that in the event of any one liferaft being lost or rendered unserviceable, sufficient aggregate capacity remains on either side of the vessel for all persons on board. This may be achieved by transferring liferafts from one side to the other. Where liferafts are transferable, this requirement may be met by the ability of the rafts to be transferred within 5 minutes, by either 2 or 4 persons.

11.6.4. GRP containers containing liferafts should be stowed on

the weather deck or in an open space and fitted with hydrostatic release units so that the liferafts will float free of the vessel and automatically inflate.

- 11.6.5. Liferafts may form part of an approved Marine Evacuation System (MES). A sufficient number of systems should be provided, such that in the event of any one entire system being lost or rendered unserviceable, sufficient aggregate capacity remains on either side of the vessel for all persons on board.

11.7. **Rescue Boats**

- 11.7.1. Means should be provided for the recovery of a person from the sea to the vessel when the person is unconscious. [If an overside boarding ladder or scrambling net is provided the ladder or net should extend from the weather deck to at least 600mm below the lowest operational waterline.]
- 11.7.2. All rescue boats covered within this section are to be equipped to the requirements of the IMO Lifesaving Appliance Code Ch V/5.1.2. Additionally, rescue boats need not be capable of being launched from both sides, and means to lower the boat from within the boat is not required.
- 11.7.3. Launching stations should be in such positions as to ensure safe launching having particular regard to clearance from the propeller and steeply overhanging portions of the hull and so that, as far as possible, the rescue boat can be launched down the straight side of the ship whilst maintaining minimum speed to keep a course.
- 11.7.4. If stowed forward the launching appliance and rescue boat should be entirely located in a sheltered position abaft the vertical extension of the aft most portion of the collision bulkhead.
- 11.7.5. Rescue Boat Mandatory Carriage
 - 11.7.5.1. Vessels should be provided with a rescue boat either meeting the requirements of SOLAS or the following:
 - 11.7.5.2. A boat which is not SOLAS approved but which is suitable for rescue purposes. The boat may be rigid, rigid inflated, or inflated, and should have a capacity for not less than 4 persons, one of which should be assumed to be lying down. Tubes of rigid inflatable or inflatable boats should have a minimum of 3 buoyancy compartments. The boat is to be capable of displaying a highly visible color. If the equipment as required is stowed in a grab bag, it may be stowed in the boat or in an easily accessible location close to the rescue boat.
 - 11.7.5.3. Launching appliances should be either comply and be approved in accordance with the IMO Lifesaving Appliance Code except that when a power operated crane is fitted, it should be capable of operation either by hand or by an emergency source of power in the event of a main power failure. The routing of the emergency source of

power should be considered in respect of damaged waterlines and fire or comply with the following requirements:

- 11.7.5.4. The appliance should be able to launch the boat within 5 minutes. When a power operated device is fitted, it should be capable of operation either by hand or by an emergency source of power in the event of a main power failure. The routing of the emergency source of power should be considered in respect of damaged waterlines and fire.
- 11.7.5.5. The launching appliance and its attachments should be constructed to withstand a static proof load on test of not less than 2.2 times the maximum working load. Acceptable factors of safety are 6 for wires, hooks and sheaves, and 4.5 for the remainder of the launching appliance. The appliance and its attachments should also be tested dynamically to 1.1 times the working load. It should be noted that there is no requirement to recover the rescue boat provided that the casualty and the boat's crew can be recovered on board from the boat in the water.
- 11.7.6. The design of the falls and winch system should take account of the principles of IMO Lifesaving Appliances Code Ch VI/6.1.2
- 11.7.7. Where it is proposed to use the running rigging on sailing vessels, the above requirements should also be met.

11.8. **Short Range Vessels**

- 11.8.1. Vessels operating as Short Range Vessels should either comply with requirements of carrying a rescue boat either as a SOLAS vessel or the following:
 - 11.8.1.1. The vessel should have sufficient mobility and maneuverability in a seaway to enable persons to be retrieved from the water. For assessing this ability it is not considered acceptable to retrieve persons over the stern of the vessel or adjacent to the propeller(s). The recovery location should be visible from the conning position at all times during the recovery, although this may be achieved by the use of remote controls where necessary.
 - 11.8.1.2. The vessel should be provided with suitable equipment and/or arrangements to enable the person(s) to be recovered without further persons entering the water.

11.9. **Lifejackets**

- 11.9.1. One adult SOLAS approved lifejacket should be provided for each person onboard plus spare adult lifejackets sufficient for at least 10% of the total number of persons onboard or two, whichever is the greater. Each lifejacket should be fitted with a light and whistle.

- 11.9.2. There should be at least two SOLAS approved inflatable lifejackets for the use of the crew of any rescue boat.
- 11.9.3. One SOLAS approved child lifejacket or infant lifejacket should be provided for each child or infant onboard.

11.10. **Immersion Suits**

- 11.10.1. One approved immersion suit should be provided for each person onboard, these may be of the non-insulated type.
- 11.10.2. Due consideration should be given to the provision of appropriate immersion/ thermal protection for children and infants carried on board.
- 11.10.3. For cold water areas of operation, the insulated type should be carried. Reference to Resolution IMO MSC Circular 1046 should be made for assessment of thermal protection.
- 11.10.4. A vessel constantly engaged on voyages in warm climates, may be exempted from this requirement.

11.11. **Lifebuoys**

- 11.11.1. Lifebuoys port and starboard provided with combined self-igniting light and self-activating smoke signals should be capable of quick deployment from the navigating bridge.
- 11.11.2. The attached buoyant lifeline required on each of two of the lifebuoys is to have a minimum length of 30 meters.
- 11.11.3. Each lifebuoy should be marked with the vessel's name and Port of Registry.

11.12. **EPIRB**

- 11.12.1. An approved EPIRB should be installed in an easily accessible position ready to be manually released, capable of being placed in a survival craft and floating free if the vessel sinks. All EPIRBs should be registered with the Administration. EPIRBs are to be tested annually and serviced at not more than five yearly intervals by an approved shore based maintainer.

11.12.2. **Radar Transponders (SART)**

- 11.12.2.1. A SART is to be installed and stowed in an easily accessible position so that it can rapidly be placed in any survival craft. Means should be provided in order that it can be mounted in the survival craft at a height of at least 1 metre above sea level.

11.13. General Alarm

11.13.1. For a vessel not subject to SOLAS this alarm may consist of the ship's whistle or siren, provided it can be heard in all parts of the vessel.

11.14. Lighting

11.14.1. Alleyways, internal and external stairways, and exits giving access to, and including, the muster and embarkation stations should be adequately lit.

11.14.2. Adequate lighting is to be provided in the vicinity of survival craft, launching appliance(s) (when provided) and the overside area of sea in way of the launching position(s). The lighting should be supplied from the emergency source of power.

11.15. Life-saving Signals & Rescue Poster

11.15.1. When display space in the wheelhouse is restricted, the 2 sides of a SOLAS No.2 poster (as contained in liferaft equipment packs) may be displayed in lieu of a SOLAS No. 1 poster.

12. FIRE SAFETY

12.1. Protection of spaces containing vehicles with fuel

12.1.1. Special consideration should be given to safe conditions of carriage of petrol and other highly flammable liquids either in hand portable containers/tanks or in the tanks of vehicles (such as personal water craft, motor cars and helicopters) which may be transported.

12.2. Miscellaneous

12.2.1. Construction and Arrangement of Saunas

12.2.1.1. All boundaries of the sauna should be of "A" class divisions, and may include changing rooms, showers and toilets. The sauna should be insulated to A-30 and B-15 for Short Range Yachts, against other spaces except those inside of the perimeter of the sauna.

12.2.1.2. Bathrooms with direct access to saunas may be considered as part of them. In such cases, the door between sauna and the bathroom need not comply with fire safety requirements.

12.2.1.3. Wooden linings on bulkheads and ceilings are permitted. The ceiling above the oven should be lined with

a non-combustible plate with an air gap of at least 30mm. The distance from the hot surfaces to combustible materials should be at least 500mm or the combustible materials should be protected (e.g. non-combustible plate with an air gap of at least 30mm).

- 12.2.1.4. Wooden benches are permitted.
- 12.2.1.5. The sauna door should open outwards by pushing.
- 12.2.1.6. Electrically heated ovens should be provided with a timer.
- 12.2.1.7. All spaces within the perimeter of the sauna are to be protected by a fire detection and alarm system and an automatic sprinkler system.

12.3. Deep Fat Frying Equipment

12.3.1. Attention is drawn to the requirements in SOLAS II-2/10.6.4 for fire extinguishing systems for deep fat cooking equipment. For fryers of up to 15 litres cooking oil capacity, the provision of a suitably sized Class F extinguisher together with manual isolation of the electrical power supply is acceptable.

12.3.2. Control Plan

- 12.3.2.1. A fire control (general arrangement) plan(s) should be permanently exhibited for the guidance of the Master and crew of the vessel. The content of the plan(s) should adequately show and describe the principal fire prevention and protection equipment and materials. As far as practical, symbols used on the plans should comply with a recognised international standard. The fire control plan may be a combined Fire & Safety Plan, which should show the positions of stowage of the life-saving and fire appliances.
- 12.3.2.2. For each deck, the plan(s) should show the position of control stations; sections of the vessel which are enclosed respectively by "A" class divisions and "B" class divisions; location of flammable liquid storage (see 14.1.); particulars of and locations of fire alarms, fire detection systems, sprinkler installations, fixed and portable fire extinguishing appliances; fireman's outfit(s); means of access and emergency escapes for compartments and decks; locations and means of control of systems and openings which should be closed down in a fire emergency.
- 12.3.2.3. The fire plan(s) should be kept up to date. Updating alterations should be applied to all copies of the plan(s) without delay.
- 12.3.2.4. A duplicate set of the plan(s) should be permanently stored in a prominently marked weathertight enclosure readily accessible to assist non-vessel fire-fighting personnel who may board the vessel in a fire

emergency.

12.3.3. Maintenance and Operation of equipment

12.3.3.1. Instructions valid to the maintenance and operation of all the equipment and installations onboard for the fighting and containment of fire should be kept in one document holder, readily available in an accessible location.

12.4. Structural Fire Protection

12.4.1. The structural fire protection of all vessels should be as follows:

1. Passive Fire Protection: Category A, machinery spaces should be enclosed in an A-30 boundary and for short range vessels the machinery spaces should be enclosed in a B-15 boundary.
2. Galleys in all vessels should also be enclosed by B-15 boundary.
3. Openings in 'A' and 'B' Class divisions are to be provided with permanently attached means of closing that are to be at least as effective for resisting fires as the divisions in which they are fitted. Windows shall not be fitted in machinery space boundaries.
4. Where 'A' or 'B' Class divisions are penetrated for the passage of electric cables, pipes, trunks, ducts, etc., or for girders, beams or other structural members, arrangements are to be made to ensure that the fire integrity is not impaired.
5. Where the structure or 'A' Class divisions are required to be insulated, it is to be ensured that the heat from a fire is not transmitted through the intersections and terminal points of the divisions or penetrations to uninsulated boundaries. Where the insulation installed does not achieve this, arrangements are to be made to prevent this heat transmission by insulating the horizontal and vertical boundaries or penetrations for a distance of 450 mm.
6. Automatic sprinkler systems or equivalent should be fitted in vessels that do not meet restrictions on combustible materials.

12.4.2. Forms of construction-Fire divisions

12.4.2.1. Fire divisions using steel equivalent, or alternative forms of construction may be accepted if it can be demonstrated that the material by itself, or due to non-combustible insulation provided, has the fire resistance properties equivalent to the required divisions

12.4.3. Insulation and Fire Door Frames

12.4.3.1. Insulation is to be such that the temperature of the structural core does not rise above the point at which the structure would begin to lose its strength at anytime during the applicable exposure to the standard fire test

as referenced in the IMO FTP Code. For 'A' Class divisions, the applicable exposure is 60 minutes, and for 'B' Class divisions, the applicable exposure is 30 minutes.

12.4.3.2. For aluminium alloy structures, the insulation is to be such that the temperature of the structural core does not rise more than 200°C above the ambient temperature at any time during the applicable fire exposure.

12.4.3.3. For composite structures, the insulation is to be such that the temperature of the laminate does not rise more than the minimum temperature of deflection under load of the resin at any time during the applicable fire exposure. The temperature of deflection under load is to be determined in accordance with a recognised international standard.

12.4.3.4. Insulation need only be applied on the side that is exposed to the greatest fire risk, ie inside the engine room, a division between two such spaces should however be insulated on both sides unless it is a steel division.

12.4.3.5. Special attention is to be given to the fixing of fire door frames in bulkheads constructed of materials other than steel. Measures are to be taken to ensure that the temperature of the fixings when exposed to fire does not exceed the temperature at which the bulkhead itself loses strength.

12.5. Materials

12.5.1. Except in refrigerated compartments of service spaces, all insulation (e.g. thermal and acoustic) is to be of not readily-ignitable materials. Insulation boundaries are to be arranged to avoid immersion in oil spillages

12.5.2. Pipes penetrating 'A' or 'B' Class divisions are to be of approved materials having regard to the temperature such divisions are required to withstand.

12.5.3. Pipes conveying oil or other combustible liquids through accommodation and service spaces are to be of approved materials having regard to the fire risk.

12.5.4. Upholstery composites used throughout the vessel including open decks should be approved in accordance with the IMO FTP Code, Annex 1, Part 8, or equivalent. This does not apply to spaces fitted with sprinklers or equivalent fixed fire extinguishing systems.

12.5.5. Organic foams used in upholstered furniture and mattresses should be of the combustion modified type.

12.5.6. Suspended textile materials such as curtains or drapes should be approved in accordance with the IMO FTP Code, Annex 1, Part 7, or equivalent. This does not apply to spaces fitted with sprinklers or equivalent fixed fire extinguishing systems.

12.6. Fuel Arrangements

12.6.1. Arrangements for the storage, distribution and utilisation of oil fuel are to be such as to minimise the risk

of fire or explosion.

- 12.6.2. Oil fuel tanks situated within, or adjacent to, the boundaries of Category 'A' machinery spaces are not to contain oil fuel having a flashpoint of less than 60°C.
- 12.6.3. Oil fuel, lubricating oil and other flammable oils are not to be carried in fore-peak tanks.
- 12.6.4. Every oil fuel pipe, which, if damaged, would allow oil to escape from a storage, settling or daily service tank situated above the double bottom, should be fitted with a cock or valve directly on the tank capable of being closed from a safe position outside the space concerned in the event of a fire occurring in the space in which such tanks are situated.
- 12.6.5. Means are to be provided to stop fuel transfer pumps, oil fired boilers and separators from outside the machinery space.
- 12.6.6. Fuel filter bowls should be of metal construction.

12.7. Means of Escape

12.7.1. Purpose

- 12.7.1.1. The purpose of this section is to provide means of escape so that persons onboard can safely and swiftly escape to the liferaft embarkation deck. For this purpose, safe escape routes should be provided and maintained in a safe condition, clear of obstacles. Additional aids for escape should be provided as necessary to ensure accessibility, clear marking, and adequate design for emergency situations.

12.7.2. Requirements

- 12.7.2.1. Stairways, ladders and corridors serving all spaces normally accessible are to be arranged so as to provide ready means of escape to a deck from which embarkation into survival craft may be effected.
- 12.7.2.2. The arrangement of the vessel should be such that all compartments are provided with a satisfactory means of escape. In the case of the accommodation, two means of escape from every restricted space or group of spaces should be provided. Concealed escapes and escape routes are to be clearly marked to ensure ready exit.
- 12.7.2.3. Category 'A' machinery spaces on motor vessels should also be provided with a minimum of two means of escape. Other machinery spaces should also have at least two means of escape as widely separated as possible, except where the small size of the machinery space makes it impracticable.
- 12.7.2.4. The normal means of access to the accommodation and service spaces below the open deck is to be arranged so that it is possible to reach the open deck without passing through a galley, engine room or other space with a high fire risk, wherever practicable.
- 12.7.2.5. Where accommodation arrangements are such that

access to compartments is through another compartment, the second escape route is to be as remote as possible from the main escape route. This may be through hatches of adequate size, leading to the open deck or separate space to the main escape route.

12.7.2.6. In exceptional circumstances a single means of escape may be accepted for spaces, other than accommodation spaces, that are entered only occasionally, if the escape route does not pass through a galley, machinery space or watertight door.

12.7.2.7. No escape route should be obstructed by furniture or fittings. Additionally, furniture along escape routes should be secured in place to prevent shifting if the vessel rolls or lists.

12.7.2.8. All doors in escape routes are to be openable from either side. In the direction of escape they are all to be openable without a key. All handles on the inside of weathertight doors and hatches are to be non removable. Where doors are lockable measures to ensure access from outside the space are to be provided for rescue purposes.

12.7.2.9. Lifts are not considered as forming a means of escape.

12.8. Ventilation Systems

12.8.1. Ventilation fans for machinery spaces and enclosed galleys are to be capable of being stopped, and main inlets and outlets of ventilation systems closed, from outside the spaces being served. This position should not be readily cut off in the event of a fire in the spaces served.

12.8.2. Ventilation ducts for Category 'A' machinery spaces, galleys, spaces containing vehicles or craft with fuel in their tanks, or lockers storing such fuels, are generally not to pass through accommodation spaces, service spaces or control stations. Where this is unavoidable, the trunking should be constructed of steel at least 3mm thick or equivalent to the satisfaction of the Administration. The ducting within the accommodation should be fitted with:

12.8.3. [1] fire insulation to A-30 (B-15 on Short Range Vessels) standard to a point at least 5 metres from the boundary of the machinery space or galley; and

12.8.4. [2] automatic fire dampers located in the deck or bulkhead within the accommodation where the trunking passes from the machinery space or galley into the accommodation. These automatic fire dampers are also to be manually closable from outside the galley or machinery space;

12.8.5. Ventilation ducts for accommodation spaces, service spaces or control stations are not to pass through Category 'A' machinery spaces, galleys, spaces containing vehicles or craft with fuel in their tanks, or lockers storing such fuels, unless the ducts are constructed of steel and arranged to preserve the integrity of the division.

12.8.6. Store-rooms containing highly flammable products are to be provided with ventilation arrangements that are separate from other ventilation systems. Ventilation is to be

arranged to prevent the build up of flammable vapours at high and low levels. The inlets and outlets of ventilators are to be positioned so that they do not draw from or vent into an area which would cause undue hazard, and are to be fitted with spark arresters.

12.8.7. Ventilation systems serving Category 'A' machinery spaces are to be independent of systems serving other spaces.

12.8.8. All enclosed spaces containing free standing fuel tanks are to be ventilated independently of systems serving other spaces.

12.8.9. Ventilation is to be provided to prevent the accumulation of dangerous concentrations of flammable gas which may be emitted from batteries.

12.8.10. Ducts provided for tumble driers are to be fitted with suitably located cleaning and inspection openings.

12.9. Arrangements for Gaseous Fuel for Domestic Purposes

12.9.1. Where gaseous fuel is used for domestic purposes, the arrangements for the storage, distribution and utilisation of the fuel is to be such that, having regard to the hazards of fire and explosion. Hydrocarbon gas detectors and carbon monoxide detectors should be provided.

12.9.2. Gas cylinders, regulators and safety devices should be stowed on the open deck (where leakage will not accumulate) or in a compartment that is vapour-tight to the vessels interior, and fitted with a vent and drain, so that any gas which may leak can disperse overboard.

12.10. Fixed Fire Detection and Fire-Alarm Systems

12.10.1. All vessels should be installed with a system to detect a fire in the space of origin and to provide for an alarm for safe escape and fire-fighting activity.

12.10.2. A fixed fire detection and fire alarm system is to be fitted in all enclosed spaces except those containing no significant fire risk (toilets, bathrooms, void spaces, etc). Manually operated call points should be placed effectively to ensure a readily accessible means of notification. The fixed fire detection and fire-alarm system is to be installed in accordance with the requirements of SOLAS II-2/7 and the IMO Fire Safety Systems Code, Chapter 9.

12.10.3. Where a fixed fire-extinguishing system not required by this Chapter, is installed, the arrangement shall be to the satisfaction of the Competent Authority.

12.11. Oil Fuel Arrangements

12.11.1. Arrangements for the storage, distribution and utilization of oil fuel are to be such as to minimize the risk of fire or explosion.

- 12.11.2. As far as practicable, oil fuel tanks are to be part of the vessel's structure and are to be located outside Category 'A' machinery spaces.
- 12.11.3. Where oil fuel tanks, other than double bottom tanks, are necessarily located adjacent to or within Category 'A' machinery spaces, at least one of their vertical sides is to be contiguous to the machinery space boundaries, and is preferably to have a common boundary with the double bottom tanks, and the area of the tank boundary common with the machinery spaces is to be kept to a minimum. Where the vertical boundary of a tank directly exposed to a machinery space meets the vessel's side plating at an acute angle, a small horizontal surface at the base of the tank, necessary to accommodate practical constructional considerations may be permitted. If the arrangement of the machinery is such that a tank with a large horizontal surface at the base is necessary then a cofferdam with suitable ventilation arrangements, to protect the base of the tank from the effect of a machinery space fire, will be specially considered. Oil fuel tanks situated within the boundaries of Category 'A' machinery spaces are not to contain oil fuel having a flashpoint of less than 60°C. Except for vessels constructed of materials other than steel, where steel tanks should be provided, the use of free standing oil fuel tanks is prohibited.

13. FIRE APPLIANCES

13.1. General Requirements

- 13.1.1. Fire appliances are to be of an approved type and should be provided to meet the minimum requirements listed in Table 1.
- 13.1.2. Any Fire appliances provided in addition to those above should be of a type acceptable to the Administration.
- 13.1.3. The location of concealed fire appliances should be clearly marked

Table 2 - FIRE APPLIANCES -

1	PROVISION OF WATER JET - sufficient to reach any part of vessel	1
2	POWER DRIVEN FIRE PUMP - engine or independent drive	1

3	<p>ADDITIONAL INDEPENDENT POWER DRIVEN FIRE PUMP, POWER SOURCE AND SEA CONNECTION - not located in the same space as item 2</p>	1
4	<p>FIREMAIN & HYDRANTS -</p>	<p>Sufficient to achieve item 1 with a single length of hose</p>
5	<p>HOSES - with jet/spray nozzles each fitted with a shut-off facility</p>	3
6	<p>FIRE EXTINGUISHERS - portable, (accommodation and service spaces)</p>	<p>For each deck, 1 within 10m of any position within an accommodation or service space</p>

7	<p>FIRE EXTINGUISHERS - for a machinery space of Category A - the options are: a fixed fire extinguishing system approved in accordance with the IMO Fire Safety Systems Code; and</p> <p>1 portable extinguisher for oil fires for each 375kw power; or 2 portable extinguishers for oil fires together with either 1 foam extinguisher of 45l capacity; or 1 CO2 extinguisher of 16kg capacity</p>	<p>4 (max) 2 + 1</p>
8	<p>FIREMANS OUTFIT - to include an approved breathing apparatus for each outfit</p>	<p>2</p>
9	<p>FIRE BLANKET - in galley</p>	<p>1</p>

13.2. Specific Requirements

13.2.1. Provision of Water Jet

13.2.1.1. At least one jet of water, from a single length of hose, should be able to reach any part of the vessel normally accessible to passengers or crew while the vessel is being navigated and, any store room or any part of a storage compartment when empty.

13.2.2. Fire Pumps

13.2.2.1. All vessels should have at least one power driven pump with a capacity greater than what is estimated by the following formula.

$V_{min} = 2.5 \times \{1 + 0.066 (L(B+D))^{0.5}\}^2 \text{ m}^3/\text{hour}$

where:

L = the length

B = the greatest moulded breadth

D = the moulded depth measured to the bulkhead deck at amidships.

When discharging at full capacity through 2 adjacent fire hydrants, the pump should be capable of maintaining a water pressure of 0.2N/mm² at any hydrant, provided the fire hose can be effectively controlled at this pressure.

13.2.2.2. The second fire pump, which may be portable, should have a capacity of at least 80% of that required by 13.2.2 and be capable of input to the fire main. A permanent sea connection, external to the machinery space, should be provided. "Throw-over" sea suctions are not acceptable.

13.2.2.3. Each centrifugal fire pump should be provided with a non-return valve in the connection to the fire main.

13.3. Fire Hoses

13.3.1. Fire hoses should not exceed 20 metres in length, and generally, the diameter for use with a powered pump should not be less than 38mm.

13.3.2. Fire hoses and associated tools and fittings should be kept in readily accessible and known locations, close to the hydrants or connections on which they will be used. Hoses supplied from a powered pump should have jet/spray nozzles (incorporating a shut-off facility) of diameter 19mm, 16mm or 12mm depending on fire fighting purposes. For accommodation and service spaces, the diameter of nozzles need not exceed 12mm.

13.3.3. Hydrants or connections in interior locations on the vessel should have hoses connected at all times. For use within accommodation and service spaces, proposals to provide a smaller diameter of hoses and jet/spray nozzles will be considered.

13.3.4. The number of fire hoses and nozzles provided should correspond to the functional fire safety requirements, but be at least 3.

13.4. Portable Fire Extinguishers (for use in accommodation and service spaces)

13.4.1. The number, location, fire extinguishing medium type and capacity should be selected according to the perceived fire risk, but for each deck, one portable extinguisher should be available for use within a distance of 10m from any location. A minimum of at least 3 portable fire extinguishers should be provided. As far as practical, the fire extinguishers provided should have a uniform method of operation and should be of an approved 5kg/9 litre type and capacity.

13.4.2. Portable fire extinguishers of the carbon dioxide type should not be located or provided for use in accommodation spaces.

13.4.3. Except for portable extinguishers provided in connection with a specific hazard within a space when it is manned (such as a galley), portable extinguishers generally should be located external to, but adjacent to, the entrance of the space(s) in which they will be used. Extinguishers should be stowed in readily accessible and marked locations.

13.4.4. Spare charges should be provided onboard for at least 50% of each type and capacity of portable fire extinguisher onboard. When an extinguisher is not of a type which is rechargeable when the vessel is at sea, an additional portable fire extinguisher of the same type (or its equivalent) should be provided.

13.5. Fire Extinguishing in Machinery Spaces

13.5.1. In a machinery space containing an oil fired boiler, oil fuel settling tank or oil fuel unit, a fixed fire extinguishing system complying with the IMO Fire Safety Systems Code should be installed.

13.5.2. Portable fire extinguishers should be installed and the number, location, fire extinguishing medium type and capacity should be selected according to the perceived fire risk in the space.

13.5.3. In any case, portable fire extinguishers for extinguishing oil fires should be fitted as follows (a) in a boiler room, at least 2, (b) in a space containing any part of an oil fuel installation, at least 2 and (c) in a firing space, at least 1.

13.6. Alternative Design and Arrangements

13.6.1. Vessels may follow Alternative Design and Arrangements. An engineering analysis shall be prepared and submitted to the Competent Authority, based on the guidelines (Refer to the Guidelines on alternative design and arrangements for fire safety (MSC/Circ.1002)) and shall include, as a minimum, the following engineering analysis elements:

1. determination of the ship type and space(s) concerned;
2. identification of prescriptive requirement(s) with which the ship or the space(s) will not comply;
3. identification of the fire and explosion hazards of the ship or the space(s) concerned, including;
4. identification of the possible ignition sources; (i)
5. identification of the fire growth potential of each space concerned;
6. identification of the smoke and toxic effluent generation potential for each space concerned;
7. identification of the potential for the spread of fire, smoke or of toxic effluents from the space(s) concerned to other spaces;
8. determination of the required fire safety performance criteria for the ship or the (d) space(s) concerned addressed by the prescriptive requirement(s) in particular:

9. performance criteria shall be based on the fire safety objectives and on (i) the functional requirements of this chapter;
10. performance criteria shall provide a degree of safety not less than that (ii) achieved by using the prescriptive requirements; and
11. performance criteria shall be quantifiable and measurable; (iii)
12. detailed description of the alternative design and arrangements, including a list (e) of the assumptions used in the design and any proposed operational restrictions or conditions; and
13. technical justification demonstrating that the alternative design and arrangements meet the required fire safety performance criteria.

14. RADIO

14.1. Radio Communications: The Global Maritime Distress and Safety System (GMDSS)

14.1.1. Each vessel should carry sufficient radio equipment to perform the following distress and safety communications functions throughout its intended voyage:

1. transmitting ship to shore distress alerts by at least two separate and independent means, each using a different radio communication service;
2. receiving shore-to-ship distress alerts;
3. transmitting and receiving ship-to-ship distress alerts;
4. transmitting and receiving search and rescue coordinating communications;
5. transmitting and receiving on-scene communications;
6. transmitting and receiving signals for locating by radar;
7. transmitting and receiving maritime safety information; and
8. transmitting and receiving bridge-to-bridge communications.

14.2. Vessels should carry the following Radio equipment fulfilling distress and safety communication functions for voyages in Sea Areas A1, A2, A3 and A4.

A1	A1+A2	A1+A2+A3		A1+A2+A3 +A4
		either	Or	
NAVTEX ₁	NAVTEX ₁	NAVTEX ₁	NAVTEX ₁	NAVTEX ₁
VHF (DSC) Radiotelephone	VHF (DSC) Radiotelephone	VHF (DSC) Radiotelephone	VHF (DSC) Radiotelephone	VHF (DSC) Radiotelephone
---	MF (DSC) Radiotelephone ₂	MF (DSC) Radiotelephone	MF/HF (DSC) Radiotelephone ₂	MF/HF (DSC) Radiotelephone ₂
---	---	INMARSAT C Ship Earth Station		

1 If the vessel is sailing in an area where an international NAVTEX service is not provided then the NAVTEX receiver shall be supplemented by an additional means of receiving MSI transmissions such as the Inmarsat enhanced group calling system.

2 Incorporating direct-printing telegraphy or an alternative means of receiving MSI transmissions in the Sea Areas in which the vessel is operating

14.3. EPIRBs for vessels operating in Sea Area A4 are to be capable of operating through the polar orbiting satellite service in the 406 MHz band.

14.4. Vessels not complying with the requirements of the above table should at least bear equipment to the satisfaction of the Competent Authority. The Competent Authority in order to satisfy itself that any proposed alternative can be accepted, will seek to verify that the functional requirements of paragraph 14.1.1 are complied with.

14.5. Sources of Energy

14.5.1. Vessels <300GT should have sufficient reserve energy supply to operate the radio installations for a minimum of 3 hours in addition to the emergency supply.

14.5.2. Vessels ≥300GT NOT meeting the emergency source of electrical energy requirements of SOLAS II-1/Part D, Regulation 43, should have sufficient reserve energy supply to operate the radio installations for a minimum of 6 hours in addition to the emergency supply.

14.5.3. All vessels ≥300 GT meeting the emergency requirements of SOLAS II-1/D, Regulation 43 should have a one hour reserve supply.

14.5.4. When a reserve source of energy consists of a

rechargeable accumulator battery, a means of automatically charging such batteries should be provided, which is capable of recharging them to minimum capacity requirements within 10 hours which should include a visual and audible charger failure device.

14.5.5. The siting and installation of accumulator batteries should ensure the highest degree of service and safety.

14.6. **Radio Personnel**

14.6.1. A vessel should carry at least one person qualified for distress and safety radiocommunication purposes, who should hold a certificate of competence acceptable to the relevant authority.

14.7. **Availability of Equipment**

14.7.1. On vessels of 300GT and above the availability of radio installations should be ensured by using such methods as duplication of equipment, shore-based maintenance or at sea electronic maintenance capability.

15. **NAVIGATION LIGHTS, SHAPES AND SOUND SIGNALS**

15.1. Every vessel should comply with the requirements of the International Regulations for Preventing Collisions At Sea, 1972, as amended. All navigation lights should be provided with main and emergency power supply.

16. **NAVIGATIONAL EQUIPMENT**

16.1. The Requirements, as specified in SOLAS 1974, as amended, Chapter V, as applicable based on ship's size, should be complied with unless the Flag Administration specifies otherwise.

17. **ANCHORS AND CABLES**

17.1. **Equipment**

17.1.1. Vessels will be considered to have adequate equipment if fitted out in accordance with standards for such equipment, set by an Authorized Organization.

17.1.2. Vessels not equipped in accordance with 20.1.1 may be specially considered by the Administration, provided full information is submitted for approval.

17.1.3. All vessels are to have at least 2 anchors, one of which must be ready for use at all times. Any powered deployment system should be connected to an emergency power supply or be capable of being manually operated.

17.2. Sailing Vessels

17.2.1. The sizing of anchors and cables for sailing vessels should take into account the additional windage effect of the masts and rigging.

17.2.2. Typically, for square rigged sailing vessels of up to 50 metres in length, experience based guidance on approximate increase in anchor mass and cable strength is typically 50% above the requirements for a typical motor vessel having the same total longitudinal profile area of hull and superstructure as the square rigged sailing vessel under consideration.

18. MARITIME LABOUR

18.1. The provisions of Maritime Labour Convention as amended through the ratifying [Law 6\(III\)/2012](#) and related [DMS circulars](#), are applicable for category A,B,C and D vessels. The competent authority will consider any requests for exemptions and or equivalent provisions as it is allowed by the pre-mentioned Law.

19. MEDICAL STORES

19.1. A vessel should carry medical stores as required by the Competent Authority (Law 175(I)/2002 and P.I. 223/2010). It is noted that pleasure vessels, not manned with professional seafarers, do not fall under the provisions of this law.

20. SPECIALIZED CRAFTS/EQUIPMENT

20.1. Tenders

20.1.1. When a vessel carries a rigid or inflatable tender, it

should be fit for its intended use. Safety equipment should be provided in the tender as appropriate to its intended range and area of operation. Each tender should be clearly marked with the number of persons that it can safely carry, and the name of the parent vessel. All tenders capable of carrying more than 6 persons, should follow where practicable, the national requirements of high speed pleasure crafts.

20.2. Helicopters

- 20.2.1. When provision is made for helicopter operations to or from the vessel, the helicopter landing area should be located on an appropriate area of the weather or superstructure deck, or on a purpose built landing area permanently attached to the vessel or structure, providing;
1. the structural strength of the helicopter landing area is designed and constructed according to an Authorized Organization rules on helicopter landing areas for vessels and a Certificate of Compliance is issued by the relevant Authorized Organization;
 2. the requirements for helicopter facilities in SOLAS II-2 are complied with in full;
 3. helicopter operations to/from the vessel are restricted to within the weather, pitch, roll, and heave limits for the vessel as defined where appropriate in the relevant operating rules;
 4. the helicopter landing area is designed for the largest helicopter which it is intended to use; and
 5. the operational procedures for the vessel fully reflect the above.
- 20.2.1.1. If it is intended to provide hangar and/or refuelling facilities for a helicopter whilst it is on board the vessel, agreement from both the Authorized Organization and the Competent Authority should be obtained.
- 20.2.1.2. The minimum safe landing area dynamic load bearing capability should be 2.5 (two and a half) times the Maximum Take-Off Mass (MTOM) of the heaviest helicopter intended to use the landing area. This may only be reduced, subject to agreement from both the Authorized Organization and the Competent Authority.
- 20.2.2. The officer(s) in charge of each helicopter landing area operations team should be in possession of an **Offshore Petroleum Industry Training Organisation (OPITO) Approved Offshore Helicopter Landing Officer (HLO) certificate**. All other crew assigned duties within the helicopter landing area operations team(s) should be in possession of an OPITO Approved Offshore Emergency Helideck Team Member certificate. Certification from an equivalent course approved by the Administration will also be accepted. All helicopter operations certification should be in date.
- 20.2.3. All crew on board should undergo familiarisation training regarding helicopter operations on board and it is

recommended that all crew undertake helicopter crash survivability ("dunker") training at a recognised OPITO training centre, prior to commencement of duties.

20.2.4. Ship to shore and ship to helicopter communications procedures, ship operating procedures, and guidance on helicopter emergencies should be included in the Safety Management System of the vessel.

20.2.5. Refueling of the helicopter while engines and rotors are running is prohibited.

20.3. Pilot for Vessel

20.3.1. Boarding arrangements provided for pilots should have due regard for SOLAS Chapter V, Regulation 23 and IMO Resolution A.1045 (27) "Pilot transfer arrangements", International Maritime Pilots' Association (IMPA) recommendations, or any documents replacing them.

20.4. Gangway and Accommodation Ladders

20.4.1. A safe means of access is to be provided at all times when in port, either deployed or available for deployment. If the safe means of access is not deployed, there should be a means provided for communication between those on the quay and those on board.

20.4.2. When provided, gangways, passerelles, and accommodation ladders should be manufactured to a recognised national or international standard, and be clearly marked with the manufacturer's name, the model number, the maximum design angle of use and the maximum safe loading (by number of persons and by total mass). Side screens or handrail(s) should be provided on both sides.

20.4.3. Where gangways, passerelles or ladders do not comply with national or international standards, a manufacturer's test load certificate should be provided. Alternatively practical tests may be carried out to the satisfaction of the Administration. In all cases the maximum design angle, maximum number of persons, and the maximum total mass should be clearly marked, and are to be used in accordance with the manufacturer's instructions.

20.4.4. Access equipment and immediate approaches to it should be adequately illuminated.

20.5. Submersible Craft

20.5.1. Registration, construction and operation of submarines are allowed to be registered in the Cyprus Registry. They may be permanently carried by a parent vessel and hence it should be registered as part of the equipment on board the parent vessel, or it may be registered as a stand alone vessel which

may be carried by a specific vessel for specific operations. If the submersible craft is carried permanently by a parent ship, both vessels must be registered under the same registry. A submersible registered in the Republic of Cyprus is allowed to be carried temporarily by a parent vessel for specific operations, subject to the approval of the State of Registry of the parent vessel.

20.5.2. Submersible crafts, registered in the Republic of Cyprus are subject to the provisions of IMO MSC.1 Circular 981, "Guidelines for the design, construction and operation of passenger submersible craft", in addition to all other relevant provisions included in these technical standards.

20.5.3. Submersible Craft carried on vessels should comply with the following:

1. They should be constructed and maintained in accordance with the rules of an Authorized Organization, applicable national regulations and be suitable for the intended use.
2. Supporting equipment should be constructed and maintained in accordance with the rules of an Authorized Organization and any applicable national regulations. The maximum safe working load of the equipment and maximum sea state in which the craft may be launched are to be stated.
3. A safety management system which may be separate from any system operated by the parent vessel, including an operations manual, must be in place, and subject to annual audit.
4. Following satisfactory survey and audit, certification for safety of submersible craft and its support equipment should be issued, and is subject to annual survey.
5. Maintenance should be carried out by the manufacturer or an organisation or person accepted by the Administration at intervals specified by the manufacturer.
6. Operating crew to have adequate theoretical and practical training for the type of submersible craft onboard, and have demonstrated ability to operate it.

21. MARINE ENVIRONMENT

21.1. MARPOL

21.1.1. Prevention of Pollution by Oil (MARPOL ANNEX I)

21.1.1.1. Ships should comply with all the requirements of MARPOL ANNEX I, as appropriate. It is the owner's responsibility to comply with Administration / coastal/ port state requirements.

21.1.1.2. Ships under 400 GT, should have holding tanks of adequate capacity for the retention of oily mixtures onboard and means of disposal to the reception facilities as minimum measures.

21.1.1.3. Holding tanks capacity should be calculated based on the formula $(7 \times 0.5\% \text{ of total daily fuel oil consumption in ltrs }) + 0.10\% \text{ of total engine lubricant capacity in ltrs}$, for ships engaged on short

international voyages and (14 x 0.5% of total daily fuel oil consumption in ltrs) + 0.10% of total engine lubricant capacity in ltrs for the ships other than those engaged on short international voyages.

21.1.1.4. Ships under 400 GT should have a nominated pump for any transfer of oily bilge water, not connected to any other system of the ship or used for any other purpose.

21.1.2. Prevention of Pollution by Sewage from ships (MARPOL ANNEX IV)

21.1.2.1. Ships should comply with the requirements of MARPOL ANNEX IV, as appropriate.

21.1.2.2. It is owner 's responsibility to comply with additional requirements of Administration / coastal / port state.

21.1.2.3. All ships should comply with the requirements of MARPOL / ANNEX IV - REGULATION 11, for discharge of sewage into the sea.

21.1.2.4. Ships of less than 400 GT which are certified to carry more than 15 persons should comply with all requirements of MARPOL ANNEX IV.

21.1.2.5. Ships of less than 400 GT certified to carry less than 15 passengers should be furnished, with a designated holding tank for retention of sewage and means of disposal to the reception facilities as minimum measures.

21.1.3. Prevention of Pollution by Garbage from ships (MARPOL ANNEX V)

21.1.3.1. The provisions of MARPOL ANNEX V shall apply to all ships.

21.1.3.2. Discharge of Garbage shall be in accordance with the MARPOL ANNEX V Regulation 3,4 and 6.

21.1.3.3. All Ships shall display placards which notify the persons (crew - passengers) onboard for the discharge requirements of Regulation 3,4,6 of MARPOL ANNEX V as appropriate.

21.1.3.4. Ships of 100 GT and above and every ship which is certified to carry 15 or more persons shall carry a Garbage Management Plan which the crew shall follow. This plan shall be based on the guidelines developed by the Organization and written in the working language of the crew.

21.1.3.5. Ships of 400 GT and above and every ship which is certified to carry 15 or more persons shall be provided with a Garbage Record Book. The Garbage Record Book shall be maintained as per the requirements of MARPOL ANNEX V.

21.1.4. Prevention of Air Pollution from ships (MARPOL ANNEX VI)

21.1.4.1. Every ships of 400 GT and above shall be subject to the surveys as specified at MARPOL ANNEX VI - REGULATION 5.

- 21.1.4.2. Ships of 400 GT and above shall maintain an International Air Pollution Prevention Certificate as required by MARPOL ANNEX VI - REGULATION 6.
- 21.1.4.3. Ships equipped with marine diesel engine with a power output of more than 130 Kw or with marine diesel engine with a power output of more than 130 kW which undergoes a major conversion on or after 1 January 2000, except when demonstrated to the satisfaction of the Administration that such engine is an identical replacement to the engine which it is replacing shall comply with MAPROL / ANNEX VI - REGULATION 13.
- 21.1.4.4. Ships which are equipped with engine as provided by Regulation 13.1 of MAPROL ANNEX VI shall maintain Engine IAPPC as appropriate.
- 21.1.4.5. All Ships shall comply to Reg. 12 of Annex VI of MARPOL and maintain an Ozone Depleting Substances Record Book.
- 21.1.4.6. All ships shall comply with the MARPOL / ANNEX VI - REGULATION 14, as amended.
- 21.1.4.7. All ships should maintain onboard the Bunker Delivery Note (BDN), as per MARPOL / ANNEX VI -REGULATION 18.5 & 18.6.

21.2. Antifouling System Requirements

- 21.2.1. All vessels should comply with the hull Anti-Fouling System Convention requirements.
- 21.2.2. Ships of 24 meters or more in length but less than 400 GT engaged in International voyages shall carry a Declaration on Anti-Fouling System.

21.3. Ballast Water Management Requirements

- 21.3.1. Ballast Water Management Convention (BWMC) shall apply to all ships.
- 21.3.2. Pleasure craft used solely for recreation or competition or craft used primarily for search and rescue, less than 50 meters in length overall, and with a maximum Ballast Water capacity of 8 cubic meters, shall conduct Ballast Water Management in accordance with the G.3 Guidelines Resolution of MEPC.123(53).
- 21.3.3. Ballast Water Management Convention shall not apply to ships which are falling under the provisions of Article 3-Application of BWMC.
- 21.3.4. All ships constructed before 08/09/2017, with Ballast Capacity more than 8 cubic meters and less than 400 GT shall:
 - 21.3.4.1. Conduct ballast water management that at least meets the standard described in BWMC / ANNEX / Regulation D-2 not later than 08 September 2024.
 - 21.3.4.2. Maintain and implement a Ballast Water Management Plan, as required by BWMC.

21.3.4.3. Maintain a Ballast Water Record Book, as required by BWMC

21.3.4.4. Conduct Ballast Water exchange in accordance with the BWMC / ANNEX / Regulation D-1, until meets the standards described in BWMC / ANNEX / Regulation D-2.

21.3.5. Every ship of 400 GT and above shall be subject to survey as specified at BWMC / ANNEX / REGULATION E-1, as amended and maintain the International Ballast Water Management Certificate as required by BWMC / ANNEX / REGULATION E-2.

21.4. Ship Recycling Requirements

21.4.1. Every ships of 500 GT and above shall comply with the provisions of Regulation EU 1257 / 2013 on Ships Recycling Requirements.

21.4.2. Ships which are excluded from the scope of Regulation (less than 500 GT) are encouraged to adopt appropriate measures to ensure that act in a manner that is consistent with this Regulation, in so far as is reasonable and practicable.

22. MANNING

22.1. Category A, B and D vessels are required to have onboard Minimum Safe Manning Document. Voluntary provisions are in place for Category C vessels. The relevant provisions and the application for the issuance of Minimum Safe Manning Document can be found in **Annex 1**.

22.2. Crew members employed, should be included in the crew list required for the vessel, should have received on board familiarisation training as required by STCW, and should not be assigned duties on the muster list unless they received appropriate training. All crew members are required to have successfully completed approved STCW Basic Safety Training.

23. Survey and Certification

23.1. General

23.1.1. The Administration may authorize Organizations to perform approvals of drawings, calculations, materials, equipment, procedures and manuals, intact and damage stability calculations and documentation, plans and statements as well as to survey and inspect vessels and issue relevant

certification on its behalf, in accordance with the provisions of the present technical standards.

- 23.1.2. Subject to the provisions of the following paragraph, the shipowner and the operator of a Cyprus ship shall individually bear the obligation to ensure that the ship be constructed, equipped and maintained in conformity with the rules and procedures of the Organization acting on behalf of the Republic, with respect to the hull, machinery and electrical and control installation requirements. Subject to subsection 23.1.3, the shipowner and the operator of a Cyprus ship shall individually bear the obligation to furnish the ship with a valid class certificate issued by an Authorized Organisation.
- 23.1.3. The Administration may, by virtue of an order, issue and apply rules it considers equivalent to those of a recognised organisation. In such case: (i) subsection (1) shall not apply; and (ii) the shipowner and operator of a Cyprus ship individually bear the obligation to ensure that the said ship complies with the aforementioned rules.
- 23.1.4. All vessels subject to these technical standards are required to be surveyed and certificated in accordance with the International Load Line Convention. Vessels which are over 400GT fall under the provisions of the MARPOL Convention. All vessels of over 300GT (except from category C) are also required to be surveyed and certificated under the radio requirements of SOLAS. All other vessels subject to these technical standards should be surveyed in accordance with relevant applicable rules and regulations of an Authorized Organization.
- 23.1.5. Statutory work may be undertaken by surveyors of the Competent Authority or by surveyors of an Authorized Organization.
- 23.1.6. A vessel to which the International Conventions apply must be surveyed and certificated appropriately in accordance to those applicable conventions. All requests for survey and certification must be made to the Administration (or the duly Authorized Organization acting on its behalf) or the appropriate organisation or Private Body in relation to radio installations.
- 23.1.7. Initial Survey (including new-building commercial vessels)
- 23.1.8. Vessels are required to be initially surveyed and issued with the applicable certificates.
- 23.1.9. Indicative list with the required certificates is included in Annex II. The issuance and validity of each certificate is subject to the requirements / conditions of the relevant instrument.
- 23.1.10. The Statement of Compliance with the present standards,

is issued with a five-year period of validity and is endorsed annually based on satisfactory results of a relevant survey, which shall be conducted within a three months window from the anniversary date. The provisions of SOLAS 74 as amended / Chapter I / Regulation 14, regulating the validity of certificates for cargo ships, are adopted mutatis mutandis for the Statement of Compliance with the present standards in order to regulate its' validity. If the survey is completed within the prescribed window, the anniversary date of the certificate i.e. the day and the month of each year, will remain the same. The owners are prompted to keep the surveys for the issuance of this certificate harmonized with the surveys required for the issuance / endorsement of other certificates. In case the survey is not completed within the window the Competent Authority should be conducted for instructions. The Competent Authority will consider any reasonable request in order to facilitate the harmonization of the surveys.

23.1.11. Alternative Inspection Schemes for Category C vessels

Notwithstanding the above, Category C vessels not falling within the scope of certification of the International Conventions ratified by the Republic of Cyprus (i.e. below 400GT), the Competent Authority may consider alternative inspection schemes proposed by the owners which do not represent inferior level of inspections compared to that provided by the above standards. Any alternative inspection scheme proposed will observe a period of validity and surveys as outlined by 23.1.10.

The competent Authority shall evaluate all the surrounding factors of the proposal with the purpose of ensuring equivalent safety levels with those of the standards and may impose relevant restrictions/conditions.

Upon positive consideration of the proposal, the Competent Authority will grant its consent to the proposed inspection scheme and upon receipt of the relevant inspection reports and notification, the Statement of Compliance shall be issued by the Competent Authority.

The competent Authority may in due course issue guidelines on such alternative schemes.

24. ACCIDENT INVESTIGATIONS

24.1. The conduct of the parties involved in relation to an accident can be found in Annex 3.

25. SAFETY MANAGEMENT SYSTEM

- 25.1. The vessels, for which the provisions of the ISM Code are not mandatory under SOLAS, a Management System should be established, addressing at least the Issues, as described in Annex 1. Category C vessels are urged to employ a Safety Management System as far as practicable. The owner is the responsible entity for the developing and implementation of the Safety Management System or another person or entity, who / which has assumed the responsibility for operation of the ship from the Shipowner and who on assuming such responsibility has agreed to take over all the duties and responsibility imposed by the Safety Management System requirements. In this respect the owner and the person / entity should be able to provide at any time and when requested evidence of their agreement and terms thereof.
- 25.2. The safety management system can be found in Annex 4.

26. Serious discrepancies / failure of compliance with the standards

- 26.1. In case of serious discrepancies / failure of compliance with the Technical Standards is identified, the Shipping Deputy Ministry may initiate the procedure as prescribed in article 6A of Cyprus Law 45/1963, for a possible revocation of the Cyprus character of a ship.

ANNEXES

Annex 1 – Minimum Safe Manning

A1.1. MINIMUM SAFE MANNING

A1.1. Minimum Safe Manning of Commercial Vessels

- A1.1.1. IMO Resolution A.1047(27) adopted on the 30th November 2011 defines the principles of Safe Manning to ensure the safe operation of, and prevention of pollution from, ships to which the Convention applies.
- A1.1.2. The Administration may choose to adopt these arrangements in full, or modify these arrangements to meet particular operational circumstances.
- A1.1.3. All sea going commercially operated vessels and sail training vessels of more than 24 metres in Tonnage Length should carry an appropriate number of qualified Deck and Engineer Officers to ensure a degree of safety at least equivalent to that established by the IMO guidelines.
- A1.1.4. Training vessels must be properly and safely manned at all times, both at sea and if necessary in port, by a sufficient number of experienced and competent personnel to ensure that trainees are adequately supervised giving particular consideration to the number, age, sex of the trainees. All training should be properly organised with clearly detailed objectives and outcomes.
- A1.1.5. The Administration should ensure that all vessels are safely and sufficiently manned in relation to the nature of their operation with the responsibilities placed on companies owning or operating seagoing vessels, to ensure that their vessels are manned with personnel of appropriate grades who have been properly trained and certificated.
- A1.1.6. The numbers of certificated officers and certificated and non-certificated ratings, must be sufficient to ensure safe and efficient operation of the vessel at all times.
- A1.1.7. The guidelines place a duty on the owner or operator to provide the master of a vessel with the necessary resources to comply with the manning requirements.

A1.2. Minimum Safe Manning Document

- A1.2.1. All vessels of Categories A, B & D in compliance with these regulations should fully comply with the national legislation on the minimum manning for the safety of navigation. All vessels should carry a valid Minimum Safe Manning Document.
- A1.2.2. Owners of Category C who wish to maintain voluntary compliance with minimum manning requirements may apply for the issuance of a Minimum Safe Manning Document.

A1.3. Application for a Minimum Safe Manning Document

- A1.3.1. Any application for a Minimum Safe Manning Document should be made by the owner, or a person authorised to act on their behalf, to the flag Administration of the vessel.
- A1.3.2. For Category A & D vessels must be used the application form as per SDM Circular 12/2017 at its latest edition. The application must include proposals as to the number and the qualifications of the crew, which the owner or a person authorised to act on their behalf, considers adequate to the vessel's safe manning for its proposed voyages and operations. In preparing such proposals, shall be taken into consideration the indicative tables of the First Schedule of "The Merchant Shipping (Safe Manning, Hours of Work and Watchkeeping) Laws of 2000 to 2005 (Law 105(I)/2000 as amended).
- A1.3.3. For Category B & C vessels an official request for the issuance of Minimum Safe Manning Document must be sent to this administration. This administration shall take into consideration the indicative table of these standards for preparation of the vessel's Minimum Safe Manning Document.
- A1.3.4. A proposal or a request should only be approved and Minimum Safe Manning Document issued provided the manning level fully satisfies these principles, recommendations and guidelines.
- A1.3.5. When the manning level has been agreed, a Minimum Safe Manning Document should be issued for that vessel in a format which complies with the requirements of SOLAS, as amended. It should be retained on board and be available for inspection by an authorised person, whenever required.
- A1.3.6. In the event of any change in equipment, construction or use of the vessel, which may affect the safe manning level, the owner or operator should make an application for the issue of a new Minimum Safe Manning Document.
- A1.3.7. A Safe Manning Document of a vessel may be withdrawn if an owner or operator fails to submit a new proposal where a vessel changes trading area(s), construction, machinery or equipment, or operation and/or method of maintenance have changed, or a vessel persistently fails to comply with the rest hours requirements.

A1.4. Sailing Vessels

- A1.4.1. Depending on the type of rig and level of automation, additional personnel may be required to operate the rig of a sailing vessel.

A1.5. Personal Water Craft

- A1.5.1. The operators are reminded that operation of personal watercraft should comply with the applicable legislation of the state in whose waters they are being operated.

Tables of indicative minimum manning levels for Category B and Category C vessels

1. The composition of the crew of commercial yacht (Category B) carrying no more than 12 passengers and private use vessels (Category C), is set in an indicative manner as follows:

1.1 Navigational Department

1.1.1 For Short Range vessels

Gross Tonnage	< 200 GT	200 - 350 GT	> 350 - < 500 GT
Master [STCW - II/3]	1	1	1
Chief Officer [STCW - II/3]	-	-	1
Deck Rating [STCW - VI/1]	1	1	1
TOTAL	2	2	3

1.1.2 Unlimited Area

Gross Tonnage	< 200 GT	200 - 350 GT	> 350 - < 500 GT
Master [STCW - II/3]	1	1	1
Chief Officer [STCW - II/3]	1	1	1
Deck Rating [STCW - VI/1]	1	1	2
TOTAL	3	3	4

1.2 Engine Department

1.2.1 For Short Range vessels

Gross Tonnage	< 750 kW	750 - 1500 kW	> 1500 kW
Chief Engineer [STCW - III/3]	-	1	1
Engine Rating A' [STCW - III/4 or III/5]	-	-	-

Engine Rating B' [STCW - VI/1]	-	-	1
TOTAL	-	1	2

1.2.2 Unlimited Area

Gross Tonnage	< 750 KW	750 - 1500 KW	> 1500 GT
Chief Engineer [STCW - III/3]	1	1	1
Engine Rating A' [STCW - III/4 or III/5]	-	-	1
Engine Rating B' [STCW - VI/1]	-	1	-
TOTAL	1	2	2

Annex 2: Indicative list of Certificates

Certificate	Observations / Limitations	CATEGORY			
		A	B	C	D
Certificate of Cyprus Registry		x	x	x	x
Radio License		x	x	x	x
Statement of Compliance with the technical standards (A draft of the document is attached below the table)		x	x	x	x
International Tonnage Certificate (1969)		x	x	x	x
International Load Line Certificate		x	x		x
Minimum safe manning document		x	x	x	x
Safety Management Certificate					x
Document of Compliance					x
Maritime Labour Certificate					x
Certificate of Inspection -Maritime Labour Convention Ratifying law 6(III)/2012		x	x	x	
Continuous Synopsis Record (CSR)					x
International Ship Security Certificate (ISSC) or Interim International Ship Security Certificate					x
International Oil Pollution Prevention Certificate	For oil tankers of 150 gross tonnage and above and any other ship of 400 gross tonnage and above	x	x	x	x
International Sewage Pollution Prevention Certificate	Ships of 400 gross tonnage and above or ships which are certified to carry more than 15 persons	x	x	x	x
International Air Pollution Prevention Certificate	Any ship of 400 gross tonnage and above	x	x	x	x
International Energy Efficiency Certificate	Any ship of 400 gross tonnage and above	x	x	x	x
International Ballast Water Management Certificate	Ships of 400 gross tonnage and above to which the BWM 2004 applies	x	x	x	x
International Anti-fouling System Certificate	Ships of 400 GT and above	x	x	x	x
Declaration on Anti-fouling System	Ships of less than 400 GT	x	x	x	x
Passenger Ship Safety Certificate					x

Offshore Supply Vessel Document of Compliance	Alternative certification upon agreement of the Administration to vessels falling under the provisions of the relevant code.	x			
Certificate of Fitness for Offshore Support Vessels	Alternative certification upon agreement of the Administration to vessels falling under the provisions of the relevant code.	x			

Annex 3: Conduct in case of maritime accident / incident

A3.1 In case of 'maritime accident' or 'maritime incident', as defined in IMO resolution A.849(20) as amended, the owner or the manager or the Master of a vessel have each one the obligation to inform immediately the Shipping Deputy Ministry for the maritime accident or incident.

A3.2 The Marine Accidents Investigation Committee, was established by virtue of the Marine Casualties and Incidents Investigation Law of 2012 (Law no.94 (I)/2012).

A3.3 The competent Authority evaluates the notifications and decides whether it will proceed with investigation. In order to decide the following are taken into account

1. Whether an investigation has been initiated by another authority such as the Marine Accidents Investigation Committee
2. The seriousness of the accident or incident
3. The possibility the outcome of the investigation to assist in the avoidance of similar incident or accident in the future
4. The obligations of the Republic deriving from international instruments etc.

A3.4 The investigation of maritime accidents and incidents is carried out by Marine Surveyors of the Shipping Deputy Ministry to the President who are assigned with such task by the Permanent Secretary of the Shipping Deputy Ministry.

A3.5 In cases of very serious accidents or / and incidents for the investigation of which specialized knowledge is required, the Permanent Secretary of the Shipping Deputy Ministry might assign the whole or part of the investigation to a specialist with purchase of services.

A3.6 The investigations carried out in accordance with the provisions of the present standards are:

- 6.1. independent of criminal or other parallel investigations held to determine liability or apportion blame;

A3.7 not unduly precluded, suspended or delayed by reason of such investigations.

A3.8 Mutatis mutandis, provisions of the 'Marine Casualties and Incidents Investigation Law' of 2012 (Law no.94 (I)/2012), are applied as follow:

A3.9 Information to be included when notifying the Competent Authority for a maritime incident or accident - Article 16(2)

A3.10 Authorities of the Investigators - Article 17(1) and 17(2)

A3.11 Confidentiality of Information - Article 19

A3.12 Preservation of Evidence - Article 21(1)

- A3.13 Investigations carried out as provided in these standards lead to the publication of a report by the Permanent Secretary.
- A3.14 The permanent secretary shall use it best efforts in order the reports, including the conclusions and possible recommendations, are available to the public within 12 months from the date of the accident - incident.
- A3.15 In case it is not possible to produce a final report within 12 months from the date of the accident or incident, then an interim report shall be published.
- A3.16 Draft of the report is made known to the persons involved with the maritime accident or incident, the owner of the vessel as well as to other involved entities, for their review and comments within a deadline of one month.
- A3.17 The Permanent Secretary, based on a proposal of the investigator, is making safety recommendations which are made known to persons or entities to whom they are addressed who shall take them into account.

Annex 4: Safety Management System - SMS

A4.1. Application /Purpose

The purpose of this Annex is to provide assistance to Companies/owners in developing and implementing an effective safety management system.

A4.1.1. Safety and Environmental Protection Policy

Each company/operator should create a systematic approach to ensure a safe working environment on board the vessel. A safety and environmental (S&E) protection policy should be developed. An S&E policy must address issues of health, safety and the environment as they affect the company and its staff, both ashore and on board. Such a policy might read along the following lines: "The policy of (name of Company/Owner) is to conduct its activities taking full account of the health and safety of its employees and of all persons using or connected with the Company/Owner. In implementing this policy, (name of Company/Owner) will ensure that the [vessel] is, at all times, properly maintained and operated by qualified personnel in full compliance with relevant legislation. In particular the [Company/Owner] will carry out an assessment of the risks to the health and safety of workers and others affected by [the undertaking], and will take the necessary measures to minimise the risks identified."

A4.1.2. Oil Management Plan

The company/owner is urged to develop and implement an oil management plan and to integrate it with the S&E Policy. This is not required for vessels over 400GT, for which an IOPP certificate is required. The Oil Management Plan should be addressed in the Safety Management Manual (SMM) either as a separate annex or as a separate document.

A4.1.3. Compliance with rules & regulations (procedure)

The company/owner is urged to include in the SMM Plan a procedure for compliance with all mandatory Rules and Regulations, applicable to the vessel, such as, the International Regulations for Preventing Collisions at Sea, Local Navigation Rules such as within the sea area of the Cyprus Ports Authority, any other applicable national health and safety regulations and all other relevant national shipping or guidance notices including Circulars of the Shipping Deputy Ministry.

A4.1.4. Standard Operation Procedure (SOP) on board (procedure)

The company/owner should draw up simple procedures to ensure that safe working practices are carried out in the operation of the vessel. These may be in the form of checklists which can be followed by all personnel. Simple procedures should be developed for the operation of the vessel. These should include, but not be limited to:

- testing of equipment (VHF, bilge pumps, life saving appliances, fire fighting equipment, emergency alarms, etc);
- testing steering gear, prior to commencing a passage;
- navigation and handling of the vessel;
- maintenance routines;
- bunkering operations;
- watertight/weathertight integrity;
- stability of the vessel;
- conduct of passengers and crew while on board;

A4.1.5. Official Log Book

Pursuant to section 99 of THE MERCHANT SHIPPING (MASTERS AND SEAMEN) LAWS OF 1963 TO 2002 an official log-book, an engine room log-book and a radio log-book, shall be kept in every Cyprus ship, in the appropriate form for that ship approved by the Minister. See also P.I. 297/2001 (THE MERCHANT SHIPPING (OFFICIAL LOG BOOKS, SHIP'S ARTICLES AND SIX - MONTH LISTS) REGULATIONS OF 2001). All vessels above 24 meters in Length, are required to carry an Official Log Book. It might be appropriate that checklists may be employed by the operator to ensure safe operation and for navigational items. Such checklists should be recorded within the Official Log book.

A4.1.6.

A4.1.7. Line of Authority and Communication (procedure)

Responsibility and authority of each employee should be clear. This may be best illustrated in a simple diagram, showing who reports to whom. This line of authority and reporting should include the transparent and recorded line of communication between personnel ashore and on board.

A4.1.8. Reporting accidents (procedure)

All Cyprus flag vessels are required to report any accidents and near accidents to the Administration without any delay whenever practicable. The company must therefore have a procedure in place to deal with the mandatory notification in addition to all kept records and relevant documents in particular the reporting to the operator/owner, who should implement corrective action, with the aim of improving safety.

The requirement for reporting accidents should be well understood by all personnel and in so doing improve the safety culture practiced on board. Incidents which are subject to national law in reporting, should be communicated directly and with no undue delay to the Marine Accident Investigation Committee (www.maic.gov.cy) and to the Maritime Administration (www.shipping.gov.cy).

A4.1.9. Security Control (procedure)

All vessels should include a procedure within their SMS to cope with the possibility of having at all times adequate control of access of personnel on board in the event of a security incident.

A4.1.10. Responding to emergency situations (procedure)

There should be clearly stated procedures for responding to emergency situations. Scenarios that should be known to all personnel should include the following scenarios. The following list may be expanded by the company/owner based on the evaluation of other safety related risks and hazards. It is strongly recommended that checklists are incorporated for training and familiarisation and implementation purposes.

Fire

Collision

Grounding

Flooding

violent act

main propulsion or steering failure

man overboard

Emergency evacuation

Injured person onboard

A4.1.11. Designated Competent Person (ashore and onboard)

There should be at least one designated competent person both ashore and onboard delegated to take responsibility for health,

safety and environmental issues. The designated person should be clearly identified, competent and trained if required. The responsibility to comply with the Policy rests with the owner/operator.

A4.1.12. Drug and Alcohol Policy

SMS should include a policy on prevention of alcohol and drug abuse on board the vessel and on key personnel ashore.

A4.1.13. Safety culture

All personnel both ashore and on board have a duty to take care of themselves and other persons who may be affected by their acts or omissions. Everyone has the obligation to report incidents whenever identified or observed to other personnel.

A4.1.14. Communication with Emergency Services

It is essential that, in the event of an emergency, there is the ability to communicate with the emergency services via a shore base. The shore base may be the company office ashore, the local Coastguard, Police or Fire Station, or another office as may be agreed between the vessel and the shore base.

A4.1.15. Master's responsibility

The Master must have authority at all times, to make decisions with regard to the safety of the vessel and the persons on board. To ensure that there is no ambiguity regarding the authority of the Master, there should be a simple written statement to this effect.

A4.1.16. Training of Personnel

All personnel should receive training appropriate to the tasks they undertake. It is the responsibility of the company/owner to ensure that this training is given, and that the personnel have an understanding of the relevant regulations and rules.

A4.1.17. Crew Certificates

Master and Crew should be appropriately qualified and certificated and appropriately trained for their designated duties in accordance with applicable rules and regulations.

A4.1.18. Crew Familiarisation on board

All vessel's personnel should receive appropriate familiarisation training and proper instruction in onboard procedures. This familiarisation training could include among other:
mooring and unmooring;
launching and recovery of survival craft;
evacuation from all areas of the vessel;
Use of Life Saving Appliances;
donning of lifejackets; and
use and handling of fire fighting equipment.

A4.1.19. Emergency Preparedness

The potential emergencies likely to be encountered by the vessel should be considered, as those mentioned in section 12 above, and drills and exercises should then be carried out at specified intervals in the handling of these emergencies and evacuation from the vessel.

Where possible, all personnel, both ashore and on board, should be involved in these exercises.

The roles and responsibilities of all personnel in an emergency situation should be defined. A muster list should be prepared and posted on board where the roles and responsibilities of the Master and the crew in an emergency situation should be described.

The drills and exercises should be recorded within the Official Log Book. The names of those who participated should also be

recorded.

A4.1.20. Maintenance Program

The equipment should be checked and tested daily when in use, in addition to the tests referred prior to departure or arrival. There should be procedures for a more detailed and scheduled inspection and a maintenance programme of the vessel and equipment. The frequency of the inspections should be determined by the company/owner taking into account manufacturer's recommendations, but every event should be recorded. An overall maintenance checklist should be employed by crew and ashore personnel and relevant records should be kept for the inspection, testing and maintenance of equipment.

A4.1.21. Mandatory Review of the SMS

Every company/owner should undertake a review of the safety management system of all vessels at least once in five years or whenever appears to be necessary due to encountered incidents or non-conformities or whenever the owner/operator or the Master initiates a review of the system. Records should be kept to outline any review of the system.

Annex 5: Specimen of the Statement of Compliance

ΔΗΛΩΣΗ ΣΥΜΜΟΡΦΩΣΗΣ STATEMENT OF COMPLIANCE

Εκδοθέν σύμφωνα με τις διατάξεις της εγκυκλίου 17/2021 κατ' εξουσιοδότηση της Κυβέρνησης της Κυπριακής Δημοκρατίας από ...

Issued under the provisions of the Circular 17/2021 under the Authority of the Government of the Republic of Cyprus by

Όνομα Πλοίου <i>Name of ship</i>	Ολική Χωρητικότητα <i>Gross Tonnage</i>	
Δ.Ν.Ο ή Επίσημος Αριθμός <i>IMO or official number</i>	Μήκος <i>Length (Article 2(8))</i>	
Λιμάνι Μηολόγησης <i>Port of Registry</i>	ΛΕΜΕΣΟΣ <i>LIMASSOL</i>	Τύπος πλοίου <i>Type of Ship</i>
Έτος τοποθέτησης Τρόπιδας <i>Keel Laid</i>	Κατηγορία <i>Category</i>	

Βεβαιώνεται ότι:

This to certify that:

1. Το πιο πάνω σκάφος επιθεωρήθηκε σύμφωνα με τις διατάξεις της πιο πάνω εγκυκλίου.
The above vessel has been surveyed in accordance with the requirements of the above-mentioned Circular.
2. Η επιθεώρηση απέδειξε ότι το σκάφος πληροί τις απαιτήσεις της πιο πάνω Εγκυκλίου σε ότι αφορά την κατασκευή, την ευστάθεια, την υποδιαίρεση και την στεγανότητα, την διάταξη πυρασφάλειας και τα μέσα πυρόσβεσης, τις μηχανές πρόωσης, τα βοηθητικά μηχανήματα, την ηλεκτρική εγκατάσταση, τα σωστικά μέσα, τα όργανα και τους φανούς ναυσιπλοΐας, τα μέσα σηματοδότησης και τηλεπικοινωνίας.
The survey has verified that the vessel meets the provisions of the above-mentioned Circular concerning the construction, stability, subdivision and watertightness, the fire protection arrangement and fire extinguishing equipment, the propulsion engines, the auxiliary machinery, the electrical installation, the lifesaving appliances, the navigation instruments and lights, the signaling and radio equipment.
3. Ο συνολικός αριθμός ατόμων για τα οποία υπάρχουν στο σκάφος διαθέσιμα σωστικά μέσα είναι: _____
The total number of persons for which lifesaving appliances are provided, is:
4. Ο συνολικός αριθμός επιβατών είναι: _____
The total number of passenger, is:
5. Στο σκάφος εφαρμόζονται οι πιο κάτω περιορισμοί λειτουργίας:
The following operational limitations apply to the vessel:
6. Στο σκάφος εφαρμόζονται οι πιο κάτω ισοδύναμες ρυθμίσεις:

Θεώρηση Ετήσιων και Περιοδικών Επιθεωρήσεων

Endorsement for Annual and Periodical Surveys

1 ^η Ετήσια Επιθεώρηση	Τόπος	
1 st Annual Survey	Place	_____
Επίσημη Σφραγίδα	Ημερομηνία	
Official Stamp	Date	_____
	Επιθεωρητής	
	Surveyor	_____
2 ^η Ετήσια / Περιοδική Επιθεώρηση	Τόπος	
2 nd Annual / Periodical Survey	Place	_____
Επίσημη Σφραγίδα	Ημερομηνία	
Official Stamp	Date	_____
	Επιθεωρητής	
	Surveyor	_____
3 ^η Ετήσια / Περιοδική Επιθεώρηση	Τόπος	
3 rd Annual / Periodical Survey	Place	_____
Επίσημη Σφραγίδα	Ημερομηνία	
Official Stamp	Date	_____
	Επιθεωρητής	
	Surveyor	_____
4 ^η Ετήσια Επιθεώρηση	Τόπος	
4 th Annual Survey	Place	_____
Επίσημη Σφραγίδα	Ημερομηνία	
Official Stamp	Date	_____
	Επιθεωρητής	
	Surveyor	_____

Electronic file with a specimen of the Statement of Compliance with the present standards



Microsoft Word 97
- 2003 Document