



COOK ISLANDS  
SMALL YACHT CODE\_Ver.5  
(Yachts <24m in LL Length)

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# SECTION 1

## INTRODUCTION

## **1.0 Introduction**

The Code has been developed for application to those commercial motor and sailing yachts of less than 24 metres in load line length for which the minimum length requirement has been waived.

Yachts that have the LOA equal to or greater than 24 meters shall have the load line length verified by the MCI Technical Department before allowing the application of this Code. The verification will be carried out through the review of the longitudinal view of the yacht, which has to include:

- Base line;
- Deck line;
- Rudder stock; or
- Position of any means of propulsion (water jet, surface drive etc...) that can be used for the evaluation of the load line length.

The relevant drawing must be provided in a suitable scale, including all main dimensions of the boat.

This version update of the Code (v.5) comes into force from the 1<sup>st</sup> March 2024. Existing yachts whose keel has been laid prior to 1<sup>st</sup> March 2024, are required to be in compliance with this Code (v.5) no later than the first annual or renewal survey scheduled after the 1<sup>st</sup> March 2024, whichever occurs earlier.

### **1.1 Private Yachts**

The Administration recommends that pleasure yachts registered for private use focus on compliance with the Code to the extent considered reasonable and practicable.

Refer to Section 26 for regulation, recommendations and requirements to be applied for Private Yachts.

### **1.2 General**

This Code of Practice for Small Yachts (the Code) refers to the Maritime Rules of the Cook Islands. Vessels registered on the flag are required to comply with the various Maritime Rules of the Administration that are relevant to the class of vessel to which they belong.

The Code relates especially to the construction of a yacht, its machinery, equipment and stability and to the correct operation of a yacht so that safety standards are maintained.

It will be noted that the Code deals with the equally important subjects of manning and of the qualifications needed for the senior members of the crew.

Compliance with the Code in no way obviates the need for yachts and/or skippers to comply with local authority licensing, permit or regulatory requirements where applicable.

**1.3** Maritime Cook Islands may, on a case by case basis, consider specific alternative equivalents to any standard mentioned in this Code. Any proposed alternative/equivalency or any request for exemption from any specific requirement of the Code is to be reviewed and accepted by Maritime Cook Islands.

**1.4** MCI shall perform periodical revisions to this Code, when considered necessary so as to update the Regulations and Requirements included in the Code to all new National Legislations, International Regulations and Law, International Standards, Environmental Protection Requirements and new technical and scientific upgrades applicable to the yachting industry.

### **1.5 Insurance**

It is a requirement of registration with the Cook Islands that the owner/owner's representative of a yacht must carry Insurance / P&I cover for commercial / charter yachts.

The Administration recommends that private yachts carry Insurance /P&I cover also.

## SECTION 2 DEFINITIONS

The following terms are used in the Code for which these definitions apply:

**"A class division"** means divisions formed by bulkheads and decks which comply with the criteria stated in SOLAS Ch. II-2, Regulation 3.2.

**"Accommodation"** means those spaces used as public areas, lavatories, cabins, offices, medication areas, cinemas, entertainment rooms, health and beauty treatment areas, pantries containing no cooking appliances and similar spaces.

**"Administration"** means the Cook Islands Maritime Administration and includes a Deputy Registrar (DR), a Recognised Organization (RO), an Authorised Surveyor, a radio communications service provider, a marine architect or other entity deemed acceptable to the Administration to represent or act on its behalf with regard to the conduct of specified reviews, surveys and/or issue of certification.

**"Annual Survey"** means a general or partial examination of the yacht, its machinery, fittings and equipment, as far as can readily be seen, to ascertain that it has been satisfactorily maintained as required by the Code and that the arrangements, fittings and equipment provided are as documented in the Yacht's Safety Certificate.

**"Anniversary date"** means the day and the month of each year which will correspond to the date of expiry of the relevant certificate.

**"Approved"** in respect to materials or equipment means approved by the Administration or approved by another administration or an organization that is formally recognised by the Administration;

**"Authorised Surveyor"** means an independent surveyor who by reason of professional qualifications, practical experience and expertise is Authorised by the Administration to carry out surveys and certification pertaining to this Code;

**"B class division"** means divisions formed by bulkheads and decks which comply with the criteria stated in SOLAS Ch. II-2, Regulation 3.4.

**"B-15 class division"** means a "B" class division which have an insulation value such that the average temperature of the unexposed side will not rise more than 140°C above the original temperature, nor will the temperature at any one point, including any joint, rise more than 225°C above the original temperature, within the time of 15 minutes;

**"Bareboat Charter"**. See *Demise Charter*.

**"Buoyant lifeline"** means a line complying with the requirements of the Life-Saving Appliances Code.

**"Cargo"** means an item of value that is carried from one place and discharged at another place and for which either a charge or no charge is made and is not for use exclusively onboard the yacht;

**"Charter"** means agreement between the Owner/Managing Agent and another party, which allows the other party to use and operate the yacht. The "Charterer" is that other party;

**"Classification Society" or "Class"** means a ship Classification Society, which the Administration has accepted as a Recognised Organization for the survey and certification of yachts in accordance with the guidelines of IMO Resolution A.739(18) as amended;

**"Code"** means the Maritime Cook Islands Code of Practice for Small Yachts, Version 5 as amended;

**"Commercial yacht"** means a pleasure yacht engaged in trade, commerce, on charter or carrying passengers for hire that is registered and described in the register and on the Certificate of Registry as a commercial yacht and is not a private yacht. Dual registered yacht shall be considered as commercial yachts for the purposes of this Code

**“Competent person”** means for the scope of this Code the Owner or the Owner's representative (such as Technical Manager or Master);

**“Date of expiry”** in relation to pyrotechnics and self-activating smoke signals means a date specified by the manufacturer but not later than four years from the date of manufacturer of that product;

**“Demise Charter”** means, in relation to a yacht, the demise, letting, hire or delivery of the vessel to the Charterer, by virtue of which the Charterer has the whole possession and control of the vessel including the right to appoint its master and crew.

**“Deputy Registrar (DR)”** means a person appointed by the Registrar to act on her behalf.

**“Emergency source of electrical power”** is a source of electrical power, intended to supply the emergency switchboard or emergency users in the event of failure of the supply from the main source of electrical power and which is usually located outside the Engine Room;

**“Emergency Switchboard”** means a switchboard which in the event of failure of the main electrical power supply system is directly supplied by the emergency source of electrical power and is intended to distribute electrical energy to the emergency equipment and services

**“EPIRB”** means a satellite emergency position-indicating radio beacon.

**“Equivalent Certification”** means a type of Certification or Approval which is equivalent to the ones required in this Code and for which the Administration have approved on a case by case basis;

**“Existing yacht”** means any yacht, which is registered and is described in the register and on the Certificate of Registry as a commercial yacht, the keel of which was laid or the construction or lay-up was started before 1st March 2024.

**“Fire Test Procedure”** means the International Code for Application of Fire Test Procedures, adopted by the International Maritime Organization by Resolution MSC.61(67), as amended by the IMO MSC 173 (79) and as may be amended by further revisions;

**“Float-free launching”** means that method of launching a life raft or beacon is automatically released from a sinking yacht and is ready for use;

**“Freeboard”** has the meaning given in Annex I of the ILLC viz. The freeboard assigned is the distance measured vertically downwards amidships from the upper edge of the deck line to the upper edge of the related load line;

**“Freeboard deck”** has the meaning given in Annex I of the ILLC viz. The freeboard deck is normally the uppermost complete deck exposed to the weather and sea, which has permanent means of closing all openings in the weather part thereof, and below which all openings in the sides of the yacht are fitted with permanent means of watertight closing.

- (a) In a yacht having a discontinuous freeboard deck, the lowest line of the exposed deck and the continuation of that line parallel to the upper part of the deck are taken as the freeboard deck.
- (b) At the option of the owner and subject to the approval of the Administration, a lower deck may be designated as the freeboard deck provided it is a complete and permanent deck continuous in a fore and aft direction at least between the machinery space and peak bulkheads and continuous athwartships.
- (c) When a lower deck is designated as the freeboard deck, that part of the hull which extends above the freeboard deck is treated as a superstructure so far as concerns the application of the conditions of assignment and the calculation of



freeboard. It is from this deck that the freeboard is calculated and measured;

**“Garbage”** means all kinds of victual, domestic and operational waste excluding fresh fish and parts thereof, generated during the normal operation of the yacht and liable to be disposed of continuously or periodically, except sewage originating from yachts;

**“GRP”** means Glass Reinforced Plastic material.

**“GT (Gross Tonnage)”** means a way to measure the overall size of the yacht, which shall be calculated according to the Simplified Tonnage Measurement Method included in the Annex II of this Code.

**“Hazardous Space”** means a space or compartment in which combustible or explosive gases or vapours are liable to accumulate in dangerous rates;

**“HRU”** means Hydrostatic Release Unit.

**“ICLL”** means the International Convention on Load Lines, 1966, as amended. ICLL applies to commercial yachts:

- i) greater than or equal to 24m Load Line Length and with the keel laid after the 21<sup>st</sup> July 1968 and
- ii) to yachts greater than or equal to 24m Load Line Length and greater than or equal to 150GT with the keel laid before the 21<sup>st</sup> July 1968;

**“IMO”** means the International Maritime Organization, a specialized agency of the United Nations devoted to maritime affairs;

**“IMO No.”**- All yachts  $\geq$  100GT shall have an IMO Number assigned in accordance with IMO Resolution A. 1117 (30), as amended. Yachts built of timber are excluded;

**“Inflatable Lifejacket”** means a lifejacket complying with the requirements of the Life-Saving Appliances Code.

**“Instructions for on-board Maintenance”** means the instructions in order to carry out the requested periodical inspection on the life-saving appliances, as per the manufacturer's instructions and Administration requirements.

**“International Voyage”**. means a voyage from a country to a port outside such country, or conversely.

**“Launching appliance”** means a provision for safely transferring a lifeboat, rescue boat, life raft or inflated boat respectively, from its stowed position to the water and recovery where applicable;

**“Length”** means the length of the hull as defined by ISO 8666.

**“Length Overall (LOA)”** means the overall length of the yacht as defined in ISO 8666 as Lmax.

**“Lifeboat”** means a lifeboat complying with the requirements of the LSA Code;

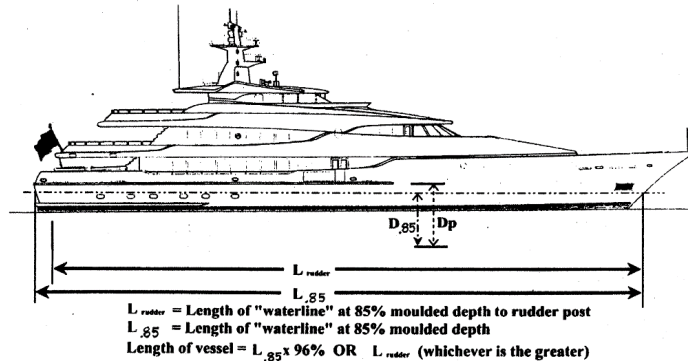
**“Life buoy”** means a life buoy complying with the requirements of the LSA Code;

**“Life jacket”** means a life jacket complying with the requirements of the LSA Code;

**“Life raft”** means a life raft complying with the requirements of the LSA Code;

**“Line Throwing Appliance”** means an appliance complying with the requirements of the Life Saving Appliances Code;

**“Load Line Length (LL Length)”** means 96% of the total length on the waterline of a yacht 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 yachts designed with a rake of keel, the waterline on which this is measured shall be parallel to the designed waterline;



**Low flame spread**" means that the surface thus described will adequately restrict the spread of flame, this being determined to the satisfaction of the Administration by an established procedure;

**"LSA Code"** means the 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 that 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 375 kW; or
- (c) any oil-fired boiler or oil fuel unit;

**"Main generating station"** is the space in which the main source of electrical power is situated;

**"Main source of electrical power"** is a source intended to supply electrical power to the main switchboard for distribution to all services necessary for maintaining the yacht in normal operational and habitable condition;

**"Main steering gear"** is the machinery, rudder actuators, steering gear power units, if any, and ancillary equipment and the means of applying torque to the rudder stock (e.g. tiller or quadrant) necessary for effecting movement of the rudder for the purpose of steering the yacht under normal service conditions;

**"Main switchboard"** is a switchboard that is directly supplied by the main source of electrical power and is intended to distribute electrical energy to the yacht's services;

**"Maritime Cook Islands"** means Maritime Cook Islands, the Corporate Administrators of the Cook Islands Ships Registry. Maritime Cook Islands administer all matters pertaining to vessels entitled to fly the Cook Islands Flag and/or that are subject to the provisions of the Cook Islands Ship Registration Act 2007 and the Cook Islands Maritime Transport Act 2008, as amended.

**"Major Alteration/Conversion"** means either:

- i) a structural/equipment modification affecting a yacht with or without previously approved stability information which undergoes a major refit or alterations. A major refit or alteration is considered when the major alteration/conversion results in either a change in the lightship weight of 2% and above and/or a shift in the longitudinal centre of gravity of 1% and above (measured from the aft perpendicular) and / or the calculated vertical gravity rises by 0.25% and above (measured from the keel), OR
- ii) a substantial change in the yacht's dimensions, type, number of passengers or engine power;

**“MARPOL”** means the International Convention for the Prevention of Pollution from Ships, 1973, as amended;

**“Maritime Rules”** means the Cook Islands Maritime Rules as made by the Cook Islands Minister of Transport;

**“MED”** means the EU Marine Equipment Directive;

**“MGN 280(M)”** means a Marine Guidance Note issued by Maritime and Coastguard Agency providing alternative construction standards with reference to the design and construction of "Small Vessels in Commercial Use for Sport or Pleasure, Workboats and Pilot Boats"

**“Midships”** means a transversal section located at the middle of the Length ( $L_H$ , Length of the Hull).

**“Mile”** means a nautical mile of 1852 metres;

**“Motor Yacht”** means a yacht which is described in the register and on the certificate of registry as such, and which has a sole means of propulsion by either one or more power units;

**“Multihull yacht”** means any yacht that 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 (1) separate or discrete area;

**“New yacht”** means a yacht to which this Code applies, the keel of which was laid, or the construction or lay-up was started on or after 1st March 2024;

**“Not readily ignitable”** means that the surface thus described will not continue to burn for more than 20 seconds after removal of a suitable impinging test flame;

**“Notified Body”** means an organization designated by an EU country to assess the conformity with the technical standards stated in the EU Directive 94/25 for *Recreational craft and personal watercraft*, as amended by EU directive 2013/53/EU, before being placed on the market. These bodies carry out tasks related to conformity

assessment procedures set out in the applicable legislation, when a third party is required.

**“Open boat”** for the application of the Code means a vessel which within its length is: -

- i) not fitted with a watertight weather deck; or
- ii) is fitted with a watertight weather deck over part of its length; or
- iii) is fitted with a watertight weather deck over the whole of its length but the freeboard to the deck does not meet the minimum requirement for freeboard (Section 10);

**“Owner(s) or managing agent(s)”** means the registered owner(s) or the managing agent(s) of the registered owner(s) as the case may be;

**“Passenger”** means any person carried on a vessel except:

- i) a person employed or engaged in any capacity on board the vessel on the business of the vessel;
- ii) a person on board the vessel either in pursuance of the obligation laid upon the master to carry shipwrecked, distressed or other persons, or by reason of any circumstances that neither the master nor the owner nor the charterer (if any) could have prevented; and,
- iii) a child under one year of age;

**“Passenger ship”** means a vessel carrying more than twelve (12) paying passengers;

**“Person”** means a person over the age of one (1) year;

**“Position 1”** means, as per ICLL Regulation 13, upon exposed freeboard and raised quarter decks and upon exposed superstructure decks situated forward of a point located a quarter of the yacht’s length from the forward perpendicular;

**“Position 2”** means, as per ICLL Regulation 13, upon exposed superstructure decks situated abaft a quarter of the yacht’s length from the forward perpendicular;

**“Porthole”**. See “Side scuttles” definition.

**“Private Yacht”** means any pleasure yacht not on charter or carrying passengers for hire, not engaged in trade or commerce, and being used solely for the pleasure or recreational purposes of its owner. More specifically, to be considered a private yacht, the yacht is:

- (a) in the case of a yacht owned by a corporate entity, one on which the persons on the yacht are employees, officers or shareholders (including beneficial owners) of the corporate entity, or their immediate family or friends; or
- (b) in the case of a trust or other ownership arrangement, one on which the persons on board the yacht are beneficiaries under the trust or beneficial owners of the ownership arrangement, or their immediate family or friends; or
- (c) one on which persons other than those referenced in (a) or (b) above are specifically authorised by the owner to use the yacht for specified periods of time; and
- (d) in private use;

**“Private Use”** means that the yacht is used on a private voyage or excursion, and during such use is not engaged in trade by transporting merchandise or carrying passengers for reward or remuneration (other than as a contribution to the actual cost of the yacht or its operation for the period of the voyage or excursion) or gain, and is not offered for commercial charter operations or for public use;

**“Radar transponder (SART)”** means a radio responding device designed for use in survival craft to facilitate location of survival craft in search and rescue operations;

**“Recognised Organization”** means Classification Society, which the Administration has accepted as being compliant with the guidelines of IMO Resolution A.739(18), as amended;

**“Recognised Standard”** means a standard or set of standards or technical regulations issued by a Recognised Organization or Notified Body.

**“Recreational Craft Directive”** is the EC Directive 2003/44/EC as amended by the EU directive 2013/53/EU;

**“Safe haven”** means a harbour or shelter of any kind that affords entry, subject to prudence in the weather conditions prevailing, and protection from the force of the weather;

**“Safety harness”** means a type approved safety device made of belts or restraints to hold a person to prevent falling or injury.

**“Sailing yacht”** means a yacht designed to carry sail, whether as a sole means of propulsion or as a supplementary means;

**“Sea Area A1”** means an area within the radiotelephone coverage of at least one VHF coast station in which continuous DSC alerting is available;

**“Sea Area A2”** means an area, excluding sea area A1, within the radiotelephone coverage of at least one MF coast station in which continuous DSC alerting is available;

**“Sea Area A3”** means an area, excluding sea areas A1 and A2, within the coverage of an Inmarsat geostationary satellite in which continuous alerting is available;

**“Sea Area A4”** means an area outside sea areas A1, A2 and A3;

**“Seafarer”** means a person who is employed or engaged in any capacity onboard the yacht on the business of the yacht. Trainees and/or volunteers onboard sail training vessels are not considered as seafarers subject that they are not included in the Muster list and

they are not expected to assume any responsibilities during emergency situations;

**“Sewage”** means .1 drainage and other wastes from any form of toilets and urinals;  
.2 drainage from medical premises (dispensary, sick bay, etc.) via wash basins, wash tubs and scuppers located in such premises;  
.3 drainage from spaces containing living animals; or  
.4 other waste waters when mixed with the drainages defined above.

**“Side scuttle”** means an ISO standardized type of an opening hinged or non-opening round ship’s window with or without deadlight (ISO 6345:1990) and which its design shall be in accordance with international standards such as ISO 12216:2018, or equivalent. Dimension of no round shaped portholes have to respect the equivalent area of a round shaped porthole as per the chosen standard.

**“SOLAS”** means the International Convention for the Safety of Life at Sea, 1974, and the 1988 Protocol, as amended;

**“SOLAS A Pack”** means a liferaft emergency pack complying with the requirements of the Life-Saving Appliances Code;

**“SOLAS B Pack”** means a liferaft emergency pack complying with the requirements of the Life Saving Appliances Code;

**“STCW”** means the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, as amended signed in London on 7th July, 1978, including any amendment or Protocol related thereto as may from time to time be ratified, acceded to or accepted by the Government of Malta and other instruments, standards and specifications of a mandatory

nature related thereto adopted or developed by the International Maritime Organization;

**“Superstructure”** has the meaning given in Annex I to International Load Line Convention;

**“Survey”** means an examination / inspection by an Authorised Surveyor, to ascertain that the yacht’s structure, machinery, equipment and fittings are in compliance (as appropriate to the specific survey conducted) with the requirements of the Code.

**“Survival craft”** means a craft capable of accommodating persons in distress from the time of abandoning the yacht;

**“Tender”** for the purpose of this code means one or more inflatable or rigid boats which are not liferafts, stowed in a position providing for easy side-to-side transfer and which may not engage in separate commercial activities from that of the mother yacht;

**“Training Manual”** means the instructions, which may comprise several volumes, on the lifesaving appliances fitted on board and the best methods of survival.

**“Two-way VHF radiotelephone set”** means a portable or a fixed VHF installation for survival craft complying with the performance adopted by the IMO contained in IMO Resolution A.809(19) or any Resolution amending or replacing it from time to time which is considered by the Administration to be relevant;

**“Type Approved”** means an item/equipment that has been approved and/or certified by an organisation/body recognised by the Administration such as a Recognised Organisation, MED Certification, ISO Certification and another Administration Certification or Notified Body;

**“Void space”** is any space, having no practical function on board the vessel, not capable of readily collecting water under normal operating circumstances;

**“Voyage”** includes an excursion;

**“Watertight”** means capable of preventing the passage of water in any direction;

**“Weather deck”** means the uppermost complete weathertight deck fitted as an integral part of the yacht’s structure and which is exposed to the sea and weather;

**“Weathertight”** has the meaning given in Annex I of ILLC viz. Weathertight means that in any sea conditions water will not penetrate into the yacht;

**“Wheelhouse”** means the control position occupied by the officer of the watch who is responsible for the safe navigation of the yacht;

**“Window”** means a ship’s window, being any window, regardless of shape, suitable for installation aboard yachts (ISO 12216:2018) and different than portholes/side scuttles;

**“Yacht”** means a vessel propelled by sail or motor, mainly used for leisure activities in recreational and/or commercial operations.

# SECTION 3

## APPLICATIONS AND INTERPRETATIONS

### **3.1 Application**

- 3.1.1 The Code applies to any Cook Islands commercially operated motor or sailing yacht of less than 24 metres load line length that proceeds to sea, does not carry cargo and does not carry more than 12 passengers.
- 3.1.2 The Code is also intended to serve as a guideline for private yachts of  $\leq$  24 meters in load line length. It is strongly recommended that private yachts comply with the standards of this Code as far as it is practicable and reasonable to assure their safe operation.
- 3.1.3 When a motor yacht is provided with a sailing rig that causes the yacht to be categorized as a sailing yacht the requirements of the Code referring to Sailing Yachts apply. Reference may be made to these requirements where a sail assisted motor yacht has a significant sailing rig.
- 3.1.4 Any requirement for goods or materials to comply with a specified standard shall be satisfied by compliance with Section 3.3 of this Code; provided that the proposed standard, code of practice, specification or technical description provides, in use, equivalent levels of safety, suitability and fitness for purpose.
- 3.1.5 Hull types
- The Code applies to mono-hull and multihull yachts.
- 3.1.6 Effective Date
- The Code is effective from 1<sup>st</sup> March 2024.
- 3.1.7 Responsibility
- It is the responsibility of the owner/owner's representative to ensure that a yacht is properly maintained, surveyed and inspected in accordance with the Code.

### **3.2 Operational Limitations**

- 3.2.1 Subject to the size, suitability for intended use and degree of compliance with the Code, a yacht may be considered for the issue of a certificate of registry allowing it to operate under one of the following limits:
- *Near coastal* - means voyages in the vicinity of a Party  
As defined by that Party;
  - *Inshore Limit*- up to 20 nautical miles from coastline
  - *Coastal Limit*- up to 60 nautical miles from coastline
  - *Offshore Limit* - up to 150 miles from coastline
  - *Unlimited* - beyond offshore limits

Depending on the nature of the yacht and its intended use, it may be restricted to less than the above specified limits. All limitations or restrictions will be recorded in the remarks section of the Certificate of Registry.

### **3.3 Pre – registration Inspection and Coding**

- 3.3.1 Pre – registration Inspection
- .1 Yachts wishing to register to be commercially operated, need to provide evidence of having been previously registered for commercial operations with one of the following flags:
- Red Ensign Group;
  - Malta;
  - New Zealand;
  - Australia.
- .2 Any yacht that 1) has previously been commercially operated under flags that are not listed above or 2) has been privately operated, needs to undergo a pre-registration inspection, to assess their compliance with the requirements of this Code.



- .3 In any case MCI reserves the right to request that a pre-registration inspection is carried out for any yacht wishing to register to be commercially operated.

#### 3.3.2 Coding

- .1 Yachts that are build according to this Code shall have the design and building process overseen by the MCI Technical Department. The list of drawings to be provided is indicated in paragraph 4.3.2 of this Code.
- .2 An MCI approved surveyor shall be appointed by the MCI Technical Department to carry out the necessary inspections in order to verify compliance with this Code.

### 3.4 **Equivalent Standards, Exemptions and Existing Yachts**

#### 3.4.1 Equivalent standards

The Administration may consider a specific alternative equivalent standard to any standard required by the Code, provided that the proposed standard, code of practice, specification or technical description provides the equivalent level of safety, suitability and fitness for purpose. Annex 1 provides guidelines on the assessment of variations to the standards applied by the Code. Proposals for the application of alternative standards considered to be at least equivalent to the requirements of the Code shall be submitted to the Administration for review and recommendation of approval by the Administration. Equivalence may be achieved by incorporating increased requirements, such as limited areas of operation, to balance deficiencies and thereby achieve the overall safety standard desired.

#### 3.4.2 Exemptions

- .1 Exemptions are only authorised and issued by the Administration.

- .2 Applications for exemption shall be made to the Administration and be supported by justification for the exemption.
- .3 The granting of exemptions will be limited by the extent to which international conventions, national legislation and this Code allow and shall be regarded as the exception and not the rule.

#### 3.4.3 Existing yachts

- .1 In the case of an existing yacht which does not comply fully with the Code Safety Standards but for which the Code standards are reasonable and practicable, the Administration may give consideration to a proposal from the owner(s) or managing agent(s) to phase in requirements within an agreed time frame.
- .2 When an existing yacht does not meet the Code Safety Standards for a particular feature and it can be demonstrated that compliance is neither reasonable nor practicable, proposals for alternative arrangements shall be submitted to the Administration for approval. In considering individual cases, the Administration will take into consideration the yacht's service history and any other factors that are judged to be relevant to the safety standard which can be achieved.
- .3 Generally, repairs, alterations and refurbishments shall be in compliance with the standards applicable to a new yacht.

### 3.5 **Review and Revision of the Code**

The requirements of the Code will be reviewed and revised when necessary by Maritime Cook Islands, and all interested parties will be advised. The latest revision will always be available on the Administration's website. Questions, comments and observations have to be addressed to Maritime Cook Islands.

### **3.6 Simplified Tonnage Measurement Method**

A simplified method of measurements provided in Annex II shall be used both for Commercial and Private Yachts of less than 24 metres in Length, in order to issue an *“Approval Letter of Simplified Tonnage Measurement”*.

# SECTION 4

## SURVEY, CERTIFICATION, INSPECTION AND MAINTENANCE

#### **4.1 Requirements for Yachts to be Surveyed and Certificated**

4.1.1 All yachts are required to be surveyed and certificated as determined by this Code.

#### **4.2 Issue of a Vessel Safety Certificate under the Code**

4.2.1 All Yachts to which this Code applies are required to carry onboard a Vessel Safety Certificate and a Radio Equipment Certificate.

4.2.2 If carrying more than 15 persons onboard a yacht is required to carry an International Sewage Pollution Prevention (ISPP) Certificate. Such Certificate is to be issued following a survey carried out from an Authorized Flag Surveyor. Yacht Owners shall notify MCI when the Yacht has been designed/certified to carry more than 15 persons onboard.

4.2.3 The Vessel Safety Certificate and the Radio Equipment Certificate can only be issued, for Commercial Yachts, on completion of a survey either carried out by an Authorized Cook Islands Flag surveyor or by a Recognised Organisation.

4.2.4 The Vessel Safety Certificate and the Radio Equipment Certificate will be valid for a maximum of five years.

4.2.5 The vessel Safety Certificate and the Radio Equipment Certificate cease to be valid if:

- i) A Vessel Safety and Radio Equipment survey is not carried within the given survey windows;
- ii) The Vessel Safety Certificate and Radio Equipment Certificate are not correctly endorsed;
- iii) The Vessel Safety and Radio Equipment survey reveals major deficiencies;

- iv) The vessel is damaged following an accident or during operations;
- v) The vessel undergoes structure, machinery or equipment alterations;

Should any of the cases listed above happen, the owner or owner's representative is required to get in contact with the Administration.

Any statutory certification issued is valid subject to the vessel maintaining registration with the Cook Islands.

#### **4.3 Commercial Yachts Survey Requirements**

4.3.1 For Commercial Yachts surveys have to be carried out by an MCI Approved Recognized Organisation or by an Authorised Surveyor with the following schedule:

- Initial survey, at the time of registration;
- Intermediate survey, between the 2<sup>nd</sup> and the 3<sup>rd</sup> Anniversary dates;
- Renewal survey, within 3 months from the expiry date of the Vessel Safety Certificate and Radio Equipment Certificate.

4.3.2 If a yacht has never been certified by a Recognised Organisation or by a Notified Body, or if the yacht has not been built under the supervision of a Recognised Organisation or by a Notified Body, the following drawings/calculations may be requested to be submitted to Maritime Cook Islands at the time of registration:

- General Arrangement Plan
- Owner's Manual
- Declaration of Conformity and CE Certificate (only for yachts built under the EC Recreational Craft Directive)
- Bilge System
- Fire Fighting System
- Escape Routes

- Structural Fire Protection in Engine Room and Other Technical Spaces (if required)
- Grey/Black Water System
- Ventilation Plan
- Electrical System
- Fuel System
- Rigging Plan (for sailing yachts)
- Navigation Lights Arrangement
- Bridge Visibility
- Structural drawings (checked by a Recognized Naval Architect, Notified Body or Classification Society)
- Windows, Portholes, Deck Hatches, Watertight and Weathertight Doors
- Stability Calculation (as per ISO 12217 or equivalent recognized standard)
- Lithium Batteries Arrangement (if necessary)
- Petrol Lockers and Garage

The assessment of the plans listed above may be carried out by the Administration at time of registration at its discretion.

- 4.3.3 A yacht demonstrating to have at least a 5 years safe and satisfactory operational and service history may be dispensed from the above drawing assessment/approval requirement.
- 4.3.4 If the survey reveals that either the yacht, its machinery, fittings or equipment are not sound or they do not comply with those documented in the original or latest revision of the Safety Certificate record, this has to be reported immediately to the Administration.
- 4.3.5 Commercial yachts must have an out of water survey every five (5) years.

#### **4.4 Operation and Maintenance of the Yacht**

- 4.4.1 The Administration may survey a certified yacht at any time.

- 4.4.2 It is the responsibility of the owner/owner's representative to ensure that at all times a yacht is operated and maintained in accordance with the requirements of the Code. If for any reason the yacht does not comply with any of these requirements, the owner/owner's representative must notify the Administration.
- 4.4.3 If a yacht suffers a collision, grounding, fire or other event that causes major damage or injury, the owner/owner's representative must notify the Administration.
- 4.4.4 The nature and extent of major repairs shall be subject to the approval of the Administration.

## SECTION 5

# STRUCTURAL CONSTRUCTION, STRENGTH & WATERTIGHT INTEGRITY

## **CONSTRUCTION and STRENGTH**

### **5.1 General Requirements**

- 5.1.1 A yacht for which the area of operation is more than 20 miles from a safe haven shall be fitted with a watertight weather deck over the length of the yacht and be of adequate structural strength to withstand the sea and weather conditions likely to be encountered in the intended area of operation.
- 5.1.2 A yacht that is not fitted with a watertight weather deck in accordance with 5.1.1 will be restricted to inshore limits (up to 20 miles from shore).
- 5.1.3 A yacht which is an open boat shall be restricted to inshore or enclosed waters as applicable to its location of operation acceptable to the Administration. It shall be provided with adequate reserves of buoyancy and stability for the yacht with its full complement of persons to survive the consequences of swamping.
- 5.1.4 Construction of new yachts may be surveyed by Authorised MCI Surveyors. It is recommended that shipyards/builders contact the Administration so as to assure compliance of construction standards and requirements included in this Code since the early design stages.

### **5.2 Structural Strength**

#### 5.2.1 General

The design of hull structure and construction have to provide strength and service life for the safe operation of a yacht, at its service draught and maximum service speed, to withstand the sea and weather conditions likely to be encountered in the intended area of operation.

The objective of this section is to ensure that all yachts are constructed to a recognised standard in respect of structural strength and watertight integrity.

#### 5.2.2 New yachts < 24 m in length

- .1 which are not certified in accordance to the EC Recreational Craft Directive or which were not built according to MGN 280 have to undergo a Structural Drawing Review either by the Flag Administration or by a Recognised Organisation, and structural surveyed by an Appointed Surveyor or a Recognised Organisation;
- .2 which are certified in accordance to the EC Recreational Craft Directive and/or were built according to MGN 280 have to undergo a Structural Survey by an Appointed Surveyor or a Recognised Organisation in order to confirm compliance with this Code.

#### 5.2.3 Existing yachts < 24 m in length

- .1 which are certified in accordance to the EC Recreational Craft Directive by a Notified Body under either of the Modules B+C, B+D, B+E, B+F, G or H will be considered to be in compliance with this section of the Code, subject to the satisfactory outcome of a structural and condition survey by an Appointed Surveyor or a Recognised Organisation.
- .2 which are neither built to Classification Society Rules nor certified in accordance with the EC Recreational Craft Directive, nor built according to MGN 280, will be dealt with on a case by case basis at the discretion of the Administration.

#### 5.2.4 Construction materials

- .1 A yacht may be constructed of wood, glass reinforced plastic (GRP), carbon fibre, aluminium alloy, titanium, steel or combinations of such materials. Requirements for materials used for the construction of inflatable and rigid inflatable boats are given in Section 5.5.
- .2 Proposals to use any other material shall be submitted for consideration and approval by the Administration.

#### 5.2.5 New yachts

- .1 The hull of a new yacht which has been surveyed and certificated by a Classification Society or a Notified Body (refer to list of Notified Bodies under Directive: [2013/53/EU Recreational craft and personal watercraft](#)) or another international standard approved by the Administration may be acceptable, subject to presentation of a certificate of construction.
- .2 See Section 21.1, for a listing of recognised Classification Societies.
- .3 A new yacht which has not been built under the survey of a Classification Society or a Notified Body or another international standard approved by the Administration will be considered to be of adequate strength after a satisfactory examination by an Authorised Surveyor and if it has been built:
  - (a) in accordance with the hull certification standards for small yacht craft, set by one (1) of the Classification Societies or by one (1) of the Notified Body; or
  - (b) in general, in accordance with the standard of a yacht recognized by the Administration that has a satisfactory record of at least five years history of safe operation in an area where the sea and weather conditions are no less severe than those likely to be encountered in the intended area of operation.
- .4 A new yacht not built in accordance with either 5.2.5.1 or 5.2.5.3 may be specially considered, provided that full information (including calculations, drawings, details of materials and construction) is provided to and approved by the Administration.

5.2.6 Existing yachts

An existing yacht will be considered to be of acceptable strength if it is in a good state of repair and is:

- .1 built to one (1) of the standards described in 5.2.5 for new yachts; or
- .2 of a design with a satisfactory record of at least five years' history of safe operation in an area where the sea and weather conditions are no less severe than those likely to be encountered in the intended area of operation.

**5.3 Decks**

5.3.1 Weather deck

- 1. All yachts shall have a watertight weather deck referred to in 5.1.1 which has to be extended along the whole length, from stem to stern, and having positive freeboard throughout, in any all sailing loading condition. Minimum requirements for freeboard are given in Section 10.
- .2 The deck shall be of adequate strength to withstand the environmental conditions likely to be encountered in the area of operation. Any recesses in the deck shall be of watertight construction and shall have draining facilities.
- .3 A weather deck may be stepped, recessed or raised provided the stepped, recessed or raised portion is of watertight construction.

5.3.2 Recesses

A recess in the weather deck shall be of watertight construction and have means of drainage.  
For water freeing arrangements requirements generally, see Section 6 and for freeboard requirements, see Section 10.

5.3.2.1 Motor yachts

A recess in the weather deck shall be of watertight construction and have means of drainage capable of efficient operation when the yacht



is heeled to 10 degrees. Such drainages have to be of an effective area, excluding grills and baffles, of at least 20 cm<sup>2</sup> for each cubic meter of volume of recess below the weather deck.

#### 5.3.2.2 Sailing yachts

A recess in the weather deck shall be of watertight construction and have:

- .1 a total volume ( $V_c$ ) that does not exceed the value obtained from the following formula:

$V_c = 0.10 \times \text{length of yacht} \times \text{breadth of yacht} \times \text{freeboard abreast the recess (or cockpit)}$ ;

- .2 means of drainage capable of efficient operation when the yacht is heeled to 30 degrees, such drainage to have an effective area, excluding grills and baffles, of at least 10 cm<sup>2</sup> for a yacht operating offshore and of at least 20 cm<sup>2</sup> for a yacht operating unlimited.

#### 5.3.2.3 All yachts

- .1 Alternative arrangements for drainage of a recess may be accepted if, considering the yacht in upright position and at its deepest draught, it can be demonstrated that:
  - the recess drains from a fully flooded condition within three (3) minutes,
  - or the cockpit or recess complies with ISO 11812 (Small Craft – Watertight cockpits and quick-draining cockpits) for the relevant design category.
- .2 If a recess is provided within a locker that gives direct access to the interior of the hull, the locker shall be fitted with weathertight cover(s). In addition, the cover(s) to the locker shall

be permanently attached to the yacht's structure and fitted with efficient locking devices to secure the cover(s) in the closed position.

### 5.4 Watertight Bulkheads and Damage Survival

Yachts < 24 m shall preferably be fitted with a Collision Bulkhead.

Watertight bulkheads shall be situated in such a way so that in case of minor damage and free flooding of any one compartment, the yacht will float safely and, if possible, at a waterline which is not less than 75 mm, at any point, below the weather deck.

Any watertight and/or fire rated bulkhead penetration shall be Type Approved or Certified.

Hinged doors may be used on watertight bulkheads.

Such doors are to be spring loaded so that they are kept closed at all times. Notices shall be affixed on both sides of these doors clearly indicating "TO BE KEPT CLOSED AT SEA". Alternative arrangements may also be accepted by the Administration.

Any enclosed compartments having access through the hull and which are located below the freeboard deck shall be bound by a watertight boundary which shall have no other through openings. In cases where a throughout opening cannot be avoided than a sliding type watertight door or equivalent may be allowed.

#### 5.4.1 New monohull yachts

When a new monohull yacht is  $\geq 15$  metres in length, or is intended to carry 15 or more persons, or is a motor yacht intended to operate unlimited, watertight bulkheads shall be fitted in accordance with the following requirements, except that consideration will be given to the continued acceptance of an existing design which does not meet the

requirements in full but is part of a building program in progress at the time when this Code comes into force.

5.4.1.1 Watertight bulkheads shall be so arranged that minor hull damage which results in the free flooding of any one (1) compartment, will not cause the yacht to float at a waterline which is less than 75mm below the weather deck at any point. Minor damage should be assumed to occur anywhere in the length of the yacht but not on a watertight bulkhead. Standard permeabilities should be used in this assessment as follows:

<u>Space</u>	<u>Permeability %</u>
Appropriated for stores	60
Appropriated for stores but not by a substantial quantity thereof	95
Appropriated for accommodation	95
Appropriated for machinery	85
Appropriated for liquids	0 or 95 whichever results in the more onerous requirement

Further permeability percentages may be accepted by the Administration on a case by case basis, considering the real status of the volume permeability for each considered compartment.

5.4.1.2 In the damaged condition, the residual stability shall be such that:

- the angle of equilibrium does not exceed seven (7) degrees from the upright position;

- the resulting righting lever curve has a range to the down flooding angle of at least 15 degrees beyond the angle of equilibrium;
- the maximum righting lever within that range is not less than 100 mm, and
- the area under the curve is not less than 0.015 meter-radians.

5.4.1.3 The strength of a watertight bulkhead shall be adequate for the intended purpose and to the satisfaction of the Administration.

5.4.1.4 When pipes, ducts, etc. penetrate watertight bulkheads, they shall be provided with valves and/or watertight glands as appropriate.

5.4.1.5 A doorway fitted in watertight bulkhead shall be of watertight construction and be kept closed at sea, unless opened at the discretion of the skipper. A notice has to be fitted to both sides of the door as follows: "To be kept closed at sea, open for access only". Sliding watertight doors, where fitted, are to be provided with suitable safety provision to avoid injury to personnel by closure of the door.

#### 5.4.2 New multihull yachts

##### 5.4.2.1 Multihull Motor yachts

- .1 Generally, the requirements of 5.4.1 for a new monohull yacht shall be applied to a new multihull yacht of  $\geq 15$  metres in length or intended to carry 15 or more persons or operate unlimited.
- .2 If a multihull yacht does not meet the damage criteria given in 5.4.1.1 and 5.4.1.2, the results of the calculations have to be submitted to the Administration for assessment. Alternative equivalent damage stability criteria to those stated in the above paragraph may be considered by the Administration on a case by case basis.

- 5.4.2.2 Multihull Sailing yachts
- .1 A new multihull yacht shall be so designed that it will float for more than 12 hours after capsizing, either when every two (2) hatches are open, or when every one (1) hull is holed between watertight bulkheads. This requirement may be met by subdivision or built-in flotation but may not include the effect of air trapped in any compartment that is open to the sea.
  - .2 Compliance with this requirement has to be demonstrated by calculation for the maximum displacement condition (as defined in paragraph 9), which should show minimum reserve buoyancy in the capsized condition of 25% of the displacement.
  - .3 When flotation material is used, it should be adequately protected from accidental damage. When an air tank is used for flotation, it shall be clearly marked:

“AIR TANK - DO NOT PUNCTURE”

and it shall be provided with means of draining and checking for freedom from water.
  - .4 When an intact compartment which is used to demonstrate positive flotation after capsizing is penetrated by a door or hatch, the door or hatch shall be of watertight construction, and should be clearly marked on both sides:

“WATERTIGHT ACCESS - KEEP CLOSED WHEN AT SEA”

5.4.3 Existing yachts

In the case of an existing yacht which is of > 15 metres in length, or is intended to carry 15 or more persons, or is a motor yacht intended to operate unlimited, it is most strongly recommended that modifications, which cause the yacht to meet the standard given by 5.4.1 for a monohull or 5.4.2 for a multihull, be implemented when the yacht undergoes major structural alterations.

It is strongly recommended that all existing yachts, whichever sea area of operation is intended to sail, meet the requirements given in 5.4.1 and/or 5.4.2 as applicable.

**5.5 Inflatable boats**

The following requirements shall apply to an inflatable or rigid inflatable boat, other than a tender (dinghy) covered by Section 20.

5.5.1 General

- .1 Generally, an inflatable boat or rigid inflatable boat which is intended to operate as an independent yacht in an Inshore and Coastal areas (and is not a tender operating from a vessel) shall be of a design and construction which would meet the requirements of Chapter III of the 1974 SOLAS Convention, as amended, and the parts of the Annex to IMO Resolution MSC.48(66) - International Life-Saving Appliance Code and MSC.81(70) - Testing and Evaluation of Life-Saving Appliances (as amended) - which are appropriate to the type of boat and subject to the variations which are given in the LSA Code, or of a design and construction in accordance with other recognised standards, such as ISO 6185-1 / 6185-2 / 6185-3.
- .2 In addition, an inflatable boat or rigid inflatable boat may only be considered for operations in an Inshore and Coastal, if additionally fitted with a permanent substantial enclosure for the protection of persons on-board and purpose designed, subject to approval by a Recognised Organisation or a Notified Body. For operation within an Inshore area only, alternative provision for enclosures may be considered, with operational/seasonal limitations. Such cases have to be agreed by the Administration.
- .3 When production of boats is covered by an approved quality system and boats are built in batches to a standard design, prototype tests on one boat may be accepted for a boat of the same design submitted for compliance with the Code.

### 5.5.2 Construction materials

Materials shall satisfy the requirements of chapter III of the 1974 SOLAS Convention, as amended (including ISO 15372:2000 Ships and marine technology. Inflatable rescue boats. Coated fabrics for inflatable chambers), except that fire – retarding characteristics are not required for the hull material.

### 5.5.3 New inflatable boats

- .1 A new inflatable boat or rigid inflatable boat shall satisfy the requirements of chapter III of the 1974 SOLAS Convention, as amended, and be tested in accordance with the requirements of IMO Resolution A.689 (17), as amended by MSC.54(66), as appropriate to the intended use of the boat, or of a design and construction in accordance with other recognised standards, such as ISO 6185-1 / 6185-2 / 6185-3.

As a minimum test to verify aspects of strength of structure shall include drop and towing. When lifting arrangements are provided in a boat, a lifting (overload) test has to be carried out at ambient temperature with the boat loaded with the mass of the full complement of persons and equipment for which it is to be approved. After each test, the boat has not to show any signs of damage.

- .2 A new boat of a type certified as a rescue boat or provided with a letter of compliance for use as a fast rescue boat for offshore stand-by vessels, or any equivalent certification or compliance, should be accepted as complying with the construction requirements of the Code.

A new boat which is not built in accordance with either Section 5.5.3.1 or 5.5.3.2 may be specially considered, provided that full information (including calculations, drawings, details of materials and construction) is presented to and approved by the Administration.

### 5.5.4 Existing inflatable boats

An existing inflatable boat or rigid inflatable boat will be considered to be of acceptable structural strength if it is in a good state of repair and is:

- .1 built to one of the standards described in 5.5.3, for a new boat; or
- .2 of a design with a record of at least five years' history of safe operation in an area where the sea and weather conditions are no less severe than those to be encountered in the intended area of operation.

## WATERTIGHT INTEGRITY

### 5.6 General

A yacht shall be designed and constructed in a manner that will prevent any undesired ingress of seawater.

Weathertight integrity arrangements on existing yachts may be accepted by this Administration on a case by case basis.

Yachts shall, comply with the following requirements:

#### 5.6.1 Hatchways and Hatches

##### 5.6.1.1 General requirements

- .1 A hatchway which gives access to spaces below the weather deck shall be of efficient construction and be provided with efficient means of weathertight closure.
- .2 A cover to a hatchway shall be hinged, sliding, or permanently secured by other equivalent means to the structure of the yacht and provided with sufficient locking devices to enable it to be positively secured in the closed position.
- .3 A hatchway with a hinged cover which is located in the forward portion of the yacht (as per "Position 1" of the ICLL) shall normally have the hinges fitted to the forward side of the hatch, as protection of the opening from boarding seas.

- .4 Openings not complying with 5.6.1.1.3 shall be fitted with an alarm giving status on the navigation bridge and a notice is to be posted stating that these openings are "TO BE KEPT CLOSED AT SEA".
- .5 Hatches which are used for escape purposes shall be capable of being opened from both sides and fitted with permanent handles. Removable type handles may be accepted subject that the handles are stowed in a visible marked and accessible location close to the hatch itself.

5.6.1.2 Hatchways that are open at sea

In general, hatches shall be kept closed at sea. However, a hatch (other than one referred to in 5.6.2.2 below) that is to be open at sea for lengthy periods has to be:

- .1 kept as small as practicable, but never more than 1m<sup>2</sup> in plane area at the top of the coaming;
- .2 located on the centreline of the yacht or as close thereto as practicable;
- .3 fitted such that the access opening is at least 300mm above the top of the adjacent weather deck at side.

5.6.2 Doorways and Companionways

5.6.2.1 Doorways located above the weather deck

- .1 A doorway located above the weather deck that gives access to spaces below shall be provided with a weathertight door. The door shall be of efficient construction, permanently attached to the bulkhead, not open inwards, and sized such that the door

overlaps the clear opening on all sides and has efficient means of closure which can be operated from either side.

- .2 A doorway shall be located as close as practicable to the centreline of the yacht. However, if hinged and located in the side of a superstructure, the door should be hinged on the forward edge.
- .3 In the case of existing yachts, if the doorway is located in the side of a superstructure and is hinged on its aft edge, it must be clearly marked as follows:

"KEEP CLOSED WHEN AT SEA"

- .3 A doorway that is either forward or side facing shall be provided with a coaming the top of which is at least 300 mm above the weather deck. A coaming may be portable provided if it is permanently secured to the structure of the yacht and can be locked in position.
- .4 Access doors leading directly from an open deck to the engine room or machinery spaces shall be located aft of the ¼ length from forward and shall be fitted with a sill of at least 450mm in height above the weatherdeck. A coaming may be portable provided if it is permanently secured to the structure of the yacht and can be locked in position.

5.6.2.2 Companionway hatch openings

- .1 A companion hatch opening from a cockpit or recess which gives access to spaces below the weather deck shall be fitted with a coaming, the top of which is at least 300mm above the sole of the cockpit or recess. The coaming may be fixed or portable.
- .2 When washboards are used to close a vertical opening they shall be so arranged and fitted that they will not become dislodged in any event.

- .3 The maximum breadth of the opening of a companion hatch shall not exceed one (1) meter.

#### 5.6.3 Skylights

- .1 A skylight shall be of efficient weathertight construction and should be located on the centreline of the yacht, or as near thereto as practicable, unless it is required to provide a means of escape from a compartment below deck.
- .2 When a skylight is an opening type it shall be provided with efficient means whereby it can be secured in the closed position.
- .3 In a new yacht, a skylight that is provided as a means of escape shall be capable of being opened from either side.
- .4 The skylights shall be Type Approved and/or EC Certified. Skylights on existing yachts that have been operational for more than 5 years may be accepted subject to a water tightness test in accordance with ISO 12216.
- .5 Unless the glazing material and its method of fixing in the frame is equivalent in strength to that required for the structure in which it is fitted, a portable “blank” has to be provided which can be efficiently secured in place in event of breakage of the glazing.

The Administration may dispense a yacht from the above requirement in cases where the skylight strength is equivalent to the hull strength and in cases where the glass thickness has a minimum of 30% increase over and above the minimum standard glass thickness requirements.

- .6 When a Skylight is considered as Escape Route, it shall be open able from both sides and have permanent handles attached or stored close by the hatches. Removable hinges have to be stored in a “ready to use” location, easy recognized to all persons onboard. Its location has to be duly and visible indicated.

#### 5.6.4 Portholes

- .1 A porthole to a space below the weather deck or in a step, recess, raised deck structure, deckhouse or superstructure protecting openings leading below the weather deck shall be of efficient construction and suitable for its intended use, in accordance with a Marine standard recognised by the Administration, such as ISO 12216.
- .2 In a new yacht, a porthole shall not be fitted in the main hull below the weather deck, unless:
- the glazing material and its method of fixing in the frame are equivalent in strength, with regard to the design pressure, to that required for the structure in which it is fitted;
  - it is of the non-opening type or non-readily openable type;
  - it has been built to meet the requirements of ISO 12216 or be Type Approved or Certified.
- .3 In a new yacht, an opening porthole should not be provided to a space situated below the weather deck.
- .4 In an existing yacht, a porthole fitted below the weather deck and not provided with an attached deadlight should be provided with a “blank” (at the rate of 50% of the total of each size of porthole in the yacht), which can be efficiently secured in place in the event of breakage of the porthole. Such a “blank”, however, is not required for a non-opening porthole that satisfies 5.6.4.2.
- .5 An opening porthole shall not exceed 250 mm in diameter or equivalent area.
- .6 Proposals to accept portholes, to a recognised standard, greater than 250 mm diameter, up to a maximum of 400 mm or equivalent area, maybe considered, with due regard to their fore, aft, and vertical position, to the satisfaction of the Administration.

.7 The lower edge of the portholes shall be at least 500mm or 2.5% of the breadth of the yacht (whichever is the greatest) above the deep water line.

.8 No portholes must be fitted in way of machinery spaces.

#### 5.6.5 Windows

.1 When a window is fitted in the main hull below the weather deck, it shall provide watertight integrity and be of strength compatible with size for the intended area of operation of the yacht, in accordance with a Marine standard recognised by the Administration, such as ISO 12216.

.2 In a new yacht, a window shall not be fitted in the main hull below the weather deck, unless the glazing material and its method of fixing in the frame are equivalent in strength, with regard to the design pressure, to that required for the structure in which it is fitted.

.3 Portable blanks shall be carried on board for all windows fitted below the weather deck. Portable blanks shall be stowed in the immediate proximity of the windows and consideration shall be given in the Master's Operational Instructions when the portable blanks must be fitted.

.4 Windows installed below the weather deck must be Type Approved or Certified, be in accordance with ISO 11336 or to Recognised Organization Rules.

.5 A window fitted to a space above the weather deck or in the side of a cockpit or recess has to be of efficient weathertight construction.

.6 In a yacht that operates more than 60 miles offshore, portable "blanks" have to be provided also for windows located above the weather deck at the rate of 50% of the total of for each size of window, which can be efficiently secured in place in the event of breakage of a window.

.7 Polarised or tinted glass should not be used in windows provided for navigational visibility.

#### 5.6.6 Portholes and Windows. Gluing procedures and other methods of installation.

Gluing test has to be carried out in accordance to ISO 12216 or equivalent standard. In any case gluing operators are to be duly trained and the bonding procedure is to be approved by the adhesive manufacturer.

#### 5.6.7 Ventilators and Exhausts

.1 A ventilator shall be of efficient construction and be provided with a permanently attached means of weathertight closure located in way of either of its opening or in the ventilation duct.

.2 A ventilator shall be kept as far inboard as practicable and the height above the deck of the ventilator opening shall be sufficient to prevent the ready admission of water when the yacht is heeled.

.3 A ventilator that must be kept open, e.g., for the supply of air to machinery or for the discharge of noxious or flammable gases or for extraction from toilets, shall be specially considered with respect to its location and height above deck having regard to 5.6.7.2 above and the down flooding angle.

.4 Goose necks and ventilators fitted on the ¼ forward length shall be facing aft and be fitted with closing flaps. Dorade (rotating) type ventilators may be accepted if they are provided with blanking devices.

.5 An engine exhaust outlet or other extraction ducts (such as those from toilets) that penetrates the hull below the weather deck shall be provided with means to prevent back flooding into the hull through the exhaust system or extraction ducts. The means may be provided by system design and/or arrangement, built-in valve or a portable fitting that can be applied readily in an emergency.

- .6 Engine Room and Machinery ventilation inlets/exhausts shall be arranged above the weather deck and provided with adequate means of closures to avoid ingress of water when the yacht is heeled. The deck through way of the ventilation duct shall be provided with a sill, which prevents the ingress of water from the deck.  
When a ventilation inlet/exhaust is arranged below the weather deck, the relative ducting shall be provided with a goose-neck shape in the way to the machinery space, in which the lower edge of the goose-neck shape duct is located above the weather deck.
- .7 When any of the requirements included in the above paragraph is fulfilled, the Administration may accept alternative arrangements on a case by case basis, limiting the sea area of operation and sea weather conditions.
- .8 Engine exhaust ducts passing through the hull below the weather deck shall be of an equivalent strength and construction of the adjacent hull and provided with reinforcement brackets where necessary. Anti-syphon equipment or goose-neck shaped ducting should be provided to avoid back flooding into the hull through the exhaust system. Mechanical means of closing are recommended to be installed in all exhaust ducting passing through the hull. This means of closure should be installed in way of the hull, just in the connection between the hull and exhaust duct.
- .9 For offshore and unlimited area of operations, the means of exhaust closures mentioned at the above paragraph must be installed. These must be Type Approved Certified.
- .10 Up to coastal limit area of operation, if an exhaust outlet closing device is not possible to be fitted, an anti-syphon equipment or goose-neck shaped ducting has to be provided. The lower edge of the anti-syphon or goose-neck shaped duct has to be located at 1000mm from the deepest water line.
- .11 Exhaust pipes passing through accommodation spaces shall be avoided always.  
When no alternatives are available than the exhaust pipe within the accommodation must pass through a gas tight trunk fitted with a CO

(Carbon Monoxide) Detector and provided with audible and visible alarm in the bridge. The alarm has to be audible from the space where the exhaust pipe is passing or installed in this space.

#### 5.6.8 Air Pipes (Vents)

- .1 When located on the weather deck, an air pipe should be kept as far inboard as possible and have a height above deck sufficient to prevent inadvertent flooding when the yacht is heeled.
- .2 An air pipe of greater than 10 mm inside diameter, serving a fuel or other tank, should be provided with a permanently attached means of weathertight closure.
- .3 An air pipe serving a fuel tank (see also Section 7.1.5.6) or other tank, where provided with a closing appliance, shall be of a type which will prevent excessive pressure on the tank boundaries.
- .4 When air pipes outlets are installed on the hull sides, these shall be provided with goose-neck shapes. The lower edge of the goose-neck pipe shall be located above the weather deck, or at a height which prevents the ingress of water for any condition of heeling, or to the under deck side.
- .5 Vents leading to fuel tanks shall be fitted with spark arrestors.
- .6 The arrangement of vent pipes leading to fuel tanks shall avoid any installation inside gas tight lockers.

#### 5.6.9 Sea Inlets and Discharges, Scuppers

- .1 An opening below the weather deck shall be provided with an efficient means of closure.
- .2 When an opening is for the purpose of an inlet or discharge below the waterline, it shall be fitted with a seacock, valve or other effective means of closure that is readily accessible in an emergency. These valves or means of closure must be Type



Approved as far as practical and built in metal, especially for those valves installed in the Engine Room or Machinery Spaces (steel, bronze, brass, etc.).

- .3 When an opening is for a log or other sensor which is capable of being withdrawn it shall be fitted in an efficient watertight manner and provided with an effective means of closure when such a fitting is removed, as.
- .4 Inlet and discharge pipes from water closets shall be looped up within the hull to the underside of deck and shell fittings provided as required by 5.6.9.2 above. When the rim of a toilet is either below or less than 300mm above the deepest waterline of the yacht, anti-siphon measures shall be provided.
- .5 For sailing vessels, overboard inlet and discharge pipes from marine toilets or holding tanks shall be looped up within the hull to the underside of the deck.
- .6 Under water lights shall be provided with watertight enclosure which allow their maintenance and avoid ingress of water in case of light damages. Under water lights should be of Approved Type.
- .7 Log, sensors, sonars and any kind of equipment fixed to the hull has to be Type Approved as far as practical.
- .8 Stabilizers should preferable be enclosed in watertight compartments. The hull structure where the stabilizers are fixed must be reinforced as per Maker Recommendations.

#### 5.6.10 Materials for Valves and Associated Piping

- .1 A valve or similar fitting attached to the side of the yacht below the waterline, within an engine/machinery space or other high

fire risk area, shall be normally of steel, bronze, copper, brass or other equivalent material and Type Approved as far as practical. Alternative materials may be considered by the Administration in case of carbon fibre yachts, when reliable and proved information of such valves or means of closure are available.

- .2 When unprotected plastic piping is used it shall be of good quality and of a type suitable for the intended purpose.
- .3 Flexible or non-metallic piping, if fitted within an engine space or fire risk area, shall be efficiently insulated against fire or be of fire resistant material (being in compliance with ISO 7840) or exhaust quality rubber hosing, or a means shall be provided to stop the ingress of water in the event of the pipe being damaged. These pipes/hoses have to be adequately secured/fastened and supported, paying major attention to protect them from impacts.

# SECTION 6

## WATER FREEING ARRANGEMENTS

**6.0** When a deck is fitted with bulwarks such that shipped water may be trapped behind them, the bulwarks must be provided with efficient freeing ports.

**6.1** **Motor yachts**

- .1 The area of freeing ports shall be at least 4% of the bulwark area and be situated in the lower third of the bulwark height, as close to the deck as practicable.
- .2 A yacht of less than 12 metres in length, if accepted for registration, having a well deck aft that is fitted with bulwarks all round and that is intended to operate only in favourable weather and no more than 60 miles from a safe haven, should be provided with freeing ports required by 6.1.1 or may be provided with a minimum of two (2) ports fitted (one (1) port and one (1) starboard) in the transom, each having a clear area of at least 225 cm<sup>2</sup>.

**6.2** **Sailing yachts**

- .1 The area of freeing ports shall be at least 10% of that part of the bulwark area that extends for 2/3 of the yacht's length amidships. A freeing port shall be located in the lower third of the bulwark height, as close to the deck as practicable.
- .2 Where the average height of the bulwark over its length does not exceed 150mm above the weather deck, freeing ports will not be required. However, attention should be paid to suitable drainage arrangements.

**6.3** **All yachts**

- .1 When a non-return shutter or flap is fitted to a freeing port it shall have sufficient clearance to prevent jamming and any hinges should have pins or bearings of non-corrodible material.
- .2 When a yacht has only small side deck areas in which water can be trapped a smaller freeing port area may be accepted. The reduced area shall be based on the volume of water that is likely to become trapped.
- .3 In a yacht when freeing ports cannot be fitted, other efficient means of clearing trapped water from the yacht shall be provided to the satisfaction of the Administration, such as for example, the total number of scupper pipes, etc.  
For existing yachts, special consideration may be given with regard to the sheer line on the main weather deck, as a mean of clearing the trapped water from the yacht.
- .4 Structures and spaces considered to be non-weather-tight must be provided with efficient drainage arrangements.
- .5 Deck scuppers shall be provided with caps during fuel bunkers or sewage shore discharge operations.
- .6 Swimming pools, Jacuzzis and spas shall be treated as recesses. Means shall be provided to prevent the backflow of sea water into the recesses. Arrangements for fast drainage, by gravity, have to be provided.

# SECTION 7

## MACHINERY (INCLUDING PROPULSION, STEERING GEAR AND BILGE SYSTEM)

## 7.1 Machinery

### 7.1.1 General Requirements

- .1 Generally, machinery installations shall comply with the requirements given below. Other installations proposed may be specially considered, provided that full information is presented to and approved by the Administration.
- .2 In motor yachts, the main propulsion machinery and all auxiliary machinery essential to the propulsion and the safety of the vessel should be designed to operate when the vessel is upright and when inclined at any angle of heel and trim up to and including 15° and 7.5° respectively either way under static conditions.
- .3 In sailing yachts, the main propulsion machinery and all auxiliary machinery essential to the propulsion and the safety of the vessel should be designed to operate when the vessel is upright and when inclined at any angle of heel up to and including 15° either way under static conditions and 22.5° either way under dynamic rolling conditions and simultaneously inclined 7.5° by bow or stern under dynamic pitching conditions.

### 7.1.2 Machinery space

- .1 Machinery spaces shall be totally enclosed, gas-tight (except openings via the appropriate ventilators) and insulated against heat and excessive noise. The materials used shall be of the type that do not absorb oil and be of low fire spread.
- .2 Bilge, fire and fuel lines shall preferably be metallic, however, non-metallic piping meeting the requirements of the IMO (FTP) Code may be deemed acceptable. Alternative material shall be considered on a case by case basis by the Administration.

### 7.1.3 Diesel engines

A yacht fitted with an inboard engine shall be provided with a suitable diesel engine and sufficient fuel tankage for its intended area of operation.

### 7.1.4 Petrol engines

- .1 In a *sailing* yacht, or in a motor yacht that is fitted with a watertight weather deck, a petrol engine may be accepted provided that the engine is a suitable outboard type and a fuel tank is fitted and constructed to an appropriate International standard, such as ISO 10088, whereby either the tank or the complete contents can be jettisoned rapidly and safely and when spillage during fuel handling will drain directly overboard.
- .2 In a *motor yacht* that is an open boat and restricted to operating inshore, a petrol engine may be accepted provided that the engine is a suitable outboard type. Petrol should be stored in portable containers of 27 litres or less in capacity, that can be jettisoned readily, or in a rigid hull motor yacht or rigid inflatable boat, a fixed-in-place inboard tank may be accepted subject to:
  - (a) the tank is constructed of steel or stainless steel, with rounded corners and edges for explosion proofing purposes, located in a safe place and installation complying with Section 7.1.5;
  - (b) Note:
    - (1) Explosafe foils shall not be used in a steel tank.
    - (2) The tank shall be tested to at least 0.3 bar.
  - (c) an intrinsically safe detector of hydrocarbon vapours being fitted under or adjacent to the tank (located in a safe place) when the possibility of accumulation of hydrocarbon vapours exists, providing audible alarm;

- (d) the opening of the vent pipe from the fuel tank being protected by a flash proof fitting; and
  - (e) electrical arrangements complying with Section 8.
- .3 In an existing yacht only, an inboard petrol engine may be accepted provided that the engine is located in an efficient enclosed space to which a fixed fire extinguishing system is fitted, and:
- (a) provision is made to ventilate the engine space thoroughly before the engine is started and
  - (b) the vent pipe from the fuel tank is led to the open deck and the opening protected by a flash proof fitting.
- .4 In an existing yacht, a fixed-in-place inboard fuel tank shall meet the requirements of 7.1.4.2(b), 7.1.4.2(c) and 7.1.4.2(d).
- .5 In an existing yacht, petrol stored in portable tanks or containers shall meet the requirements of 7.1.4.1 or 7.1.4.2 as appropriate.
- .6 In an existing inflatable boat or rigid inflatable boat, a petrol engine installation shall meet the requirements of 7.1.4.2.

#### 7.1.5 Installations

- .1 The machinery, fuel tank(s) and associated piping systems and fittings shall be of a design and construction adequate for the service for which they are intended and shall be installed and protected so as to reduce to a minimum danger to persons during normal movement about the yacht, due regard being paid to moving parts, hot surfaces and other hazards.
- .2 Means, such as a shut-off valve, shall be provided to isolate a source of fuel that may feed a fire in an engine space fire situation. A valve or cock, which is capable of being closed from a position outside the engine space, shall be fitted in the fuel feeding pipe at the exit of the pipe from the fuel tank.

- .3 In a fuel supply system to an engine unit, when a flexible section of piping is introduced, connections shall be of a screw type or equivalent approved type. Flexible pipes must be fire resistant/metal reinforced or otherwise protected from fire. Where hose clamps are used, the fitting to which the flexible pipe attaches shall have a bead, flare, annular grooves or other means of preventing slippage. Materials and fittings shall be of a suitable recognised national or international standard, such as ISO 7840 or equivalent.
- .4 Where the fuel oil level gauges penetrate below tank top, the gauge shall be fitted with valves, being of self-closing type.
- .5 In the case of an existing yacht fitted with a diesel engine in which the installation of a flexible section of piping does not immediately meet the requirements, such as international standards as ISO 7840, or equivalent ones, the requirements must met when existing fittings in the fuel supply system are replaced.
- .6 A venting pipe shall lead to the open atmosphere, terminating in a position level with or higher than the fuel filling mouth and its open end protected against:
  - water ingress - by a goose neck or other efficient means; and
  - for petrol engines or where there is a risk from flame ingress - by a suitable gauze diaphragm (which can be detached for cleaning).

#### 7.1.6 Engine Starting

- .1 An engine shall be provided with either mechanical or hand starting or electric starting with independent batteries.
- .2 When the sole means of starting is by battery, the battery shall be in duplicate and connected to the starter motor via a 'change over switch' so that either battery can be used for starting the engine. Charging facilities for the batteries shall be available.

- .3 All internal combustion machinery shall have an additional secure means of remote stopping from outside the engine space, located at the navigation controls/helm.

#### 7.1.7 Portable Equipment

- .1 When a portable equipment powered by a petrol engine is provided, the unit shall be stored on the weather deck.
- .2 A deck locker or protective enclosure for the portable equipment shall have no opening(s) to an enclosed space within the hull of the yacht, and the locker or protective enclosure shall be adequately ventilated and drained.
- .3 A safety warning sign has to be displayed with details of appropriate precautions to be taken when filling the fuel tank.
- .4 Fuel provided for the engine shall be stored in portable containers or tanks and meet the requirements of Section 7.1.8.

#### 7.1.8 Stowage of Petrol

When petrol in portable containers for use in an outboard engine of a tender (dinghy) is unavoidably carried on board, the containers has to be clearly marked and has to be stowed on the weather deck where they can readily be jettisoned and where spillage will drain directly overboard. The quantity of petrol and number of portable containers should be kept to a minimum. (Requirements for the storage of petrol for propulsion engines of a yacht are given in Section 7.1.4).

### 7.2 Steering Gear

- 7.2.1 .1 A yacht must be provided with efficient means of main and emergency steering systems. These shall be of adequate strength design to enable the heading and direction of the yacht to be effectively controlled at all operating speeds.

- .2 The control position shall be located so that the person steering the yacht has a clear view for the safe navigation of the yacht.
- .3 When a steering gear is fitted with remote control, arrangements shall be made for emergency steering in the event of failure of the control. Arrangements may take the form of a tiller to fit the head of the rudder stock or a hydraulic manual arrangement, as equivalent alternative.
- .4 As appropriate to the vessel, the rudder and rudder stock construction materials, design (including tiller head attachments, bearings and pintles) and the supporting structures shall be adequate for the operating conditions of the vessel. Recognised design standards should be used.
- .5 Construction and fittings shall be of an appropriate standard, to the satisfaction of the Administration.
- .6 The main and emergency steering gear of a new yacht is to be CE Certified or Type Approved.
- .7 In case of existing yachts, the Administration will duly take into consideration the existing arrangements regarding safety. In these cases, sea trials will be carried out, if deemed necessary from the Administration, to confirm the efficiency of the existing steering system.
- .8 Steering gear system shall be equipped with a rudder angle indicator on the navigation bridge, and close by the emergency steering as far as practicable.
- .9 Means of communication between the emergency steering position and the bridge or main help have to be provided.
- .10 Clearly instructions for emergency steering operations have to be posted by the emergency steering position.

### 7.3 Bilge Pumping System

#### 7.3.1 General requirements

Bilge piping lines shall preferably be metallic, when installed in the machinery space.

However, non-metallic piping meeting the requirements of the IMO (FTP) Fire Test Procedures Code may be considered for use.

#### 7.3.2 All yachts must be fitted with a bilge pumping system of a sufficient capacity which consists of at least:

- primary mechanical (driven by the main engine) or an electric bilge pump with suction pipes so arranged that any compartment can be drained when the yacht is heeled up to an angle of 10 degrees.
- secondary manual bilge pump;

#### 7.3.4 Pumps provided shall be situated in not less than two (2) separate spaces. Electrically operated bilge pumps shall be in accordance to ISO 8849 or equivalent standard.

#### 7.3.5 When considered necessary to protect the bilge suction line from obstruction, the bilge lines shall be equipped with strum boxes.

#### 7.3.6 Portable semi-submersible bilge pumps may be considered as an alternative to one (1) of the two (2) required pumps.

#### 7.3.6 The Administration may accept the installation of automatic or manual bilge pumps for each compartment together with a hand pump, capable of taking suction from all compartments and which is located in the cockpit.

#### 7.3.7 Other means of providing efficient bilge pumping may be considered provided that full information is submitted to and approved by the Administration.

#### 7.3.8 The internal diameter of the main bilge pipe line shall be calculated as follows:

$$d = 25 + 1.68 \sqrt{L(B+D)}$$

where

d = diameter of bilge main in mm

L = length of yacht in metres (Lh as per "Definitions")

B = breadth of yacht in metres

D = moulded depth of yacht in metres

#### 7.3.9 The capacity of each pump or group of pumps, should not be less than:

$$Q = 0.00565 \times d^2$$

Where:

Q = Minimum capacity of each pump or group of pumps, in m<sup>3</sup>/hour

d = Internal diameter of the bilge main as defined in 7.3.8

#### 7.3.2 Bilge Alarm System. General requirements

- .1 Bilge alarms have to be fitted in all Machinery Spaces.
- .2 A high bilge level alarm or panel shall be fitted for each compartment. The alarm must provide a visual and audible warning at the control position.

A bilge repeater panel or alarm may be requested by the Administration in the crew mess depending on the dimensions of



the vessel and arrangement of internal spaces. This requirement will be evaluated on a case by case basis.

- .4 It is recommended that all bilge alarm panels are “addressable alarm panels”.
- .3 It is recommended to provide low level bilge alarms in those spaces where risk of major accumulation of bilge water may occur. These further alarms may be mandatory requested by the Administration on a case by case basis.

In case of independent submersible bilge pumps, the low-level bilge alarm may be part of the bilge pump itself.

- .4 Electric connections to bilge pumps have to be done in a safe and adequate way, preventing that wire connections and wires are not in contact with bilge water or liquids, which may affect the safety of persons onboard as a consequence of electric shocks.

# SECTION 8

## ELECTRICAL ARRANGEMENT AND LIGHTING

## 8.1 Electrical Arrangements, Lighting and Batteries

- .1 Electrical arrangements shall be designed:
  - to minimize risk of fire and electric shock to any person onboard;
  - assure power supply to all electrical auxiliary services so as to maintain the normal, operational and habitable conditions without relying on the emergency source of power;
  - assure efficient operation of all electrical services and systems essential for the safety of yacht and persons onboard.
- .2 Particular attention shall be paid to the provision of overload and short circuit protection of all circuits, except engine starting circuits supplied from batteries.
- .3 When general lighting within a yacht is provided by a centralized electrical system, an alternative source of lighting shall be provided, sufficient to enable persons to make their way to the open deck, to Muster stations, to LSA, survival crafts and life rafts and to permit work on essential machinery.

The above requirement can be fulfilled in the following way:

- To connect all lighting circuits or part of the lighting circuits to an emergency source of power which allow these circuits to be powered automatically in case of fault of the main source of electric power. A waiver to the automatic activation may be considered by the Administration if the light switches which control these emergency circuits are clearly identified;
- To provide flashlights in all habitable spaces. The location of these lights has to be clearly indicated and visible, also during night when the spaces are not illuminated.

- .4 Batteries and battery systems must be provided as indicated in paragraphs 7.1.6.1, 7.1.6.2 and 14.1.4
- .3 Ventilation of enclosed battery storage spaces to the open air shall be provided so as to release the accumulation of gas that is emitted from batteries of all types.
- .4 In case of steel or metal battery lockers, these have to be internally lined up by an inert material, as rubber, etc.
- .5 Batteries on Sailing Yachts shall be of sealed type.
- .6 Batteries shall be duly arranged onboard, protected from water and oil spray and preferably not installed in the bilge spaces or bottom recesses.
- .7 Batteries must not be arranged close by fuel tanks or in contact with any flammable surfaces.
- .8 Main switchboards of alternate (AC) and continuous (DC) voltage must be separated and clearly marked with adequate labels when provided.
- .9 All circuits, except the main supply from the battery to the starter motor and electrically driven steering motors, have to be provided with electrical protection against overload and short circuit (i.e. fuses or circuit breakers should be installed).
- .10 Batteries, supplying essential services (emergency lighting, steering systems, navigation and communications equipment), when fitted below the weather deck, must be placed above the maximum waterline in the upright condition of the yacht, as far as practicable.
- .11 All batteries shall be properly secured to avoid movement when the vessel is subjected to sudden acceleration or deceleration, a large angle of heel, trim and in the case of sailing vessels, knockdown or inversion.

.12 It is recommended that all wires used onboard are certified flame retardant. Equivalent arrangements are to be considered by the Administration.

.13 All cables and wires which dedicated to lighting, internal communication or signals, essential or emergency power, must be routed far from high fire risk areas as galleys, machinery spaces, saunas, laundries, etc. Watertight penetrations should be Type Approved or Certified. Alternative arrangements may be accepted by the Administration.

## **8.2 Emergency Electrical Power Supply**

.1 Emergency source of power has to be provided and duly stored to avoid ingress of water in the battery lockers or water spray on them.

The emergency source of power has to be installed outside the Engine Room, completely independent of the main source of power and provided with a dedicated battery charger which allows the charging of the batteries at their maximum rate within 10 hours. The emergency source of power should be capable of provide power for at least 3 hours to the following main equipment:

- GPS
- Echo Sounder
- AIS, if fitted
- Radio communication as VHF, etc
- Emergency lighting (when provided)
- Navigation lights

.2 The emergency source of power requested above has to be independent of the emergency Radio Batteries as far as

practicable. The Administration may consider alternative arrangements on a case by case basis.

## **8.3 Electrical Insulation**

- .1 At discretion of the Administration, Electrical Insulation Test (Megger Test) may be requested to be performed to all circuits of the boat every 5 years, or immediately upon completion of main maintenance works onboard or re-fitting activities,
- .2 Recognized Organisation requirements or alternative recognised standard, such ISO 10133 Annex C, have to be considered as guidelines for performance of test and acceptance of resistance values range.
- .3 After completion of Megger Test, if earth leakage values over the acceptable range are noted, actions must be implemented to solve such leakages.

# SECTION 9

## STABILITY

## 9.1 **General Requirements**

### 9.1.1 General

All yachts have to be provided with a Stability Booklet or Stability Calculations, approved by the Administration or by a Recognised Organisation or Notified Body as applicable.

Stability Criteria Results shall be assessed when the yacht is considered in the following loading conditions:

- Fully Loaded, Departure: 100% of consumables and persons onboard;
- Light Loaded, Arrival: 10% of consumables and 100% of persons onboard;
- Half Load (suggested): 50% of consumables and 100% of persons onboard.

9.1.2 The Approved Stability Booklet or Approved Stability Calculations has to be kept onboard and available to all Crew members at any time.

### 9.1.3 Major Alterations

A yacht with a previously approved Stability Booklet or Stability Calculations which undergoes a major alteration or major refit shall be subjected to a complete reassessment of stability and provided with newly approved Stability Booklet or Stability Calculations approved by the Administration or by a Recognized Organisation or Notified Body.

### 9.1.4 Fixed Ballast

When permanent ballast is provided, this must be positioned in a way that prevents its shifting or movement and accumulation of bilge water.

The position and amount of fixed ballast has to be indicated in the Stability Booklet or Stability Calculations. This has not to be total or partially removed unless further Stability Assessments are performed which

demonstrate that the Vessel complies with the Stability Requirements when the ballast is partially or total removed.

### 9.1.5 Inclining Experiment and Lightweight Survey

The Displacement and Position of Centre of Gravity of a Vessel have to be assessed by means of an Inclining Experiment and Lightweight Survey and its results included in the Stability Booklet. The Inclining Experiment have to be performed by a Surveyor or Naval Architect and attended by an Administration Surveyor when required by the Administration. This requirement applies specially for new yachts or when Major Alterations on the Vessel are performed.

### 9.1.6 Sister Vessels

New and Existing Sister Vessels may be exempted of the 9.1.4 requirement subject to the results get from a Lightweight Survey which shall be performed by a Naval Architect or Surveyor and attended by an Authorized MCI Surveyor when required by the Administration.

### 9.1.7 Inclining Experiment and Lightship Survey

Inclining Experiment and Lightship Survey Procedures have to be submitted to the Administration for acknowledgement and comments, prior to the performing the Inclining Experiment and/or Lightship Survey.

### 9.1.8 Lightship Margin

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 shall be clearly identified and recorded in the stability booklet.

9.1.9 Exemptions to the 9.1.1 and 9.1.4 requirements may be considered by the Administration on a case by case basis.

### 9.1.10 Yacht involved in Special Circumstances and Events for Charter

When a boat is requested to be allowed for charter during special circumstances and events, carrying a higher number of persons onboard of that included in the Stability Booklet or Stability Calculations, a new Stability Requirement Assessment has to be performed and submitted to the Administration for check and approval. This Assessment has to include the new loading condition, considering suggested number and position of persons onboard. In addition to the Stability Criteria Assessment for this new loading condition, the Crowding Criteria has to be assessed.

## 9.2 **Stability Criteria**

### 9.2.1 **New Yachts**

The stability shall be calculated in accordance to EN ISO12217-1 for non-sailing yachts and EN ISO 12217-2 for sailing yachts, or in accordance with a Recognized Standard, such as IMO Resolution A.749 (18), as amended, submitted to the Administration with regards to the following design categories:

Category 'A' (Ocean Going) - Wind force exceeding Beaufort 8 and significant wave height exceeding 4m;

Category 'B' (Offshore) - Wind force up to and including Beaufort 8 and significant wave height up to and including 4m.

Category 'C' (Inshore) - Wind force up to and including Beaufort 6 and significant wave height up to and including 2m.

Category 'D' (Inland or Sheltered Coastal Waters) - Wind force up to and including Beaufort 4 and significant wave height up to and including 0.5m.

Compliance with Equivalent Stability Standards may be considered by the Administration on a case by case basis.

### 9.2.2 **Existing Motor Yachts. Simplified Stability Test.**

Generally, an existing motor yacht shall be considered as a new yacht for the scope of this section.

Existing motor yachts not having stability data and operating under Coastal Limit (up to 60 nautical miles from Coastline) may undergo a simplified stability test as mentioned here below:

A yacht shall be tested in fully laden conditions with all fuel tanks and freshwater tanks being full and having onboard the total number of persons which the yacht is certified to carry or a 75kg weight replacing each of the above-mentioned persons. By assembling all persons/weights along one side of the yacht, the angle of the heel and the change in waterline height are calculated.

The yacht will be judged to have passed the simplified stability test if the test shows that:

1. the angle of heel does not exceed 7 degrees, and;
2. in the case of a yacht with a watertight weather deck extending from stem to stern, as described in Section 5.1.1, the freeboard to deck distance is not less than 75mm at any point;
3. The angle of heel may exceed 7 degrees, but shall not exceed 10 degrees, if the freeboard in the heeled condition is in accordance with that required in Section 10 in the upright condition;
4. The heeling moment applied during the test described above shall also be calculated. By using the below formula, the yacht shall attain a value of initial GM not less than 0.5m if using an estimated displacement of the yacht, or 0.35m if the displacement of the yacht is known and can be verified by the Naval Architect or Surveyor.

$$GM = \frac{57.3 \times \text{Heeling Moment}}{\theta \times \text{Displacement}}$$

Where:

HM = Heeling moment in kilogram x metres, where

$HM = W \times d$

W= weight of persons/weights shifted to one side of the yacht during the Simplified Stability Test in kilogram;

d= transversal distance from the initial position of persons/weights to the side of the yacht, during the Simplified Stability Test in metres;

$\theta$  = angle of heel in degrees obtained from the test as defined in section above;

Displacement= the displacement of the yacht in kilogrammes, either estimated or measured and verified by the attending Naval Architect or Surveyor.

In all cases, the maximum number of persons that may be carried onboard resulting from the above-mentioned test and calculations shall be recorded on the certificate. Any additional personal equipment, such as diving equipment etc, are to be disembarked during the simplified test as this will affect the end result and the yacht's fully loading condition.

#### 9.2.3 Existing Sailing Yachts.

Generally, an existing sailing yacht shall be considered as a new yacht for the scope of this section.

The Administration may consider alternative Stability Standards on a case by case basis.

#### 9.2.4 Existing Motor and Sailing Yachts.

When a motor or sailing yacht fails to meet the standards applied to a new yacht, a lesser standard may be accepted by the Administration, provided that the yacht has a satisfactory record of safe operation in the intended area of operation for at least 5 years.



# SECTION 10

## FREEBOARD AND FREEBOARD MARKING

## 10.1 Motor Yachts

A motor yacht shall have a freeboard mark placed on each side of the yacht at Midships. The freeboard on a motor yacht shall be not less than that determined by the following requirements:

### 10.1.1 New motor yachts

Stability and consequent minimum freeboard shall be requested to comply with the international standard ISO 12217 as applicable, or equivalent standard and not to be less than the ones given in the following paragraphs, as applicable.

A new motor yacht, when in still water and loaded with liquids, stores and weights representing the total number of persons certificated to be carried (taken as 75 kg per person), shall be upright, and:

- .1 in the case of a motor yacht with a continuous watertight weather deck, which is neither stepped nor recessed nor raised, shall have a freeboard measured down from the lowest point of the weather deck of not less than 300mm for a motor yacht of seven (7) metres in length or under and not less than 750mm for a vessel of 18 metres in length or over. For a motor yacht of intermediate length, the freeboard shall be determined by linear interpolation;
- .2 in the case of a motor yacht with a continuous watertight weather deck, which may be stepped, recessed or raised, have a freeboard measured down from the lowest point of the well deck of not less than 200mm for a motor yacht of seven (7) metres in length or under and not less than 400mm for yachts of 18 metres in length and over. For a motor yacht of intermediate length, the freeboard shall be determined by linear interpolation;
- .3 in the case of either an open or partially open motor yacht, have a clear height of side (i.e., the distance between the waterline and the lowest point of the gunwale (\*) of not less than 400mm for a motor yacht seven (7) metres in length or under and not

less than 800mm for a motor yacht 18 metres in length or over. For a motor yacht of intermediate length, the clear height shall be determined by linear interpolation.

- \* The clear height of the side is to be measured to the top of the gunwale or capping or to the top of the wash strake if one is fitted above the capping.

### 10.1.2 Existing motor yachts

- .1 Generally, an existing yacht shall comply with paragraph 10.1.1.
- .2 In the case of an existing motor yacht that is unable to comply with 10.1.1, the Administration may be prepared to consider a lesser standard of 'operational freeboard' or 'clear height of side'. However, in such a case it will be necessary for the owner/owner's representative to provide the Administration with a detailed account of the operational history of the yacht. This detailed account should include sea areas normally visited, loaded draught/freeboard/height of side, number of persons usually carried, number of years employed in this mode, together with other details which may be considered relevant.

### 10.1.3 All motor yachts

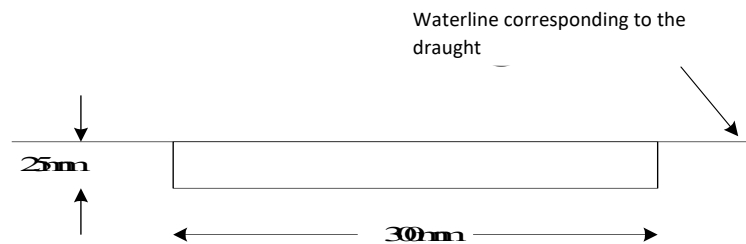
A yacht shall be assigned with a freeboard that corresponds to the draught of the yacht when fully loaded with liquids, stores and the total number of passengers and crew to be carried (taken as 75 kg per person), but which in no case is less than the freeboard required by paragraphs 10.1.1 or 10.1.2.

## 10.2 Sailing Yachts

A sailing yacht required to be provided with an approved stability information booklet shall have a freeboard mark placed on each side of the hull at Midships for the maximum draught at which the stability of the sailing yacht has been assessed and find in compliance with the corresponding Stability Criteria.

### 10.3 Freeboard Mark and Loading

- .1 The freeboard mark referred to in paragraphs 10.1 and 10.2 above should measure 300mm in length and 25mm in depth. The marking shall be permanent and painted black on a light background or in white or yellow on a dark background. The top of the mark shall be positioned at the waterline corresponding to the draught given in 10.1.3 or 10.2, as appropriate, at Midship, as shown in Figure 1 below



**Figure 1**

- .2 A yacht should not operate in any condition that will result in its freeboard marks being submerged when it is at rest and upright in calm water.
- .3 An alternative position of the freeboard mark may be considered by the Administration on a case by case basis when the requirement of 10.3.1 is not suitable.
- .4 Notwithstanding the Freeboard height given by the above calculations, it is recommended that the position of the Freeboard is ultimately determined by:
  - a) the height between the deep waterline and the lowest edge of the port lights/windows. This height shall not be less than 500mm and/or

- b) the height between the top of the engine exhaust and the deep waterline shall not be less than 1,000mm, on those yachts which are not fitted with an exhaust hull valve.

# SECTION 11

## LIFE SAVING APPLIANCES

### **11.1 Requirements**

Life-saving appliances must be provided in accordance with the requirements appropriate to the type of yacht as given in Table 1. All life-saving equipment shall be fitted with retro reflective tape, well maintained and readily accessible for use.

### **11.2 Approved types**

Life-saving appliances must be of a type approved in accordance with SOLAS Chapter III and the LSA Code or, an alternative standard accepted by the Administration (such as MED certified) and be readily available onboard.

### **11.3 Life rafts**

- .1 Unlimited area yachts must be provided with life rafts of such number and capacity that, in the event of any one (1) life raft being lost or rendered unserviceable, there is sufficient capacity remaining for all on board.
- .2 For a yacht that operates beyond 60 nautical miles from safe haven, all the life rafts provided have to be equipped with a "SOLAS A PACK". For yachts that always operate within 60 nautical miles from safe haven, a minimum "SOLAS B PACK" is requested which may be stowed in a grab bag and placed next to the life raft.
- .3 The life rafts have to be stowed on the weather deck or in an open space and must be fitted with float free arrangements (hydrostatic release units) so that the life rafts float free and inflate automatically. All life rafts (including any transferable life rafts) shall be fitted with Hydrostatic Release Units and installed in a way that they can float free. The weak link is to be appropriately fixed to a strong point and the painter line duly installed.

.4 Life rafts on yachts identified in 11.3.1 and 11.3.2 may be installed either:

- (a) in approved GRP containers stowed on the weather deck or in an open space and fitted with float free arrangements so that the life rafts float free and inflate automatically; or
- (b) in GRP containers or valise stowed in readily accessible and dedicated weathertight lockers opening directly to the weather deck.

.5 Life rafts provided on multihull sailing yachts have to be located so that they are accessible when the yacht is either upright or after capsizing.

.6 Inflatable life rafts, hydrostatic release units (other than the types which have a date limited life and are test "fired" prior to disposal) have to be serviced annually at a service station approved by the manufacturer and service certificates shall be maintained onboard at all times. Only in exceptional circumstances, where this case is impracticable, the Administration may extend this period to 15 months.

.7 In case of life rafts installed enclosed in special lockers, the top of the locker and necessary side parts have to be float free so as to allow the life raft to float free in case of flooding.

### **11.4 Dan-buoy**

A Dan-buoy is required to be provided on a sailing yacht only.

### **11.5 Life buoys**

.1 All lifebuoys have to be duly installed onboard, proper fastened and ready to use. Installation of lifebuoys must be in the exterior areas of the boat.

.2 Each lifebuoy must be marked with the yacht's name and its Port of Registry.

**11.6**      **Lifejackets**

- .1 Lifejackets that are not directly approved by the Administration must comply with a recognized international, national or equivalent standard and be fitted with a whistle, light and retro-reflective tape.
- .2 If the lifejackets are inflatable an additional 10% or 2, whichever is the greater, have to be provided.
- .3 Lifejackets are to be provided for the total number of children onboard (min. 4).
- .4 Lifejackets on inshore yachts need not be provided with lights.
- .5 Gas inflatable lifejackets should be serviced annually at a service station approved by the manufacturer. Only in exceptional circumstances, where this case is impracticable, the Administration may extend this period to 15 months. Service Certificates to be kept onboard.
- .6 Orally inflated lifejackets must be pressure tested annually and, as far as is reasonable and practicable, visually examined weekly by the owner/owner's representative to determine whether they are safe to use.

**11.7**      **Thermal Protective Aids**

TPAs may be stowed in an accessible and clearly marked location.

**11.8**      **Immersion Suits**

It is recommended that each suit be subjected to an air pressure test such, at intervals not exceeding three years. Service Certificates to be kept onboard.

These are required only when the yacht operates in areas where the sea water temperature falls below 20 degrees Celsius.

**11.9**      **406MHz EPIRB**

- .1 The 406MHz EPIRB has to be installed in an easily accessible position ready to be manually released, capable of being placed in a life raft, and capable of floating free and automatic activation if the yacht sinks (HRU to be provided).
- .2 All EPIRBs must be annually serviced. Service Certificates to be kept onboard.

**11.10**      **Radar Transponder (SART)**

The SART is to be stowed in an easily accessible position so that it can be rapidly placed in any survival craft.

**11.11**      **General Alarm**

The General/Fire Alarm may be a bell or Klaxon or consist of the vessel's whistle or siren providing it can be heard in all parts of the vessel.

**11.12**      **Safety harnesses**

Safety harnesses to be provided for all persons on board a sailing yacht.

Area of operation	Up to 20 nm from Safe Haven	Up to 150 nm from Safe Haven	Beyond 150nm from Safe Haven
Life rafts	None	100% capacity on each side (*)	100% capacity on each side
Danbuoy - See 11.4	One (only sailing yachts)	One (only sailing yachts)	One (only sailing yachts)
Life buoys with self-igniting lights & lines	2	4	4
Life buoy with smoke and light	-	-	1 (***)
Adult Lifejackets	100%	120%	120%
Children Lifejackets	100% of children onboard (min. 4)	100% of children onboard (min. 4)	100% of children onboard (min. 4)
Parachute flares	2	4	6
Hand flares	4	4	4
Buoyant Smoke Signals	2	2	2
Line Throwing Appliance	-	-	1
Thermal Protective Aids (TPA)	100%	100%	100%
Immersion Suits	-	2 (**)	100%
Safety harness (Sailing Yachts)	100%	100%	100%
406MHz EPIRB	1	1	1
SART	1	1	1
General Alarm	-	Yes	Yes
Life-Saving Signals Table 2 x SOLAS No. 2 or 1 x SOLAS No. 1	Yes	Yes	Yes
Training Manual	None	Yes	Yes
Instructions for on-board maintenance	None	Yes	Yes

**Table 1- Life Saving Appliances**

(\*) If the life rafts are easily transferable from side to side then, a 100% aggregate capacity may be considered sufficient.

(\*\*) Up to 60nm from safe haven, Immersion Suits are required only if the Vessel sails in water temperature which falls below 20Celsius Degrees.

(\*\*\*) Which can be part of the total 4 required.

# SECTION 12

## FIRE PROTECTION ARRANGEMENT AND APPLIANCES



## 12.1 General

The boundary of the engine space must, with special consideration given to fire flaps / fire dampers, be arranged to contain the fire extinguishing medium, if fitted, i.e. the engine space must be capable of being closed down in order that the fire extinguishing medium cannot escape. Any fans for ventilation and extraction located within or feeding a machinery space must be capable of being stopped from outside the space in the event of a fire.

## 12.2 New Yachts

### 12.2.1 Engine space

- .1 The engine space must be separated from accommodation spaces and storerooms containing combustible materials and flammable liquids or on smaller yachts the engine can be enclosed within a fire-insulated box (made of non-combustible material).
- .2 Combustible materials, fuel or flammable liquids having a flash point below 60°C must not be stowed in the engine space.
- .3 In a yacht provided with a fixed gas extinguishing system, the boundary of the engine space must be arranged to retain the fire extinguishing medium.
- .4 Portholes or windows must not be fitted in the boundary of the engine space except that an observation port having a maximum diameter of 150mm may be fitted in an internal boundary bulkhead or watertight door, provided that the porthole is of the non-opening type, the frame is constructed of steel or other equivalent material and the port is fitted with a permanently attached cover with securing arrangements. Only fire rated toughened safety glass should be used in an observation porthole.
- .5 Steel Construction: Yachts which have the machinery space boundaries constructed of steel, require no additional fire protection. However, finishing materials used on the opposite

sides of Steel Machinery Boundaries must have low flame spread characteristics.

- .6 GRP (Glass Reinforced Plastic) Construction: Machinery space boundaries have to prevent the passage of smoke and flame and be thermal insulated to B-15 or MGN 280 Standards. The fire insulation of these spaces should extend at least 300mm below the deepest water line.
- .7 Fire resistance of GRP may be achieved by the use of woven roving glass layers or additives (which must be added strictly in accordance with the manufacturer's requirements) to the resin. Intumescent polyester, epoxy, vinyl ester or phenolic resin surface coatings may also be used; however, solvent borne intumescent paints are not acceptable. The Administration may waive the requirement for the test described above ("Fire Test") if the construction complies with an ISO or equivalent standard to give at least the same level of protection.
- .8 Aluminium and Wood Construction: Machinery space boundaries must have an equivalent level of fire protection of GRP construction.
- .9 A waiver from the requirements of 12.2.1.6 and 12.2.1.7 may be considered by the Administration on a case by case basis subject to:
  - The total combined power does not exceed 375Kw in each machinery space;
  - The fuel tanks and their remote quick closing device are located outside the Engine Room;
  - Not more than 100 litres of fuel are carried inside the Engine Room;
  - No escape route is directly adjacent or linked the Engine Room.

#### 12.2.2 Insulation

- .1 Thermal or acoustic insulation fitted inside the engine space has to be of non-combustible material.
- .2 Insulation has to be protected against impregnation by flammable vapours and liquids.
- .3 Engine Room Ventilation trunks and galley hood ducting passing through accommodation spaces must be thermal insulated as per the requirements set up at paragraph 12.2.5 and 12.2.6 as applicable.
- .4 Any door fitted in the insulation bulkheads shall have the same insulation fire rating of the corresponding bulkhead and open able from both sides. These doors have to be kept closed at all times and provided with sensor alarm which indicate their status (open/close) in the bridge. The installation of this sensor may be exempted by the Administration on a case by case basis. These doors should be Type Approved or MED Certified.
- .5 Pipes or ducts penetrating A Class or B Class divisions shall be made of metal or of an equivalent Type Approved or Certified material and must be of a structural construction designed to withstand the same conditions as the divisions they penetrate. Horizontal and Vertical boundaries of penetrations are requested to be thermal insulated as per the fire rating of the bulkhead which penetrate. This insulation should be provided at least 450mm on both sides of the bulkhead. A waiver of this requirement may be considered by the Administration on a case by case basis.
- .6 Galley hood passing through accommodation spaces should be provided with a minimum B-15 or MGN 280 standard thermal insulation.

#### 12.2.3 Fire extinguishing in Engine Room

Machinery spaces must be fitted with a Fixed Fire Fighting Systems as CO<sub>2</sub>, FM200, Aerosol System, etc. which must be manually released from outside the Engine Room.

This system has to be a Type Approved, MED Certified or equivalent, appropriate to the space to be protected and be installed and maintained in accordance with the manufacturer's requirements. In case of CO<sub>2</sub>/FM200 systems, the complete system, including the system release, has to be annually serviced and the Service Certificates have to be kept onboard at all times.

#### 12.2.4 Cleanliness and containment

- .1 Provisions have to be made to retain any oil leakage within the engine space.
- .2 In a yacht constructed of wood, measures shall be taken to prevent absorption of oil into the structure.
- .3 In a situation when it is totally impracticable to fit a metal drip tray in way of the engine, the use of the engine bearers as a means of containment of the oil may be accepted when they are of sufficient height and have no limber holes. Provisions should be made for the clearing of spillage and drainage collected in the engine space.
- .4 Efficient means have to be provided to ensure that all residues of persistent oils are collected and retained on board for discharge to collection facilities ashore.
- .5 The engine space has to be kept clean and clear of oily waste and combustible materials.
- .6 Reference should also be made to Section 17, Pollution Prevention.

- .7 Galley hood ducting should be made in accordance with 12.2.2.6. It is recommended to have galley hood ducting made in metal (3mm thickness minimum).
- .8 The hood ducting has to be easily accessible for cleaning and inspection. It is recommended to inspect and clean all galley hood ducts annually.

12.2.5 Wooden yachts

Particularly on wooden yachts, measures shall be taken to prevent the absorption of oil into the structure. Metal drip trays shall be installed under engines and under other equipment/machinery that could drip oil. Such drip trays shall have draining facilities so that they can be drained in appropriate containers. Such containers shall be properly disposed off ashore at oil reception facilities.

Engine rooms shall be kept clean and free from oily waste, oily rags and other combustible materials at any time.

12.2.6 Open flame gas appliances

- .1 Open flame gas appliances provided for cooking, heating or any other purposes shall comply with the requirements of ISO 10239 or equivalent.
- .2 Installation of an open flame gas appliance shall comply with the provisions of Annex III.
- .3 Materials which are in the vicinity of open flame cooking or heating appliances should be of non-combustible type.
- .4 Combustible materials and other surfaces that do not have a Class 1 surface spread of flame rating should not be left unprotected within the following distances of the cooker:
  - .1 400mm vertically above the cooker, for horizontal surfaces, when the yacht is upright;

- .2 200mm above the top of the cooker, for horizontal surfaces, when the sailing yacht is heeled to 30 degrees; and
- .3 125mm horizontally from the cooker, for vertical surfaces.
- .4 Curtains or any other suspended textile materials have not to be fitted within 600mm of any open flame cooking, heating or other appliance.

12.2.7 Furnishing materials

- .1 Only Combustion Modified High Resilient (CMHR) foams should be used in upholstered furniture and mattresses.
- .2 Upholstery fabrics have to satisfy the fire test procedures of IMO Resolution MSC.61(67), Annex 1, Part 8, or equivalent.

12.2.8 Smoke detection

- .1 All yachts where the total installed power (propulsion and electrical generation) is greater than 750 kW, are required to be fitted with a Type Approved or Certified fire detection system in the engine space(s) and spaces containing open flame cooking and/or heating devices. This system has to be fully addressable, with visual and audible alarm, indicating their status in the bridge and independently powered.
- .2 In case of multi-hull vessels, the total engine power in each hull is to be considered. The main alarm panel is to be fully addressable and be located at the main steering position.
- .3 Efficient smoke detectors may be required in all yachts in order to comply with paragraph 12.2.9.2.
- .4 Installation of Smoke/Heat detectors, as applicable, is strongly recommended within Accommodation Spaces. In cases where addressable system is not available onboard, stand along

detectors may be accepted by the Administration (except for machinery spaces).

- .5 Laundries and Galleys have to be provided with heat detectors.

#### 12.2.9 Means of escape

- .1 Each accommodation space, which is either used for sleeping/rest or is affected by a fire risk situation, should be provided with two (2) means of escape. Only in an exceptional case, one (1) means of escape may be accepted. Such a case would be when the single escape is to open air or when the provision of a second means of escape would be detrimental to the overall safety of the yacht.
- .2 In the exceptional case when a single means of escape is accepted, efficient smoke detectors should be provided as necessary to give early warning of a fire emergency that could cut off the single means of escape from a space and one EEBD for each person in such space has to be provided.
- .3 Each mean of escape shall be clearly marked with self-adhesive photoluminescent stickers, representing IMO symbols.
- .4 One EEBD may be requested by the Administration to be provided in the Engine Room.
- .5 Removable Escape ladders have to be easily accessible in case of emergency and stored closed by the Emergency Escape Route are serving. The locker containing the ladder has to be duly and visible marked.
- .6 All escape ways have to be kept clear of encumbrances at all times.
- .7 Multi hull yachts have to have additional means of escape through each hull to be used in case of capsized. Escape hatches shall be located above each waterline, when the Vessel is in upright and in

capsized position. These hatches have to be watertight and Type Approved. Dispensation to this requirement may be considered by the Administration in case of roll on-roll off hulls or when is specifically demonstrated that the Vessel cannot capsize.

#### 12.2.10 Ventilation

- .1 Engine Room Ventilation and Exhaust ducts have to be provided with fire dumpers which have to be easily released from outside the Engine Room. The location of the release has to be annually serviced and their location visible marked.
- .2 Galley ducts shall be provided with fire dumpers which have to be activated from outside the galley space or close by the galley accesses. A waiver to this requirement may be considered by the Administration when induction cooktops are installed.

#### 12.2.11 Galley, Saunas and Steam Rooms. Further requirements.

- .1 Galley. The installation of deep fat frying equipment shall be avoided. However, the Administration may accept the installation of this equipment subject that a fixed fire extinguishing system complying with SOLAS II-2/10.6.4 is installed. For deep frying equipment of up to 15 litres cooking oil capacity a suitably sized Class F Fire Extinguisher and a manual shut-off of the electrical power supply may be accepted by the Administration.
- .2 Saunas and Steam Rooms. All boundaries of Saunas and Steam Rooms have to be insulated to at least B-15 and protected by a fire detection and alarm system. The boundaries adjacent to the sauna oven and the steam generator must be insulated to A-0 or equivalent. Wooden linings on ceilings and bulkheads are allowed. The ceiling above the sauna oven shall be lined with a non-combustible plate with an air gap of at least 30mm whilst the distance from the hot surfaces to combustible materials shall be at least 500mm. The sauna door shall always open outwards by pushing.

12.2.12 Galley, Saunas and Steam Rooms. Further requirements.

The location of dedicated lockers on deck used for stowage of hand-held flammable liquid containers (Approved Type or Jerry Cans), must be clearly marked indicating that the locker contains flammable material and no-smoking signs shall be posted. In addition, these lockers shall:

- be located away from any high-risk area;
- have intrinsically safe electrical fittings in or around them (minimum IP55 rating) and the electrical fittings shall be fitted at a height  $\geq 450$  mm from the deck;
- have a means of ventilation at the top and bottom and ventilators shall be fitted with spark arrestors;
- have self-draining holes leading to overboard;
- have means to secure the fuel containers;
- have No-Smoking signs affixed;

Enclosed spaces, highly flammable fuel lockers and garages wherein vehicles or craft containing fuel having a flash point below 60 degrees Celsius are stowed, shall be fitted with:

- 1) a mean of ventilation which is exclusive to this space and not connected to any other space on board. The ducting shall extract air from a low area. Any forced ventilation motor used is to be intrinsically safe. The ventilation system is to have a capacity of 6 air changes per hour and an appropriate airflow alarm shall be fitted giving an indication of low airflow in the bridge. The exhaust ducting is to be fitted with spark arrestors and with a shutdown flap which can be easily closed remotely;
- 2) All electrical equipment within the space shall be intrinsically safe (minimum IP55 rating) and the electrical fittings shall be fitted at a height  $\geq 450$  mm from the deck;
- 3) A petrol fume detector shall be fitted with an alarm on the bridge and in the crew accommodation spaces;

- 4) No-Smoking Signage;
- 5) A fixed firefighting system or equivalent arrangements.

**12.3 Existing Yachts**

- .1 In an existing yacht, the requirements of Section 12.2 should be reasonably complied with as far as possible.
- .2 In an existing yacht, replacement of existing upholstery or mattresses to satisfy paragraph 12.2.7 may be delayed until renewal.

**12.4 Fire Appliances**

A yacht has to be provided with efficient firefighting equipment, as follows:

1. At least one hand fire pump (outside engine space) or one (1) power driven fire pump (stored outside engine space), with sea and hose connections, capable of delivering one (1) jet of water to any part of the yacht through hose and nozzle.  
As reference, the minimum capacity of power-driven pumps may be estimated using the following formula:  
$$2.5 \times (1 + 0.066 \times (L \times (B + D))^{0.5})^2 \text{ m}^3/\text{hr.}$$

Being:

L	length of the Hull
B	moulded Breadth
D	moulded Depth at amidships
2. One fire hose of adequate length with 10mm nozzle and suitable spray nozzle, allowing easy access to all spaces.
- .3 Adequate number of multipurpose portable fire extinguishers, not less than four (4) and in compliance with BS EN 3 or MED approved with a minimum fire rating of 13A/113B or equivalent. The quantity and capacity of these extinguishers shall be suitable

for the dimensions of the spaces to be protected. All fire extinguishers have to be annually serviced and Service Certificates have to be kept onboard at all times.

- .4 Depending on the dimensions of the machinery spaces and hydraulic oil systems installed in it, aggregate 18lt of portable foam extinguishers in machinery spaces may be requested by the Administration at its discretion on a case by case basis.
- .5 The position of each portable fire extinguisher must be clearly marked with self-adhesive photoluminescent stickers, representing IMO symbols.
- .6 At least two (2) metal fire buckets with lanyards.
- .7 One fire blanket in galley or cooking.

Smaller yachts, where it is impracticable to comply with the requirements above, can be considered by the Administration and assessed on a case by case basis.

# SECTION 13

## DECK AND MOORING EQUIPMENT

## 13.1 Anchors and Cables

### 13.1.1 General

The requirements given in Table 1 are for a yacht of normal form which may be expected to ride-out storms while at anchor and when seabed conditions may not be favourable.

### 13.1.2 Anchors

- .1 The anchor sizes given in Section 13.1.1, Table 1 are for high holding power (HHP) types.
- .2 When a fisherman type of anchor is provided, the mass given in Table 1 has to be increased by 75%.
- .3 When a yacht has an unusually high windage, due to high freeboard, heavy rigging (e.g., square-rigger) or large superstructures, the mass of anchor given in Table 2 has to be increased to take account of the increase in wind loading.
- .4 The diameter of the anchor cable has to be appropriate to the increased mass of anchor.

### 13.1.3 Anchor Cables

- .1 The length of anchor cable attached to an anchor shall be appropriate to the area of operation but generally should be not less than 4 x the yacht length overall or 30 metres, whichever is the longer, for each of the main and kedge anchors.
- .2 In a yacht  $\geq 15$  metres in length overall, the anchor cable for the main anchor has to be made-up of chain.
- .3 In a yacht  $< 15$  metres in length overall, the cable for main anchors and for kedge anchors may be of chain or rope.

- .4 When the anchor cable is of fibre rope or wire, there must be  $\geq 10$  metres of chain between the rope and the anchor. The rope diameter given in Section 13.1.1, Table 1, is for nylon construction. When rope of another construction material is proposed, the breaking load has not to be less than that of the nylon rope specified in the table.
- .5 Anchor cables/chains are to be provided with emergency release.
- .6 Anchor, chain, cables, anchor links, shackles, etc. must be periodically checked and calibrated where necessary.

### 13.1.4 Anchoring Arrangements

- .1 When an anchor mass is more than 25kg, a windlass has to be provided for handling the anchor.
- .2 There should be a strong securing point on the foredeck and a fairlead or roller at the stem head that can be closed over the cable and capable of being released in an emergency.
- .3 Electrical or hydraulic operated anchor winches/windlasses shall be supplied by an emergency source of power or be able to be manually operated. Location of foot operational buttons shall assure easy operational activities and consider the safe operation of the equipment.

### 13.1.5 Area of Operation – Offshore & Unlimited

- .1 A yacht has to be provided with at least two (2) anchors (one (1) main and one (1) kedge or two (2) main and cables, subject to Section 13.1.1 and in accordance with the requirements of Table 1.
- .2 Anchors of equivalent holding power may be proposed and provided, subject to approval by the Administration.



13.1.6 Area of Operation – Coastal

A coastal area yacht restricted to operations in favourable weather and daylight from a designated point has to be provided with an anchor of sufficient mass in accordance with Table 1.

13.1.7 Towing and lines

.1 A yacht has to be provided with a towline of not less than the length and diameter of the kedge anchor cable. The towline may be the warp for the kedge anchor.

.2 Accessible efficient strong securing points designed in accordance with ISO 15084 or other equivalent standards shall be provided for the attachment of towlines for the yacht to tow and be towed.

Loa + Lwl 2	Anchor Mass		Anchor Cable Diameter			
	Main	Kedge	Main		Kedge	
			Chain	Rope	Chain	Rope
(metres)	(kg)	(kg)	(mm)	(mm)	(mm)	(mm)
6	8	4	6	12	6	10
7	9	4	8	12	6	10
8	10	5	8	12	6	10
9	11	5	8	12	6	10
10	13	6	8	12	6	10
11	15	7	8	12	6	10
12	18	9	8	14	8	12
13	21	10	10	14	8	12
14	24	12	10	14	8	12
15	27	13	10	-	8	12
16	30	15	10	-	8	12
17	34	17	10	-	8	14
18	38	19	10	-	8	14
19	42	21	12	-	10	14
20	47	23	12	-	10	14
21	52	26	12	-	10	14
22	57	28	12	-	10	16
23	62	31	12	-	10	16
24	68	34	12	-	10	16

**Table 1- Anchors and Cables**

# SECTION 14

## RADIO AND NAVIGATIONAL EQUIPMENT

## **14.1**      **Radio Installation**

### 14.1      General Requirement

In accordance with Section 4.0, when a survey is requested by an Authorised surveyor, a radio survey will be requested to be carried out by an Authorised Radio Service Provider and the Radio Survey Report has to be submitted to the Administration duly signed and stamped by the Radio Surveyor.

Private yachts are recommended to be surveyed by an Authorised Radio Service Provided, as far as practicable. Alternatively, private yachts shall be requested to be surveyed by competent persons, including Owners, Owner's representatives or Technical managers.

All equipment listed within this section is to be certified ('wheelmarked') in accordance to the Marine Equipment Directive 96/98/EC as amended or to equivalent standards, accepted by the Administration.

- .1 A yacht has to carry equipment for transmitting and receiving on the VHF Maritime Mobile band and for receiving regular shipping weather forecasts for the area of operation.
- .2 When the main aerial antenna is fitted to a mast that is equipped to carry sails, an emergency aerial antenna has to be provided.
- .3 A yacht, other than one operating within 20 miles of a safe haven must be provided with a radio installation capable of transmitting and receiving messages to and from a radio communications centre on land. Having regard to the range limitations of VHF, radio equipment shall be provided which has a range capability commensurate with that needed for the intended area of operation.
- .4 When the electrical supply to radio equipment is from batteries, charging facilities or a duplicate battery of capacity enough for the

voyage have to be provided. Battery electrical supply to radio equipment should be arranged such that radio communications are not interrupted.

- .5 Emergency light on the navigation bridge may be fed, if a dedicated emergency source of power is not available, also by service batteries, at the Administration's discretion.
- .6 A dedicated reserve source of energy, independent of the main and emergency source of electrical power shall be provided for the purpose of conducting distress and safety radio communications in the event of failure of the main and emergency source of electrical power. This shall have a minimum capacity for operating the required radio equipment for a period of at least:
  - 1 hr on yachts provided with an emergency source of electrical power, and;
  - 6 hrs on yachts not provided with an emergency source of electrical power.
- .7 Instruction cards giving a clear summary of the radio-telephone distress, including Vessel name, Call Sign and MMSI numbers whenever applicable, urgency and safety procedures should be displayed in full view of the radiotelephone operating positions.
- .8 With regard to the minimum and recommended radio equipment to be fitted on a yacht, depending on its intended area of navigation, reference is to be made to the Table 1.

## **14.2**      **406MHz EPIRB**

Requirements for the carriage of a 406MHz EPIRB are given in Section 14.1, Table 1.

- .1 Distress beacons are designed to broadcast a Vessel's position and identity and call for help should she run into trouble.

- .2 EPIRBS must be registered. They may be registered in the country where they are purchased provided the SAR authorities in that country accept the registration under the Cook Islands Flag or be re-programmed with the Cook Islands prefix 518 as part of the HEX ID and registered with the Rescue Co-ordination Centre New Zealand.
- .3 An EPIRB will have a country prefix, (usually a three-digit number, depending on where the EPIRB is purchased and registered – Check [ITU List](#) of MID Country Code Numbers) followed by the beacon serial number programmed into it. The Prefix and the serial number create the new 15 digits hexadecimal ID (characters range must be 0 - 9 and a - f), which shall be displayed on the outside of the EPIRB.
- .4 Commercial yachts shall be requested to have an annual test carried out by an approved radio service provider, and relevant test issued, in compliance with IMO MSC.1/Circ.1040/Rev.1, as amended, in order to verify that EPIRB is working properly.

### **14.3 Radio Logbook**

All commercial yachts are required to keep records of communications relating to distress, urgency, and safety traffic.

Records must be reported on a Radio Logbook.

Private yachts are recommended to comply with the above requirement.

<i>Radio Equipment</i>	<i>Area of operation</i>			
	<i>Up to 20 nm</i>	<i>Up to 60 nm</i>	<i>Up to 150 nm</i>	<i>Unlimited</i>
VHF fixed radio station (DSC function/RT) (*)	1	1	1	1
Handheld Portable VHF (GMDSS) Radios	1	1	1	1
MF/HF DSC/RT having DSC watch keeping (***)	None	None	1a	1a
Inmarsat Ship Earth Station (or an MF/HF transceiver with DSC)	None	None	R	R
9 GHz Radar	1	1	1	1
406 MHz EPIRB	1	1	1	1
SART (Search and Rescue Transponder)	1	1	1	1
NAVTEX receiver (**) with recording system	None	R	1	1
Valid Shore Based Maintenance Agreement	None	None	R	R

Table 1

*Legend:*

R = Recommended only

a = or an Inmarsat Ship Earth Station or an Inmarsat Satellite phone with DSC function

(\*) A VHF/RT radio installation capable of transmitting Digital Selective Calling (DSC) on Channel 70. It shall also be possible to initiate transmission of distress alerts on Channel 70. In addition, a VHF DSC watch receiver has to be fitted. This unit may be combined in a unique equipment having all requested functions. For Vessels sailing up to 150nm from Safe Haven or over, Class A equipment (wheelmarked) is required.

(\*\*) Fore Vessels sailing up to 150nm from Safe Haven, NAVTEX equipment to be MED marked (equivalent standard may be considered by the Administration). Additional means of receiving MSI transmissions (such as INMARSAT EGC System) must be installed should the yacht be operating in areas where NAVTEX coverage is not available.

(\*\*\*) MF/HF DSC/RT installation also having DSC watch keeping capability on 2187.5KHz, 8414.5KHz and at least one other DSC distress & safety frequencies within the HF marine band. Alternatively, an additional INMARSAT-C unit complete with EGC receiver may be installed.

## Navigational Equipment

### 14.4 Magnetic Compass

A yacht has to be fitted with an efficient magnetic compass, independent of any power supply, and valid deviation card (updated every two years) complying with the following requirements as appropriate:

- .1 In a steel yacht, it shall be possible to correct the compass for coefficients B, C and D and heeling error;
- .2 The magnetic compass or a repeater shall be fitted with an electric light and so positioned as to be clearly readable by the helmsman at the main steering position;
- .3 Means shall be provided for taking bearings as nearly as practicable over an arc of the horizon of 360 degrees. This requirement may be met, at the discretion of the Administration, by the fitting of a Pelorus or, in a yacht other than a steel yacht, a hand bearing compass.
- .4 Yachts  $\geq 150$  GT shall have a spare magnetic compass.
- .5 Magnetic Compass has to be Type Approved or MED certified.

### 14.5 Other Equipment

A yacht that operates more than 20 miles from land has to be provided with:

- .1 a receiver for a Global Positioning System (GPS);
- .2 an echo sounder, easily visible from the navigational position;
- .3 a speed and distance measuring device, unless this is being measured via the GPS unit;
- .4 an Engine Revolution Counter in the navigation position;

- .5 a Rudder Angle Indicator

### 14.6 BNWAS

Commercial Yachts  $\geq 150$ GT shall be fitted with a Bridge Navigational Watch Alarm System (BNWAS) in accordance with SOLAS Chapter. The BNWAS System shall be certified as compliant with the performance standards laid down in IMO's Performance standards for a Bridge Navigational Watch Alarm System (BNWAS) adopted by Resolution MSC.128 (75).

### 14.7 Nautical Publications

All yachts must comply with the requirements of Cook Islands Rules, Safety of Navigation, Navigational Charts, Publications and Notices to Mariners.

Every yacht shall also carry on board adequate and updated Nautical Publications for the intended area of navigation.

These shall include:

- Sailing directions;
- List of lights;
- Notices to Mariners;
- Pilot Books;
- Tide Tables;
- Radio Aids to Navigation;
- Port Information Guide.

Updated nautical charts for the intended voyage must be placed on board.

Yachts engaged on international voyages shall keep on board a record of navigational activities and incidents which are of importance to

safety of navigation, containing sufficient detail to restore a complete record of the voyage(s). All this information shall be recorded in the deck logbook.

#### 14.8 **ECDIS**

Yachts fitted with an approved Electronic Chart Display and Information System (ECDIS), are accepted as meeting the chart carriage requirements when navigating within waters covered by Electronic Navigation Charts (ENC) officially issued by an authorised Hydrographic Office subject to suitable duplicate/back-up arrangements being provided.

The following arrangements are accepted as fulfilling the duplicate/back-up requirements: 1. an appropriate folio of up-to-date paper nautical charts; or 2. a second type approved ECDIS; or 3. a Type Approved or Certified electronic back-up arrangement for ECDIS mode of operation (using ENC).

Both the primary and secondary (alternative 2.) ECDIS shall be fully independent and both supplied from the yacht's main and emergency source of power. In addition, a reserve power source (UPS mode) with a capacity of at least 30 minutes is to be provided if change-over of the source of power entails restarting of ECDIS.

For alternatives 2 and 3 above, an appropriate folio of up-to-date paper charts is to be available to enable the yacht to safely reach a port within or adjacent to its trading areas when coverage by ENC is not available.

When paper nautical charts serve as the only back-up arrangement (alternative 1), the charts shall be up to-date and include the planned route and, when navigating within restricted waters, the yacht's position is to be regularly updated to ensure a safe take-over of ECDIS functions shall the need arise.

#### 14.9 **Miscellaneous Equipment**

##### 14.9.1 Day light signalling lamp

A yacht has to be provided with an efficient waterproof electric light suitable for Morse signalling, for search and rescue operations at night and intended to assist any berthing operations in the dark.

##### 14.9.2 Radar Reflector

A yacht built on GRP, carbon fibre or wood, must carry a radar reflector complying with the specification ISO 8729-2 Ships and Marine Technology - Marine radar reflectors or any approved equivalent specification.

##### 14.9.3 Measuring Instruments

- .1 All yachts have to carry a barometer.
- .2 A mono hull *sailing* yacht operating in the offshore or unlimited areas and of 15 metres in length and over shall be provided with an anemometer and an inclinometer.
- .3 A multihull *sailing* yacht has to be provided with an anemometer providing a continuous indication of relative wind speed, with the display clearly visible at each control position.

##### 14.9.4 Search light

A yacht operating beyond the inshore area shall be provided with an efficient fixed and/or portable searchlight suitable for use in man-overboard search and recovery operations.

##### 14.9.5 Wire cutting equipment

A *sailing* yacht shall carry wire cutting equipment for use in the event of dismasting.



#### **14.10**      **Navigation Lights and Shapes**

- .1 Navigation Lights and Shapes have to be installed, as far as applicable, in compliance with the International Regulations for Preventing Collisions at Sea, 1972 (COLREG), as amended.
- .2 As far as the COLREG regulations is concerned, the longitudinal position of the main mast may be accepted to be aft of midships by the Administration. This applies when the design of the Vessel does not allow fully compliance with the COLREG.
- .3 Type Approved or Certified navigation lights shall be provided with duplicate bulbs. When this requirement is not fulfilled, spare bulbs should be placed onboard. Arrangement of the navigation lights has to assure the easy and fastest bulb replacement in case of failure.

## SECTION 15

# ACCOMODATION AND PROTECTION OF PERSONNEL

## 15.1 ACCOMMODATION- General

MLC 2006 (Accommodation requirements)

Refer to Chapter 19.10 of this Code.

In addition to the requirements set. Chapter 19, the following standards need to be implemented onboard yachts to which this Code applies.

## 15.2 Yachts with seafarers sleeping onboard at Sea for more than 24 hours

When a yacht is intended to be at sea with seafarers sleeping onboard ~~for more than 24 hours~~, an adequate standard of accommodation for all persons on board should be provided. In considering such accommodation, primary concern should be directed towards ensuring the health and safety aspects of persons, e.g., the ventilation, lighting, water services, galley services and the access/escape arrangements. In particular the following standards should be observed:

### 15.2.1 Ventilation

Mechanical ventilation should be provided to accommodation spaces which are situated completely below the level of the weather deck (excluding any coach roof) on yachts intended to make voyages more than 24 hours at sea or operate in tropical waters and which carry nine (9) or more berthed persons below deck. As far as practicable, such ventilation arrangements should be designed to provide at least 6 changes of air per hour when the access openings to the spaces are closed.

Enclosed galleys, where air-conditioning is not fitted, shall be fitted with mechanical ventilation with a capacity of 20 air changes per hour and a mechanical exhaust capable of 30 air changes per hour, as far as practicable with the internal lay-out of the yacht.

Provisions for air purification should be provided, especially for those yachts engaged in charter operations.

Air conditioning ducting should be easily accessible for check and cleaning activities.

### 15.2.2 Lighting

- .1 An electric lighting system should be installed which is capable of supplying adequate light to all enclosed accommodation and working spaces.
- .2 The system should be designed and installed in a manner that will minimize the risk of fire and electric shock.

### 15.2.3 Water services

- .1 An adequate supply of fresh drinking water should be provided and piped to convenient positions throughout the accommodation spaces.
- .2 In addition, a dedicated emergency supply of drinking water should be carried to provide at least two (2) litres per day to each person on board.
- .3 Fresh water tanks should be checked, and annual water analysis carried out. Water analysis results have to be kept onboard at all times.

### 15.2.4 Sleeping accommodation

A bunk or cot should be provided for each person on board, and at least 50% of those provided should be fitted with lee boards or lee cloths.

Males and females gender sleeping accommodation must be separated. When this is not possible, especially for sailing yachts, the

Administration may consider alternative arrangements to this requirement.

#### 15.2.5 Galley

- .1 A galley should be fitted with a means for cooking, a sink and adequate working surface for the preparation of food.
- .2 When a cooking appliance is gimballed, it should be protected by a crash bar or other means to prevent it being tilted when it is free to swing. A strap, portable bar or other means should be provided to allow the cook to be secured in position, with both hands free for working, when the yacht is rolling. Means should be provided to isolate the gimbaling mechanism.
- .3 There should be secure storage for food in the vicinity of the galley.
- .4 Refer to Sections 17.1 and 17.4 for possible further regulatory requirements.
- .5 Installation of an open flame gas appliance should comply with the provisions of Annex III.
- .6 The floor of the galley is to be of the non-skid type.
- .7 All furniture and fittings in the galley shall be made of a material which is impervious to dirt and moisture.

#### 15.2.6 Messing facilities

Adequate messing facilities should be provided taking account of the number of seafarers likely to use them at any one time.

#### 15.2.7 Sanitary facilities

- .1 Adequate toilet facilities, separated from the rest of the accommodation, should be provided for persons on board.
- .2 In general, there should be at least:
  - i) one water closet for every eight persons on board;
  - ii) one freshwater shower for every eight persons on board;
  - iii) one wash basin for every six persons on board.
- .3 For sewage arrangements, refer to Section 17.3, Sewage.

#### 15.2.8

#### Stowage facilities for personal effects

Adequate stowage facilities for clothing and personal effects should be provided for each person on board.

### 15.3 **Protection of Personnel**

#### 15.3.1 Deckhouses

A deckhouse used for accommodation of persons has to be of sufficient construction to withstand the prevailing conditions.

#### 15.3.2 Bulwarks, Guard Rails and Handrails

- .1 The perimeter of an exposed deck has to be fitted with bulwarks, guard rails or guard wires of sufficient strength and height for the safety of persons on deck, supported efficiently by stays or stanchions.
- .2 When the proper working of a *sailing* yacht may otherwise be impeded, bulwarks or two (2) courses of rails or taut wires shall be fitted around the working deck and the height of the protection should be not less than 600mm above the deck. Rails or wires should be supported at intervals not exceeding 2.2 metres.
- .3 When the proper working of a *sailing* yacht of less than nine (9) metres in load line length, if accepted for registration, may otherwise be impeded, bulwarks or a single rail or taut wire has to be fitted around the working deck and the height of protection is not to be less than 450mm above the deck.
- .4 To protect persons from falling overboard, and when the proper working of the yacht is not impeded and there are persons frequently on the deck, bulwarks or three courses of rails or taut wires have to be provided and the bulwark top or top course

should be not less than 1000mm above the deck. Intermediate courses should be evenly spaced.

- .5 In a yacht fitted with a cockpit that opens aft to the sea, additional guardrails should be fitted so that there is no vertical opening (i.e. between vertical 'members') greater than 500mm in width.
- .6 In a *sailing* yacht fitted with a headstay, a fixed or drop-nosed bow pulpit should be provided forward of the headstay of at least the same height as the guardrails, except in way of a substantial bowsprit. A drop-nosed pulpit with an opening wider than 250mm should be provided with a means of closure at guardrail height, for use at sea:
  - .1 In a *sailing* yacht fitted with a headstay, a pulpit shall be provided forward and around the headstay of at least the same height as the adjacent guardrails.
  - .2 When it is desired to move forward of a pulpit to access a bowsprit or to assist with docking operations it shall be permissible to arrange the pulpit with an opening in its forward-most part. In this case, an efficient means of closure of the opening and jackstays in accordance with 15.2.3.5 should be provided.
- .7 Access stairways, ladderways and passageways should be provided with handrails as far as practicable.
- .8 In an inflatable boat or a rigid inflatable boat, handgrips, toeholds and handrails shall be provided as necessary to ensure safety of all persons on board during transit and the worst weather conditions likely to be encountered in the intended area of operation.
- .9 Existing yachts

	<p>Minimum height of bulwarks or course of rails listed in the above-mentioned subparagraph 15.2.2.2, 15.2.2.3 and 15.2.2.4 shall be complied with, as far as practicable.</p> <p>In case that the height of bulwarks or course of rails should not comply with the above requirements, the Administration will consider alternative safety equivalence (such as interdiction instructions during the navigation).</p>		<p>When appropriate to the working of a yacht provided with a sailing rig, a toe rail of not less than 25mm in height should be fitted around the working deck.</p>
15.3.3	<p><b>Safety Harnesses</b></p> <p>.1 A motor yacht has to be provided with two (2) safety harnesses. A <i>sailing</i> yacht has to provide a safety harness for each person on board.</p> <p>.2 Efficient means for securing the lifelines of safety harnesses shall be provided on exposed decks, and grab-rails provided on the sides and ends of a deckhouse.</p> <p>.3 Fastening points for the attachment of safety harness lifelines should be arranged having regard to the likely need for work on or above deck. In general, securing points have to be provided in the following positions:</p> <p>.1 close to a companionway; and</p> <p>.2 on both sides of a cockpit.</p> <p>.4 When guard rails or wires are not otherwise provided, jackstays (which may be fixed or portable) secured to strong points have to be provided on each side of the yacht to enable crew members to traverse the length of the weather deck in bad weather.</p> <p>.5 When a <i>sailing</i> yacht is provided with an open fronted pulpit, jackstays should be carried sufficiently far forward to protect persons working in the vicinity of the pulpit.</p>	15.3.5	<p><b>Surface of Working Decks</b></p> <p>.1 The surface of a working deck should be non-slip type.</p> <p>.2 Acceptable surfaces are: unpainted wood; a non-skid pattern moulded into GRP; non-slip deck paint; or an efficient non-slip covering.</p> <p>.3 Particular attention shall be paid to the surface finish of a hatch cover when it is fitted on a working deck and to sloping coach roof sides on <i>sailing</i> yachts where these effectively constitute a working deck when the <i>sailing</i> yacht is heeled.</p> <p>.4 In an inflatable boat or rigid inflatable boat the upper surface of the inflated buoyancy tube should be provided with a non-slip finish.</p>
		15.3.6	<p><b>Recovery of Persons from the Water</b></p> <p>An over side boarding ladder or scrambling net which extends from the weather deck to at least 600mm below the operational waterline or other means to aid the recovery of an unconscious person from the water has to be provided to the satisfaction of the Administration.</p> <p>A procedure about the recovery of persons from the water, which can also be either in the manufacturer's manual issued by the boarding ladder or scrambling net or in the Owner's Manual issued by the yacht builder, must be duly kept on board.</p>
15.3.4	<p><b>Toe Rails</b></p>	15.3.7	<p><b>Personal Clothing</b></p> <p>It is the responsibility of an owner, managing agent or skipper to advise that the following requirements for items of personal clothing are met:</p>

- .1 Each person on board a yacht has to have protective clothing appropriate to the prevailing air and sea temperatures.
  - .2 On a yacht that intends to operate in high latitudes, each person on board has to have either an approved immersion suit or a dry suit of suitable quality to reduce the likelihood of hypothermia should the wearer enter the sea.
  - .3 Each person on board a yacht has to have footwear having non-slip soles, to be worn on board.
- 15.3.8 Training Manual
- 15.3.8.1 The yacht's training manual should include at least details of established safe working practices specific to the yacht, guidance on training for members of the crew, personal clothing and protection from injury, health and safety awareness, and prevention of pollution.
- 15.3.8.2 The training manual has to contain instructions and information on the life-saving appliances provided in the yacht and on the best methods of survival in easily understood terms and illustrations where appropriate. Depending on the life-saving appliances provided, the following should be explained in reasonable detail:
- .1 donning of lifejackets, immersion suits, and thermal protective aids, as appropriate;
  - .2 mustering at assigned stations;
  - .3 boarding, launching and clearing survival craft, rescue boats, fast rescue boats, free-fall boats and inflated boats;
  - .4 illumination in launching areas;
  - .5 location and use of pyrotechnics;
  - .6 use of all survival equipment;
  - .7 use of all detection equipment;
  - .8 with the use of illustrations, the use of radio life-saving appliances;
  - .9 use of sea anchors;
  - .10 use of engine and accessories;
  - .11 recovery of survival craft, rescue boats, fast rescue boats, free-fall boats and inflated boats including stowage and securing, where applicable;
  - .12 hazards of exposure and the need for warm clothing;
  - .13 best use of the survival craft facilities in order to survive;
  - .14 methods of retrieval, including the use of helicopter rescue gear, breeches-buoy and shore life-saving apparatus and yacht's line-throwing apparatus;
  - .15 all other functions contained in the muster list and emergency instructions;
  - .16 instructions for emergency repair of the life-saving appliances;
  - .17 means of rescue arrangements;
  - .18 marine evacuation systems, where applicable;
  - .19 helicopter landing and pick-up area operations, if applicable.
- 15.3.8.3 In addition to the requirements of paragraph 15.2.8.2 above, the skipper (the Master) has to routinely drill the crew who will be sailing on the voyage regarding the following:
- .1 Location of life rafts and the method of launching;
  - .2 Procedures for the recovery of a person from the sea;
  - .3 First Aid;
  - .4 Procedures and operation of radios carried on board;

- .5 Location of navigation and other light switches;
- .6 Location and use of firefighting equipment on various types of fires;
- .7 Method of starting, stopping, and controlling the main engine; and
- .8 Method of navigating to a suitable port of refuge.

15.3.9 Safety Briefing

Before the commencement of any voyage the skipper has to ensure that all persons on board are briefed on the stowage and use of personal safety equipment such as lifejackets, thermal protective aids and life buoys, and the procedures to be followed in cases of emergency.

15.3.10 Instructions for on-board maintenance

Instructions have to be provided describing the maintenance procedures for all safety and firefighting appliances in easily understood terms and illustrated wherever possible. The instructions should include at least:

- .1 a checklist for use when carrying out required survey;
- .2 maintenance and repair instructions;
- .3 a schedule of periodic maintenance;
- .4 a diagram of lubrication points with the recommended lubricants;
- .5 a list of replacement parts;
- .6 a list of sources of spare parts; and
- .7 a record of survey and maintenance.

15.3.11 Gangway, Passerelles, Accommodation ladders, etc.

- .1 A safe means of access is to be provided whilst the yacht is moored in port.
- .2 Any gangways, passerelles and accommodation ladders shall be manufactured to adequate and recognised standards. They shall be clearly marked with the number of persons and the SWL (Safety Working Load) corresponding to the total weight that can be safely carried.
- .3 In case such equipment has no details about Safe Working Load, the certificate stating the SWL shall need to be collected from the manufacturer.

Alternatively, a load test shall be carried out and witnessed by an Appointed Surveyor or Recognised Organisation.

This test shall:

- be carried out to 120% of the rated load at mid span (75kg per person is to be assumed);
- deflections shall be measured;
- confirmation that no permanent deformations are present after the test;
- be performed every 5 years;



# SECTION 16

## MEDICAL STORES

## **16.1 MEDICAL STORES**

- .1 A yacht has to carry medical stores appropriate to the area of operation.
- .2 A yacht operating in the offshore area and carrying 15 or less persons has to carry double the medical stores prescribed in Section 1 of Annex V.
- .3 When more than 15 persons are carried, the quantities of consumable items prescribed in Section 2 of Annex V Equivalent stores are acceptable.
- .4 A yacht operating in the Inshore area shall carry an augmented first aid kit as detailed in Annex 5.
- .5 A yacht operating unlimited has to carry the medical stores prescribed in Section 2 of Annex V, or its equivalent.
- .6 Medical Stores have to be periodically checked by a pharmacist or supplier. Annual Check Certificate issued by a pharmacist or producer has to be kept onboard at all times.

## SECTION 17

# MARINE POLLUTION PREVENTION AND ADDITIONAL NOTATIONS

## **17.1 General Requirements**

- .1 A yacht complying with the Code has to also comply with international and national applicable regulations and meet any possible specific requirements for the prevention of marine pollution that are applicable to the area in which the yacht is operating.
- .2 Responsibility for the yacht to be properly equipped and maintained to meet the prevailing requirements rests with the owner or managing agent.
- .3 It is also the responsibility of the owner/owner's representative to ensure that a demise charterer of a yacht receives up-to-date and adequate information on prevention of pollution in the area in which the demise charterer intends to operate. The information may include the need to seek advice from local authorities, for which contact points should be given.
- .4 The following requirements shall be applicable to all type of yachts, either private or commercial.

## **17.2 Oil Pollution Prevention – MARPOL Annex I**

Means to prevent pollution by oil shall be provided which are acceptable to the Administration and authorities in the area in which a yacht operates. It is recommended that all yachts maintain an oil record book.

All yachts are prohibited from discharging oily bilge water overboard, through bilge pumping arrangement.

Oily bilge water, if any, shall be disposed to appropriate shore facilities.

Where a yacht is fitted with oil filtering equipment, it shall be ensured that the equipment is Type Approved or Certified and that the

calibration and testing of the equipment is carried out at intervals as per the manufacturer's recommendations.

## **17.3 Sewage Pollution Prevention – MARPOL Annex IV**

When the direct overboard discharge from a water closet is prohibited by authorities in an area of operation, the provision of "holding tanks" of sufficient capacity to store waste for discharge to shore facilities may be needed.

Yacht certified to carry out more than 15 persons shall be equipped with:

- i) a sewage treatment plant which shall be of a type approved recognized by the Administration. This equipment must follow also the USG regulations when the yacht is sailing in USA waters or another country where USG regulations are applied;
- ii) in alternative to the above, a sewage comminuting and disinfecting system approved by the Administration;
- iii) in alternative to the above two points, a holding tank of the capacity to the satisfaction of the Administration, complete of a means to indicate visually the amount of its content;
- iv) a discharge pipeline (flexible hose may be deemed acceptable) complete of standard discharge connection flange with dimensions as per MARPOL Annex IV, Reg. 10;

## **17.4 Garbage Pollution Prevention – MARPOL Annex V**

The disposal of garbage into the sea is prohibited. Arrangements for the retention of garbage on board and for discharge to shore facilities have to be provided. Arrangements should be varied as necessary to comply with special requirements that may be applied by authorities in the area in which a yacht operates.

Every yacht of 12 m or more in length overall shall display placards which notify the crew and passengers of the discharge requirements of MARPOL Reg. 3, 4, 5 and 6 (ref. IMO MEPC.295(71) as amended)

Every ship of 100 gross tonnage 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.

Every yacht which is certified to carry 15 or more persons engaged in voyages to ports or offshore terminals under the jurisdiction of another Party to the Convention shall be provided with a Garbage Record Book.

#### **17.5 Air Pollution Prevention – MARPOL Annex VI**

If a yacht, either registered as commercial or pleasure, has its keel laid on or after the 1st January 2000, and it is fitted with diesel engine(s), being either for main propulsion or for the electrical generating set, developing each an output power of 130 kW or more, an EIAPP (Engine International Air Pollution Prevention) Certificate is requested to be issued for each diesel engine.

Alternatively, if a yacht is fitted with a marine diesel engine, found in compliance with EU Directive 94/25 for Recreational craft and personal watercraft, as amended by Directive 2013/53/EU, Annex I, Part B, it shall be deemed acceptable by the Administration.

#### **17.6 Ballast Water Convention**

- i) All yachts designed or constructed to carry ballast water, as defined in the Ballast Water Management Convention, shall need to comply with the requirements of the Ballast Water Management Convention, as far as practicable.
- ii) Equivalent compliance with the Convention shall be determined by the Administration taking into account the Guidelines developed by the Organization, for pleasure yacht used solely for

recreation, less than 50 metres in length overall, and with a maximum Ballast Water capacity of 8 cubic metres

#### **17.7 Polar Code**

All yachts operating either in the Arctic waters and Antarctic waters, as defined in the Polar Code (ref. IMO Resolution A.1024(26)) shall need to comply with the requirements of the Polar Code, Part I-A and Part I-B, as far as practicable.

Exemptions, if any, may be considered by the Administration on a case by case.

# SECTION 18

## MANNING AND CREW CERTIFICATION

## **18.1**      **MANNING**

General

The aim of this section is to set up the minimum safe manning requirements and the minimum level of crew certification.

During lay up or during wintering periods the number of crew may be reduced whilst an adequate and sufficient number of crew onboard, that are able to handle emergencies, are kept onboard.

Proposal for reduced manning must be submitted to the Administration.

All commercial yachts must carry onboard a Minimum Safe Manning certificate issued by the Administration.

## **18.2**      **Owner's Responsibility**

- .1 It is the responsibility of the owner/owner's representative of a yacht to ensure that it is safely manned and the skipper and crew properly trained and certified, in accordance with the Minimum Safe Manning certificate issued by the Administration.
- .2 The qualification of the skipper (and of the other member(s) of the crew, where applicable) for operations are given in Annex VI.
- .3 Qualifications issued in accordance with the STCW Convention, as amended, or other recognised standards are accepted subject to endorsement by the Cook Islands Flag Administration.
- .4 A vessel operating as Private yacht is not subject to the safe manning given in Annex VI. However, it is recommended that private yachts are manned in the same way of commercial yachts.

## **18.3**      **Yachts on Demise Charter**

The owner/owner's representative of a yacht offered for demise charter has to ensure that the skipper and crew of the yacht are provided with sufficient information about the yacht and its equipment to enable it to be navigated safely. The owner/owner's representative should be satisfied that the demise charter skipper and crew are competent for the intended voyage.

Where the Owner chartering the vessel intends to use the vessel for further commercial work, the manning requirements fall within those given in Annex VI.

## **18.4**      **Yachts on Skipped Charter**

Before the commencement of any voyage the skipper has to ensure that all persons on board are briefed on the stowage and use of personal safety equipment such as lifejackets, thermal protective aids and life buoys, and the procedures to be followed in cases of emergency.

# SECTION 19

## MARITIME LABOUR CONVENTION 2006



### 19.1 Application requirements

The MLC, 2006 **and the Cook Islands Maritime (MLC) Rules**, applies, except as expressly provided otherwise, to all seafarers on ships covered by the Convention regardless of the type and size of ships or whether or not the ship has been issued with a Maritime Labour Certificate.

Commercial Yachts covered by this code are required to comply with MLC, 2006 standards **and the Cook Islands Maritime (MLC) requirements**.

### 19.2 Definitions

The following definitions are to be used only with reference to the MLC **and the Cook Islands Maritime (MLC) requirements** application purposes:

**“Floor Area”**- In calculating the floor area of sleeping rooms, spaces occupied by berths, lockers, seats, chests of drawers and other furniture shall be included in the area, but spaces which by reason of their small size or irregular shape cannot accommodate furniture and do not contribute to the area available for free movement, shall not be included. Where a berth or other fixed furniture is situated at the side of the vessel the projected area (to floor level) of such berths or fixed furniture may be used in the calculation of the sleeping room area.

**“Gross tonnage**: means a way to measure the overall size of the yacht, which shall be calculated according to the Simplified Tonnage Measurement Method included in the Annex II of this Code.

**“Seafarer”**: means any person who is employed or engaged or works in any capacity on-board a ship to which the MLC, 2006 applies. In accordance with Resolution VII adopted 22nd February 2006, by the 94 (Maritime) Session of the International Labour Conference, held in Geneva, the term “Seafarer” means the Master and everyone working on- board including shopkeepers, resident entertainers, hairdressers and similar.

Seafarers are persons who regularly spend more than short periods on board.

Seafarers are not persons whose work is not part of the routine business of the yacht and whose principal place of work is ashore, e.g.: harbour pilots, inspectors, superintendents, scientists, researchers, divers and specialist offshore technicians.

Those persons working on an occasional and short-term basis for example, fitters, repair technicians, surveyors, port workers or day workers who do not stay on board the yacht overnight are also not considered to be seafarers;

**“Seafarers” employment agreement**” includes both a contract of employment and articles of Agreement;

**“Seafarer recruitment and placement service”** means any person, company, institution, agency or other organization, in the public or the private sector, which is engaged in recruiting seafarers on behalf of shipowners or placing seafarers with shipowners;

**“Ship”** means a ship (including commercial yachts) other than one which navigates exclusively in inland waters or waters within, or closely adjacent to, sheltered waters or areas where port regulations apply;

**“Shipowner”** means the owner of the yacht or another organization or person, such as the manager, agent or bareboat charterer, who has assumed the responsibility for the operation of the ship from the owner and who, on assuming such responsibility, has agreed to take over the duties and responsibilities imposed on shipowners in accordance with this Convention, regardless of whether any other organization or persons fulfil certain of the duties or responsibilities on behalf of the shipowner;

### 19.3 Documentation requirements

Declaration of Shipowner assuming MLC responsibilities (form 88) should be filled upon request of vessel certification and returned to the contacts indicated in MCI Circular 276/2023, as amended, together with copy of Protection & Indemnity Certification, including MLC amendments.

MCI Circulars related to Maritime Labour Conventions are all applicable to all commercial Yachts < 500, unless expressly excluded from the application.

#### **19.4 Inspection and enforcement**

Commercial Yachts covered by this code does not need to be certified, unless on a voluntary basis, expressly requested by the ship-owner.

Maritime Cook Islands will require that Commercial Yachts covered by this code are in compliance with MLC and the Cook Islands Maritime (MLC) Rules for all the same requirements as a certified ship.

19.4.1 All Commercial Yachts are required to be inspected by an MCI Approved Recognized Organisation or by an Authorised Surveyor with the following schedule:

- **Initial inspection:** to be carried out at time of registration, which consists of an onboard visit to verify that all matters detailed in MLC Appendix A5-I comply with MLC and the Cook Islands Maritime (MLC) Rules requirements;

- **Intermediate Inspection:** to verify compliance with MLC and the Cook Islands Maritime (MLC) Rules requirements (for all matters detailed in MLC Appendix A5-I) between the Initial and the renewal inspection. The Intermediate inspection must be carried out between the twenty-fourth (24) and the thirty-sixth month (36) from the initial inspection date.

- **Renewal inspection:** to verify compliance (for all matters detailed in MLC Appendix A5-I) with the MLC and the Cook Islands Maritime (MLC) Rules requirements, to be carried out between the fifty-seventh (57) and sixtieth (60) month from the initial inspection date.

Following the inspection carried out by an MCI Approved Recognized Organisation or by an Authorised Surveyor, Commercial Yachts will be issued with an audit report subject to the satisfactory completion of the inspection onboard; copy of the audit report shall be posted in a conspicuous place onboard where it is available to seafarers.

#### **19.4.3 Changes of flag/re-registration, change of shipowner, substantial alteration**

A Commercial Yacht will be required to undergo a new inspection when:

- There is a change of flag
- There is a change of MLC shipowner
- Substantial changes have been made to the structure or equipment dealt with under Title 3 (Seafarers' accommodation) (Standard A5.1.3, paragraph 14).

The inspection will be conducted in the same manner as specified above.

#### **19.5 Voluntary Full Certification**

For Commercial Yachts that do not have to be certified (ships under 500 gross tonnage, or ships that are not engaged in international voyages and that do not operate from a port or between ports in another country), shipowners may apply for voluntary certification.

In case of voluntary Certification, the requirements of MLC Standard A5.1.3 Apply.

The following documents upon satisfactory inspections, shall be issued either by Maritime Cook Islands or by an approved Recognised Organisation:

- Declaration of Maritime Labour Convention Part I;
- Declaration of Maritime Labour Convention Part II;
- Maritime Labour Convention Certificate.

#### **19.6 MLC Complaints**

Maritime Cook Islands will take the steps necessary to investigate any MLC complaints received. In case the complaint is not considered manifestly unfounded and if Maritime Cook Islands obtains evidence that a ship that flies its flag does not conform to the MLC 2006 Convention and to the related Cook Islands Maritime (MLC) Rules requirements or that there are

serious deficiencies in the implementation of the measures set out in the MLC and related national regulations, then Maritime Cook Islands will take actions to ensure that the deficiencies found are remedied.

MCI Complaint procedure and form are available in MCI Circular 174/2018.

## **19.7 General - Accommodation requirements**

### **19.7.1 Existing Yachts (yachts constructed before 18 December 2020).**

Existing commercial yachts shall comply with the following requirements:

- a. they must provide and maintain decent accommodations and recreational facilities for seafarers working or living on board, or both, consistent with promoting the seafarers' health and well-being;
- b. as a guide, the requirements relating to ship construction and equipment that are set out in the Accommodation of Crews Convention (Revised), 1949 (No. 92); and
- c. as a guide, the requirements relating to ship construction and equipment that are set out in the Accommodation of Crews (Supplementary Provisions) Convention, 1970 (No. 133).

### **19.7.2 New Yachts (yachts constructed on or after 18 December 2020).**

New Commercial Yachts shall comply with the MLC and the Cook Islands Maritime (MLC) Rules requirements. For Commercial Yachts covered under this code, the following exemptions/substantial equivalents may be issued upon request:

#### **Accommodation and Recreational Facilities**

The Administration, after consultation with shipowners' and seafarers' organizations concerned, may exempt ships of less than 200 gross tonnage, where it is reasonable to do so, taking into account of the size of the ship and number of persons on board in relation to the requirements of the following provisions of MLC Standard A.3.1 and the corresponding Cook Islands Maritime (MLC) Rules, Title 3. 1:

(a) paragraphs 7(b), 11(d) and 13; and

(b) paragraph 9(f) and (h) to (l) inclusive, with respect to floor area only.

With respect to multihull yachts the Gross Tonnage of one hull must be taken into consideration for the application of the floor area exemptions mentioned above.

Such exemptions may be made only where they are expressly permitted in the MLC Standard and only for particular circumstances in which such exemptions can be clearly justified on strong grounds and subject to protecting the seafarers' health and safety.

The accommodation shall also be adequate for those who are not seafarers onboard the yacht.

.1.1 Accommodation shall provide decent living conditions and recreational facilities for those persons employed or engaged in any capacity on board.

.1.2 The materials used to construct internal bulkheads, panelling and sheeting, floors and joining shall be suitable for the purpose and conducive to ensuring a healthy environment.

.1.3 Excessive noise and vibration shall be limited within accommodation spaces, and as far as practicable in accordance with relevant international standards, such as IMO Resolution MSC.337(91).

#### **Ventilation and heating (7b):**

Ships, except those regularly engaged in trade where temperate climatic conditions do not require this, shall be equipped with air conditioning for seafarer accommodation, for any separate radio room and for any centralized machinery control room;

#### **Sanitary facilities (11d):**

With the exception of passenger ships, each sleeping room shall be provided with a washbasin having hot and cold running fresh water, except where such a washbasin is situated in the private bathroom provided;

### Laundry Facilities (13):

Appropriately situated and furnished laundry facilities shall be available.

#### Exemptions flexibility (only with respect to the floor area)

### Sleeping Accommodation (9(f) and (h) to (k) inclusive):

When sleeping accommodation on board ships is required, the following requirements for sleeping rooms apply:

(f) in single berth seafarers' sleeping rooms the floor area shall not be less than:

(i) 4.5 square metres in ships of less than 3,000 gross tonnage;

(h) in ships of less than 3,000 gross tonnage other than passenger ships and special purpose ships, sleeping rooms may be occupied by a maximum of two seafarers; the floor area of such sleeping rooms shall not be less than 7 square metres;

(k) on ships other than passenger ships and special purpose ships, sleeping rooms for seafarers who perform the duties of ships' officers, where no private sitting room or day room is provided, the floor area per person shall not be less than:

(i) 7.5 square metres in ships of less than 3,000 gross tonnage;

19.8 With regard to the requirements set out in the MLC Standard A3.1.6 (c) and the Cook Islands Maritime (MLC) Rules, Title 3, 1.1.9.c when it is neither reasonable nor practicable to site seafarer sleeping accommodation amidships or aft, and above the deepest waterline as required, measures taken to ensure an equivalent level of seafarer health and safety shall be agreed with the Administration. Where the sole of the sleeping accommodation is below the deepest waterline amidships, a bilge visible and audible flooding alarm shall be provided in the cabin or crew area situated at the same level so as to provide early warning of flooding to that compartment. This flooding alarm

should be also connected to the addressable bilge alarm system with warning on the bridge. Sleeping accommodation with the deck head lining below the deepest intact waterline is not permitted. In addition, for vessels other than short range yachts, where such accommodation is sited partially below the deepest waterline it shall be arranged such that in the event of damage to the watertight compartment in which the accommodation space is situated, the deck head lining shall not be immersed. Satisfactory arrangements shall be made for lighting and ventilation.

19.9 With regard to the requirements set out in the MLC Standard A3.1.9 (e) and the Cook Islands Maritime (MLC) Rules, Title 3, 1.1.13.e, the minimum inside dimensions of a berth shall not be less than 198 centimetres in length and not less than 80 centimetres in width over half the length of the berth. A taper is permitted from approximately half the length of the berth towards the foot of the berth but under no circumstances is the berth permitted to be narrower at any point than 50 centimetres.

19.10 With regard to the requirements set out in the MLC Standard A3.1.9 (n) and the Cook Islands Maritime (MLC) Rules, Title 3, 1.1.13.d, where the total required volume cannot be provided within the cabin, the Administration may consider accepting secure facilities for the individual elsewhere within the seafarer accommodation, provided that within the cabin a minimum of 300 litres storage space is provided for each individual seafarer.

19.11 Any request for exemptions/substantial equivalences of Title 3 of the MLC or Title 3 of the Cook Islands Maritime (MLC) Rules, should be submitted to the Competent Authority as per below criteria:

- Indication of rule to be exempted
- Proposal of yacht arrangements in alternative to the required Standard
- Attachments relevant to the evaluation of the request.

Timing to submit Title 3 exemption/substantial equivalences request:

Any request as per Paragraph 19.11 should be sent to MCI Technical department by email at [technical@maritimecookislands.com](mailto:technical@maritimecookislands.com) upon completion of the initial inspection.

The request will be acknowledged by MCI technical department and processed.

## SECTION 20

# TENDERS, WATER TOYS AND OTHER ANCILLARY CRAFTS

## 20.1 **TENDERS (Dinghies)**

### General

Yacht's tenders may be of rigid or inflatable construction or a combination of both and may be either stowed on board or towed.

The tender may not be engaged on separate commercial activities.

Such tenders shall be used in conjunction with the mother yacht and may operate only within a 3 nautical mile radius from the mother vessel.

All tender(s) and other ancillary craft belonging to the yacht and having a length between 2.5 metres and 24 metres shall be certified and marked in accordance with the Recreational Craft Directive 2003/44/EC, as amended.

Craft not falling under this Directive shall be certified to an applicable recognised International Standard.

- .1 An inflatable tender is not required to meet the requirements for inflatable boats or rigid inflatable boats.
- .2 A tender has to be clearly marked with the number of people of mass 75 kg that it can safely carry and with the name of the mother vessel.
- .3 An inflatable tender should be fit for the purpose intended, regularly inspected by the owner/owner's representative and maintained in a safe condition.
- .4 A *sailing* yacht should carry (or tow) one or more rigid or inflatable tenders.
- .5 An extended tender operating range may be considered by the Administration on a case by case basis, however for tenders having Recreational Craft Directive

Certification to a minimum of Design Category B, and which are equipped with the necessary radio, safety and life-saving equipment, the range of tender operation may be extended up to a 20 nautical miles radius from the mother vessel, subject to favourable weather conditions. The number of persons the tender may safely carry, and the name of the mother yacht shall be clearly marked onboard of the tender. Personal watercraft may not be considered as tenders for the purposes of this sub-section.

## 20.2 **Other Water Toys and Ancillary Crafts**

Submersibles, Amphibious Craft and Hover Craft, when utilised solely in conjunction with the mother yacht are considered as ancillary craft and their details shall be included in the relevant survey report.

# SECTION 21

## RECOGNIZED ORGANIZATIONS AND APPOINTED SURVEYORS



### **21.1 Recognised Organizations**

The organisations currently recognised by the Administration for the survey and certification of yachts are the following:

[\(https://www.maritimecookislands.com/maritime-cook-islands/survey-and-certification/recognised-organizations/ \)](https://www.maritimecookislands.com/maritime-cook-islands/survey-and-certification/recognised-organizations/)

This list is subject to change and will be updated on the Maritime Cook Islands website periodically.

### **21.2 Authorised Surveyors**

Authorised Surveyors are independent surveyors who by reason of professional qualifications, practical experience and expertise are authorised by the Administration to carry out surveys and certification pertaining to this Code. Qualified, experienced and skilled exclusive surveyors belonging to Recognised Organisations may carry out the full range of survey and certification processes pertaining to this Code.

# SECTION 22

## YACHTS OPERATING UNDER RACE RULES

## **22.1**      **General**

Yachts holding a Certificate of Compliance to trade as a Commercial Yacht do not need to remain fully in compliance with the requirements of the Code during races and during the transfer voyages to and from the race location.

Any person on board is to be clearly informed of the suspended commercial yacht certification status for the duration of the race and/or the transfer voyage. The Administration is to be informed when the yacht is transferring for a race or taking part in a race.

## **22.2**      **Motor yachts**

.1 A yacht chartered or operated commercially for the purpose of racing need not comply with the provisions of the Code provided that, when racing, it is racing under the rules of the Union Internationale Motonautique and the affiliated national authority in the country where the race is taking part.

.2 Relief from compliance with the provisions of the Code that is permitted by paragraph 22.2.1 does not apply to a motor yacht taking part in a recreational event or an event created and organized with intent to avoid the provisions of the Code.

## **22.3**      **Sailing yachts**

.1 A sailing yacht chartered or operated commercially for the purpose of yacht racing need not comply with the provisions of the Code provided that when racing:

(a) It is racing under the rules of the International Yacht Racing Union or equivalent; or

(b) If it is racing offshore, it complies with the special regulations of the Offshore Racing Council or the race organizing committee or equivalent; and

(c) If it is a yacht of a national or an international class, it complies with the appropriate class rules.

.2 Relief from compliance with the provisions of the Code that is permitted by 22.3.1 does not apply to a sailing yacht taking part in:

(a) a sail training race;

(b) a recreational event; or

(c) an event created and organized with intent to avoid the provisions of the Code.

## SECTION 23

# SAILING YACHTS, RIGGING AND REQUIREMENTS

## **23.1 Rigging on Sailing yachts**

### 23.1.1 Requirements

This section deals with the requirements for rigging on sailing yachts. The condition of the masts, booms and the rigging shall be subject to a continuous monitoring and to a preventive maintenance schedule. The records of all inspections are to be recorded and inspected by the Appointed Surveyor or RO during each annual or renewal survey.

### 23.1.2 Masts and Spars

1. Masts, their associated rigging and spars on new yachts shall be in accordance with the requirements of a Recognised Organisations Rules or a recognised International Standard.
2. Masts and spars on existing yachts shall be subjected to a thorough inspection by a professional rigger and the attending surveyor during the Initial Survey.  
Due consideration shall be given to the past performance and the declared areas of operation of the yacht.
3. The structure supporting the masts and spars shall be constructed to effectively carry and transmit all forces involved.

### 23.1.3 Standing Rigging

1. Cables used for standing rigging shall be of sufficient strength that is equivalent or higher to the strength of non-flexible steel wire rope.  
The yacht shall carry a log of all rigging elements used whilst clearly recording when each element has been installed or replaced.
2. When solid rod is used for standing rigging the yacht is to log the time when each element has been put in use.  
The solid rods are to be inspected at regular intervals as per manufacturer's instructions.

The solid rods are to be renewed strictly within the time limit set by the manufacturers.

3. Chain plates for standing rigging shall be of strong construction and adequate to carry and transmit all forces involved. Adequate access is to be given to examine the attachment to the hull of all chain plates. Service and Inspection Records have to be kept onboard.

## **23.2 Storm Sails**

- .1 Efficient storm sails have to be carried which are capable of taking a sailing yacht to windward in heavy weather.
- .2 Storm sails need not to be provided for a sailing yacht restricted to coastal area.
- .3 In case of sails that can be furled, additional storm sails may not be requested.

## **23.3 Rigging used as lifting device**

If any rigging is used as a life-saving appliance launching device (such as a davit for life rafts and/or tender), or for usual lifting activities, the rig design, construction and materials shall be in compliance with a Recognised Organisation's Rules or a recognised International Standard. In this case the rig is to be subjected to the same periodical maintenance and inspections as those required by standard life saving launching devices.

## SECTION 24

# CASUALTY: MANAGING, OBLIGATIONS AND INVESTIGATIONS

## **24.1 Casualty Investigation**

- .1 The Administration with which the yacht is registered is obliged under SOLAS Regulation I/21 and MARPOL 73/78 articles 8 and 12 to investigate accidents or incidents. Apart from this legal requirement, Maritime Cook Islands investigates such occurrences to demonstrate the effective control and importance Cook Islands addresses to safety at sea.
- .2 It is an offense under Cook Islands Maritime Transport Act 2008 for the yacht's master, skipper or owner not to inform the Administration of a reportable accident shortly after it occurs and to provide details so that an assessment of its seriousness can be made. The Administration will appoint a suitable Surveyor or Investigator whenever an investigation is required.
- .3 All very serious casualties in accordance with the International Maritime Organization's (IMO) definition will be reported to IMO by the Administration.

# SECTION 25

## SPECIAL CATEGORY VESSELS



### **25.1 High Speed Yachts**

- .1 High speed yachts shall comply with the IMO High Speed Craft (HSC) Code, as far as practicable. Any deviations from the HSC Code have to be accepted by the Administration.
- .2 High speed yachts shall be built under Recognised Organisation supervision and maintain a valid certificate issued by the Recognised Organisation.

### **25.2 Sail Training Yachts**

- .1 A Sail training yacht shall comply with the Cook Islands Maritime Sail Training Rules, 2014 and with the Sail Training Code"
- .2 A Sail Training Yacht may carry a combination of trainees and passengers; however, the number of passengers may not exceed 12.
- .3 The crew compliment on board requires to be set by the Administration taking in consideration the number of trainees, the area of operation, the time of year, the weather conditions and the level of competence of the trainees being trained.
- .4 Trainees and/or volunteers onboard sail training vessels are not considered as seafarers subject that they are not included in the Muster list and they are not expected to assume any responsibilities during emergency situations.

### **25.3 Traditional / Historical Yachts**

- .1 This special category of yachts will be considered by the Administration on a case by case basis.
- .2 These yachts, as far as practicable, shall comply with the contents of this Code.  
  
The Administration may consider on a case by case basis equivalent arrangements for those yacht not being able to comply with all the requirements set out in this Code.

Under these circumstances, what traditional/historical yachts lack in modern technology or structural details shall be compensated for by operational measures that ensure the yacht's safe operation without destroying their particular historical character and design.

- .3 Such yachts would normally be certified to operate within 60 miles from a safe haven and in good weather conditions, however, special considerations may be made on a case by case basis.

### **25.4 Dual Registered Yachts**

#### **.1 Standards to be maintained**

While operating under Private registration (type that has the lowest safety standards), the yacht must maintain all safety standards that apply Commercial registration (the type that requires the highest safety standards), except where minimum safe manning is concerned.

#### **.2 Survey and Certification requirements**

The yacht shall be surveyed and inspected at scheduled intervals, for commercial safety standards.

The yacht will be issued a complete suite of certificates for private operation and for commercial operation.

#### **.3 Notification and alternation requirements**

- i) Notification: The vessel representative (owner / skipper) must notify the Administration in advance of the intention to alternate the operation type to commercial / private, specifying the intended dates of operation.
- ii) Alternate Certificates: Registration and safety certificates for the elected operation type shall be displayed, while the pervious operation type certificates shall be considered inactive and

removed from display. The vessel may operate to the limits specified in the certificates on display.

- iii) Logbook entry: the operation alternation must be recorded in the yacht official logbook.

# SECTION 26

## PRIVATE YACHTS

### **26.1 Private Yachts**

The Administration recommends that pleasure yachts registered for private use comply with this Code to the extent considered reasonable and practicable.

### **26.2 Certification for Private Yachts**

- .1 All Private Yachts to which this Code applies are required to carry onboard the latest MCI Statement of Acknowledgement .
- .2 If carrying more than 15 persons onboard a yacht is required to carry an International Sewage Pollution Prevention (ISPP) Certificate. Such Certificate is to be issued following a survey carried out from an Authorized Flag Surveyor. Yacht Owners shall notify MCI when the Yacht has been designed/certified to carry more than 15 persons onboard.
- .3 Owners may apply for voluntary Vessel Safety Certificate and the Radio Equipment certification. In this case Sections 4.2 and 4.3 of this Code will apply. Surveys will carried out with consideration to the fact that Private Yachts are required to comply with this code to the extent considered reasonable and practicable.

### **26.3 Private Yacht Survey Requirements**

- .1 Private Yachts under 24 meters in LL length are not required to have a survey carried out by an authorised surveyor. However, The Administration recommends owners of Private Yachts under 24 meters to have the vessel surveyed by an authorised surveyor, annually or at least every 2.5 years.
- .2 The owner/owner's representatives are required to arrange for a safety survey of a yacht:

- i) If the yacht is registered for one or three years with the following schedule:
    - at the time of registration;
    - at the time of renewal of registration;
  - ii) If the yacht is registered for five years with the following schedule:
    - at the time of registration;
    - third year of registration, (between 33 and 39 months from the first survey);
    - at the time of renewal of registration.
- .3 The surveys specified above can be carried out by a competent person, provided that:
    - i) The survey is carried out following and completing the checklist provided by the Administration;
    - ii) The duly completed checklist is returned to the Administration complemented by a statement, signed by the yacht's owner, declaring the yacht is safe and seaworthy.
  - .4 The checklist provided by The Administration will support the competent person through the survey, which is aimed to confirm that the arrangements, fittings, equipment are in a satisfactory and well-maintained condition.
  - .5 Upon the receipt of the checklist and the owner's declaration, The Administration will issue a Statement of Acknowledgement.
  - .6 If the survey reveals that either the yacht, its machinery, fittings or equipment are not sound or in satisfactory condition, this has to be reported within 7 days to The Administration.
  - .7 The owner or owner's representative is required to report to the Administration also the following cases:

- i) the vessel is damaged following an accident or during operations, or if a yacht suffers a collision, grounding, fire or other event that causes major damage or injury;
- ii) the vessel undergoes structure, machinery or equipment alterations.

.8 Private yachts are recommended to have an out of water survey every five (5) years.

#### **26.4 Private Yachts – Structural and Water tightness**

A yacht has to be designed and constructed in a manner that will prevent any undesired ingress of seawater.

Watertight and weathertight integrity arrangements must be duly checked and confirmed to be sound, as indicated by the items listed in the Self-Assessment Survey Report, as applicable.

Any item which deems to be not in order, and which may compromise the structural safety of the yacht, must be promptly communicated to The Administration.

#### **26.5 Private Yachts – Essential required machinery, equipment and systems.**

Following machinery, equipment and systems are to be considered as essential for the safety navigation of the yacht, as deem to be applicable according to the size and type of yacht and trading area:

- i. Main Engines
- ii. Generators and/or batteries (available to supply enough power for main propulsion, services and radio/navigational systems)
- iii. Rudder (s) and steering system (unless water jets or surface drive propellers are installed)
- iv. Bilge system
- v. Fixed Firefighting system in engine room (when required by building regulations or deemed to be necessary according to the total engine power installed onboard, for onboard engines)
- vi. Rigging (for sailing yachts)
- vii. Adequate lighting system

#### **26.6 Private Yachts – Essential required radio and navigation equipment**

Following radio and navigation equipment are to be considered as essential for the safety navigation of the yacht, as deem to be applicable according to the size and type of yacht and trading area:

- i. EPIRB
- ii. VHF with DSC
- iii. GPS
- iv. Magnetic Compass
- v. Echo sounder
- vi. Speed Log
- vii. Barometer
- viii. Anemometer (sailing yachts)
- ix. Updated Nautical Charts
- x. Navigation lights and shapes as per COLREG regulations

#### **26.7 Private Yachts – Essential required firefighting and safety appliances**

.1 Following firefighting and safety appliances are to be considered as essential for the safety navigation of the yacht, as deem to be applicable according to the size and type of yacht and trading area:

- i. Appropriate number of Dry Powder Extinguishers
- ii. Appropriate number of CO<sub>2</sub> Extinguishers
- iii. Appropriate number of Foam Extinguishers

- iv. Life rafts: a number capable to accommodate 100% of persons on board;
- v. Lifebuoys with buoyant line and self-igniting light (min. 2 pcs);
- vi. Red hand flares (min 2 pcs);
- vii. Parachute flares (min 2 pcs);
- viii. Smoke signals (min 2 pcs);
- ix. Lifejackets for adults (for 100% of adults accommodated onboard);
- x. Appropriate number of lifejackets for children (for 100% of children accommodated onboard, min 4pcs);
- xi. Immersion suits (depending on the extension of the trading area):
  - a) for yachts trading up to 150 Nm it is recommended to hold min 2 pcs.
  - b) for yachts trading over 150 Nm it is recommended to hold suits for all persons accommodated on board.

**26.8 Private Yachts – COLREG and MARPOL Regulations**

- .1 All private yachts regardless of size must comply with the International Regulations for Preventing Collisions at Sea (COLREGS'72);
- .2 MARPOL regulations. All Private Yachts are required to comply with MARPOL regulations as follows:
  - i. Annex I (Regulations for the Prevention of the Pollution by Oil) applies to all yachts regardless of size unless expressly provided otherwise;
  - ii. Annex IV (Regulations for the Prevention of Pollution by sewage) applies to all yachts certified to carry more than 15 persons onboard;
  - iii. Annex V (Regulations for the Prevention of Pollution by garbage) applies to all yachts regardless of size unless expressly provided

otherwise. Private Yachts of 100 Gross Tonnage and above has to carry onboard a Garbage Record Book and a Garbage Management Plan accordingly;

- iv. Annex VI (Regulations for the Prevention of the Air Pollution) applies to all yachts unless expressly provided otherwise.

**26.9 Private Yachts – National Regulation Compliance.**

In addition to the International Regulations, all private yachts are required comply with local coastal State regulations and requirements for the control and limitation of pollution in their domestic waters.

# ANNEX I

## **GUIDELINES FOR THE ASSESSMENT OF VARIATIONS TO THE STANDARDS APPLIED BY THE CODE**

1. Section 3.3 recognizes that variations to the standards applied by the Code can be considered on the basis that the variations provide equivalent standards of safety by taking into account specific local conditions that are certain to exist.
2. Applications for the acceptance of alternatives must be supported by justifications and be formally made to the Administration.
3. Variations are expected to be either a direct alternative to a requirement or a reduced requirement based upon factors that compensate for that reduction.
4. Justifications made formally in support of an application for acceptance of a reduced requirement are to be arranged in priority order, according to the judgment of the applicant.
5. Although not an exhaustive list, factors that will be considered individually by the Administration will include:
  1. area of operations significantly reduced;
  2. a guaranteed control of yacht which restricts operations to sea and weather conditions such that there is a very low risk of an accident;
  3. the certainty of readily available means of emergency rescue;
  4. operations wholly within sight of the local authority and means of emergency rescue;
  5. yachts operating in close proximity to one another and equipped to provide efficient safety back-up to each other in an emergency;
  6. provision or wearing of additional (special) individual personal survival equipment or clothing which will protect lives in an emergency;
  7. enhanced communications between the yacht(s) and constantly attended shore base with readily available emergency rescue craft at the base;
  8. the nature of the sport or pleasure activity involving very low risk of participants accidentally entering the water or causing the yacht to capsize;
  9. very restricted operations to sea from a safe beach;
  10. inherent safety of the yacht by design, test and experience;
  11. a high ratio of professional skipper and crew numbers to the number of other persons on board;
  12. the number of safety craft provided to protect the yachts operating commercially for sport or pleasure;
  13. enhanced provisions for distress alert and rescue;
  14. means provided for “dry” rescue from a yacht in emergency situations.

# ANNEX II

## SIMPLIFIED TONNAGE MEASUREMENT METHOD

The following simplified method of measurement must be used for new builds, registered either as commercial or pleasure yachts less than 24 metres in Load Line length.

The Administration shall deem acceptable the Tonnage calculations issued by other flag Authorities, in case of change of flag, and when the previous Tonnage Calculation results may be considered reliable.

As far as Tonnage Calculation is concerned, yachts which perform major conversions, which may affect the estimation of the original hull and/or breaks volumes, shall be considered as new builds.

### 1.0 Applicability

This simplified tonnage assignment criterion is applicable to monohull and multihull yachts of normal proportions and forms.

### 2.0 Definitions – For the purpose of this simplified measurement scheme only

#### .1 TML (Tonnage Measurement Length) = LOA

*“Length of a vessel measured horizontally (parallel to the designed waterline) from the fore side of the foremost fixed permanent structure to the aft side of the aftermost fixed permanent structure excluding appendages that do not contribute to the volume of the vessel.”*

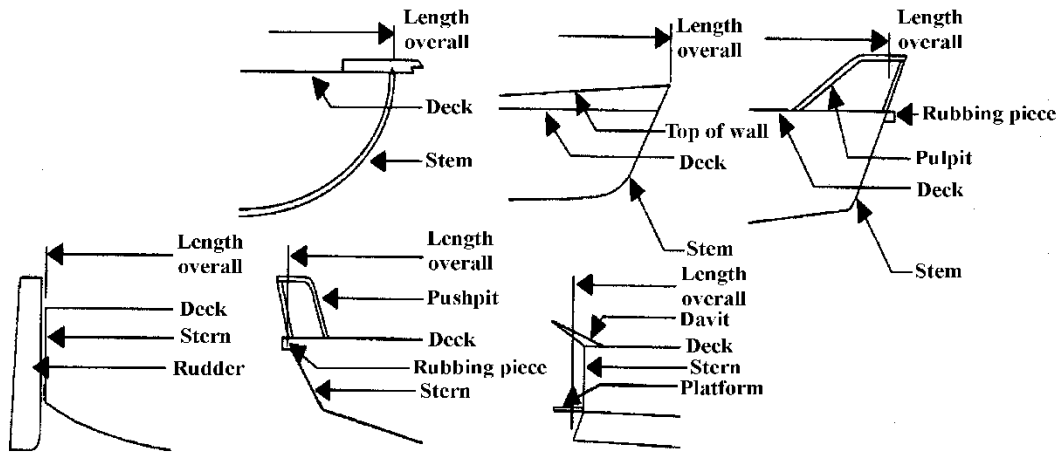
For vessels where the TML > 24 metres, TML shall be considered equal to the Length as per ITC 1969, as, Art. 2(8) of the ITC 1969, as amended:

*the greater distance of the following distances;*

*(a) the distance between the fore side of the stem and the axis of the rudder stock; or*

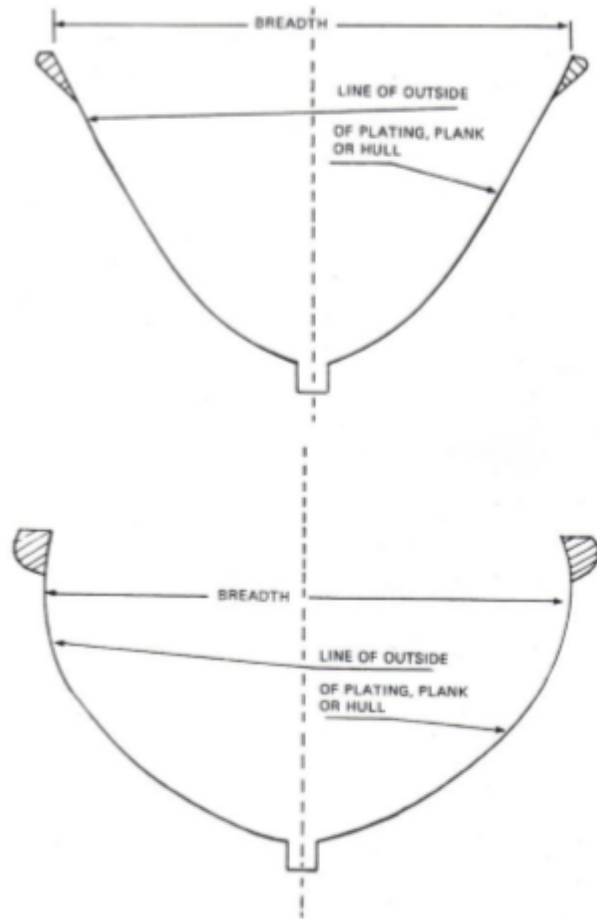
*(b) 96 per cent of the distance between the fore side of the stem and the aft side of the stern measured on a waterline at 85 per cent of the least moulded depth measured from the top of the keel. In case of a ship having a rake of keel, the waterline shall be parallel to the designed waterline;*





.2 TMB (Tonnage Measurement Breadth)

*“Maximum breadth of a vessel measured horizontally from outside of outer planking or plating on one side of the hull to the outside of the outer planking or plating on the other side excluding any fenders or rubbing strakes.”*

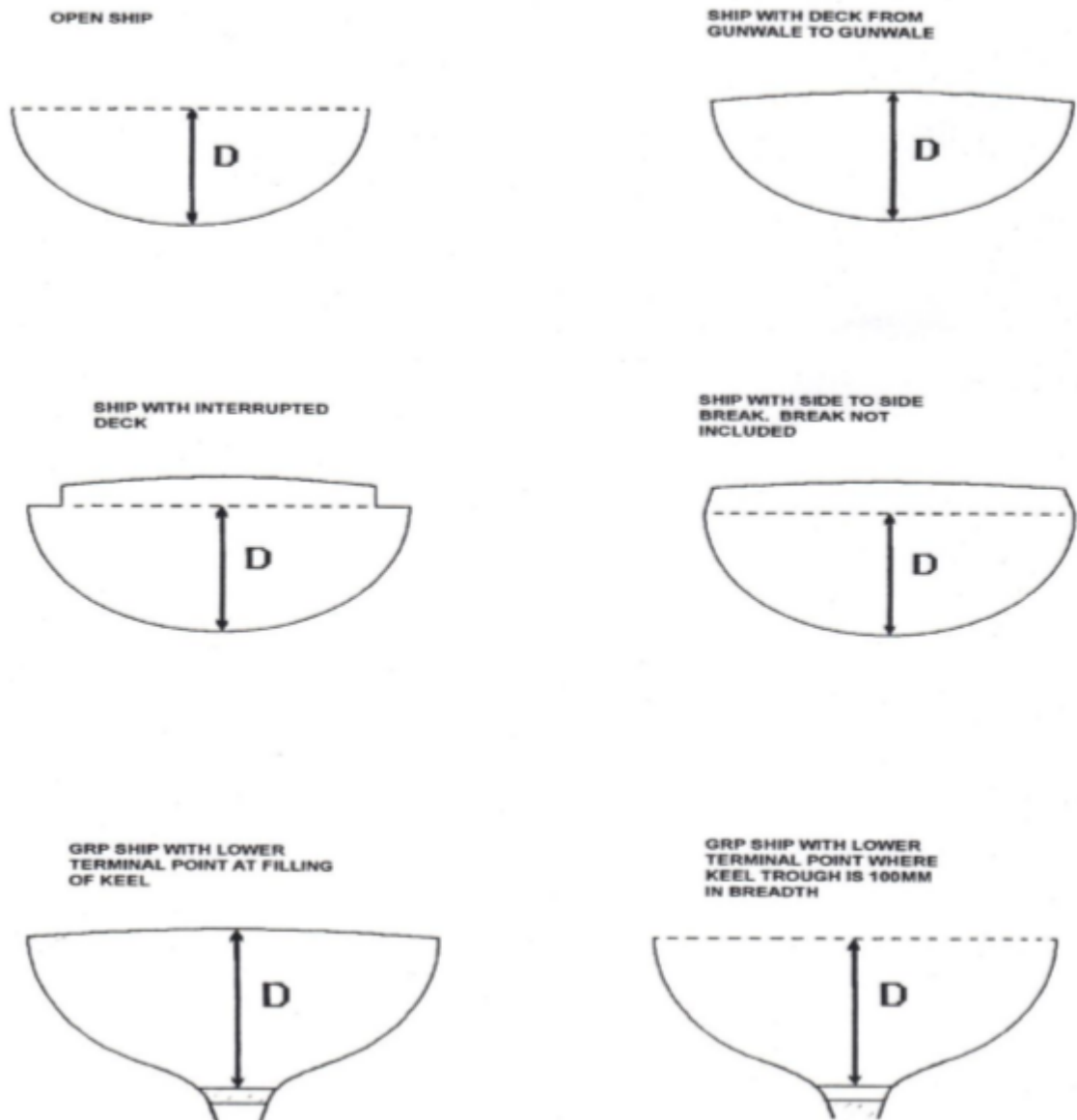


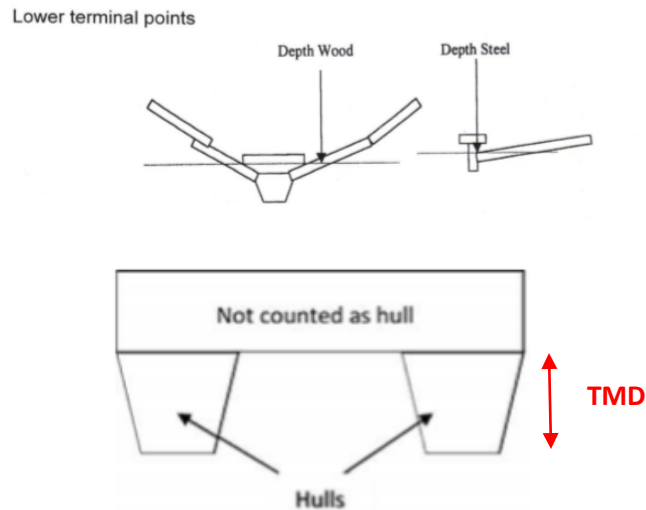
.3 TMD (Tonnage Measurement Depth)

*“Depth of the yacht measured at the middle of TML in metres vertically from the top of the deck at the side to the underside of the hull where it meets the keel or to the point where the projected line of the bottom intersects the yacht’s centreline.”*

Where a break exists in way of the point of measurement for depth, the height of the break shall not be included in the measurement of depth.

Refer to the images below for motor, sailing yachts and catamarans.





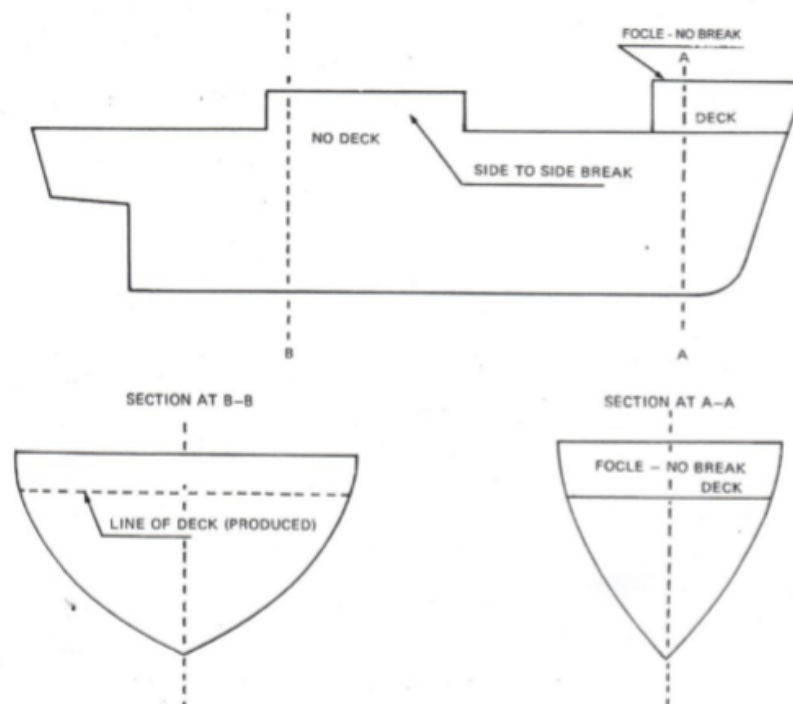
Depth for Catamarans

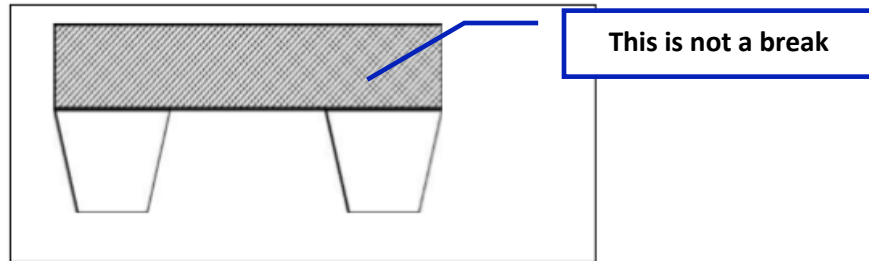
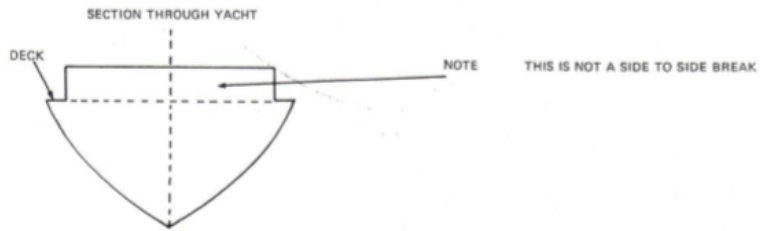
.4 Breaks

*“A BREAK is defined as a full side to side (bounded by the sides of the vessel) upward **step** in the lowest line of the ‘upper deck’.*

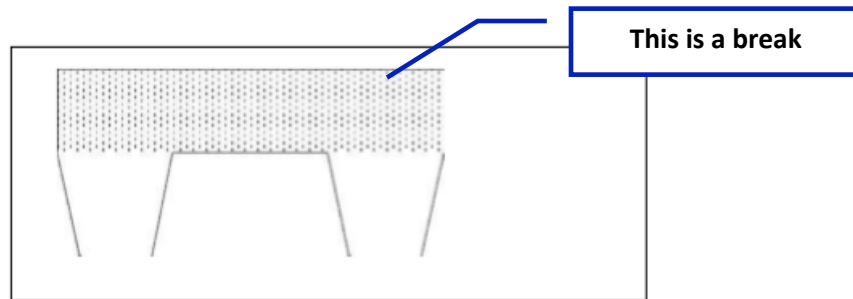
*If more than one break exists, each break should be entered separately.”*

*“**Step** is the longitudinal discontinuity in the upper deck that extends over the full breadth of the vessel.”*





**Side to side step with deck underneath**



**Side to side upward step constituting a break**

### 3.0 Measurements

All lengths and depths must be measured in a vertical plane at centreline and breadths must be measured in a line at right angles to that plane. All dimensions must be expressed in metres.

For multihull yachts, each hull must be measured separately for overall length, breadth, and depth and the yacht as a whole must be measured.

For new builds, the following documents must, at least, be collected and submitted to the Administration:

- EC Certificate, for yacht built under the EU Directive for the Recreational Crafts;
- Declaration of construction issued by the shipbuilder / boatbuilder;

### 4.0 Multihull Yachts

Gross Tonnage of a multihull yacht is the sum of the gross tonnages of each hull as calculated using the formulas listed below.

5.0 Tonnage Calculation (GT Gross Tonnage)

1. The tonnage of a vessel below 24m in Length is to be calculated as follows:

	_____	x	_____	x	_____	x	0.16=	_____	<b>GT</b>
Hull 1	TML		TMB		TMD				
Hull 2	TML		TMB		TMD				
Hull 3	TML	x	TMB	x	TMD	x	0.16=	_____	

Hull 1, 2 and 3 are referred to monohull, catamaran and trimaran vessels respectively.

The contribution of the Breaks in the Tonnage Calculations is to be calculated as follows:

_____	x	_____	x	_____	x	0.35=	_____
Mean Length		Mean Breadth		Mean Depth			
_____	x	_____	x	_____	x	0.35=	_____
Mean Length		Mean Breadth		Mean Depth			

When the vessel is provided with more than 2 breaks, the additional breaks are to be calculated in the same way as above and included in the Total Sum.

Superstructures other than breaks are not to be taking into consideration in the calculation of the Tonnage.

2. The Tonnage of the Vessel is to be calculated as the sum of each figure (hull(s) + break (s)) calculated as per the above formulation and included in the GT column.

3. Tonnage amount approximation.

Results in Tonnage Calculations shall be expressed with maximum 2 decimals by means of rounded down approximation.

Example: **GT= 56.678** to be approximated by **56.67**

# ANNEX III

## OPEN-FLAME GAS INSTALLATIONS

### 1.0 General Information

- .1 Possible dangers arising from the use of liquid petroleum gas (LPG) open flame appliances in the marine environment include fire, explosion and asphyxiation, due to leakage of gas from the installation.
- .2 Consequently, the location of gas-consuming appliances and storage containers and the provision of adequate ventilation to spaces containing them, is most important.
- .3 It is dangerous to sleep in spaces where gas-consuming open flame appliances are left burning, because of the risk of carbon monoxide poisoning.
- .4 LPG, which is heavier than air, when released, may travel some distance while seeking the lowest part of a space. Therefore, it is possible for gas to accumulate in relatively inaccessible areas, such as bilges, and diffuse to form an explosive mixture with air, as in the case of petroleum vapor.
- .5 A frequent cause of accidents involving LPG installations is the use of unsuitable fittings and improvised “temporary” repairs.
- .6 All open flame appliances shall be certified in compliance with the requirements of EC Directive 2009/142/EC, as amended, or other recognised standard, such as ISO 10239, to the satisfaction of the Administration.

### 2.0 Stowage of Gas Containers

- .1 Gas containers should be stowed on the open deck in a dedicated locker, naturally ventilated, or in an enclosure opening only to the deck or overboard and otherwise gastight, so that any gas, which may leak from the containers, can disperse overboard.
- .2 In multiple container installations a non-return valve should be placed in the supply line near to the stop valve on each container. If a changeover device is used, it should be provided with non-return valves to isolate any depleted container.
- .3 Where more than one (1) container can supply a system, the system should not be used with a container removed.
- .4 Containers not in use or not being fitted into an installation should have the protecting cap in place over the container valve.

### 3.0 Fittings and Pipework

- .1 Solid drawn copper alloy or stainless-steel tube with appropriate compression or screwed fittings is recommended for general use for pipework in LPG installations.

- .2 Aluminium or steel tubing, or any material having a low melting point, such as rubber or plastic, should not be used, except as permitted by paragraph 3.3.
- .3 Lengths of flexible piping (if required for flexible connections) should be kept as short as possible and be protected from inadvertent damage. Also, the piping should conform to an appropriate standard, such as. Where flexible pipings are fitted, these shall be renewed every five years as maximum allowable period, or earlier accordingly to the manufacturer's recommendations.

Flexible hoses shall be certified as per international standard stated above at paragraph 1.0.6.

Proposals for a more extensive use of flexible piping (which conforms to an internationally recognised standard for its application) should be submitted to the Administration for approval on an individual basis.

#### 4.0 Open Flame Heaters and Gas Refrigerators

- .1 When such appliances are installed, they should be well secured to avoid movement and, preferably, be of a type where the gas flames are isolated in a totally enclosed shield where the air supply and combustion gas outlets are piped to open air.
- .2 In refrigerators, where the burners are fitted with flame arrester gauze, shielding of the flame may be an optional feature.
- .3 Refrigerators should be fitted with a flame failure device.
- .4 Flue-less heaters should be selected only if fitted with atmosphere-sensitive cut-off devices to shut off the gas supply at a carbon dioxide concentration of not more than 1.5% by volume.
- .5 Heaters of a catalytic type should not be used.

#### 5.0 Flame Failure Devices

All gas consuming devices should be fitted, where practicable, with an automatic gas shut-off device that operates in the event of flame failure.

#### 6.0 Gas Detection

- .1 Suitable means for detecting the leakage of gas should be provided in any compartment containing a gas-consuming appliance, or in any adjoining space of a compartment into which the gas (denser than air) may seep, as far as practicable.
- .2 Gas detectors should be securely fixed in the lower part of the compartment in the vicinity of the gas-consuming appliance and in other space(s) into which gas may seep.
- .3 Any gas detector should, preferably, be of a type that will be actuated promptly, and automatically by the presence of a gas concentration in air of not greater than 0.5% (representing approximately 25% of the lower explosive limit) and should incorporate an audible and a visible alarm.

- .4 Where electrical detection equipment is fitted, it should be certified as being flameproof or intrinsically safe for the gas being used.
- .5 In all cases, the arrangements should be such that the detection system can be tested frequently while the yacht is in service.

## 7.0 Emergency Action

- .1 A suitable notice, detailing the action to be taken when an alarm is given by the gas detection system, should be displayed prominently on the navigation bridge in the yacht.

Instruction card may be deemed as acceptable from the Administration.

- .2 The information given should include the following:
  - (a) The need to be ever alert for gas leakage; and
  - (b) When leakage is detected or suspected, all gas-consuming appliances should be shut off at the main supply from the containers, and NO SMOKING should be permitted until it is safe to do so.
  - (c) Naked lights should never be used as a means of locating gas leaks.



# ANNEX IV

## LIST OF CERTIFICATES TO BE ISSUED

Certification	Subject & Convention	Cook Islands Regulations	Survey & Certification Tasked To	Limits	Detail & Remarks
Certificate of Registry	CISR Act 2007		Administration		Provisional / Full
Vessel Safety Certificate and Record	Small Yacht Code		Administration/Cook Islands Authorised Surveyor - Competent Person as applicable	< 24 m	Private or Commercial
Radio Equipment Certificate	Small Yacht Code		Administration/Cook Islands Authorised Surveyor - Competent Person as applicable	< 300 GT	All yachts
Carving and Marking Note Certificate			Administration/Class/Authorised Surveyor		All yachts
International Sewage Pollution Prevention Certificate	Pollution MARPOL Annex IV		Administration/Class/Authorised Surveyor	> 15 Persons or > 400 GT	Sewage treatment equipment / Sewage holding tank(s)
Ship Radio Station License	Communications		Administration		Radio Call and Signal Letters, frequency assignments, station licensing, Inmarsat, etc.
Minimum Safe Manning Certificate	Manning STCW		Administration		Commercial vessels

Endorsement Certificate for deck / engine officers	Manning STCW		Administration		Commercial vessels
Engine International Air Pollution Prevention Certificate & Supplement	Pollution MARPOL Annex VI		Class	> 130 kW	NOx emissions
Ballast Water Management Certificate	Ballast Water Management Convention		Class		All yachts which carry ballast water
Polar Ship Certificate	Polar Code		Class		All yachts operating within Polar waters
Exemption Certificate	Various	As Applicable to the subject	Administration		Covers exemption from the regulations relative to the subject

NOTES:

- 1) The Administration retains the right to survey and issue certificates for all of the above items.
- 2) References to regulations mentioned above should be construed as including any amendment to those regulations that may be made from time to time.

# ANNEX V

## MEDICAL STORES

- 1.0 All yachts have to carry adequate and suitable medical stores for their area and range of operation, also considering the number of persons onboard.

Yachts < 24m in Load Line Length have to carry, as minimum, the following:

### 1.1 FIRST AID KIT

The following to be in a damp-proof strong canvas bag, satchel or box with a strap for carrying:

Item	Description	Qty
1	Triangular bandages with sides of about 90cm and a base of about 127cm.	4
2	Standard dressings no 8 or 13 BPC	6
3	Standard dressings no 9 or 14 BPC	2
4	Extra-large sterile unmediated dressings 28cm x 17.7cm	2
5	Medium size safety pins, rustles	6
6	Assorted adhesive dressing strips medicated BPC	20
7	Sterile pads with attachments	2
8	Packages each containing 15g sterile cotton wool	2
9	Pairs of large, disposable Polythene gloves.	5
		<b>Qty</b>
1.2	<b>PARACETAMOL</b> High strength aspirin or equivalent; 500mg tablets;	50
1.3	<b>SEASICKNESS REMEDY</b> Tablets (Hyoscine hydro bromide 0.3mg recommended);	50
1.4	<b>BUTTERFLY CLOSURES</b> Adhesive skin closures, length about 5cm individually sealed sterile, in a container;	20
1.5	<b>FORCEPS</b> Epilation with oblique ends, 12.5cm of stainless steel throughout;	1
1.6	<b>SCISSORS</b> About 18cm, one (1) blade sharp pointed and the other round-ended;	1
1.7	<b>THERMOMETER</b> Ordinary range clinical thermometer, stubby bulb pattern;	1
1.8	<b>FIRST AID MANUAL (Issued by an approved Body or Authority)</b>	1

2.0 Yachts operating unlimited (carrying more than 15 persons) have to carry medical stores, or the equivalent, as follows:

Product	Size	Quantity
Aspirin 325 mg Tablets-100 tablets per	100	2
Alcohol 70% Rubbing Isopropyl-16 oz	16 oz	1
Aluminium Acetic Acid 2% Otic Solution (Domeboro) 60 ml units	60 ml	2
Alumina and Magnesia Tablets (Maalox)-100 tablets per	100	3
Calamine Lotion-4 oz	4 oz	1
Hibiclens Solution (Chlorhexidine Gluconate)-16 oz	16 oz	1
Charcoal, Activated Powder-227g	227g	1
Chloroquine 250 mg Tablets-100 tablets per	100	1
Chlorpromazine 25 mg Tablets (Thorazine)-Each	Each	20
Clove Oil-1 oz	1 oz	1
Meclizine 25 mg Tablets (Antivert)-100 tablets per	100	1
Dimercaprol 100 mg/ml Injection-2 ml units	2 ml	1
Epinephrine 1 mg/ml Injection-1 ml units	1 ml	10
Triple Antibiotic Ophth Solution-10 ml units	10 ml	1
Triple Antibiotic Ophth Ointment (Neosporin)-3.5 gm	3.5 gm	1
Eye Wash Sterile-4 oz	4 oz	1
Nitro-Quick 0.4 mg Sublingual Tablets-25 tablets per	25	1
Hydrocortisone 1% Ointment-1 oz	1 oz	2
Ichthammol 10% Ointment-1 oz	1 oz	1
Insect Repellent Pump-2 oz	2 oz	2
Iodine Tincture 2% Mild-1 oz	1 oz	2
Milk Of Magnesia-12 oz	12 oz	2
Triple Antibiotic Ointment (Neosporin)-1 oz	1 oz	5
Electrolyte Tablets-100 tablets per	100	1
Acetaminophen 500 mg Tablets (Tylenol)-100 tablets per	100	1
Petrolatum Ointment-1 oz	1 oz	4
Proguanil 100 mg (Pauludrine)-100	100	1
Thermotabs (Enteric Coated Salt Tablets)-100 tablets per	100	10
Baby Powder J & J (Talc)-4 oz	4 oz	3
Antibiotic Otic Solution (Generic Cortisporin)-10 ml units	10 ml	1
Zinc Oxide Ointment-1 oz	1 oz	3
Eye Cup Glass-Each	Each	1
Funnel Stainless Steel-6 oz	6 oz	1
Cylinder Glass Double Scale-50 ml	50 ml	1
Cylinder Glass Double Scale-500 ml	500 ml	1
Stokes Litter Basket-Each	Each	1
Resuscitator Bag Adult Disp. W/Mask & Tubing-Each	Each	1
Sphygmomanometer Aneroid #115-Each	Each	1
Splint Inflatable Kit-4 per kit	Each	1
Finger Splint Padded Assorted Sizes-3-Each	Each	2
Stethoscope Black-22"	22"	1
International Medical Guide For Ships-Each	Each	1
Medical First Aid/Dangerous Goods-Each	Each	1
International Health Regulations-Each	Each	1
Airway Kit Nasopharyngeal -5 Sizes w/Case	5 Sizes w/Case	1
Forceps Dressing Bayonet-Shaped 7"-Each	Each	1

Product	Size	Quantity
Forceps Splinter-3-1/2"	3-1/2"	1
Forceps Tissue 1x2 teeth-4-1/2"	4-1/2"	1
Scissors Bandage-7-1/2"	7-1/2"	1
Scissors Operating Straight Sharp/Sharp-5-1/2"	5-1/2"	1
Tape Micropore Paper 2" x 10 yd -Each	Each	1
Tape Micropore Paper 1" x 10 yd -Each	Each	1
Cotton Tipped Applicators 6"-100 per box	100	1
Elastic Bandage 3" x 4.5 yd -Each	Each	6
Elastic Bandage 2" x 4.5 yd -Each	Each	6
Elastic Bandage Cotton 2"-Each	Each	12
Flexilite Conforming Gauze Bandage 2"x4-1/2'-Each	Each	100
Flexilite Conforming Gauze Bandage 6"x4-1/2'-Each	Each	10
Flexilite Conforming Gauze Bandage 4"x4-1/2'-Each	Each	30
Gauze Telfa "Ouchless" Adhesive Pads 3"x4" Sterile-100 per	100	10
Band Aid Adhesive Surgical Dressing 8"x6"-Each	Each	5
Triangular Bandage-Each	Each	1
Surgitube #2 7/8" x 5 yd -Each	Each	2
Bandage Spray-3 oz	3 oz	1
Vaseline Dressing 3"x18"-Each	Each	1
Vaseline Dressing 3"x9"-Each	Each	2
Vaseline Dressing 6" x 36"-Each	Each	1
Bandage Compress 4" (1 Per Box)-Each	Each	5
Bandage Compress 2" (4 Per Box)-Each	Each	2
Bandage Compress 3" (2 Per Box)-Each	Each	5
Medical Report For Seafarers-Each	Each	50
Cotton Rolled Sterile-2 oz	2 oz	1
Cotton Rolled Sterile-1/2 oz	1/2 oz	5
Cotton Rolled Sterile-4 oz	4 oz	5
Finger Cots Assorted Sizes Sm., Med., & Large-12	12	1
Penlight Heavy Duty W/batteries-Each	Each	1
Surgitube #1 5/8" x 5 yd - Each	Each	1
Medicine Cups Plastic 1 oz-100	100	1
Surgipad Combine Dressing 8"x10" Sterile-Each	Each	3
Eye Pad Large Sterile-12 per	12	1
Gauze Pads Non-Adherent 3"x4" Sterile	Each	20
Safety Pins Assorted Sizes-50 per	50	1
Brush (Surgeons Scrub)-Each	Each	1
Condoms Lubricated-Each	Each	30
Sheet waterproof 36x72"-Each	Each	1
Butterfly Closure Medium-100-Each	Each	1
Syringe & Needle 3 cc 21g x 1-1/2"-Each	Each	10
Syringe & Needle 5 cc 21g x 1-1/2"-Each	Each	10
Syringe & Needle 3 cc 25g x 5/8"-Each	Each	10
Kleenex-250 sheets per box	250 per box	1
Thermometer Dual Scale Oral-Each	Each	2
Tourniquet Grafkette Adult Size-Each	Each	1
Tongue Depressors Wood 6" Senior-Each	Each	20
"Sharps" Disposal Box-Each	Each	1

# ANNEX VI

## MINIMUM MANNING LEVELS FOR SMALL MOTOR & SAILING YACHTS IN COMMERCIAL USE

This Annex gives information relating to the required manning and operation of small motor and sailing yachts in commercial use. The Administration recommends that operators of private yachts comply as well.

### Safe Manning

#### 1.0 Minimum Qualifications of the Person In Charge of the Yacht (Skipper) and of the Additional Persons Required to be carried on board

RYA (Royal Yachting Association) certificates of competency and/or service, IYT (International Yacht Training Worldwide) certificates of competency, MCA Yacht master certificates or others equivalent shall be recognized by the Administration.

Miles from Safe haven	Personnel	No.	Minimum Qualification
Up to 20	Master	1	Coastal Skipper
Up to 60	Master	1	Yacht master Offshore
	Yacht Rating	1	
	The yacht rating should be deemed by the skipper to be experienced.		
Up to 150	Master	1	Yacht master Offshore
	Yacht Rating	1	
	The yacht rating should be deemed by the skipper to be experienced.		
	One of the persons referred to above, or another person, should be familiar with the operation and maintenance of the main propulsion and associated machinery of the yacht and should have attended an Approved Engine Course (AEC).  This note is requested for motor yachts only.		
Unlimited	Master	1	Yacht master Ocean
	Mate	1	Yacht master Offshore
	One of the persons referred to above, or another person, should be familiar with the operation and maintenance of the main propulsion and associated machinery of the yacht and should have attended an Approved Engine Course (AEC).		

This note is requested either for motor and sailing yachts.

## 2.0 Endorsement of Certificates

All certificates of competency and/or service should be valid at the time of submission and be endorsed by the Cook Islands Administration.

### 2.1 Radio Qualifications

Every yacht should carry at least one (1) person holding a Radio Operator's Certificate suitable for the radio equipment on board.

Yachts < 300 GT and certified to operate within Sea Area A1 require, at least, a minimum one operator to be in possession of a GMDSS Short Range Certificate (SRC).

### 2.2 Medical Fitness Certificates

The skipper All crew members should hold the Cook Islands a valid Medical Fitness Certificate, or an equivalent, issued by a licensed physician.

### 2.3 First Aid Certificate

Skippers or another member of the crew of yachts that operate up to and including the offshore area should hold a First Aid Certificate or a certificate issued by a voluntary society following the successful completion of a first aid course acceptable to the Administration.

Skippers of yachts operating in the unlimited area should hold a Medical Care Person In Charge Certificate unless another member of the crew holds a medical or nursing qualification of an equivalent or a higher standard.

## 3.0 Revalidation of Certificates and Licenses

All Yacht master Certificates should be revalidated every five (5) years. To revalidate, the applicant should prove at least 150 days of actual sea service on motor yachts during the previous five (5) years and be in possession of a valid Medical Fitness Certificate.

## 4.0 Approved Engine Course

An Approved Engine Course (AEC) is a shore-based course of at least thirty hours duration that is approved or recognised by the Administration. A "Certificate of Attendance" must be given by the course organizers to persons completing the course.

## 5.0 Responsibility of the Owner/owner's representative for Safe Manning of the Yacht

It is the responsibility of the owner/owner's representative to ensure that the skipper and, where necessary, the crew of the yacht have, in addition to any qualifications required in 2.0 above, recent and relevant experience with the type and size of yacht, the machinery on the yacht, and the type of operation in which the yacht is engaged. The owner/owner's representative should also ensure that there are sufficient additional crew on board having regard to the type and duration of voyage being undertaken.

## 6.0 Keeping a Safe Navigational Watch

It is the responsibility of the skipper to ensure that there is, at all times, a person with adequate experience in charge of the navigational watch. In taking this decision the skipper should take into account all the factors affecting the safety of the yacht, including:

- .1 the present and forecast state of the weather, visibility and sea;
- .2 the proximity of navigational hazards;
- .3 the density of traffic in the area.

## 7.0 Withdrawal of Certificate of Competency

Maritime Cook Islands reserves the right to withdraw a Certificate of Competency at any time if due cause is shown.