

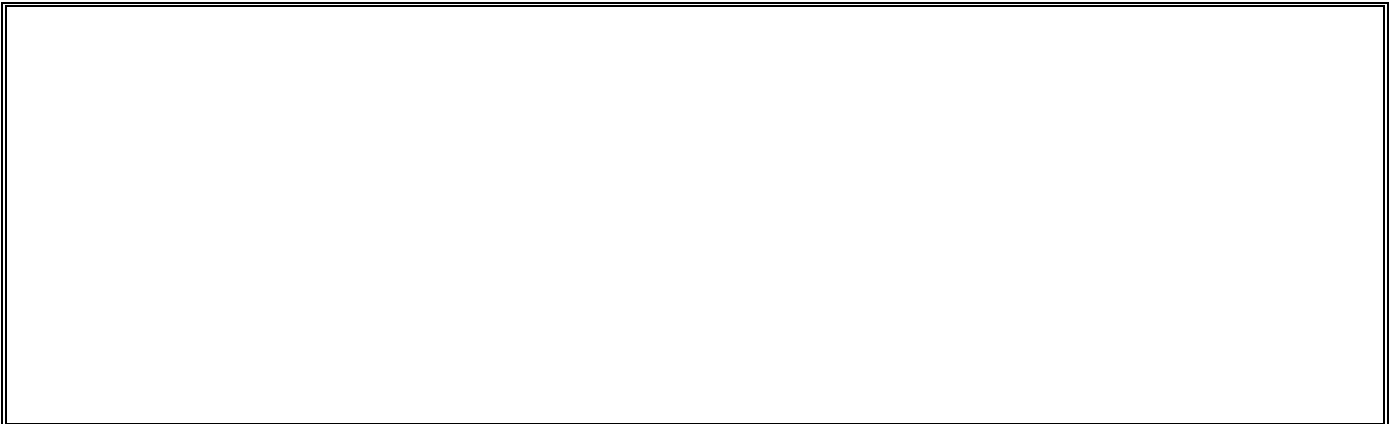
COOK ISLANDS



CODE OF PRACTICE

LARGE YACHTS (≥ 24 meters)





	CODE OF PRACTICE	
	LARGE YACHTS v.4	

SUBJECT: ISSUE AND REVISION HISTORY

REV	DATE dd/mm/yy	DESCRIPTION	APPROVED BY	ENTERED BY	ENTERED dd/mm/yy

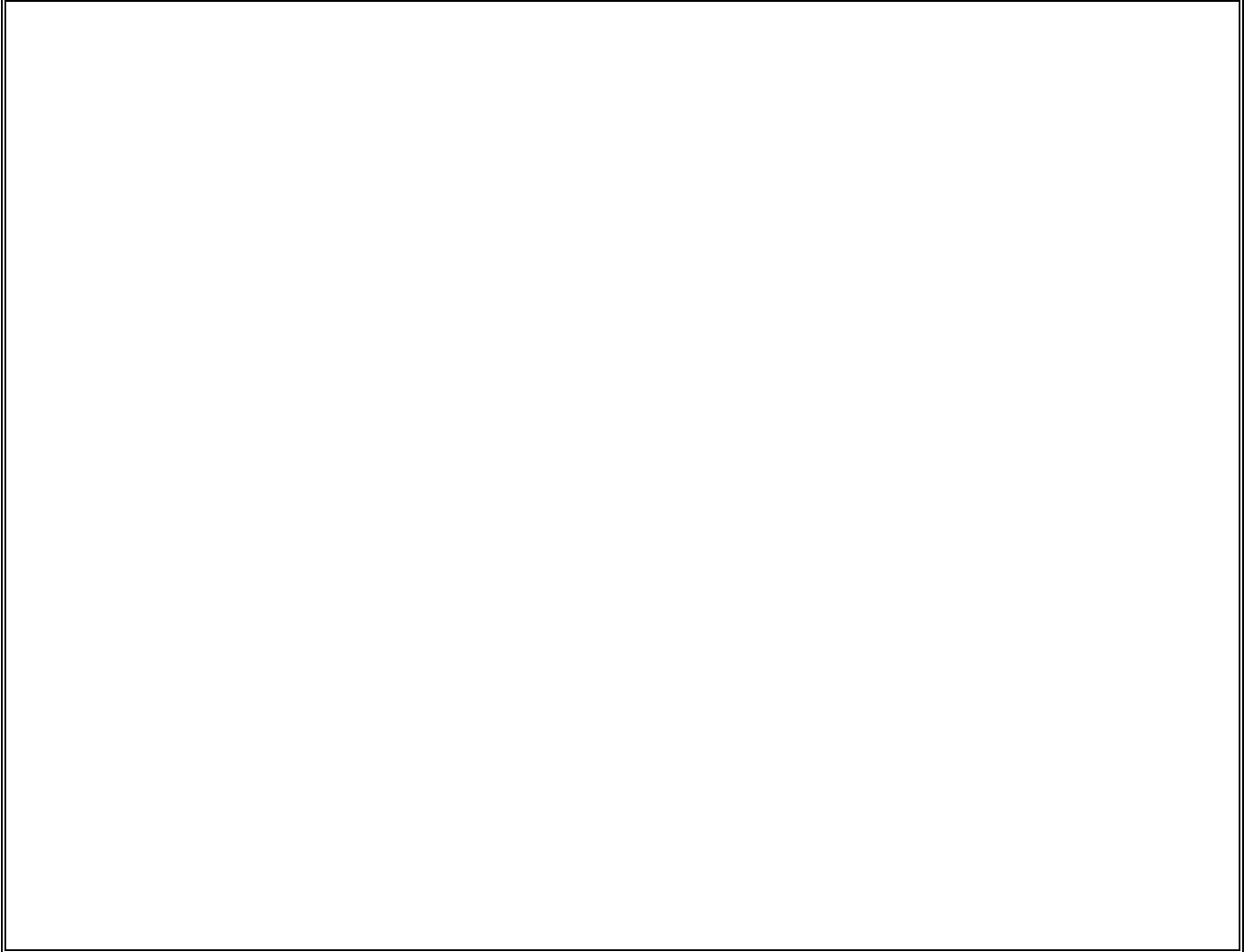


TABLE OF CONTENTS

LARGE COMMERCIAL YACHTS (≥24 METRES IN LOAD LINE LENGTH)

1.0	INTRODUCTION	10
1.1	General.....	10
1.2	Yachts not Engaged in Navigation.....	11
1.3	Insurance.....	11
2.0	DEFINITIONS	12
3.0	APPLICATION and INTERPRETATION	19
3.1	Application	19
	3.1.1 Large Commercial Yachts.....	19
	3.1.2 Large Private Yachts	20
	3.1.3 Hull Types.....	20
	3.1.4 Effective Date	20
	3.1.5 Responsibility	20
3.2	Operational Limitations	20
3.3	Equivalent Standards, Exemptions and Existing Yachts	20
	3.3.1 Equivalent Standards	21
	3.3.2 Exemptions.....	21
	3.3.3 Existing Yachts.....	21
3.4	Review and Revision of the Code	21
4.0	SURVEYS, CERTIFICATION, and INSPECTIONS	22
	4.1.1 International Conventions	22
	4.1.2 Survey Standards	23
	4.1.3 Survey Requests.....	23
4.2	Initial Survey	23
	4.2.1 General.....	23
	4.2.2 Load Line Certificate	23
	4.2.3 Cargo Safety Construction Certificate	24

4.2.4	Cargo Ship Safety Equipment Certificate & Record	24
4.2.5	Cargo Ship Safety Radio Certificate and Record	24
4.2.6	Large Yacht Safety Certificate	24
4.2.7	Long Range Identification & Tracking – (LRIT)	24
4.2.8	International Safety Management (ISM)	24
4.2.9	International Ship and Port Facility Security (ISPS).....	24
4.2.10	International Oil Pollution Prevention Certificate.....	25
4.2.11	International Sewage Pollution Prevention Certificate of Compliance.....	25
4.2.12	Garbage Management	25
4.2.13	International Air Pollution Prevention Certificate	25
4.2.14	International Anti Fouling System Certificate	25
4.2.15	International Anti Fouling System Declaration	25
4.2.16	Bunkers Certificate.....	26
4.2.17	Maritime Labour Convention Certificates.....	26
4.2.18	International Tonnage Certificate	26
4.2.19	Exemption From Certain Safety Regulations	26
4.3	Periodic Surveys	26
4.3.1	Load Line Certificates, Cargo Ship Safety Certificates and MARPOL Certificates.....	26
4.3.2	Vessel Safety and Radio Equipment Certificates.....	27
5.0	CONSTRUCTION and STRENGTH	28
5.1	General Requirements.....	28
5.2	Structural Strength	28
5.2.1	New Yachts.....	28
5.2.2	Existing Yachts.....	28
5.3	Recesses	29
5.4	Watertight Bulkheads.....	29
5.4.1	New Yachts.....	29
5.4.2	Existing Yachts.....	29
5.5	Enclosed Compartments.....	30

5.6	Sailing Yacht Rigging	30
	5.6.1 General Maintenance	30
	5.6.2 Masts and Spars	30
	5.6.3 Running and Standing Rigging.....	30
	5.6.4 Sails	31
6.0	WEATHERTIGHT INTEGRITY	32
6.1	Hatchways and Skylight Hatches	32
	6.1.1 General Requirements	32
	6.1.2 Hatchways That are Open at Sea	32
6.2	Doorways and Companionways	33
	6.2.1 Doorways Located above the Weather Deck.....	33
	6.2.2 Companion Hatch Openings	33
6.3	Skylights	34
6.4	Side Scuttles	34
6.5	Windows	35
6.6	Ventilators and Exhausts	35
6.7	Air Pipes	36
6.8	Scuppers, Sea Inlets and Discharges	36
6.9	Materials for Valves and Associated Piping	36
7.0	WATER FREEING ARRANGEMENTS	38
8.0	MACHINERY	39
8.1	General Requirements	39
8.2	Installation	39
9.0	ELECTRICAL INSTALLATIONS	41
9.1	Installation	41
9.2	Lighting	41
9.3	Batteries	41
10.0	STEERING GEAR	42
10.1	General Requirements	42
11.0	BILGE PUMPING	43
11.1	General Requirements	43
12.0	STABILITY – Intact and Damaged	44

12.1	General	44
12.2	Intact Stability	44
	12.2.1 New Motor Yachts	44
	12.2.2 Existing Motor Yachts.....	45
	12.2.3 New Sailing Yachts	46
	12.2.4 Existing Sailing Yachts	47
12.3	Damaged Stability	47
	12.3.1 New Yachts.....	48
	12.3.2 Existing Yachts.....	48
12.4	Elements of Stability	50
12.5	Stability Documents	50
13.0	FREEBOARD	52
13.1	General	52
13.2	Freeboard Mark and Loading	52
13.3	Draft Marks	53
13.4	Docking Plan	53
14.0	LIFE-SAVING APPLIANCES	54
14.1	General Requirements	54
	14.1.1 Life-Saving Appliances.....	54
	14.1.2 Solas Requirements.....	54
	14.1.3 Personal Safety Equipment	54
	14.1.4 Retro Reflective Tape	54
	14.1.5 Life Raft	54
	14.1.6 Steel Wire Falls.....	55
	14.1.7 Service Intervals	55
	14.1.8 Maintenance	55
	14.1.9 Stowage and Installation.....	55
	14.1.10 Availability for Use	55
	14.1.11 Side Projections	55
	14.1.12 Overboard Discharge	55

14.2	Equipment Carriage Requirements	56
14.2.1	Lifeboats.....	56
14.2.2	Life Rafts.....	57
14.2.3	Rescue Boats	57
14.2.4	Lifejackets	58
14.2.5	Immersion Suits	58
14.2.6	Life Buoys	59
14.2.7	Line Throwing Appliances	59
14.2.8	Pyrotechnics.....	59
14.2.9	EPIRB	59
14.2.10	Registering EPIRBS with RCCNZ.....	60
14.2.11	Radar Transponders (SART)	60
14.2.12	General Alarm	60
14.2.13	Lighting	60
14.2.14	Life-Saving Signals and Rescue Poster	61
15.0	FIRE SAFETY AND STRUCTURAL FIRE PROTECTION	62
15.1	Stowage of Gasoline and Other Highly Flammable Liquids	62
15.2	Fire Control Plans	63
15.3	Yachts < 500 GT	64
15.3.1	Boundaries	64
15.3.2	Fuel Tanks	64
15.3.3	Ventilation.....	64
15.3.4	Means of Escape	65
15.3.5	Passage of Flame.....	65
15.3.6	Thermal or Acoustic Insulation	65
15.3.7	Paints, Varnishes and Other Finishes	65
15.3.8	Upholstery Composites.....	65
15.3.9	Open Flame Gas Appliances.....	66

15.3.10	Fire Detection and Fire Alarm System	66
15.3.11	Ventilation Trunking	66
15.4	Yachts ≥ 500 GT	67
16.0	FIRE APPLIANCES.....	68
16.1	Yachts < 500 GT	68
16.1.1	General Requirements.....	68
16.1.2	Specific Requirements.....	68
17.0	RADIO	73
17.1	General.....	73
17.1.1	Global Marine Distress and Safety System (GMDSS)	73
17.1.2	Automatic Identification System (AIS)	73
17.1.3	Long-Range Identification and Tracking (LRIT).....	74
17.2.	Radio Station Equipment.....	74
17.2.1	Radio Installations.....	74
17.2.2	Operational Performance	75
17.2.3	Location, Protection and Markings	75
17.2.4	Sources of Energy.....	75
17.2.5	Watches	76
17.2.6	Radio Personnel	76
17.2.7	GMDSS Log Books	76
18.0	NAVIGATION LIGHTS, SHAPES and SOUND SIGNALS	77
19.0	NAVIGATIONAL EQUIPMENT and WHEELHOUSE VISIBILITY	78
19.1	Navigational Equipment	78
19.2	Wheelhouse Visibility	78
20.0	MISCELLANEOUS EQUIPMENT	80
20.1	Nautical Publications	80
20.2	Signaling Lamp.....	80
20.3	Instruments	80
20.4	Searchlight.....	80
20.5	IMO Number	80

21.0	ANCHORS, CABLES and TOWING ARRANGEMENTS	81
21.1	Equipment	81
21.2	Towing Arrangements	81
22.0	ACCOMMODATION	82
22.1	General.....	82
22.2	Access/Escape Arrangements	82
22.3	Lighting.....	82
22.4	Food Preparation and Storage	82
22.5	Messing Area/s.....	82
22.6	Hand Holds and Grab Rails	83
22.7	Ventilation / Heating	83
22.8	Water Services.....	83
22.9	Sleeping Accommodation	83
22.10	Sanitary Facilities.....	84
22.11	Recreational Facilities.....	84
22.12	Stowage Facilities for Personal Effects	84
22.13	Securing of Heavy Equipment	85
22.14	Protection from Mosquitos	85
22.15	Masters Inspections.....	85
22.16	Headroom.....	85
23.0	PROTECTION of PERSONNEL.....	86
23.1	Deckhouses and Superstructures.....	86
23.2	Bulwarks and Guard Rails	86
23.3	Safe Work Aloft and on the Bowsprit of Sailing Yachts	86
23.4	Recovery of Persons from the Sea	87
23.5	Noise	87
23.6	Training Manual	88
23.7	Safety Briefing	89
23.8	Instructions for On-Board Maintenance	90
23.9	Safety Management System	91
	23.9.1 Yachts < 500GT.....	91
	23.9.2 Yachts ≥ 500GT	91
	23.10 International Ship and Port Facilities Security (ISPS)	91
24.0	MEDICAL STORES	92

25.0	SHIP-SHORE TRANSFER of PERSONNEL	93
25.1	Tenders	93
25.2	Helicopters	93
25.3	Pilots for Yachts.....	93
25.4	Gangways, Accommodation Ladders and Passerelles	93
	25.5.1 General Requirements.....	94
	25.5.2 Lifting Appliances and Attachments	94
	25.5.3 Operation	94
26.0	COASTAL STATE REGULATIONS	95
27.0	MANNING AND CERTIFICATION	96
27.1	Owners Responsibility	96
27.2	Requirements	96
27.3	Radio Qualifications	96
27.4	Medical Fitness Certificates	96
27.5	Basic Training Certification	97
27.6	First Aid Certification	97
27.7	Fire Fighting Course	97
27.8	Revalidation of Certificates and Licenses	97
28.0	PASSENGERS	98
28.1	Limitations.....	98
28.2	Definitions.....	98
28.3	Supernumeraries	98
29.0	RECOGNISED ORGANIZATIONS	100
29.1	Recognised Classification Societies	100
29.2	Recognised Organisation Appointed Surveyors	100
30.0	Accident Investigations	101
	ANNEX 1 LIST OF REFERENCE DOCUMENTS	102
	ANNEX 2 GUIDELINES FOR THE ASSESSMENT OF VARIATIONS TO THE STANDARDS APPLIED BY THE CODE	103
	ANNEX 3 OPEN-FLAME GAS INSTALLATIONS	105
	ANNEX 4 MINIMUM SAFE MANNING LEVELS FOR COMMERCIAL YACHTS ≥ 24M	108
1.0	General Notes.....	108
2.0	MINIMUM SAFE MANNING SCALE FOR MOTOR YACHTS	109
2.1	<200GT and 1500kW to <3000kW.....	109
2.2	≥200 GT <500GT and <3000kW	110

2.3	≥200GT <500GT and <6000kW	111
2.4	≥500GT <3000GT and <3000kW	111
2.5	≥500GT <3000GT and <6000kW	112
2.6	≥500GT <3000GT and <9000kW	113
3.0	MINIMUM SAFE MANNING SCALE FOR SAILING YACHTS	114
3.1	<200GT and <750kW.....	114
3.2	≥200GT <500GT and <1500kW	115
3.3	≥500GT <1000GT and <1500kW	115
3.4	≥1000GT <3000GT and <3000kW	116
	ANNEX 5 TABLE OF CONVENTIONS.....	118
	ANNEX 6 MEDICAL STORES.....	120
1.0	All Yachts should carry a first aid kit as follows:	120
2.0	Yachts operating unlimited should carry medical stores, or the equivalent, as follows	121

LARGE COMMERCIAL YACHTS (≥24 meters in load line length)

1.0 INTRODUCTION

1.1 General

The Cook Islands Large Yacht Code makes reference to the Cook Islands Maritime Rules. Vessels registered under 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. However, the Administration has recognised that yachts in commercial use for sport or pleasure (commercial yachts) do not fall naturally into a single class, and certain prescribed merchant ship safety standards have been found to be incompatible with the safety needs particular to such yachts.

Likewise, yachts in private use for sport or pleasure (private yachts) are confronted with similar circumstances where safety standards compatible with the safety needs of such yachts have not been well defined by the Administration.

The primary purpose in the Administration's acceptance of this Code has been to set standards of safety and protection for all persons on board yachts, particularly for those who are trainees, passengers or guests. 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 also deals with the subjects of manning and qualifications needed for senior members of the crew.

Designers and builders of new yachts will need to pay special regard to the intended area of operation and the working conditions to which a yacht will be subjected when selecting the materials and equipment to be used in its construction. The builder, repairer, owner or managing agent of a yacht, as appropriate, should take all reasonable measures to ensure that a material or appliance fitted is in accordance with the requirements of the Code.

When equipment manufactured in accordance with a recognised national or international standard is required by the Code, the Administration may accept existing equipment, provided it can be shown that the specification or technical description of the equipment provides the equivalent level of safety, suitability and fitness for purpose. Such equipment, when replaced, should be to the standard required by the Code.

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.

1.2 Yachts not Engaged in Navigation

Where a yacht is not engaged on a voyage, guest numbers can be set at an appropriate level, taking into consideration:

- .1 Location (within port limits),
- .2 Weather conditions,
- .3 Availability of shore base emergency services.

Notwithstanding any of the above, adequate safety equipment must be provided for the number of persons on board.

1.3 Insurance

It is a requirement of registration with the Cook Islands that the owner or managing agent of a commercial yacht should carry Insurance / P&I cover that covers repatriation as required by Standard A2.5 and Ship owners Liability as set out in Standard A4.2 of the Maritime Labour Convention 2006.

2.0 DEFINITIONS

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

“Administration” means the Cook Islands Maritime Administration in the Cook Islands Ministry of Transport. Maritime Cook Islands are the Corporate Administrators of the Cook Islands Ships Registry responsible for the registration and certification of ships and yachts entitled to fly the Cook Islands Flag. Administration includes any Surveyor or Agent formally authorised or appointed by the Administration to represent it or act on its behalf;

“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 Record;

“Appointed Representative” means; 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;

“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 required for yachts;

“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;

“Class” or **“Recognised Organisation”** means a ship Recognised Organisation, 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);

“Code” means the Maritime Cook Islands Code of Practice for Large Yachts;

“Commercial Yacht” means a 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;

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

“Emergency Source of Electrical Power” is a source of electrical power, intended to supply the emergency switchboard in the event of failure of the supply from the main source of electrical power;

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

“Existing Commercial 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 1 January 2010;

“Existing Private Yacht” means any yacht, which is registered and is described in the register and on the Certificate of Registry as a private yacht, the keel of which was laid or the construction or lay-up was started before 1 January 2010;

“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 athwart ships.
- (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, excluding sewage originating from yachts;

“Guest” means any person(s) who are not passengers and are on board for a period fewer than 16 hours.

“ILLC” means the International Convention on Load Lines, 1966, as amended;

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

“**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;

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

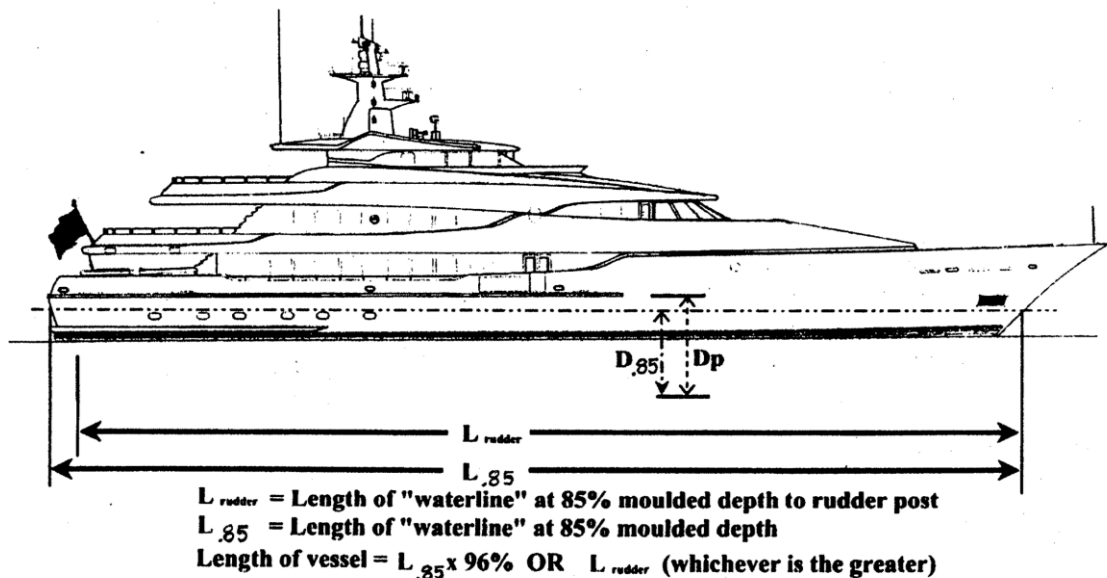
“**Life Buoy**” means a life buoy complying with the requirements of the LSA Code;

“**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 LSA Code;

“**Load Line 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 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 N” 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 ≥ 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;

“Main Vertical Zone” means those sections into which the hull, superstructure and deckhouses are divided by “A” class divisions, the mean length of which on any deck does not normally exceed 40 meters;

“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.

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

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

“Mile” means a nautical mile of 1852 meters;

“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 1 January 2010;

“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;

“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 Ship” means a vessel carrying more than 12 passengers;

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

“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 authorized 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;

“Position 1” means upon exposed freeboard and raised quarter decks and upon exposed superstructure decks situated forward of a point located a quarter of the yacht’s length from the forward perpendicular;

“Position 2” means upon exposed superstructure decks situated abaft a quarter of the yacht’s length from the forward perpendicular;

“Radar Transponder” means a radio responding device designed for use in survival craft to facilitate location of survival craft in search and rescue operations;

“Rescue Boat” means a boat complying with the requirements of Section 15.2.3 and designed to rescue persons in distress and for towing life rafts;

“Retro-Reflective Material” means a material that reflects in the opposite direction a beam of light directed on it and which complies with the specification laid down in Section 15.1.4;

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

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

“Short Range Yacht” means a yacht that is limited to areas within 60 nm from a safe haven;

“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);

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

“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;

“Training Manual” with regard to life-saving appliances means a manual complying with the requirements of Section 23.7;

“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.762(18) or any Resolution amending or replacing it from time to time which is considered by the Administration to be relevant;

“Voyage” includes an excursion;

“Waterproof” means protected as far as is practicable from the ingress of water;

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

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

“Weather tight” has the meaning given in Annex I of ILLC viz. Weather tight 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; and

“Window” means a ship’s window, being any window, regardless of shape, suitable for installation aboard yachts (ISO 6345:1990).

3.0 APPLICATION and INTERPRETATION

3.1 Application

3.1.1 Large Commercial Yachts

- .1 The Code applies to a motor or sailing yacht of ≥ 24 meters in load line length which at the time it is registered, is in commercial use for sport or pleasure and carries no cargo and up to 12 passengers, provided that it is not a vessel to which either the International Code of Safety for High-Speed Craft or the Code of Safety for Dynamically Supported Craft is applicable.

Vessels of < 24 meters are regulated by the Cook Islands Small Yacht Code.

- .2 To the Administration, any pleasure yacht engaged in trade, commerce, on charter or carrying passengers for hire is a commercial yacht.
- .3 The Cook Islands is signatory to the major shipping international conventions, and, as vessels engaged in trade, commercial yachts are thus inter alia subject to SOLAS (≥ 500 gross tons), International Load Line Convention (24 meters or more), MARPOL (400 gross tons or more) and STCW Convention requirements. Furthermore, under SOLAS, any vessel carrying more than 12 passengers for hire on board is considered to be a passenger vessel.
- .4 A commercial yacht of 500 gross tons or more must be classed at time of registration or within six (6) months after initial registration, by an organization recognised by the Administration. A commercial yacht built under an organization recognised by the Administration but no longer in Class, may be considered for registration, if suitably maintained and subject to inspection, by the Administration.
- .5 The Administration would prefer that commercial yachts of 24 meters or more in load line length and up to 500 gross tons be classed by a Recognised Organization in order to facilitate satisfying the requirements for registration. Although the Administration does not require that commercial yachts in this category be classed, the technical reviews and surveys necessary to establish and maintain compliance with certain convention requirements will likely be performed by one of the Administration's Recognised Organizations that maintain rules for the construction of yachts. For this reason, and because classification standards are generally linked to statutory requirements, it is strongly recommended that these commercial yachts be retained in Class.

- .6 The Code has been adapted from prominent existing large and mega yacht codes with the express intention of setting minimum pollution prevention and safety standards that are consistent and appropriate to the size of the yacht and identify with the specific needs of yachts in commercial and private use for sport and pleasure. The standards applied are either set by the relevant international conventions or are equivalent standards where it is not reasonable, practicable or, in the case of non-convention vessels, a requirement to comply with the international conventions. The standards adopted are judged to be at least equivalent in their effect to those required by the international conventions for the maintenance of safety and pollution prevention.
- .7 Compliance with the minimum standards required by the Code, will entitle a yacht to be issued with certification applicable to the service and size of the yacht, upon satisfactory completion of the corresponding surveys and inspections. The certificates demanded by the international conventions that apply to commercial yachts covered by the Code are summarized in Section 4.
- .8 Annex 1 lists the documents to which the Code refers for the application of specific safety and pollution prevention standards.
- .9 Compliance with the Code satisfies the requirements of the Cook Islands Maritime Rules, as amended.

3.1.2 Large Private Yachts

The Code is also intended to serve as a guideline for private yachts of ≥ 24 meters in load line length. It is recommended that private yachts, strive to conform to the standards of the Code as near as is practicable and reasonable to assure their safe operation.

3.1.3 Hull Types

The Code applies to monohull and multihull yachts.

3.1.4 Effective Date

The Code is effective as of 1 April 2010.

3.1.5 Responsibility

It is the responsibility of the owner or managing agent to ensure that a yacht is properly maintained, surveyed and inspected in accordance with the Code.

3.2 Operational Limitations

In general, requirements given within this Code are based on unrestricted geographical operation unless specifically stated otherwise.

3.3 Equivalent Standards, Exemptions and Existing Yachts

3.3.1 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 levels of safety, suitability and fitness for purpose. Annex 2 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 should be submitted to the Administration for approval. 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.

3.3.2 Exemptions

- .1 Exemptions are only authorised and issued by the Administration.
- .2 Applications for exemption should be made to the Administration via its appointed representatives and be supported by justification for the exemption.
- .3 The granting of exemptions will be limited by the extent to which international conventions allow and should be regarded as the exception and not the rule.

3.3.3 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 standard for a particular feature and it can be demonstrated that compliance is neither reasonable nor practicable, proposals for alternative arrangements should be submitted to the Administration for approval. In considering individual cases, the Administration will take into account 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 should comply with the standards applicable to a new yacht.

3.4 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, www.maritimecookislands.com. Questions, comments and observations should be addressed to Maritime Cook Islands at the address above.

4.0 SURVEYS, CERTIFICATION, and INSPECTIONS

4.1 General

A standard interval of one year between harmonized surveys for ships which could be based on any of the followings:

- **Initial survey** – A complete inspection of all the items concerning the particular certificate before the ship is put into service to make sure they possess satisfactory conditions and are capable of carry out the service for which the ship is intended.
- **Periodical survey** – An official examination of the items relating to the particular certificate to ensure that they are meeting the requirements and are fit for the intended services.
- **Renewal survey** – As similar as the periodical survey but consequently results in issuing a new certificate.
- **Intermediate survey** – Inspection of specified items.
- **Annual survey** – General reviewing of the items concerned to the particular certificate to ascertain the fact that they have been observed maintained and remained fit for the service for which the ship is designated.
- * **Additional survey** – General or partial Inspection, according to the circumstances, made after a repair resulting from casualty probes or whenever there is an important repair or renewal made.

4.1.1 International Conventions

- .1 All commercial yachts covered by this Code must be surveyed and certificated in accordance with the applicable provisions of the International Load Line Convention as modified by the Code.
- .2 Commercial yachts ≥ 500 GT undertaking international voyages are required to be surveyed and certificated under the construction and safety equipment requirements of the SOLAS Convention as modified by the Code.
- .3 All commercial yachts ≥ 300 GT are also required to be surveyed and certificated under the radio requirements of SOLAS Chapter IV as modified by the Code.
- .4 All yachts ≥ 400 GT will have to be surveyed and certificated under the MARPOL Convention.
- .5 The Administration considers the Code and its application to commercial yachts to be an equivalent arrangement under the provisions of the applicable Conventions. Annex 6 is the list of certificates to be issued.

4.1.2 Survey Standards

The underlying principle is that for all vessels registered in the Cook Islands, the same survey standards will apply. Therefore, it has been agreed that this statutory work may be undertaken by Appointed Representatives which are inspectors of the Administration, Authorised Surveyors appointed by the Administration, Recognised Organisation surveyors and, for safety radio, an appropriate service provider in relation to radio installations.

4.1.3 Survey Requests

All requests for survey and certification must be made to the Administration or Recognised Organisation acting on behalf of the Administration.

4.2 Initial Survey

4.2.1 General

- .1 For new construction and existing yachts, Authorised Surveyors will be appointed to undertake the day-to-day surveys required and to act as a focal point between the shipbuilders/ship repairers and the Administration.
- .2 Fees for the surveys conducted by surveyors of the Administration and surveyors of other Appointed Representatives will be recovered directly from the owner or managing agent by the organization providing the service at its prevailing rates.

4.2.2 Load Line Certificate

- .1 When a commercial yacht is either in class or under survey to be classed with a Recognised Organisation, that Recognised Organisation will be authorised to do the survey and the issuance of an International Load Line Certificate (1966).
- .2 In any other case, the Administration will assist the owner where possible to arrange the survey by an Authorised Surveyor and issuance of an International Load Line Certificate (1966).
- .3 Exemptions from the requirements of the Code for load line marking, conditions of assignment and protection of the crew may be granted only by the Administrator, which is the sole authority for the issuance of a load line exemption certificate. It is not Administration policy to exercise this authority for commercial yachts, except for acceptable conditions within the scope of Article 8 of the ILLC cited as not in compliance with the ILLC in order to facilitate the issuance of an international load line certificate.

Safety of Life at Sea (SOLAS) Requirements

4.2.3 Cargo Safety Construction Certificate

All Commercial yachts $\geq 500\text{GT}$ are required to be surveyed and comply with requirements of SOLAS Chapter II-1 "Construction – Structure, subdivision and stability, machinery, and electrical installation" & Chapter II-2 "Construction – Fire protection, detection and extinction"

4.2.4 Cargo Ship Safety Equipment Certificate & Record

All Commercial yachts $\geq 500\text{GT}$ are required to be surveyed and comply with requirements of Chapter III "Life Saving appliances and arrangements"

4.2.5 Cargo Ship Safety Radio Certificate and Record

All Yachts $\geq 300\text{GT}$ are to be surveyed and comply with the requirements of Chapter IV "Radio Communication" by a Recognised Organisation surveyor or an Authorised Surveyor considered by the Administration to be appropriate in relation to radio installations.

4.2.6 Large Yacht Safety Certificate

All Commercial yachts $\geq 500\text{GT}$ are to be surveyed and comply with requirements of SOLAS Chapter II-1 "Construction – Structure, subdivision and stability, machinery, and electrical installation" & Chapter II-2 "Construction – Fire protection, detection and extinction" III, IV and V and other relevant requirements of SOLAS 1974 as modified by the 1988 SOLAS Protocol as an alternative to the cargo ship safety certificates. This certificate includes Safety Equipment, Safety Construction and Safety Radio.

4.2.7 Long Range Identification & Tracking – (LRIT)

Applies to all Commercial Yachts $\geq 300\text{GT}$ engaged in international voyages. Yachts need compliant INMARSAT terminals that need to be programmed and tested by an approved Application Service Provider. The test report needs to be kept on board. Cook Islands are a member of the Australian Cooperative Data center for the purpose of LRIT. Visit www.auscddc.org for more information.

4.2.8 International Safety Management (ISM)

All Commercial yachts $\geq 500\text{GT}$ are required to comply with SOLAS Chapter IX and the ISM Code. The Safety Management System (SMS) is to be audited to ensure compliance with the on-board Safety Management Plan. This plan is to be approved by the Administration.

4.2.9 International Ship and Port Facility Security (ISPS)

All Commercial Yachts $\geq 500\text{GT}$ are to comply with SOLAS Chapter XI-2 and the ISPS Code

MARPOL Requirements

4.2.10 International Oil Pollution Prevention Certificate

All yachts $\geq 400\text{GT}$ are required to comply with the requirements set out in MARPOL Annex I. "Regulations for the Prevention of Pollution by Oil"

4.2.11 International Sewage Pollution Prevention Certificate of Compliance

All yachts $\geq 400\text{GT}$ or are certified to carry more than 15 persons onboard are required to comply with the requirements set out in MARPOL Annex IV, Regulation 2.

4.2.12 Garbage Management

All yachts $\geq 400\text{GT}$ or more are required to comply with MARPOL Annex V: Regulations for Prevention by Garbage from Ships. A Garbage Record Book must be maintained. All yachts $\geq 100\text{GT}$ or above are required to have a Garbage Management Plan.

4.2.13 International Air Pollution Prevention Certificate

All yachts $\geq 400\text{GT}$ or more are required to comply with MARPOL Annex VI: Regulations for the Prevention of Air Pollution from Ships. They will need to be surveyed and be in compliance with the following documents:

- (a) International Air Pollution Prevention Certificate & Supplement
- (b) Ozone Depleting Substances Record Book
- (c) Ship Energy Efficiency Management Plan (SEEMP)
- (d) Under regulation 13 of Annex VI shall have a technical file and an Engine AIPPC for each marine diesel engine $\geq 130\text{ kW}$

4.2.14 International Anti Fouling System Certificate

All yachts $\geq 24\text{m}$ < 400GT must comply with the "International Convention on the Control of Harmful Anti-fouling Systems on ships".

4.2.15 International Anti Fouling System Declaration

All yachts $\geq 24\text{m}$ and < 400GT engaged in International voyages shall carry an Anti -Fouling Declaration signed by the owner or their representative. The declaration is to have a paint receipt or contactor invoice attached to the Declaration.

4.2.16 Bunkers Certificate

All yachts 1000GT and above are required to be insured and certified under the “International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001”. For further information see www.maritimcookislands.com

4.2.17 Maritime Labour Convention Certificates

All Commercial Yachts must comply with the Maritime Labour Convention 2006.
Yachts ≥ 500 GT must carry onboard “Maritime Labour Certification”.
Yachts < 500 GT are not required to be certified but must be surveyed by a Cook Islands Appointed Surveyor or Recognised Organisation.

4.2.18 International Tonnage Certificate

- .1 Compliance with the 1969 Tonnage Convention and the issuance of a 1969 Certificate of Tonnage Measurement is required for commercial yachts.
- .2 Private yachts and Commercial yachts operating exclusively in the domestic waters of the Cook Islands will not require an international certificate of tonnage measurement regardless of size.

4.2.19 Exemption From Certain Safety Regulations

If an owner or managing agent seeks an exemption from the application of specific safety regulations, formal application must be made to the Administration. The Administration will issue an exemption if and when appropriate.

4.3 Periodic Surveys

4.3.1 Load Line Certificates, Cargo Ship Safety Certificates and MARPOL Certificates

- .1 Annual, intermediate and renewal surveys with respect to the Load Line Certificates, the Cargo Ship Safety Certificates must be carried out to the satisfaction of the Administration.
- .2 Valid for five (5) years. No extension is permitted to the five (5) year period of validity of these certificates.
3. The underwater hull must be inspected twice in every 5 year period. The renewal survey must be an out of water survey.

4.3.2 Vessel Safety and Radio Equipment Certificates

- .1 Vessel Safety Certificates and Radio Equipment Certificates (if applicable) are valid for five (5) years. Annual and renewal surveys must be carried out by a Recognised Organisation surveyor or by an Authorised Surveyor.

4.3.3 ISM / ISPS / MLC Certificates

- .1 These Certificates are valid for five (5) years. Periodic verification must be carried out by a Recognised Organisation surveyor or by an Authorised Surveyor.

5.0 CONSTRUCTION and STRENGTH

5.1 General Requirements

- .1 All commercial yachts of 500 gross tons or more must be classed by one of the organizations recognised by the Maritime Cook Islands listed in Section 29.1.
- .2 Although the Administration would prefer those private yachts of ≥ 500 gross tons and commercial yachts ≥ 24 meters in load line length and < 500 gross tons be classed by an organization recognised by the Administration, this is not an absolute requirement. For those commercial yachts that are not classed, this Safety Code shall apply.
- .3 The choice of hull construction material affects fire protection requirements, for which reference should be made to Section 15.

5.2 Structural Strength

5.2.1 New Yachts

- .1 New yachts will be considered to be of adequate strength if built under survey and are certificated to be in accordance with applicable yacht construction rules set by any of the Administration's recognised Classification Societies.

A Confirmation of Classification Certificate must be provided.

- .2 New yachts classed by one (1) of the Classification Societies listed in Section 29.1 after construction has been completed in accordance with the standards of the Society, will be accepted as being of adequate strength for the service conditions covered by the classification notation.
- .3 New yachts not built in accordance with paragraph 5.2.1.1 may be specially considered provided full information, including calculations, drawings and details of materials prepared by the yacht designer is provided to the Administration for review and satisfactory survey before acceptance by the Administration.

5.2.2 Existing Yachts

Existing yachts will be considered to be of adequate structural strength if they are in good repair and were:

- .1 Built to the standards defined by paragraph 5.2.1.1 for new yachts and remain in class; or
- .2 Built to the standards defined by paragraph 5.2.1.1 for new yachts and, where no longer in class, are subjected to a full structural survey by an authorised Surveyor to determine that the hull is substantially in as-built condition and records indicate satisfactory engine and electrical maintenance. ;or

- .3 Not built in accordance with paragraph 5.2.2.1 but where full information, including calculations, drawings and details of materials have been provided and reviewed by the Administration, and the yacht subjected to a satisfactory survey by the Appointed Representative.

5.3 Recesses

Any recess in the weather deck must be self-draining under all normal conditions of heel and trim of the yacht.

5.4 Watertight Bulkheads

5.4.1 New Yachts

- .1 The strength of watertight bulkheads should be in accordance with the requirements of one (1) of the Classification Societies listed in Section 29.1.
- .2 Openings in required watertight bulkheads should have an efficient means of closure that will maintain the watertight integrity of the bulkhead.
- .3 Hinged watertight doors in lieu of those required by SOLAS Ch II-1, Regulation 15, are considered acceptable for yachts < 50 meters in load line length or < 500 gross tons. Such doors should be fitted with indicators in the wheelhouse and remain shut at sea, except at the Master's discretion, or in accordance with operational procedures. This is based on the subdivision being an alternative to load line conditions of assignment and not a SOLAS subdivision standard, which applies to vessels \geq 80 meters in load line length.

5.4.2 Existing Yachts

- .1 Watertight bulkheads in existing yachts should comply with the requirements of Section 5.4.1 as far as it is reasonable and practicable to do so.
- .2 In individual cases, when the Administration considers that the requirements of Section 5.4.1 cannot be met, the Administration may consider a justification for exemption from the specified requirements.
- .3 In considering an individual case, the Administration will take into account the yacht's past performance in service and the declared area(s) of operation and any other conditions that restrict the use of the yacht at sea, which will be recorded on the Vessel Safety Certificate and Certificate of Registry issued to the yacht.

5.5 Enclosed Compartments

- .1 For new yachts, compartment(s) below the freeboard deck, provided for oil fueling, fresh water reception or other purposes to do with the business of the yacht and having access openings in the hull, should be bounded by watertight divisions without any opening (i.e., doors, manholes, ventilation ducts or any other opening), separating the compartments from any other compartment below the freeboard deck.
- .2 For existing yachts, alternative arrangements may be accepted for the provision of watertight boundaries in way of hinged shell openings, particularly where built to Class. Bolted manhole covers to openings in inner boundaries are considered acceptable provided that the shell door is in accordance with Section 5.4.2 above.
- .3 Where shell doors are provided in the transom of a yacht for recreational purposes leading to a Lazarette, access from the Lazarette to the engine room may be allowed through a watertight door provided the door is never open at sea and that bilge sensors are fitted in the Lazarette.

5.6 Sailing Yacht Rigging

5.6.1 General Maintenance

The condition of the rig should be monitored in accordance with a planned maintenance schedule. The schedule should include, in particular, regular monitoring of all the gear associated with safe work aloft and on the bowsprit (see Section 23.3).

5.6.2 Masts and Spars

- .1 Dimensions and construction materials of masts and spars should be in accordance with the recommendations of one (1) of the Classification Societies listed in Section 29.1 or a recognised international standard.
- .2 The associated structure for masts and spars (including fittings, decks and floors) should be constructed to absorb the forces involved.

5.6.3 Running and Standing Rigging

- .1 Wire rope used for standing rigging (stays or shrouds) must not be flexible wire rope (fiber rope core).
- .2 The strength of all blocks, shackles, rigging screws, cleats and associated fittings and attachment points should exceed the breaking strength of the associated running or standing rigging.
- .3 Chain plates for standing rigging should be constructed to support and absorb the forces involved.

5.6.4 Sails

- .1 Adequate means of reefing or shortening sail should be provided.
- .2 All yachts, except those engaged on short day sailing, should either be provided with separate storm sails or have specific sails designated and constructed to act as storm canvas.

6.0 WEATHERTIGHT INTEGRITY

For new yachts and existing yachts, the standards for achieving weathertight integrity should comply with or be equivalent to the ILLC as far as it is reasonable and practicable.

In individual cases, when the Administration considers that the requirements of ILLC or the Code cannot be met, the Appointed Representative may consider and propose to the Administration alternative arrangements to achieve adequate safety standards, such as, operational limitations.

For an existing yacht, the yacht's past performance in service and the declared area(s) of operation and any other conditions will be taken into account. Conditions that restrict the use of the yacht at sea should be recorded on the Vessel Safety Certificate.

The minimum standards for weathertight integrity that should be applied are as follows:

6.1 Hatchways and Skylight Hatches

6.1.1 General Requirements

- .1 All openings leading to spaces below the weather deck not capable of being closed, must be enclosed within either an enclosed superstructure or a weathertight deckhouse of adequate strength.
- .2 All exposed hatchways which give access to spaces below the weather deck are to be of substantial weathertight construction and provided with efficient means of closure. Weathertight hatch covers should be permanently attached to the yacht and provided with adequate arrangements for securing the hatch closed.
- .3 Hatches that are to be used for escape purposes should be provided with covers that are capable of being opened from both sides. An escape hatch should be readily identified and easy and safe to use, having due regard to its position and access to and from the hatch.
- .4 Flush deck hatches are acceptable for escape hatches and lockers on deck if constructed to Class requirements. Wells for rescue boats with flush hatches are acceptable provided they meet the requirements for wells.

6.1.2 Hatchways That are Open at Sea

In general, hatches should be kept closed at sea. However, hatchways that may be kept open for lengthy periods are to be kept as small as practicable (a maximum of one (1) square metre in clear area), located on the centerline of the yacht, and fitted with coamings of at least 450mm in height in Position 1 and 150mm in height in Position 2 (refer to Definitions, Section 2.0). Covers of hatchways are to be permanently attached to the hatch coamings and, where hinged, the hinges are to be located on the forward side.

6.2 Doorways and Companionways

6.2.1 Doorways Located above the Weather Deck

Exposed doors in deckhouses and superstructures that give access to spaces below the weather deck are to be weathertight, and door openings should have coaming heights of \geq :

- .1 600mm when the door is in the forward quarter length of the yacht and used when the yacht is at sea;
- .2 300mm when the door is in an exposed forward facing location aft of the forward quarter length; or
- .3 150mm above the surface of the deck when the door is in a protected location aft of the forward quarter length.

Assuming these minimums are maintained, the Administration will consider an exemption for the purposes of issuing an International Load Line Certificate, when required.

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

An access door leading directly to the engine room from the weather deck should be fitted with a coaming height of 600mm if in Position 1 and 380mm if in Position 2 (see Definitions, Section 2.0).

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

6.2.2 Companion Hatch Openings

- .1 Companionway hatch openings that give access to spaces below the weather deck should be fitted with a coaming the top of which is at least 300mm above the deck.
- .2 Washboards may be used to close the vertical opening. When washboards are used, they should be so arranged and fitted that they will not be dislodged readily. Provisions are to be made to ensure that they are stowed in a secure location when not in use.
- .3 The maximum breadth of an opening in a companion hatch should not exceed one (1) metre.

6.3 Skylights

- .1 All skylights should be of efficient weathertight construction complying with an appropriate recognised international marine standard, provided with a portable cover and should be located on or as near to the centerline of the yacht as practicable.
- .2 If they are of the opening type, they should be provided with efficient means whereby they can be secured in the closed position.
- .3 Skylights that are provided as a means of escape should be operable from both sides. An escape skylight should be readily identified and easy and safe to use, having due regard to its position and access to and from the skylight.
- .4 The skylight glazing material and its method of securing within the frame should meet appropriate recognised international marine standards.
A minimum of one (1) portable cover for each size of glazed opening should be provided which can be accessed rapidly and efficiently secured in the event of a breakage of the skylight.

6.4 Side Scuttles

- .1 Side scuttles should be of an approved type. They should be of strength appropriate to location in the yacht and meet appropriate recognised international marine standards. With regard to structural fire protection in new yachts, the requirements for the construction of certain side scuttles should meet the requirements of Section 16.5.3.10.
- .2 In general, all side scuttles fitted in locations protecting openings to spaces below the weather deck or fitted in the hull of the yacht should be provided with a deadlight which is to be permanently attached and is capable of securing the opening watertight in the event of a breakage of the scuttle glazing. Proposals to fit side scuttles with portable deadlights will be subject to special consideration and approval by the Administration, having regard for the location of the side scuttles and ready availability of deadlights to be fitted. Consideration should be given to the provision of operational instructions to the Master as to when deadlights must be applied to side scuttles.
- .3 Side scuttles fitted in the hull of the yacht below the level of the freeboard deck should be either non-opening or of a non-readily opening type, have a glazed diameter of not more than 450mm and be in accordance with a standard recognised by the Administration. The sill height of the side scuttles should be at least 500mm or 2.5% of the breadth of the yacht, whichever is the greater, above the all seasons load line assigned to the yacht. Scuttles of the non-readily opening type must be secured closed when the yacht is in navigation.
- .4 Side scuttles should not be fitted in the hull in way of the machinery space.

6.5 Windows

.1 Windows should be of an approved type. They should be of strength appropriate to location in the yacht and meet appropriate recognised international marine standards. Where windows are not to Code requirements, they may be accepted subject to substantial storm covers being provided for transit voyages, e.g., Caribbean to Mediterranean, and with geographic limits. With regard to structural fire protection in new yachts, the requirements for the construction of certain windows should meet the requirements of Section 16.5.3.10.

.2 In general, windows fitted in superstructures or weathertight deckhouses are to be substantially framed and efficiently secured to the structure. The glass is to be of the toughened safety glass type that breaks into small sized particles. Small bonded windows may be accepted on a case-by-case basis.

Safety standards relating to the provision of large glass doors or windows fitted in the aft end of a superstructure or weathertight deckhouse will be considered on an individual basis by the Administration.

.3 Proposals to fit windows in the main hull below the level of the freeboard deck will be subject to special consideration and approval by the Administration, having regard for the location and strength of the windows and their supporting structure and, the availability of strong protective covers for the windows. Operational instructions must be given to the Master, with respect to weather conditions expected to be encountered on the voyage.

.4 Storm shutters are required for all windows in the front and sides of first tier and front windows of the second tier of superstructures or weathertight deckhouses above the freeboard deck. When storm shutters are interchangeable port and starboard, a minimum of 50% of each size should be provided.

.5 For yachts restricted to voyages that are always within 60 nm from a safe haven, storm shutters are not required.

.6 Windows to the navigating position should not be of either polarized or tinted glass. (See paragraph 19.2.2.)

6.6 Ventilators and Exhausts

.1 Adequate natural and/or mechanical ventilation is to be provided throughout the yacht. The accommodation spaces are to be protected from the entry of gas and/or vapor fumes from galley, machinery, exhaust and fuel systems.

.2 Ventilators are to be of efficient construction and provided with permanently attached means of weathertight closure.

- .3 Ventilators should be kept as far inboard as practicable and the height above the deck of the ventilator opening should be sufficient to prevent the ingress of water when the yacht heels.
- .4 The ventilation of spaces, such as the machinery space, that must remain open requires special attention with regard to the location and height of the ventilation openings above the deck.
- .5 The means of closure of ventilators serving the machinery space should be selected with regard to the fire protection and extinguishing arrangements provided in the machinery space.
- .6 Engine exhaust outlets that penetrate the hull below the freeboard deck should be provided with means to prevent back flooding into the hull through a damaged exhaust system.

6.7 Air Pipes

- .1 Air pipes serving fuel and other tanks should be of efficient construction and provided with permanently attached means of weathertight closure.
- .2 Where located on the weather deck, air pipes should be kept as far inboard as practicable and be fitted with a coaming of sufficient height to prevent inadvertent flooding.

6.8 Scuppers, Sea Inlets and Discharges

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

6.9 Materials for Valves and Associated Piping

- .1 Valves that are fitted below the waterline should be of steel, bronze or other material having a similar resistance to impact and fire.
- .2 The associated piping should, in areas as indicated above, be of steel, bronze, copper or other equivalent material.
- .3 Where the use of plastic piping is proposed, it will be considered on an individual basis and full details of the type of piping, its intended location and use, should be submitted to the Administration for approval. The Administration may require tests to be carried out on the plastic piping, as necessary, to give approval to its use.

- .4 The use of flexible piping in any situation should be kept to a minimum compatible with the essential reason for its use. The Administration should approve flexible piping and the means of joining it to its associated hard piping system as fit for the purpose.

7.0 WATER FREEING ARRANGEMENTS

- .1 For new yachts and existing yachts, the standards for water freeing arrangements should comply with ILLC as far as it is reasonable and practicable to do so.
- .2 In individual cases, when the Administration considers that the requirements of ILLC cannot be met, the owner may propose alternative arrangements to achieve adequate safety standards for the Administration's consideration.
- .3 In considering an individual case, the Administration may take into account the yacht's past performance in service and the declared area(s) of operation and any other conditions that restrict the use of the yacht at sea that will be recorded on the Vessel Safety Certificate.
- .4 Section 5.3 sets requirements specific to the drainage of recesses.

8.0 MACHINERY

This section outlines the minimum requirements for machinery which are to be in accordance with the requirements of one of the Recognised Organisations and should cover the minimum aspects defined below, even if the machinery is not considered the primary means of propulsion. Existing yachts which do not hold a Class Certificate or equivalent approved by the Administration should be surveyed by either a Cook Island authorized surveyor with relevant experience or one of the Recognised Organisations so that an appropriate certificate can be issued. However alternative arrangements for Short Range Yachts may be agreed by the Administration.

8.1 General Requirements

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

Plastic piping may be accepted where the piping and the arrangements for its use meet the requirements of the IMO Fire Test Procedures Code.

- .2 The requirements for main propulsion are based upon the installation of diesel powered units. When other types of main propulsion are proposed, the arrangements and installation should be specially considered. Where gas turbines are to be fitted, attention should be paid to the guidance contained within the IMO High-Speed Craft Code, and installation is to be to the satisfaction of the Administration.
- .3 Notwithstanding the requirements of paragraph 8.1.1, in a fuel supply system to an engine unit, where a flexible section of piping is provided, connections should be of a screw type or equivalent approved type. Flexible pipes should be fire resistant/metal reinforced. Materials and fittings should be of a suitable recognized national or international standard.

8.2 Installation

- .1 Notwithstanding the requirements referred to in 8.1, the machinery, fuel tanks and associated piping systems and fittings should be of a design and construction adequate for the service for which they are intended, and should be so installed and protected as to reduce to a minimum any danger to persons during normal movement about the yacht, with due regard being made to moving parts, hot surfaces, and other hazards.

- .2 Means should be provided to isolate any source of fuel which may feed a fire in an engine space. A fuel shut-off valve(s) should be provided which is capable of being closed from a position outside the engine space. The valve(s) should be fitted as close as possible to the fuel tank(s).Part B, Section 7.
- .3 All external high-pressure fuel delivery lines between the high pressure fuel pumps and fuel nozzles should be protected with a jacketed tubing system capable of containing fuel resulting from a high-pressure line failure. The jacketed tubing system should include means for collection of leakage and arrangements should be provided for an alarm to be given in the event of a fuel line failure.
- .4 When a glass fuel level gauge is fitted it should be of the "flat glass" type with self-closing valves between the gauge and the tank.

9.0 ELECTRICAL INSTALLATIONS

This section outlines the minimum requirements for electrical installations which are to be in accordance with the requirements of one of the Recognised Organisations, and should cover the minimum aspects defined below. For sailing vessels, this should also cover the elements necessary to ensure safety of the yacht including control of the sails, where appropriate.

Existing yachts which do not already hold a Class Certificate or approved equivalent should be surveyed by either a Cook Island authorised surveyor with relevant experience or one of the Recognised Organisations so that an appropriate certificate can be issued. However, alternative arrangements for Short Range Yachts may be agreed by the Administration.

9.1 Installation

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

9.2 Lighting

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

9.3 Batteries

Batteries of a type suitable for marine use and not liable to leakage should be used. Areas in which batteries are stowed should be provided with adequate ventilation to prevent an accumulation of gas which is emitted from batteries of all types. Reference should also be made to Section 15.1.5.

10.0 STEERING GEAR

This section outlines the minimum requirements for steering gear, which are to be in accordance with the requirements of a Recognised Organisation. The Class Notation, Survey or equivalent should cover the minimum aspects defined within this chapter. Due regard is to be paid to the requirements for emergency steering.

10.1 General Requirements

- .1 The steering gear and its installation should, in general, meet with the requirements of one of the Recognised Organisations.

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

- .2 Yachts should be provided with means for directional control of adequate strength and suitable design to enable the heading and direction of travel to be effectively controlled at all operating speeds. When appropriate to the safe steering of the yacht, the steering gear should be power operated in accordance with the requirements of the Administration.
- .3 When the steering gear is fitted with remote control, arrangements should be made for emergency steering in the event of a failure of such control.

11.0 BILGE PUMPING

This section outlines the minimum requirements for bilge pumping, which are to be in accordance with the requirements of a Recognised Organisation. The Class Notation or equivalent should cover the minimum aspects defined within this chapter. The principle objective of this section is that in the event of one compartment being flooded, which may or not be the engine room, there is an ability to control any leakage to adjacent compartments.

11.1 General Requirements

- .1 The bilge pumping equipment and its installation should, in general, meet with the requirements of a Recognised Organisation. The yacht should hold a Certificate of Class or equivalent or should be surveyed by one of the Recognised Organisations so that an appropriate certificate can be issued.

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

- .2 All yachts should be provided with at least two fixed and independently powered pumps, with suction pipes so arranged that any compartment can be effectively drained when the yacht is heeled to an angle of 10 degrees. For Inshore Yachts, the second pump and suction pipes may be portable.
- .3 The location of pumps, their individual power supplies and controls, including those for bilge valves, should be such that in the event of any one compartment being flooded another pump is available to control any leakage to adjacent compartments.
- .4 Each bilge pump suction line should be fitted with an efficient strum box.
- .5 In the case of a yacht where the propulsion machinery space may be unmanned at any time, a bilge level alarm should be fitted. The alarm should provide an audible and visual warning in the Master's cabin and in the wheelhouse. The audible and visual alarm may be accepted elsewhere if it is considered that such a location may be more appropriate.
- .6 Pumping and piping arrangements for bilges into which fuel or other oils of similar or higher fire risk could collect, under either normal or fault conditions, should be kept clear of accommodation spaces and separate from accommodation bilge systems. Bilge level alarms meeting the requirements of 11.1.5 should be fitted to all such bilges.

12.0 STABILITY – Intact and Damaged

12.1 General

- .1 This Section deals with the standards that should be met for both intact and damaged stability.
- .2 An intact stability standard proposed for assessment of a yacht type, which is not covered by the standards defined in the Code, should be submitted to the Administration for approval at the earliest opportunity.
- .3 When an existing yacht either fails to meet the stability standards applied to a new yacht or has up-to-date stability information which complies with a different but defined standard, the Administration will consider the stability standard of the yacht as a special case and take into account its recorded history of safe operation.

12.2 Intact Stability

12.2.1 New Motor Yachts

.1 Monohulls

In accordance with IMO Resolution A.749(18), the curves of static stability for seagoing conditions should meet the following criteria:

- (a) The area under the righting lever curve (GZ curve) should not be < 0.055 metre radians up to a 30° angle of heel and ≥ 0.09 metre-radians up to a 40° angle of heel, or the angle of down flooding, if this angle is less;
- (b) The area under the GZ curve between the angles of heel of 30° and 40° or between 30° and the angle of down flooding if this is $< 40^\circ$, should be ≥ 0.03 metre-radians;
- (c) The righting lever (GZ) should not be less than 0.20 metres at an angle of heel equal to or $\geq 30^\circ$;
- (d) The maximum GZ should occur at an angle of heel of preferably exceeding 30° but not less than 25° ;
- (e) After correction for free surface effects, the initial metacentric height (GM) should be ≥ 0.15 metres; and

- (f) In the event that the yacht's intact stability standard fails to comply with the criteria defined in .1 to .5, the Administration may be consulted for the purpose of specifying alternative but equivalent criteria, which should be achieved. This may particularly be the case for most hard chine hulls that develop maximum GZ at $< 25^\circ$. Reference should be made to Section 5.5.6.2 of IMO Res. A.749(18). Caution should be taken in the application of wind heel levers to tri-decked yachts in accordance with Section 3.2.2.2 of IMO Res. A.749(18).

.2 Multihulls

Likewise, the curves of static stability for seagoing conditions should meet the following criteria:

- (a) The area under the righting lever curve (GZ curve) should not be less than 0.075 metre-radians up to an angle of 20° when the maximum righting lever (GZ) occurs at 20° , and not less than 0.055 metre-radians up to an angle of 30° when the maximum righting lever (GZ) occurs at 30° or above. When the maximum righting lever (GZ) occurs at angles between 20° and 30° , the corresponding requisite area under the righting lever curve (GZ curve) should be determined by linear interpolation by the formula:

Area to maximum righting lever, at $\theta^\circ = 10.055 + 0.002(30 - \theta)$ metre radians;

- (b) The area under the GZ curve between the angles of heel of 30° and 40° or between 30° and the angle of downflooding if this is less than 40° , should not be less than 0.03 metre-radians;
- (c) The righting lever (GZ) should be at least 0.20 metres at an angle of heel where it reaches its maximum;
- (d) The maximum GZ should occur at an angle of heel not less than 20° ;
- (e) After correction for free surface effects, the initial metacentric height (GM) should not be less than 0.15 metres; and
- (f) If the maximum righting lever (GZ) occurs at an angle of less than 20° , approval of the stability should be considered by the Administration as a special case.

12.2.2 Existing Motor Yachts

- .1 The standard of stability required to be achieved by an existing yacht is generally to be as required for a new yacht.
- .2 Unless a yacht is provided with stability information which is approved to a standard recognised by the Administration and relevant to the yacht in its present condition, the yacht should be treated as if it is a new yacht.

12.2.3 New Sailing Yachts

.1 Monohulls

Requirements for a new sailing yacht are:

- (a) Curves of static stability (GZ curves) for at least the Loaded Departure with 100% consumables and the Loaded Arrival with 10% consumables should be produced.
- (b) Generally, the GZ curve required by .1 should have a positive range of not less than 90°. A positive range of less than 90° may be considered but subject to the imposition of operational limitations.
- (c) In addition to the requirements of .2, the angle of steady heel should be greater than 15° (see figure). The angle of steady heel is obtained from the intersection of a “derived wind heeling lever” (dwhl) curve with the GZ curve required by .1.

In figure 1:

$$\begin{aligned} \text{dwhl} &= \text{the “derived wind heeling lever” at any angle } \theta^\circ. \\ &= 0.5 \times \text{WLO} \times \text{Cos}1.3\theta \end{aligned}$$

$$\begin{aligned} \text{where WLO} &= \text{GZf} \\ &\text{Cos}1.3\theta \end{aligned}$$

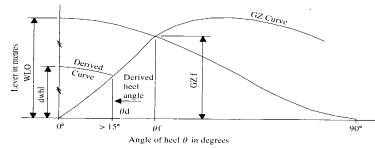


Figure 1

Noting that:

WLO is the magnitude of the actual wind heeling lever at θ° which would cause the yacht to heel to the ‘down flooding angle’ (θ_f) or 60° whichever is least.

Gzf is the lever of the yacht’s GZ at the ‘down flooding angle’ (θ_f) or 60° whichever is least.

θ_d is the angle at which the “derived wind heeling lever” curve intersects the GZ curve. (If θ_d is less than 15° , the yacht will be considered as having insufficient stability for the purpose of the Code.)

θ_f the ‘down-flooding angle’ is deemed to occur when openings having an aggregate area, in square metres, greater than:

$$\frac{\text{yacht displacement in tons}}{1500}$$

are immersed.

Moreover, it is the angle at which the lower edge of the actual opening that results in critical flooding becomes immersed. All regularly used openings for access and for ventilation should be considered when determining the down flooding angle. No opening regardless of size that may lead to progressive flooding should be immersed at an angle of heel of less than 40°. Air pipes to tanks can, however, be disregarded.

If, as a result of immersion of openings in a deckhouse, a yacht cannot meet the required standard, those deckhouse openings may be ignored and the openings in the weather deck used instead to determine θ_f . In such cases, the GZ curve should be derived without the benefit of the buoyancy of the deckhouse.

It might be noted that provided the yacht complies with the requirements of paragraphs 12.2.3.1.1 and 12.2.3.1.2 and it is sailed with an angle of heel which is no greater than the 'derived angle of heel', it should be capable of withstanding a wind gust equal to 1.4 times the actual wind velocity (i.e., twice the actual wind pressure) without immersing the 'down flooding openings', or heeling to an angle greater than 60°.

.2 Multihulls

Reference should be made to paragraph 12.1.2 when new multihull sailing yachts are to be certificated in accordance with this Code. Intact stability for catamarans is not defined. It would be appropriate for the owner to demonstrate that their proposals achieve an equivalent level of safety to that required by the Code, i.e., a "safety case." Such yachts would then be treated as novel vessels in terms of the ILLC.

12.2.4 Existing Sailing Yachts

.1 Existing monohull sailing yachts:

When the Administration has approved existing valid stability information, this will continue to be acceptable subject to the following:

- (a) verifiable evidence is available which proves that the approved stability information is valid; or
- (b) the owner or managing agent elects to re-submit a yacht for stability approval based on the new criteria.

.2 An existing monohull sailing yacht that does not comply with paragraph 12.2.5.1 should comply with paragraph 12.2.3.1 for a new monohull sailing yacht.

12.3 Damaged Stability

12.3.1 New Yachts

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

Table 1

Space	Percentage Permeability
Stores	60
Stores but not a substantial quantity thereof	95
Accommodation	95
Machinery	85
Liquids	95 or 0 whichever results in the more onerous requirements.

- .4 In the damaged condition, considered in paragraph 12.3.1.1, the residual stability should be such that any angle of equilibrium does not exceed 7° from the upright, the resulting righting lever curve has a range to the down flooding angle of at least 15° beyond any angle of equilibrium, the maximum righting lever within that range is $\geq 100\text{mm}$ and the area under the curve is < 0.015 metre radians.
- .5 For any yachts of ≥ 100 metres in load line length for which construction is started on or after 1 June 2001 and any yachts of ≥ 80 metres in load line length but < 100 metres for which construction is started on or after 1 August 2001, application should be made to the Administration of the Administration at the earliest possible stage in order to agree upon the damage stability requirements applicable to that yacht.
- .6 A yacht of ≥ 85 metres to which paragraph 15.2.1.4 - Equipment Carriage Requirements, Lifeboats - applies, should meet a two (2) compartment standard of subdivision, calculated using the deterministic standard for subdivision.
- .7 Insufficient WT subdivision may be offset by full compliance with ILLC conditions of assignment or operational restrictions.

12.3.2 Existing Yachts

- .1 An existing yacht should be assessed according to the requirements of Section 12.3.1 for a new yacht. A summary of the findings should be submitted to the Administration of the Administration.

- .2 When an existing yacht does not meet a standard that is required for a new yacht, the summary of findings should include a review of the consequences of overcoming the deficiency, including compensatory measures that exist or are proposed. Options may include;
- (a) operational restrictions on consumables; e.g., such as that the yacht retains on board specified weights in the arrival condition;
 - (b) full compliance with the ILLC may be used as an equivalent to the Code subdivision standards for existing motor yachts < 80 metres in load line length. The subdivision is there as an equivalent to load line conditions of assignment. Note that subdivision is an inherent part of sailing yacht stability; also, yachts of ≥ 80 metres in load line length require SOLAS probabilistic damage or SOLAS one (1) compartment damage as an equivalent.
 - (c) pre 1968 yachts built to the 1959 Load Line Rules that allowed for different door arrangements may be taken into consideration; and
 - (d) geographic restriction to 60 nautical miles from a safe haven.
- Submergence of the weather deck after damage may be accepted provided that:
- (e) the yacht retains adequate transverse and longitudinal stability, i.e., complies with paragraph 12.3.1.4 of the Code and has a positive longitudinal GM;
 - (f) there will be no progressive flooding to spaces assumed intact, i.e., weather tight openings remain above the waterline and are able to be secured weather tight after damage;
 - (g) if the yacht relies on the buoyancy of an enclosed superstructure or deckhouse to remain afloat, then this structure must be efficiently constructed and able to be secured weathertight;
 - (h) bulkheads limiting the extent of flooding are able to withstand the head of water;
 - (i) escape routes from compartments assumed intact are not submerged; and
 - (j) survival craft stowage or boarding points are not submerged.
- .3 The Administration will accept an existing yacht on the basis of the assessment made. The Administration will consider the application of operational limitations as compensation for deficiencies that cannot be overcome reasonably. Again, options may include:
- (a) The yacht being restricted to operating up to a maximum of 60 nautical miles from a safe haven;

- (b) where the criteria is not met in certain cases of damage, they may be accepted on the basis that the freeboard is greater than the required minimum and the yacht restricted to operate not more than 120 nautical miles from a safe haven in favorable weather; and
- (c) when on an ocean transit voyage, e.g., Caribbean to Mediterranean, all windows on the freeboard deck to be fitted with storm covers,
- (d) where a yacht by reason of age is entitled to use the 1959 Load Line Rules, full compliance with the 1959 conditions of assignment would exempt the yacht from damage stability requirements.

12.4 Elements of Stability

- .1 The lightship weight, vertical center of gravity (KG) and longitudinal center of gravity (LCG) of a yacht should be determined from the results of an inclining experiment.
- .2 An inclining experiment should be conducted in accordance with a detailed standard in the presence of an Authorised Surveyor.
- .3 The report of the inclining experiment and the lightship particulars derived should be approved by the Administration prior to its use in stability calculations:
 - (a) at the discretion of the owner(s) or managing agent(s) and prior to approval of the light ship particulars by the Administration of the Administration, a margin for safety may be applied to the light ship weight and KG calculated after the inclining experiment;
 - (b) such a margin should be clearly identified and recorded in the stability booklet;
 - (c) a formal record should be kept in the stability booklet of alterations or modifications to the yacht for which the effects on lightship weight and vertical centres of gravity offset against the margin.
- .4 When sister yachts are built at the same shipyard, the Administration of the Administration may accept lightweight check on subsequent yachts to corroborate the results of the inclining experiment conducted on the lead yacht of the class.

12.5 Stability Documents

- .1 A yacht should be provided with a stability information booklet for the Master that is approved by the Administration of the Administration.
- .2 The content, form and presentation of information contained in the stability information booklet should be based on a standard model booklet for the yacht type (motor or sailing) that is acceptable to the Administration.

- .3 A yacht with previously approved stability information, which undergoes a major refit or alterations, should be subjected to a complete reassessment of stability and provided with newly approved stability information.

A major refit or major alteration is one which results in either a change in the lightship weight of 2% and above and/or the longitudinal center of gravity of 1% and above (measured from the aft perpendicular) and/or the calculated vertical center of gravity rises by 0.25% and above (measured from the keel).

- .4 Sailing yachts should have mounted in a suitable position for the ready reference of the crew a copy of the 'Curves of Maximum Steady Heel Angle to Prevent Downflooding in Squalls'. This should be a direct copy taken from that contained in the approved stability booklet.

13.0 FREEBOARD

13.1 General

- .1 Compliance with the International Load Line Convention, 1966 (ILLC '66), is mandatory for all new commercial yachts of 24 metres or more in load line length and existing commercial yachts of 150 gross tons or more as defined in accordance with ILLC '66. Private yachts are exempt.
- .2 For existing commercial yachts where full compliance with the ILLC cannot be attained, the Administration may consider exemptions in accordance with Article 6 of the Convention.
- .3 The freeboard for the yacht and its marking should be approved by the Administration for the assignment of freeboard and issue of the International Load Line Certificate.
- .4 Yachts should comply with ILLC for the assignment of a greater than minimum freeboard mark which corresponds to the deepest loading condition included in the stability information booklet for the yacht.
- .5 The freeboard assigned should be compatible with the strength of hull structure and fittings, intact and damage stability requirements for the yacht.
- .6 The Appointed Representative should provide the owner(s) or managing agent(s) of the yacht with a copy of the particulars of the freeboard assigned and a copy of the record of particulars relating to the conditions of assignment.

13.2 Freeboard Mark and Loading

- .1 A freeboard disk is required where an ILLC is issued. The freeboard mark applied should be all seasonal marks, positioned port and starboard at amidships in the load line length. The mark should be permanent and be of a contrasting colour to the hull of the yacht in way of the mark.
- .2 The fresh water freeboard allowance should be obtained by deducting from the all seasons freeboard assigned:

$\Delta/40$ T centimetres

where Δ = displacement in salt water in tons at the all seasons load waterline, and
T = tons per centimetre immersion in salt water at the all seasons load waterline.

Should it be necessary, the quantity of 1/48th of the all seasons draft of the yacht at midships may be deducted.

- .3 A yacht should not operate in any condition, which will result in its appropriate freeboard marks being submerged when it is at rest and upright in calm water.

13.3 Draft Marks

- .1 Draft marks should be provided at the bow and stem, port and starboard, and be adequate in number for assessing the condition and trim of the yacht. A draft mark may be a single datum line.
- .2 Draft marks should be permanent and easily read but need not be of contrasting color to the hull. The marks need not be at more than one (1) draft at each position but should be above and within 1000mm of the deepest load waterline.
- .3 The draft to which marks relate should be indicated either above the mark on the hull and/or in a record on the docking plan for the yacht.

13.4 Docking Plan

The yacht should be provided with a docking plan, a copy of which should be maintained on board.

14.0 LIFE-SAVING APPLIANCES

14.1 General Requirements

14.1.1 Life-Saving Appliances

Life Saving appliances should be provided in accordance with the following Table 2, Life-Saving Appliances.

14.1.2 Solas Requirements

All life-saving appliances should comply with SOLAS Chapter III and the LSA Code, unless expressly approved by the Administration. Additional life-saving equipment that may be provided should meet the requirements of this Section.

14.1.3 Personal Safety Equipment

When personal safety equipment is provided for use in water sport activities, arrangements for its stowage should ensure that it will not be used mistakenly as life-saving equipment in an emergency situation.

14.1.4 Retro Reflective Tape

All life-saving equipment carried should be fitted with retro-reflective material in accordance with the recommendations of IMO Resolution A.658(16). Retro-reflective material already fitted on existing life-saving appliances in accordance with IMO Resolution A.274(III) will continue to be acceptable until it has to be replaced as a result of deterioration or damage.

14.1.5 Life Raft

Life raft embarkation arrangements should comply with the following:

- .1 Where the distance between the embarkation deck and the top of the life raft buoyancy tube exceeds one (1) metre with the yacht in its lightest condition, an embarkation or rope ladder is to be provided.
- .2 Where the distance between the embarkation deck and the top of the life raft buoyancy tube exceeds 5.5 metres with the yacht in its lightest condition, at least one (1) launching appliance for launching a davit launched life raft is to be provided on each side of the yacht.

14.1.6 Steel Wire Falls

Steel wire falls used in launching life-saving appliances should be turned end for end at intervals of not more than 30 months and renewed either when necessary due to deterioration of the falls or at five (5) years, whichever is the lesser. However, in lieu of turning "end for end" the Administration may accept a specified period between inspections of the falls and renewal either when necessary due to deterioration or at four (4) years, whichever is the lesser. When falls are of stainless steel, they should be renewed at intervals not exceeding the service life recommended by the manufacturer. Stainless steel falls which do not have a service life recommended by the manufacturer should be treated as steel falls.

14.1.7 Service Intervals

Every inflatable or rigid inflatable rescue boat, inflatable boat, life raft, inflatable and hydrostatic release unit should be serviced, at intervals not exceeding those specified by manufacturer.. Hydrostatic release units and life rafts, which have been approved for a service life of greater than one (1) year need not be serviced after one (1) year.

14.1.8 Maintenance

Maintenance of equipment should be carried out in accordance with the instructions for onboard maintenance.

14.1.9 Stowage and Installation

The stowage and installation of all life-saving appliances is to be to the satisfaction of the Administration.

14.1.10 Availability for Use

All life-saving appliances should be in working order and be ready for immediate use before any voyage is commenced and at all times during the voyage.

14.1.11 Side Projections

For a yacht equipped with stabilizer fins or having other projections at the sides of the hull special consideration should be given and provisions made as necessary to avoid possible interference with the safe evacuation of the yacht in an emergency.

14.1.12 Overboard Discharge

Means should be provided to prevent overboard discharge of water into survival craft during abandonment.

Table 2
LIFE-SAVING APPLIANCES
(see Section 14.1)

YACHT LENGTH IN METRES	≤200 50m & ≤200 500 GT	≥ 50m OR ≥ 500 GT
Lifeboats (see 14.2.1)		
Life Rafts (see 14.2.2)	Yes	Yes
Rescue Boat (see 14.2.3)		Yes
Inflatable Boat (see 14.2.3)	Yes	
Lifejackets (see 14.2.4)	Yes	Yes
Immersion Suits (see 14.2.5)	Yes	Yes
Life Buoys (Total) (see 14.2.6)	4	8
Life Buoys with Light and Smoke	2	2
Life Buoys with Light		2
Life Buoys with Buoyant Line	2	2
Line Throwing Appliance (see 14.2.7)	1	1
Rocket Parachute Flares (see 14.2.8)	6	12
Red Hand Flares (see 14.2.8)	4	12
Smoke Signals (see 14.2.8)	2	4
Portable VHF	2	2
EPIRBS (see 14.2.9)	1	1
SARTS (see 14.2.10)	1	2
General Alarm (see 14.2.11)	Yes	Yes
Lighting (see 14.2.12)	Yes	Yes
Mini ISM	Yes	No
Safety Management System (ISM Code)	No	Yes
Training Manual (see 23.6)	Yes	Yes
Instructions for On-board Maintenance(see 23.8)	Yes	Yes
Lifesaving Signals and Rescue Poster - SOLAS No 1 In Wheelhouse (see 14.2.13)	Yes	Yes

14.2 Equipment Carriage Requirements

14.2.1 Lifeboats

- .1 When lifeboats are required to be carried their acceptance is conditional upon the provision of suitable stowage and launching arrangements.
- .2 When lifeboats are provided on each side of the yacht, the lifeboats on each side should be of sufficient capacity to accommodate the total number of persons onboard.
- .3 Where it is impractical to carry lifeboats on a yacht, alternative arrangements may be considered as indicated in paragraphs 15.2.1.4 and 15.2.2.5.

- .4 For yachts of $\geq 85\text{m}$ in load line length, when it is impractical to carry lifeboats on each side of the yacht, alternative arrangements will be considered provided the required subdivision index meets the requirements of paragraph 12.3.1.6.
- .5 A lifeboat will also be acceptable as a rescue boat provided it meets the requirements for an approved rescue boat as indicated in Section 15.2.3.

14.2.2 Life Rafts

- .1 The life rafts carried are to be stowed in GRP containers and must contain the necessary "emergency pack".
- .2 Life rafts carried should be of equal, or as near equal, capacity as possible.
- .3 Life raft approval includes approval of their stowage, launching and float-free arrangements.
- .4 A yacht should be provided with life rafts of such number and capacity that, in the event of any one life raft being lost or rendered unserviceable, there is sufficient capacity remaining for all on board.

If life rafts are not readily transferable, additional life rafts should be fitted so that life rafts having a total capacity of 150% of the yacht's complement are provided on each side of the yacht.

- .5 For a sailing yacht, when it is impractical to stow the life rafts required by paragraph 15.2.2.4 at the yacht's side, alternative arrangements could be accepted to provide life rafts having a capacity of 150% of the yacht's complement stowed on the centerline, subject to their being readily transferable to either side of the yacht.
- .6 GRP containers containing life rafts should be stowed on the weather deck or in an open space and fitted with hydrostatic release units so that the life rafts will float free of the yacht and automatically inflate.
- .7 For a yacht that operates beyond 60 nautical miles from land, all the life rafts provided should be equipped with a "SOLAS A PACK". For yachts that always operate within 60 nautical miles from land, the pack can be a "SOLAS B PACK".

14.2.3 Rescue Boats

- .1 For a yacht of $\geq 50\text{m}$ in load line length or $\geq 500\text{ GT}$, a rescue boat meeting SOLAS requirements should be provided. The approved rescue boat should have a capacity for \geq six (6) persons. A rigid inflatable boat (RIB) or tender may be accepted subject to paragraph 14.2.3.2.

- .2 The acceptance of an approved rescue boat is conditional upon the provision of suitable stowage and launching arrangements. When a power-operated crane is used as a launching device, it should be capable of operation by hand in the event of a power failure. A secondary power source, e.g., emergency generator power, battery or hydraulic pump, is acceptable in lieu of emergency hand operation of the rescue boat crane. It should be possible to launch the boat within five (5) minutes.
- .3 For a yacht of < 50m in load line length and < 500 GT, when an approved rescue boat is not carried on board, alternative arrangements may be considered. These include:
 - (a) a rescue boat of a SOLAS approved type which is towed by the main yacht; or
 - (b) a boat that is suitable for rescue purposes carried on board but which is of a non-SOLAS approved type. The boat should have a capacity for \geq four (4) persons and may be a rigid, rigid inflatable or inflatable tender. Tubes of a non-SOLAS inflatable boat should have a minimum of three (3) buoyancy compartments built in; and
 - (c) the ability to efficiently use the yacht itself to recover an unconscious person from the water.

A white boat instead of orange may be used provided it has high visibility panels and is properly equipped.

- (d) Launching rescue boats on the fore deck is accepted as a practical necessity, since it would normally be possible to maneuver the yacht to provide a lee position for the rescue boat. The ability to launch the rescue boat from either side of the yacht is not a requirement.

14.2.4 Lifejackets

- .1 One (1) adult lifejacket should be provided for each person on board plus spare adult lifejackets sufficient for at least 10% of the total number of persons on board or two (2), whichever is the greater. Each lifejacket should be fitted with a light and whistle.
- .2 There should be at least two (2) inflatable lifejackets included in the above number of lifejackets for use of the crew of any rescue boat or inflatable boat carried on board.
- .3 In addition to the adult lifejackets, a sufficient number of children's lifejackets should be provided for children carried on the yacht. If no lifejackets are provided then no children shall be carried onboard.

14.2.5 Immersion Suits

- .1 One immersion suit complying with the requirements of Chapter II, 2.3 of the LSA Code should be provided for each person onboard. However, these need not be provided if:
 - (a) totally enclosed or partially enclosed lifeboats are fitted; or

- (b) davit launched life rafts are provided; or
- (c) the yacht operates all year round on voyages between the parallels of latitude 32° North and 32° South or exempted under paragraph 15.2.5.2.
- (d) Where the yacht is exempted as above, TPAs (Thermal Protective Aids), are required to replace the immersion suits and also be included in the safety equipment for the tender(s).

In the case of a yacht that is provided with means for dry-shod emergency evacuation covered by .1 or .2, at least two (2) immersion suits should be provided for use by the crew of the rescue boat (see Section 15.2.2).

- .2 Owners or managing agents of yachts which operate outside of the parallels of latitude 32° North and 32° South but in areas where the sea water temperature at the time of operation is known and considered to be high enough for dispensation from the safety provision of immersion suits, should apply to the Administration for exemption from the requirements. Full details of the proposed location, period of operation and established temperature data from recognised authorities should be provided. Immersion suits shall always be provided for the rescue boat crew and for the crew on repositioning voyages.

14.2.6 Life Buoys

- .1 White life buoys are acceptable, provided they are marked in quarters by retro-reflective tape.
- .2 Life buoys port and starboard provided with combined light and smoke signals should be capable of quick release from the navigating bridge. When this is impractical, they may be stowed at the side of the yacht and provided with conventional release arrangements.
- .3 The attached buoyant line required on each of two (2) of the life buoys is to have a minimum length of 30 metres.

14.2.7 Line Throwing Appliances

For all yachts, appliances capable of firing four (4) shots of line are required.

14.2.8 Pyrotechnics

Flares, complying with the requirements of Chapter III of the LSA Code, shall be positioned in a readily accessible location and in the quantities stated in the table in section 14.1.

14.2.9 EPIRB

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

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.

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.

14.2.10 Registering EPIRBs with RCCNZ

If owners / operators wish to register their EPIRB with Rescue Co-ordination Centre New Zealand (RCCNZ), they may Use the online registration form set up by RCCNZ to register the beacon: <http://www.beacons.org.nz/406-Registration.aspx>. The process is quick, simple and free of charge. Owner / operators may keep EPIRB information current by using the online form or contacting RCCNZ (406registry@maritimenz.govt.nz) with any updates.

14.2.11 Radar Transponders (SART)

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

14.2.12 General Alarm

- .1 For a yacht of < 50m in load line length and < 500 GT, this alarm may consist of the yacht's whistle or siren.
- .2 For a yacht of ≥ 50m in load line length or ≥ 500 GT , the requirements of paragraph 15.2.9.1 are to be supplemented by an electrically operated bell or Klaxon system, which is to be powered from the yacht's main supply and also the emergency source of power (see Section 8).
- .3 For a yacht of 85m in load line length and above, in addition to the requirements of paragraph 15.2.9.2, a public address system or other suitable means of communication should be provided.

14.2.13 Lighting

- .1 Alleyways, internal and external stairways and exits giving access to and including the muster and embarkation stations should be adequately lighted. For a yacht of ≥50m in load line length or ≥ 500 GT, the lighting should be supplied from the emergency source of power (see Section 8).
- .2 Adequate lighting is to be provided in the vicinity of survival craft, launching appliance(s) (when provided) and the overside area of sea in way of the launching position(s). The lighting should be supplied from the emergency source of power.

14.2.14 Life-Saving Signals and Rescue Poster

When display space in the wheelhouse is restricted, the two (2) sides of a SOLAS No. 2 poster (as contained in life raft equipment packs) may be displayed in lieu of a SOLAS No. 1 poster. Symbols used should conform to IMO Resolution A.760(18).

15.0 FIRE SAFETY AND STRUCTURAL FIRE PROTECTION

15.1 Stowage of Gasoline and Other Highly Flammable Liquids

- .1 Special consideration should be given to safe conditions of carriage of gasoline and other highly flammable liquids either in hand portable containers/tanks or in the tanks of vehicles (such as personal water craft, motor car and helicopter) which may be transported from time to time. Alternatives to consider may be:
 - (a) recessed stowage with overboard chutes;
 - (b) lockers on deck, fully ventilated and with fixed fire suppression system; or internal lockers with fixed fire suppression system.
- .2 The quantity of gasoline and/or other highly flammable liquids carried should be kept to a minimum.
- .3 Containers used for the carriage of flammable liquids should be constructed to a recognised standard appropriate to the contents and each container clearly marked to indicate its contents.
- .4 Enclosed spaces designated for the safe carriage of gasoline or vehicles with gasoline in their tanks should be fitted with:
 - (a) a fixed fire detection and fire alarm system complying with the requirements of SOLAS Ch II-2/Part A;
 - (b) a manually activated deluge water spray system of capacity to cover the total area of deck and container/vehicle support platform(s) (if any) at a rate of 3.5 liters/ m² per minute, or

For a space in which the provision of a deluge system would be inappropriate/ impractical, alternative provisions should be made to the satisfaction of the Administration. (Consideration should be given to the provision of a water spray from at least one (1) fire hose fitted with a jet/spray nozzle being brought to bear on any part of the gasoline stowage from the entrance(s) to the space.);

- .3 adequate provisions for drainage of water introduced to the space by paragraph 15.1.5.2. Drainage should not lead to machinery or other spaces where a source of ignition may exist; and

- .4 a ducted mechanical continuous supply of air ventilation, which is isolated from other ventilated spaces, to provide at least six (6) air changes per hour (based on the empty space) and for which reduction of the airflow should be signaled by an audible and visual alarm on the navigating bridge and at the “in port” control station(s). The ventilation system should be capable of rapid shut down and effective closure in event of fire.
- .5 Electrical equipment should be located well clear of those areas where flammable gases are likely to accumulate within the space and be so constructed as to prevent the escape of sparks. Electrical equipment not so located or constructed should each be provided with an easily accessible and identified means of double pole isolation outside the space, with a fixed flammable gas detector/detectors fitted in the compartment and comprising alarm features on the navigating bridge and elsewhere in the accommodation in accordance with paragraph 15.5.3.15.2. Where any of these requirements are not practical, then the electrical arrangements should be installed to a suitably certified standard, i.e., flameproof, intrinsically safe, etc.
- .6 The location of gasoline storage, quantities of gasoline and procedures to be followed in an emergency should be approved and recorded on the fire safety plan and/or safety manual, as appropriate.
- .7 Reference must be made to Section 25.2 if there is a requirement to provide for helicopter operations to/from the yacht.

15.2 Fire Control Plans

- .1 A fire control (general arrangement) plan must be permanently exhibited for the guidance of the Master and crew of the yacht. The content of the plan should adequately show and describe (in English) the principal fire prevention and protection equipment and materials. As far as is practicable, symbols used on the plan should comply with the recognised international standard provided by the IMO.

For each deck, the plan must show the position of control stations; sections of the yacht which are enclosed respectively by “A” class divisions and “B” class divisions; location of flammable liquid storage (see Section 15.1); particulars of and locations of fire alarms, fire detection systems, sprinkler installations, fixed and portable fire extinguishing appliances; fireman’s outfit(s); means of access and emergency escapes for compartments and decks; and locations and means of control of systems and openings which should be closed down in a fire emergency.
- .2 The plan required by paragraph 15.2.1 must be kept up to date. Up-dating alterations should be applied to all copies of the plan without delay. Each plan should include a list of alterations and the date on which each alteration was applied.
- .3 A duplicate set of the plan must be permanently stored in a prominently marked weathertight enclosure, readily accessible to assist non-vessel fire-fighting personnel who may board the yacht in a fire emergency.

- .4 Instructions valid to the maintenance and operation of all the equipment and installations onboard for the fighting and containment of fire must be kept in one (1) document holder, readily available in an accessible location.

15.3 Yachts < 500 GT

15.3.1 Boundaries

- .1 The boundaries of a space containing internal combustion propulsion machinery or oil fired boilers on a new yacht must be:
 - (a) gas tight;
 - (b) capable of preventing the passage of smoke and flame to the end of the 60 minute standard fire test; and
 - (c) insulated where necessary with a suitable non-combustible material, that if the division is exposed to a standard fire test, the average temperature on the unexposed side of the division should not increase by more than 139°C above the initial temperature within a period of 30 minutes.
- .2 When boundaries are constructed of materials other than steel or aluminum, calculation methods may be used where appropriate to determine compliance with .2 and .3 above.
- .3 Galleys must be enclosed wherever possible.
- .4 Application to existing yachts must be as far as practicable to the standard for new yachts, it being understood that structural alterations will generally not be practicable.

15.3.2 Fuel Tanks

Fuel tanks and associated pipes and fittings must be located to reduce to a minimum the risk of fire or explosion. Spaces containing such items must be provided with an adequate and efficient ventilation system.

15.3.3 Ventilation

In a yacht provided with a gas extinguishing system within an enclosed machinery space, arrangements should be provided for the closure of all openings to the machinery space that can admit air. Additionally, means should be provided for stopping all ventilation fans supplying the machinery space along with the means to cut off the supply of fuel to the engine and any auxiliaries in the event of a fire within the machinery space. The fuel cut off valves should be located as close to the tank as possible (see paragraph 8.1.2.2).

The above arrangements should be capable of being operated from outside the machinery space.

15.3.4 Means of Escape

- .1 The arrangement of the hull must be such that all underdeck compartments are provided with a satisfactory means of escape. In the case of the under deck and above deck accommodations and engine room spaces, two (2) means of escape from every restricted space or group of spaces should be provided. Only in an exceptional case should one (1) means of escape be accepted, and then only if the means of escape provided does not require passage through a hazardous area, e.g., a galley or engine room, leads directly to the open air and it can be demonstrated that the provision or retrofitting of a second means of escape would be impractical or detrimental to the overall safety of the yacht. No escape route should be obstructed by furniture or fittings.
- .2 Where a second means of escape is via a sealed window, then breakable glass, not polycarbonate or laminated glass, which can be readily broken with a conveniently located crash hammer, may be accepted. Weatherdeck flush hatches may be used as passenger or crew area secondary escapes, but as they are more prone to leakage and more difficult to use, their fitting should be avoided if possible.

15.3.5 Passage of Flame

When a yacht is not classed by a Recognised Organisation Recognised by the Administration and the hull, bulkheads, and main deck are constructed of materials other than steel, evidence of precautions taken to reduce the passage of flame must be submitted to the Administration for approval.

15.3.6 Thermal or Acoustic Insulation

Thermal or acoustic insulation fitted must be of a type that is not readily ignitable and, where fitted within a machinery space that does not contain either internal combustion propulsion machinery or oil-fired boilers, the surface of the insulation is to be impervious to oil and oil vapor. Insulation provided within a machinery space, which contains either internal combustion propulsion machinery or oil-fired boilers, must be of a non-combustible type and the surface of the insulation is also to be impervious to oil and oil vapor.

15.3.7 Paints, Varnishes and Other Finishes

Paints, varnishes and other finishes which offer an undue fire hazard, should not be used in the engine room or galley or in other areas of high fire risk. Elsewhere such finishes must be kept to a minimum.

15.3.8 Upholstery Composites

Upholstery composites (fabric in association with any backing or padding material) used throughout the yacht must satisfy fire test procedures of IMO Resolution MSC.61(67), Annex 1, Part 8, or an equivalent standard, or incorporate an inter-liner that satisfies ignition resistance testing.

- .1 Organic foams used in upholstered furniture and mattresses must be of the combustion-modified type satisfying the fire test procedures of IMO Resolution MSC.61(67), Annex 1, Part 9, or an equivalent standard.
- .2 Suspended textile materials such as curtains or drapes should satisfy the fire test procedures of IMO Resolution MSC.61(67), Annex 1, Part 7, or be of equivalent standard.
- .3 Where the resistance to combustion of any foam or soft furnishing material located inside the vessel cannot be established, then treatment with a fire retarding spray by a suitably qualified and experienced contractor could suffice, subject to the satisfaction of the authorized surveyor. Furnishings located outside the accommodation, (e.g. sun beds), do not need to be treated.

15.3.9 Open Flame Gas Appliances

- .1 An open flame gas appliance provided for cooking, heating or any other purpose must comply with the requirements of ISO 10239 or equivalent.
- .2 The installation of an open flame gas appliance must comply with the appropriate provisions of Annex 4.

15.3.10 Fire Detection and Fire Alarm System

- .1 A fire detection and fire alarm system must be fitted. It must be provided with a control panel located within the wheelhouse, and with audible alarms provided in locations where they are most likely to be heard. The system should be comprised of smoke, heat or other suitable detectors fitted in the machinery space and galley as a minimum.
- .2 In the exceptional case of a space or compartment having only one (1) means of escape (Section 15.3.4), the integrity of the escape route must be protected by the installation of smoke detectors that should give instantaneous early warning of danger by means of audible and visible alarms in the space or compartment, audible throughout the yacht.

15.3.11 Ventilation Trunking

Ventilation trunking emanating from either a machinery space or a galley should not, in general, pass through the accommodation spaces. Where this is unavoidable, the trunking should be constructed to the satisfaction of one (1) of the Recognised Classification Societies listed in Section 29.1. The trunking within the accommodation should be fitted with:

- .1 fire insulation to "A-60" standard to a point at least five metres from the machinery space or galley; and
- .2 automatic fire dampers located in the deck or bulkhead within the accommodation where the trunking passes from the machinery space or galley into the accommodation.

15.4 Yachts \geq 500 GT

Must comply with the requirements of SOLAS Ch II-2 Construction .

16.0 FIRE APPLIANCES

16.1 Yachts < 500 GT

16.1.1 General Requirements

Fire appliances of an approved type should be provided at least to the extent listed in Table 3 below and, in any case, to the satisfaction of the Administration and the specific requirements of Section 16.1.2 below.

Fire appliances provided in addition to those required by this section should be of an approved type.

The location, installation, testing and maintenance of all equipment should be to the satisfaction of the Appointed Representative.

Concealed fire appliances should be clearly marked; however the marking need not comply with IMO signs, but be suitable, taking into account décor.

16.1.2 Specific Requirements

16.1.2.1 Provision of water jet

At least one jet of water should be able to reach any part of the yacht normally accessible to passengers or crew while the yacht is being navigated and, any storeroom and any part of a storage compartment when empty.

16.1.2.2 Fire pumps

.1 The power driven fire pump should have a capacity of -

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

where: L is the load line length;

B is the greatest molded breadth; and

D is the molded depth measured to the bulkhead deck at amidships.

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

- .2 The second fire pump should have a capacity for:
- (a) a hand pump, sufficient to produce a throw of at least six (6) metres through a fire hose with a 10mm diameter nozzle and which can be directed on any part of the yacht; or
 - (b) a power driven pump, at least 80% of that required by 16.1.2.2.1 and be fitted with an input to the fire main; or
 - (c) a portable fire pump with a throw-overboard weighted sea suction is acceptable on existing yachts. The pump should be placed on deck and be capable of operating two (2) hoses. The hoses should be capable of reaching all points of the yacht. The junction should be long enough to allow for worst list conditions.

Table 3
Fire Appliances - Yachts < 500 GT (see 16.1.1)

1	PROVISION OF WATER JET - sufficient to reach any part of yacht	1
2	POWER DRIVEN FIRE PUMP - engine or independent drive	1
3	ADDITIONAL HAND OR INDEPENDENT POWER DRIVEN FIRE PUMP AND ITS SEA CONNECTION - not located in the same space as item 2 or a machinery space containing internal combustion type machinery	1
4	FIRE MAIN & HYDRANTS - to achieve item 1 with a single length of hose	Sufficient
5	HOSES - with jet/spray nozzles each fitted with a shut-off facility	Sufficient
6	FIRE EXTINGUISHERS - portable, for use in accommodation and service spaces	3
7	FIRE EXTINGUISHERS - for a machinery space containing internal combustion type machinery - the options are: (a) a fixed fire extinguishing system complying with SOLAS Regulation 11-2/Part A; and (b) (i) one (1) portable extinguisher for oil fires for each 75.6kW power; or (ii) two (2) portable extinguishers for oil fires together with either: - one (1) foam extinguisher of 45l capacity; or - one (1) CO2 extinguisher of 16kg capacity	7 (max) 2 + 1
8	FIREMANS OUTFIT - to include one (1) breathing apparatus with a spare cylinder (recommended)	1
9	FIRE BLANKET - in galley	1

16.1.2.3 Fire main and hydrants

- .1 A fire main, water service pipes and fire hydrants should be fitted.
- .2 The fire main and water service pipe connections to the hydrants should be sized for the maximum discharge rate of the pump(s) connected to the main.
- .3 The fire main, water service pipes and fire hydrants should be constructed such that they will:
 - (a) not be rendered ineffective by heat;
 - (b) not corrode; and

- (c) be protected against freezing.
- .4 When a fire main is supplied by two (2) pumps, one (1) in the machinery space and one (1) elsewhere, provision should be made for isolation of the fire main within the machinery space and for the second pump to supply the fire main and hydrants external to the machinery space.

The isolation valve(s) should be fitted outside the machinery space in a position easily accessible in the event of a fire.
- .5 The fire main should have no connections other than those necessary for fire fighting or washing down.
- .6 Fire hydrants should be located for easy attachment of fire hoses, protected from damage and distributed so that the fire hoses provided can reach any part of the yacht.
- .7 Fire hydrants should be fitted with valves that allow a fire hose to be isolated and removed when a fire pump is working.

16.1.2.4 Fire hoses

- .1 Fire hoses must not exceed 18 metres in length and, generally, the diameter of a lined hose for use with a powered pump should be $\geq 45\text{mm}$. Smaller diameter hoses may be accepted provided that two (2) such hoses of average length are capable of discharging the pump volumetric capacity in paragraph 16.1.2.2.1 above with adequate jets.
- .2 Fire hoses and associated tools and fittings should be kept in readily accessible and known locations close to the hydrants or connections on which they will be used. Hoses supplied from a powered pump should have jet/spray nozzles (incorporating a shut-off facility) of diameter 19mm, 16mm or 12mm depending on fire fighting purposes. (For accommodation and service spaces, the diameter of nozzles need not exceed 12mm.)
- .3 Hydrants or connections in interior locations on the yacht should have hoses connected at all times. For use within accommodation and service spaces proposals to provide smaller diameter of hoses and jet/spray nozzles will be considered.
- .4 The number of fire hoses and nozzles provided should correspond to the functional fire safety requirements.

16.1.2.5 Portable fire extinguishers for use in accommodation and service spaces

- .1 The number, location, fire extinguishing medium type and capacity should be selected according to the perceived fire risk but at least three (3) portable fire extinguishers should be provided. As far as practicable, the fire extinguishers provided should have a uniform method of operation.
- .2 Portable fire extinguishers of carbon dioxide type should not be located or provided for use in accommodation spaces.

- .3 Except for portable extinguishers provided in connection with a specific hazard within a space when it is manned (such as a galley), portable extinguishers generally should be located external to but adjacent to the entrance of the space(s) in which they will be used. Extinguishers should be stowed in readily accessible and marked locations.
- .4 Spare charges should be provided onboard for at least 50% of each type and capacity of portable fire extinguisher onboard. When an extinguisher is not of a type that is rechargeable when the yacht is at sea, an additional portable fire extinguisher of the same type (or its equivalent) should be provided.

16.1.2.6 Fire Extinguishing in Machinery Spaces

- .1 In a machinery space containing internal combustion type machinery fire appliances should be provided at least to the extent listed in item 7 of Table 3 above - Fire Appliances.
- .2 In a machinery space containing an oil fired boiler, oil fuel settling tank or oil fuel unit, a fixed fire extinguishing system complying with SOLAS Ch II-2/Part A should be installed.
- .3 Portable fire extinguishers must be installed and the number, location, fire extinguishing medium type and capacity should be selected according to the perceived fire risk in the space. Spare charges or spare extinguishers should be provided per paragraph 16.1.2.5.4 above. In any case, at least two (2) portable fire extinguishers for extinguishing oil fires should be fitted in an engine room.

16.1.2.7 Fireman's Outfits

- .1 Fireman's outfits must be stored in a conspicuous and well-marked space, ready to don.
- .2 Personal equipment shall consist of the following;
 - (a) protective clothing of a material able to protect the skin from the heat radiating from the fire, from burns and scalding by steam. The outer surface shall be water-resistant;
 - (b) boots of rubber or other electrically non-conducting material;
 - (c) rigid helmet providing effective protection against impact;
 - (d) electric safety lamp (hand lantern) of an approved type with a minimum burning period of 3hours;
 - (f) axe with a handle provided with high-voltage insulation;
 - (g) breathing apparatus - Reference IMO FSS Code, Chapter 3, 2.1.2
 - (h) lifeline – Reference IMO FSS Code, Chapter 3, 2.1.3

17.0 RADIO

17.1 General

All yachts must comply with the requirements of this Section.

17.1.1 Global Marine Distress and Safety System (GMDSS)

Each yacht shall carry sufficient radio equipment in order to perform the following distress and safety communications functions throughout its intended voyage:

Transmitting ship-to-shore distress alerts by at least two (2) separate and independent means, each using a different radio communication service;

Receiving shore-to-ship distress alerts;

- .1 Transmitting and receiving ship-to-shore distress alerts;
- .2 Transmitting and receiving search and rescue coordinating communications;
- .3 Transmitting and receiving on-scene communications;
- .4 Transmitting and receiving signals for locating by radar;
- .5 Transmitting and receiving maritime safety information; and
- .6 Transmitting and receiving bridge-to-bridge communications.

17.1.2 Automatic Identification System (AIS)

.1 AIS CLASS-A

All vessels of ≥ 300 GT shall be fitted with an approved automatic identification system in accordance with SOLAS regulation V/19.2.4. Please refer to RMI Marine Notice 2-011-17

.2 AIS CLASS-B

Yachts that have a permanent tow (such as a tender) and wish to have a dedicated Maritime Mobile Service Identity (MMSI) number programmed in the Class-B AIS of the tender, shall apply to the Administrator through the Radio Service Area to obtain a permanent MMSI number which will be categorized under a "Daughter Craft" MMSI number.

The “Daughter Craft” MMSI number will be declared on the radio license of the yacht as a permanent identification of the tow. Radio Service Area must be notified of any changes/alterations made to the “Daughter Craft” in terms of additional radio installation or if the yacht ceases to tow the tender.

17.1.3 Long-Range Identification and Tracking (LRIT)

Yachts of ≥ 300 GT shall be capable of complying with the requirements of LRIT in accordance with SOLAS regulation V/19-1. Please refer to RMI Marine Notice 2-011-25

17.2. Radio Station Equipment

17.2.1 Radio Installations

The table below provides the minimum radio installations to be carried by new yachts and on yachts subject to major conversion. This, fulfills the distress and safety communication functions for voyages in Sea Areas A1, A2, A3 and A4 as defined in SOLAS regulation IV/2.

A1	A2	A1+A2+A3	Or	A1+A2+A3+A4
NAVTEX1	NAVTEX1	NAVTEX1	NAVTEX1	NAVTEX1
VHF (DSC) Radiotel	VHF (DSC) Radiotelephone	VHF (DSC) Radiotelephone Duplication	VHF (DSC) Radiotelephone Duplication	VHF (DSC) Radiotelephone Duplication
---	MF (DSC) Radiotelephone ²	One MF/HF (DSC) Radiotelephone or NBDP	Two	MF/HF (DSC) Radiotelephone or NBDP
---	---	One INMARSAT- C Ship Earth Station	INMARSAT-C	One Or Iridium

Notes

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

Incorporating direct-printing telegraphy or an alternative means of receiving Maritime Safety Information (MSI) transmissions in the Sea Areas in which the yacht is operating.

The requirements for the carriage of two-way radiotelephone sets, EPIRBs and SARTs are provided in sections 18.0 and 20.0 of this Code. EPIRB's for yachts operating in Sea Area A4 are to be capable of operating through the polar orbiting satellite service in the 406 MHz band.

All yachts with INMARSAT equipment must register with a Radio Accounting Authority on the ITU list.

17.2.2 Operational Performance

All radio communications equipment shall be of an Approved Type.

17.2.3 Location, Protection and Markings

The radio station on board the yacht shall:

- .1 be so located to ensure the greatest possible degree of safety and operational availability;
- .2 be protected against harmful effects of water, extremes of temperature, and other adverse environmental conditions; and
- .3 be clearly marked with the call sign, the yacht station identity, and any other codes applicable to the use of the radio station installation.

17.2.4 Sources of Energy

There shall be available at all times while the yacht is at sea a supply of electrical energy sufficient to:

- .1 Operate the radio installations; and
- .2 To charge any batteries used as part of a reserve source; or
- .3 Sources of energy for the radio installations.

Vessels of < 300 GT shall have sufficient reserve power supply to operate the radio equipment for a minimum of three (3) hours in addition to the emergency supply.

Vessels of ≥ 300 GT but < 500 GT NOT meeting the emergency source of electrical energy requirements of SOLAS regulation II-1/43, shall have sufficient reserve power supply to operate the radio equipment for a minimum of six (6) hours in addition to the emergency supply.

All vessels of 300 GT and above meeting the emergency requirements of SOLAS regulation II-1/43 shall have a one (1) hour reserve power supply.

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

17.2.5 Watches

While at sea, a yacht shall maintain a continuous watch;

- .1 where practicable, on VHF Channel 16;
- .2 where practicable, on VHF Channel 13;
- .3 on VHF Digital Selective Calling (DSC) channel 70;
- .4 on the distress and safety DSC frequency 2187.5kHz;
- .5 for satellite shore-to-ship distress alerts if fitted with a radio facility for reception of maritime safety information by the INMARSAT enhanced group calling system; and
- .6 for broadcasts of maritime safety information on the appropriate frequency or frequencies which is applicable for the area in which the yacht is navigating.

17.2.6 Radio Personnel

A yacht shall carry at least one (1) person qualified for distress and safety radio communication purposes. This person shall hold a Certificate of Competence (CoC) issued or endorsed by the Administrator. Refer to the RMI publication M1-118 "Requirements for Seafarer Certification."

17.2.7 GMDSS Log Books

All yachts are required to keep records of communications relating to distress, urgency, and safety traffic. Records of important incidents connected with the radio service, regular positions of the yacht, and results of tests carried out on the radio equipment. Records must be stored onboard and be available for inspection as required.

18.0 NAVIGATION LIGHTS, SHAPES and SOUND SIGNALS

- .1 Every yacht must comply with the requirements of the International Regulations for Preventing Collisions At Sea, 1972, as amended (COLREGS '72).
- .2 It is strongly recommended that yacht designers and builders ensure that the yacht's navigation lights and associated fittings are correctly installed on new yachts and on yachts undergoing extensive alterations. It is also the responsibility of an owner or managing agent to ensure that a yacht being taken over, whether new or second-hand, is also in compliance with COLREGS '72.
- .3 The Administration may, if deemed necessary, require the submission of detailed plans showing the positioning and arrangements of navigation lights for examination prior to registration.

19.0 NAVIGATIONAL EQUIPMENT and WHEELHOUSE VISIBILITY

19.1 Navigational Equipment

A yacht should be fitted with an efficient magnetic compass complying with the following requirements, as appropriate:

- .1 On a steel yacht it should be possible to correct the compass for coefficients B, C and D.
- .2 The magnetic compass or a repeater should be so positioned as to be clearly readable by the helmsman at the main steering position. It should also be provided with an electric light, the electric power supply to be twin wire type.
- .3 Means should be provided for taking bearings as near as practicable over an arc of the horizon of 360°. This requirement may be met by the fitting of a pelorus or, on a yacht other than a steel yacht, a hand held compass.

A yacht should be fitted with an echo sounder.

A yacht should be provided with the following equipment:

- .1 an electronic navigational positioning system appropriate to the area of operation;
- .2 a speed and distance device or other means to indicate speed and distance through the water.
- .3 a gyro compass, satellite compass, fluxgate compass or spare magnetic compass bowl;
- .4 a rudder angle indicator; and
- .5 a 9 GHz radar.

For vessels of < 300GT the equipment specified in section 19 need not be of an approved type.

All SOLAS vessels that are not Short Range Yachts must be fitted with a bridge navigational watch alarm systems (BNWAS) in accordance with SOLAS Chapter V Regulation 19.

19.2 Wheelhouse Visibility

- .1 The normal conning position should permit a good all round view of the horizon. The sea surface should not be obscured for more than two (2) yacht lengths forward of the bow. Refer to SOLAS Ch. V, Regulation 22 shall be applied as far as is reasonable and practicable to do so

- .2 Windows to the navigating position should not be of either polarized or tinted glass. Portable tinted screens may be provided for selected windows.

20.0 MISCELLANEOUS EQUIPMENT

20.1 Nautical Publications

Every yacht should comply with SOLAS requirements for all vessels to carry, for the voyage intended or the service in which they are engaged, adequate and up to date charts, sailing directions, light lists, tide tables and other nautical publications.

An approved electronic chart display and information system (ECDIS) may be accepted as meeting the chart carriage requirements.

20.2 Signaling Lamp

Every yacht must carry a means to communicate by light during day and night using an independent energy source. This may be the search light required by 20.4

20.3 Instruments

- .1 Every yacht should carry a barometre.
- .2 Every sailing yacht should carry an anemometre and an inclinometre.
- .3 Every yacht constructed of non-reflective materials must carry a radar reflector, minimum diametre of 50 cm. This does not need to be permanently fitted. If not permanently fitted, must be easily deployable and be demonstrated to the attending surveyor.

20.4 Searchlight

Every yacht should carry an efficient fixed or portable searchlight suitable for man-overboard search and rescue operations.

20.5 IMO Number

Every vessel $\geq 300\text{GT}$ must be marked externally with the vessel IMO number visible from the air.

21.0 ANCHORS, CABLES and TOWING ARRANGEMENTS

21.1 Equipment

- .1 Yachts will be considered to have adequate equipment if fitted out in accordance with certification standards set by any of the Classification Societies listed in Section 29.1.
- .2 Yachts not built in accordance with paragraph 21.1.1 may be specially considered by the Administration provided full information is submitted for review and approval.
- .3 All vessels are to have at least 2 anchors one of which must be ready to use at all times. Any deployment system should be connected to an emergency power supply or be capable of being manually operated.
- .4 The sizing of anchors and cables for sailing yachts should take into account the additional windage effect of the masts and rigging.

21.2 Towing Arrangements

Accessible efficient strong securing points should be provided for the attachment of towlines for the yacht to tow and be towed.

All yachts $\geq 500\text{GT}$ shall be provided with a documented towing procedure as outlined in SOLAS Chapter II-I Regulation 3-4. Further guidance is provided in MSC.1/Circ.1255

22.0 ACCOMMODATION

22.1 General

An adequate standard of accommodation must be provided to ensure the comfort, recreation, health and safety of all persons on board.

Generally, accommodation standards for the crew should be equivalent to the standards set by the International Labor Organization conventions for crew accommodation in merchant ships. The following standards are described by general principles that need to be expanded to meet the requirements that relate to the use and areas of operation of a particular yacht.

For Commercial Yachts $\geq 500GT$, they must comply with the Maritime Labour Convention, 2006 as far as practicable given the design and trading patterns differ significantly from Cargo vessels.

22.2 Access/Escape Arrangements

See Sections 15.3.4

22.3 Lighting

An electric lighting system should be installed which is capable of supplying adequate light to all enclosed accommodation and working spaces. The system should be designed and installed in accordance with Section 9.2.

22.4 Food Preparation and Storage

- .1 The galley should be provided with a cooking stove fitted with fiddle bars and a sink, and have adequate working surface, made of a material that is impervious to dirt and moisture, for the preparation of food.
- .2 The galley floor should be provided with a non-slip surface and provide a good foothold.
- .3 When a cooking appliance is gimbaled, a crash bar or other means to prevent personal injury should protect it. Means should be provided to lock the gimbaling mechanism.
- .4 Means should be provided to allow the cook to be secured in position, with both hands free for working, when the yacht motions threaten safe working.
- .5 Secure and hygienic storage for food and garbage must be provided.
- .6 Galley must be adequately ventilated.

22.5 Messing Area/s

- .1 Mess rooms shall be of adequate size and comfort and properly furnished and equipped.
- .2 Mess rooms may be a shared facility, subject to administration approval.

22.6 Hand Holds and Grab Rails

There should be sufficient hand holds and grab rails within the accommodation and stairways to allow safe movement around the accommodation at all times.

22.7 Ventilation / Heating

- .1 Effective means of heating and ventilation should be provided to all enclosed spaces that are entered by personnel. Heating is not required for yachts exclusively operating in tropical climates.
- .2 Mechanical ventilation should be provided to all accommodation spaces on yachts that are intended to make long international voyages or operate in tropical waters.
- .3 As a minimum, mechanical ventilation should be capable of providing six (6) changes of air per hour, when all access and other openings (other than ventilation intakes) to the spaces are closed.

22.8 Water Services

- .1 An adequate supply of fresh filtered drinking water should be provided and piped to the galley.
- .2 In addition, an emergency reserve supply of drinking water should be carried, sufficient to provide at least two (2) litres per person.
- .3 If a yacht cannot produce its own water supply, sufficient potable water must be carried for the intended voyage.
- .4 Hot and cold running fresh water must be available in all wash places.

22.9 Sleeping Accommodation

A bed (bunk or cot) should be provided for every person on board. Where appropriate, means for preventing the occupants from falling out must be provided.

- .1 Sleeping accommodation shall be of adequate size and properly equipped so as to insure reasonable comfort.
- .2 There should be no direct access into sleeping rooms from spaces for machinery.

- .3 In seafarer's accommodation, whenever possible, the maximum number of persons per sleeping room should be two (2). Any increase in the maximum number of persons per sleeping room should be agreed with the Administration.
- .4 Sleeping accommodation should be situated or equipped to provide appropriate levels of privacy for men and women.
- .5 Berths for seafarers must have a minimum inside dimension of ≥ 190 cm by 70cm with no tapering or ≥ 198 cm and ≥ 80 cm in width over half the length of the berth. A taper is permitted from half the length of the berth towards the foot but under no circumstances < 50 cm.
- .6 Where considered appropriate, means for keeping occupants from falling out should be provided.
- .7 Sleeping rooms should preferably be situated above the load line mark and in no cases forward of the collision bulkhead.
- .8 When it is neither reasonable nor practicable to site crew sleeping accommodation amidships or aft and above the deepest waterline as required, measures taken to ensure an equivalent level of crew. Where 22.9.7 is not complied with, a bilge alarm must be provided for early warning of flooding so as to provide sufficient time to escape from the accommodation.

22.10 Sanitary Facilities

- .1 Adequate sanitary toilet facilities should be provided on board and separate from accommodation. The facilities should be at least one toilet, one wash hand basin and one shower or tub for every four (4) persons.. Each facility must be provided with a door that is lockable.
- .2 In yachts where a sanitary system, including a holding tank, is provided, care should be taken to ensure that there is no possibility of fumes from the tank finding their way back to a toilet, should the water seal at the toilet be broken.

22.11 Recreational Facilities

- .1 Appropriate recreational facilities and amenities should be provided for the seafarers.
- .2 All vessels should have space on the open deck to have access for seafarers when off duty. These areas shall not cause a safety risk to the seafarers. Such spaces may be shared with the passengers on board.

22.12 Stowage Facilities for Personal Effects

Adequate stowage facilities for clothing and personal effects should be provided for every person on board and this must a minimum of 125 L per seafarer.

22.13 Securing of Heavy Equipment

- .1 All heavy items of equipment such as ballast, batteries, cooking stove, etc. should be securely fastened in place.
- .2 All stowage lockers containing heavy items should have lids or doors that are capable of being securely fastened.

22.14 Protection from Mosquitos

Vessels regularly trading to and within mosquito infested ports should be fitted with appropriate devices to protect seafarers from mosquitos.

22.15 Masters Inspections

There should be weekly documented inspections carried out under the authority of the Master, with respect to:

- .1 Supplies of food and drinking water;
- .2 All spaces and equipment used for the storage and handling of food and drinking water;
- .3 Galley and other equipment used for the preparation and service of meals; and
- .4 That seafarer accommodation is clean, decently habitable and maintained in a good state of repair.

The results of each inspection should be recorded in the official log book and made available for review.

22.16 Headroom

There should be adequate headroom in all seafarer accommodation. The minimum permitted headroom in all seafarer accommodation where full and free movement is necessary should not be < 203 cm. Some limited reduction in headroom in any spaces, or part of any space, in such accommodation may be permitted, provided this is reasonable and does not result in discomfort to the seafarer and is agreed with the Administration.

23.0 PROTECTION of PERSONNEL

23.1 Deckhouses and Superstructures

The structural strength of any deckhouse or superstructure should comply with the requirements of one of the Classification Societies listed in Section 29.1, as appropriate to the yacht and its areas of operation.

23.2 Bulwarks and Guard Rails

- .1 Wherever reasonable and practicable, yachts should comply with ILLC requirements and the interpretation used by any of the Classification Societies listed in Section 29.1.
- .2 When it can be justified that such standards cannot be complied with, compliance with the following guidelines will be considered by the Administration:
 - (a) Where the function of the yacht is not impeded and there are frequently people on the deck, bulwarks or three (3) courses of rail or taut wires should be fitted around the deck at a height of $\geq 1000\text{mm}$ above the deck, or as close to that height as is practicable. They should be supported at intervals not exceeding 2.2 metres. Intermediate courses of rails or wires should be evenly spaced.
 - (b) Where the function of the yacht would be impeded by the provision of bulwarks and/or guard rails complying with Section 23.2.1, alternative proposals detailed to provide equivalent safety for persons on deck should be submitted to the Administration for review and approval.

23.3 Safe Work Aloft and on the Bowsprit of Sailing Yachts

- .1 When access to the rig is an operational necessity, provision should be made to enable people to work safely aloft and out on the bowsprit, to the satisfaction of the Appointed Representative.
- .2 The arrangements provided should be based on established safe working practices for the type of yacht. The arrangements may include but not be limited to:
 - (a) Safety nets below the bowsprit.
 - (b) Safety grab-rails in wood (or jackstays in metal) fixed along the bowsprit to act as handholds and safety points for safety harnesses.
 - (c) Mandatory use of safety harnesses aloft and for work on the bowsprit.
 - (c) Sufficient footropes and horses in wire (or rope) permanently rigged to enable seamen to stand on them while working out on the yards or on the bowsprit.

- (d) Safety jackstays (in metal) fixed along the top of the yards, to provide handholds and act as strong points for safety harnesses.
- (f) Means of safely climbing aloft, such as:
 - (1) fixed metal steps or ladders attached to the mast; or
 - (2) traditional ratlines (rope) or, rattling bars (wood/steel), fixed across the shrouds to form a permanent ladder.

23.4 Recovery of Persons from the Sea

- .1 Means should be provided for the recovery of a person from the sea to the yacht. The means should allow that the person is unconscious or unable to assist in the rescue. This may be satisfied by an inflatable boat or rescue boat provided with a suitable davit should it not be possible for the yacht itself to be used to recover persons from the sea.
- .2 The means of recovery by whatever intended means should be demonstrated to the satisfaction of the Administration.
- .3 If an overside boarding ladder or scrambling net is provided to assist in the recovery of an unconscious person from the water, the ladder or net should extend from the weather deck to at least 600mm below the lowest operational waterline.

23.5 Noise

- .1 Attention is drawn to the IMO Code on Noise Levels on Board Ships - Resolution A.468(XII) (the Noise Code).
- .2 New yachts covered by this Code should meet the recommendations of the Noise Code so far as is reasonable and practicable.
- .3 Existing yachts should be considered with particular regard to the recommendations of the Noise Code for protection of the crew from noise levels that may give rise to noise-induced hearing loss.
- .4 The Administration recognises that the scope for strict application of recommended noise levels on small yachts can be limited and will consider other means of protecting the seafarer from the risk of noise-induced hearing loss under conditions where, at the present time, it is not technically feasible to limit the noise to a level which is not potentially harmful.
- .5 For safe navigation, so that sound signals and VHF communications can be heard, it is recommended that a noise level of 65dB(A) at the navigating position should not be exceeded.

- .6 For machinery spaces, workshops and stores, which are manned either continuously or for lengthy periods, the recommended limits are 90dB(A) (see paragraph 23.5.7 below) for machinery spaces and 85dB(A) for workshops and stores. For any space which is required to be manned and in which the noise level exceeds 90dB(A), consideration should be given to providing a designated refuge area from noise.
- (a) For machinery spaces, which are not intended to be continuously manned or are attended for short periods only, the recommended limit is 110dB(A) (see paragraph 23.5.7 below).
 - (b) The limits have been set from hearing damage risk considerations and the use of suitable ear protectors.
- .7 To indicate the need to wear ear protectors in spaces in which the noise level exceeds 85dB(A), each entrance to the space should be provided with a warning notice comprising a symbol and supplementary sign stating: "High Noise Levels. Use Ear Protection." Efficient ear protectors should be provided for use in such spaces.

23.6 Training Manual

The yacht's training manual should include 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.

The training manual should 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 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;
- .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; and
- .19 helicopter landing and pick-up area operations (if applicable).

In addition to the requirements of paragraph 23.6.2 above, the skipper should 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

23.7 Safety Briefing

Before the commencement of any voyage, the skipper should 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. A "Safety Card" is to be placed in each passenger cabin, showing the exit route and what to do in the event of an incident.

23.8 Instructions for On-Board Maintenance

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

- .1 a checklist for use when carrying out required inspections;
- .2 maintenance and repair instructions;
- .3 a schedule of planned maintenance schedule;
- .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 inspection and maintenance.

23.9 Safety Management System

23.9.1 Yachts < 500GT

A safety management system for yachts < 500GT must be established and include:

- .1 A documented system to ensure that all safety and critical equipment are regularly checked and maintained and that this is recorded.
- .2 Identified and prepared procedures for known risks, such as fires, man overboard, grounding and heavy weather.
- .3 A system of basic on-board training for the crew and the instruction of guests regarding actions to be taken in the event of an emergency.

Model manuals may be sought from Maritime Cook Islands, and adapted to the vessels requirements; once a manual is established and has been implemented on board, a Maritime Cook Islands surveyor will inspect the vessels implementation and compliance with the established manual.

23.9.2 Yachts ≥ 500GT

All yachts of ≥ 500GT must comply with the ISM Code and SOLAS IX “Management for the safe operation of ships”

23.10 International Ship and Port Facilities Security (ISPS)

All Commercial Yachts of ≥ 500GT are required to comply with the requirements of SOLAS Chapter XI-2 and the ISPS Code and issued with an International Ship Security Certificate (ISSC)

24.0 MEDICAL STORES

- .1 A yacht should carry medical stores as required by the Cook Islands Maritime Rule No 50.
- .2 Medical training requirements for members of the complement of the yacht are given in Section 26 and Cook Islands Maritime Rule No 31.

25.0 SHIP-SHORE TRANSFER of PERSONNEL

25.1 Tenders

- .1 A rigid or inflatable tender carried on a yacht in addition to any lifeboat, rescue boat or inflatable boat which may be carried in compliance with life-saving appliance requirements, must be fit for its intended use.
- .2 Safety equipment should be provided in each tender as appropriate to its intended range and areas of operation.
- .3 Tenders must be clearly marked with the number of persons (mass 75 kg) that they can safely carry, and the name of the parent yacht.
- .4 Inflatable tenders should be of a type which has a minimum of three (3) buoyancy compartments built into them, and must be maintained in a safe condition by the operator.
- .5 In the case of petrol engine tenders; see Section 15.1 for the safety requirements for the carriage of petrol.

25.2 Helicopters

When provision is made for helicopter operations to and from the yacht, the arrangements must comply with the requirements of SOLAS Ch II-2/18, as may be amended from time to time, which apply to helicopter facilities, IMO Resolution A.855(20). The yacht to shore and yacht to helicopter communications procedures, ship operating procedures, and guidance on helicopter emergencies are outlined in the International Chamber of Shipping Guide to Helicopter/ Ship Operations and shall be used as part of the helicopter operations manual. The latest edition of this guide must be readily available onboard the yacht.

25.3 Pilots for Yachts

Boarding arrangements provided for pilots must have due regard for SOLAS Chapter V – Regulation 23 and the international standards of safe practice for the boarding and landing of pilots by pilot boat as recommended in IMO Resolution A.889(21).

25.4 Gangways, Accommodation Ladders and Passerelles

- .1 Safe means of access is to be provided at all times and available for deployment. If the safe means of access is not deployed there must be a means for communication for those onboard and those ashore.

- .2 Gangways, accommodation ladders and Passerelle when provided, should be manufactured to a recognised national or international standard and be clearly marked with the manufacturer's name, the model number and the maximum design angle of use and the maximum safe loading by number of persons and by total weight.
- .3 A gangway to international standards should be carried on a yacht of ≥ 24 metres in load line length.
- .4 Accommodation ladders to international standards should be provided on a yacht of ≥ 120 metres in load line length.
- .5 Access equipment and immediate approaches to it should be adequately illuminated.

Submersibles

25.5.1 General Requirements

All submersibles to be installed on a yacht shall be designed and built in accordance with the Rules of an RO and maintained in Class.

When installing a submersible, special consideration shall be given to the stability and structure of the yacht.

25.5.2 Lifting Appliances and Attachments

- .1 The design and construction of the lifting appliance(s) and their attachment to the structure of the yacht and the associated stowage of the submersible shall be in accordance with the Rules of an RO or certified as suitable for their intended use.
- .2 Lifting appliances and associated equipment shall be maintained and tested in accordance with the LSA Code Chapter VI/6.1.2.

25.5.3 Operation

- .1 The safe operation of the submersible is the responsibility of the Master.
- .2 The Master shall ensure that the operator of the submersible has had the proper training and is certified to operate the submersible.
- .3 An operation manual shall be available onboard the yacht. The manual shall contain, as a minimum, the lowering and recovery procedures, fire-fighting and safety procedures and drills.

26.0 COASTAL STATE REGULATIONS

Special local requirements may exist in national sea areas, ports and harbors. The attention of owners and managing agents is drawn to the need to comply with local requirements as appropriate.

27.0 MANNING AND CERTIFICATION

27.1 Owners Responsibility

It is the responsibility of the owners or managing agents of seagoing commercial yachts of more than 24 metres in load line length to ensure that they are safely manned. The master and, where necessary, other members of the crew of a yacht should have, in addition to the qualifications required in Annex 5, recent and relevant experience with the type and size of yacht and of the type of operation in which she is engaged. The Administration recommends that operators of private yachts be guided by these requirements as well.

27.2 Requirements

- .1 Minimum safe manning levels will be established by the Administration for every commercial yacht. The Manning levels will be established to ensure that the hours of rest as set out in MLC and STCW can be met, given the nature of the intended operation.
- .2 Levels are determined by yacht size, trading area and propulsion power.
- .3 All crew on a commercial yacht must have a crew employment agreement that meets the requirements of MLC 2006.
- .4 All seagoing commercial yachts of more than 24 metres load line length but < 3000 GT should carry qualified Deck and Engineer Officers as required in Annex 5.
- .5 Officers who have qualifications issued by administrations and/or yachting associations that are recognised by the Administration and are serving on vessels of 500 GT or more will have their qualifications endorsed. The endorsement will be for a period not exceeding the validity of the period of the original certificate.
- .6 The Minimum Safe Manning Certificate should be kept on board the yacht, (to which this section applies), at all times.

27.3 Radio Qualifications

Every yacht should carry, as a minimum, one person who holds an appropriate radio operator's certificate that is suitable for the radio installation and equipment on board, and reflects the operating area of the yacht.

27.4 Medical Fitness Certificates

- .1 All ratings and officers are required to provide evidence of medical fitness certified by a registered medical practitioner, following the Maritime Labour Convention 2006 as amended.

27.5 Basic Training Certification

- .1 All members of a commercial yacht's crew must hold a current Basic Training Certificate, to the satisfaction of the Administration.
- .2 Basic Training Certificates must show evidence of having received appropriate instruction in
 - (a) Personal survival techniques,
 - (b) Fire prevention and firefighting,
 - (c) Elementary first aid, and
 - (d) Personal safety and social responsibilities.

27.6 First Aid Certification

- .1 All officers on commercial yachts must hold a current First Aid Certificate, which is acceptable to the Administration.
- .2 At least one officer on a commercial yacht must hold a Medical Care on Board Certificate, which is acceptable to the Administration.

27.7 Fire Fighting Course

All officers should hold a current Advanced Fire Fighting Course Certificate, acceptable to the Administration.

27.8 Revalidation of Certificates and Licenses

Where certificates are of Cook Islands Origin;

- .1 All Yacht Master Certificates, Officer Certificates of Competency and Special Qualifications Certificates should be revalidated every five (5) years. To revalidate, a submitted applicant should prove at least one (1) years' service on seagoing yachts of more than 24 metres Load Line length during the previous five (5) years and be in possession of a valid Medical Fitness Certificate.
- .2 Applicants for revalidation who are not able to prove the requisite sea service but are able to demonstrate that during at least half of the five (5) year period they have been employed on duties closely associated with the management and operation of one (1) or more of the appropriate types of yachts, may have their Certificates considered for revalidation.

28.0 PASSENGERS

28.1 Limitations

- .1 Yachts of any gross tonnage carrying more than 12 passengers on any voyage will be considered passenger vessels that must be classed as such and must meet SOLAS passenger ship requirements.
- .2 Yachts carrying guests refer to section 1.2

28.2 Definitions

- .1 A passenger is any person carried in a yacht except:
 - (a) a person employed or engaged in any capacity on board the yacht on the business of the yacht;
 - (b) a person on board the yacht 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
 - (c) a child under one (1) year of age; and
- .2 A person employed or engaged in any capacity on board the yacht on the business of the yacht may include:
 - (a) bona-fide members of the crew over the minimum age 16 years who are properly employed on the operation of the yacht;
 - (b) a person or persons employed by the owner in connection with business interests and providing a service available to all passengers; and
 - (c) a person or persons employed by the owner in relation to social activities on board and providing a service available to all passengers.

The above persons should be included in the crew agreement and be given appropriate safety training required for the yacht.

28.3 Supernumeraries

Supernumeraries and accompanying persons are to be treated as passengers unless such supernumeraries are trained in basic sea survival etc., and are included in the crew agreement required for the yacht.

29.0 RECOGNISED ORGANIZATIONS

29.1 Recognised Classification Societies

- .1 The organizations recognised by the Administration for the survey and certification can be found at [Class Societies](#)
- .2 Recognised Classification Societies are aware of the extent to which responsibility has been delegated to issue Certificates. International Conventions give specific discretion to an Administration to either make exemptions or accept equivalent equipment or arrangements. The formal agreement between the Administration and a Recognised Organisation governs the relationship between the two (2) parties.

29.2 Recognised Organisation Appointed Surveyors

- .1 An exclusive surveyor from a Recognised Organisation, appointed by the RO, to make the visit necessary for a survey shall be considered acting on behalf of the Administration.
- .2 When a Recognised Organisation surveyor is so appointed, actions taken will be under direct instruction of the Recognised Organisation. The Recognised Organisation will provide the appointed surveyor with detailed guidance on the scope of survey and report required.

30.0 Accident Investigations

- .1 The Administration will, under SOLAS Regulation I/21 and MARPOL 73/78 articles 8 and 12, investigate accidents or incidents in accordance with the Casualty Investigation Code.
- .2 All casualties and near misses must be reported to the Administration. It is an offense under Section 14 of the Cook Islands Maritime Transport Act for the yacht's master, or owner not to inform the Office of the Maritime Cook Islands of a reportable accident shortly after it occurs and to provide details so that an assessment of its seriousness can be made quickly.

ANNEX 1

LIST OF REFERENCE DOCUMENTS

Cook Islands Ship Registration Act, 2007
Cook Islands Maritime Transport Act, 2008
The Cook Islands Maritime Rules, as amended
Cook Islands Marine Notices
International Convention on Load Lines 1966, ILLC 1966
International convention for the Safety of Life at Seas, 1974, SOLAS 1974
International Convention for the Prevention of Pollution from Ships, 1973, MARPOL 73/78
International Convention on Tonnage Measurement of Ships, 1969, ITC 1969
International Regulations for Preventing Collisions at Sea 1972, as amended, COLREGS 72
International Labor Organization Conventions
Maritime Labour Convention 2006
Casualty Investigation Code
Bunkers Convention 2001

IMO Resolution A.274(III), Retro Reflective Material
IMO Resolution A.658(16), Retro Reflective Material
IMO Resolution A.661(16), EPIRB Performance Standards
IMO Resolution A.763(18), EPIRB Performance Standards
IMO Resolution A.762(18), Two-way VHF Radiotelephone Set
IMO Resolution A.739(18), Guidelines for the Authorization of Organizations Acting on Behalf of the Ad
IMO Resolution A.749(18), Code on Intact Stability for all types of Ships Covered by IMO Instruments
IMO Resolution A.760(18), Symbols Related to Life-Saving Appliances and Arrangements
IMO Resolution A.654(16), Graphic Symbols for Fire Control Plans
IMO Resolution MSC.61(67), FTP Code, Annex 1, Part 8, Test for Upholstered Furniture
IMO Resolution MSC.61(67), FTP Code, Annex 1, Part 9, Test for Bedding Components
IMO Resolution MSC.61(67), FTP Code, Annex 1, Part 7, Test for Vertically Supported Textiles and Films
IMO Resolution MSC.44(65), Standards for Fixed Sprinkler Systems for High-Speed Craft
IMO Resolution A.468(XII), Code of Practice for Noise Levels in Ships (the Noise Code)
IMO Resolution A.855(20), Standards for On-board Helicopter Facilities
IMO Resolution A.889(21), Pilot Transfer Arrangement
IMO MSC-MEPC.3/Circ.1

ISO 6345:1990, Windows and Side Scuttles
ISO 10239, Appliances Burning Gaseous Fuels

International Chamber of Shipping publication, "Guide to Helicopter/Ship Operations

ANNEX 2

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

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 via 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 the reduction.
5. 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 and combined 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;
 5. operations wholly within sight of the local authority and means of emergency rescue;
 5. seasonal limitations, such as, between 1 June and 31 October or some lesser period;
 6. yachts operating in close proximity to one another and equipped to provide efficient safety back-up to each other in an emergency;
 7. provision or wearing of additional (special) individual personal survival equipment or clothing which will protect lives in an emergency;
 8. enhanced communications between the yacht(s) and constantly attended shore base with readily available emergency rescue craft at the base;
 9. the nature of the sport or pleasure activity involving very low risk of participants accidentally entering the water or causing the yacht to capsize;
 10. very restricted operations to sea from a safe beach;
 11. inherent safety of the yacht by design, test and experience;

12. a high ratio of professional skipper and crew numbers to the number of other persons on board;
13. the number of safety craft provided to protect the yachts operating commercially for sport or pleasure;
14. enhanced provisions for distress alert and rescue; and
15. means provided for “dry” rescue from a yacht in emergency situations.

ANNEX 3 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.
- 2.0 Stowage of Gas Containers
 - .1 Gas containers should be stowed on the open deck 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 Aluminum 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.

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 (more dense than air) may seep.
- .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 in the yacht.

- .2 The information given should include the following:
- (a) The need to be ever alert for gas leakage; and
 - (c) 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 4
MINIMUM SAFE MANNING LEVELS FOR COMMERCIAL YACHTS ≥ 24M

1.0 General Notes

The following notes should be read in conjunction with the following minimum safe manning scales.

Dual Certification

Where appropriate dual deck and assistant engineer roles may be considered provided that the officer is suitably qualified in both disciplines and that the person taking the dual role is a person other than the master. In such cases additional rating(s) may require to be carried. Dual purpose (deck/engineer) will be considered provided that a yacht has been assigned a classification society UMS notation for unmanned machinery space operation or fulfils the following criteria:-

It has full bridge control of main engine maneuvering

It is fitted with high level bilge alarms in the machinery space; and
The engine room alarm system, including the fire alarm if fitted, is relayed to the accommodation and/or the bridge

Total propulsion power of ≥ 1500kW but < 3000kW

≥ 1500 kW and < 3000kW propulsion power: certificate holder is required to have attended an approved engine manufacturer's course appropriate to the engine type and power range.

Total propulsion power of ≥ 3000kW and < 6000.

≥ 3000kW and < 6000 kW propulsion power: certificate holder is required to have attended an approved engine manufacturer's course appropriate to the engine type and power range.

United Kingdom Merchant Navy Second Engineer III/2 certificate holders

Holders of United Kingdom Merchant Navy Second Engineer III/2 certificates of competency are required to have these certificates endorsed with the additional Chief Engineer III/2 (Yacht 1) (≤200 3000GT; ≤200 9000 kW) capacity and limitation ("Yacht Endorsement").

Gas turbine powered yachts ≥ 24m

On ALL yachts with gas turbine propulsion, or gas turbine propulsion in addition to diesel engine propulsion, the Chief Engineer is required to have attended an approved gas turbine manufacturer's course.

The manning scale for yachts with gas turbine propulsion, or gas turbine propulsion in addition to diesel engine propulsion, is identical to the following tables for the manning scale on motor yachts.

The Master (Code Vessels < 200 GT)

The Master (Code vessels < 200 GT limited to 150 miles from a safe haven) certificate may be used instead of the Yachtmaster Offshore certificate and the Master (Code Vessels < 200 GT unlimited area) instead of the Yachtmaster Ocean certificate.

Grade of certificates and their explanation.

CERTIFICATE EXPLANATION OF GRADE

(Full 1978 STCW, as amended, Certificates)

- RII/1 Reg. II/1. Officer in charge of a navigational watch of vessels ≥500GT
- RII/2 Reg. II/2. Master and Chief Mate of vessels ≥500GT and <3000GT
- RII/3 Reg. II/3 Master and Officers of vessels <500GT
- RII/4 Reg. II/4. Ratings forming part of a navigational watch
- RIII/1 Reg. III/1 Officer in charge of an engineering watch of vessels ≥750kW
- RIII/2 Reg. III/2. Chief Engineer and Second Engineer of vessels ≥3000kW
- RIII/3 Reg. III/3. Chief Engineer and Second Engineer of vessels <3000kW
- RIII/4 Reg. III/4 Ratings forming part of an engineering watch

(Yacht certificate system introduced by the MCA)

- RII/2(Y) Officer of the Watch (Yacht) of vessels <3000GT (MSN 1802 (M))
- RII/2(Y) Chief Mate (Yacht) of vessels <3000GT (MSN 1802 (M))
- RII/2(Y) Master (Yacht) of vessels <500GT (MSN 1802 (M))
- RII/2(Y) Master (Yacht) of vessels <3000GT (MSN 1802 (M))
- RII/2(Y) Master Code vessels <200GT, 150 NM from a safe haven (MSN 1802 (M))
- RII/2(Y) Master Code vessels <200GT, unlimited (MSN 1802 (M))
- RIII/2(Y4) Chief Engineer (Yacht 4) (MGN 156 (M))
- RIII/2(Y3) Chief Engineer (Yacht 3) (Chief Engineer “Service Endorsement”) (MGN 156 (M))
- RIII/2(Y2) Chief Engineer (Yacht 2) (MGN 156 (M))
- RIII/2(Y1) Chief Engineer (Yacht 1) (“Large Yacht Endorsement”) (MGN 156 (M))
- Yacht Rating Navigational or Engineering Watch Rating (MGN 270 (M))

2.0 MINIMUM SAFE MANNING SCALE FOR MOTOR YACHTS

2.1 <200GT and 1500kW to <3000kW

Miles from a Safe Haven	Personnel	No.	Minimum Qualifications
Up to 60	Master	1	Yachtmaster Offshore
	Chief Engineer	1	AEC ^{a) b)}
	Yacht Rating	1	Yacht Rating Certificate
	Master	1	Yachtmaster Offshore

Up to 150	Chief Mate	1	Coastal Skipper
	Chief Engineer	1	MEOL (MN) a)b) or MEOL (Y) a)b)
	Yacht Rating	1	Yacht Rating Certificate
Unlimited	Master	1	Yachtmaster Ocean
	Chief Mate	1	Yachtmaster Offshore
	Chief Engineer	1	R.III/1 (OOEW MN) or R. III/3(Y4) ^{b)}
	Assistant Engineer	1	MEOL (MN) a)b) or MEOL (Y) a)b)
	Yacht Rating	2	Yacht Rating Certificate

2.2 ≥200GT <500GT and <3000kW

Miles from a Safehaven	Personnel	No.	Minimum Qualifications
Up to 60	Master	1	R.II/2 or R.II/2(Y)
	Chief Mate	1	Coastal Skipper
	Chief Engineer	1	R. III/1 or R. III/3(Y4) ^{b)}
	Assistant Eng. Off.	1	AEC a)b)
	Yacht Rating	2	Yacht Rating Certificate
Up to 150	Master	1	R.II/2 or R. II/2(Y)
	Chief Mate	1	Yachtmaster Offshore
	Chief Engineer	1	2/E (MN) III/3 or R. III/3(Y3)
	Assistant Eng. Off.	1	AEC a)b)
	Yacht Rating	2	Yacht Rating Certificate
Unlimited	Master	1	R. II/2 or R. II/2(Y)
	Chief Mate	1	R. II/1 or OOW(Y)
	Chief Engineer	1	C/E (MN) R. III/3 or R. III/3(Y3) ^{b)}

	Second Eng.	1	R.III or R.III/3(Y4) ^{b)}
	Yacht Rating	2	Yacht Rating Certificate

2.3 ≥200GT <500GT and <6000kW

Miles from a Safehaven	Personnel	No.	Minimum Qualifications
Up to 60	Master	1	R.II/2 or R.II/2(Y)
	Chief Mate	1	Coastal Skipper
	Chief Engineer	1	C/E (MN) R. III/3 or R. III/2(Y3) ^{c)}
	Assistant Eng. Off.	1	MEOL (MN) ^{c)} or MEOL (Y) ^{c)}
	Yacht Rating	2	Yacht Rating Certificate
Up to 150	Master	1	R.II/2 or R. II/2(Y)
	Chief Mate	1	Yachtmaster Offshore
	Chief Engineer	1	C/E (MN) R. III/3 or R. III/2(Y3) ^{c)}
	Second Engineer	1	R.III/1 or R.III/3(Y4) ^{c)}
	Yacht Rating	2	Yacht Rating Certificate
Unlimited	Master	1	R. II/2 or R. II/2(Y)
	Chief Mate	1	R. II/1 or OOW(Y)
	OOW (Nav)	1	Yachtmaster Offshore
	Chief Engineer	1	C/E (MN) R. III/3 or R.III/3(Y2) ^{c)}
	Second Engineer	1	R.III/1 or R.III/3(Y4) ^{c)}
	Yacht Rating	2	Yacht Rating Certificate

2.4 ≥500GT <3000GT and <3000kW

Miles from a Safehaven	Personnel	No.	Minimum Qualifications
------------------------	-----------	-----	------------------------

Up to 60	Master	1	R.II/2 or R.II/2(Y)
	Chief Mate	1	R.II/1 or OOW(Y)
	Chief Engineer	1	C/E (MN) R. III/3 or R. III/2(Y3)
	Assistant Eng. Off.	1	MEOL ^{a)b)}
	Yacht Rating	2	Yacht Rating Certificate
Up to 150	Master	1	R.II/2 or R. II/2(Y)
	Chief Mate	1	R.II/2 or R.Chief Mate (Y)
	Chief Engineer	1	C/E (MN) R. III/3 or R. III/2(Y2)
	Second Engineer	1	R.III/1 or R.III/3(Y3)
	Yacht Rating	2	Yacht Rating Certificate
Unlimited	Master	1	R. II/2 or R. II/2(Y)
	Chief Mate	1	R. II/2 or Chief Mate (Y)
	OOW (Nav)	1	R.II/1 or OOW(Y)
	Chief Engineer	1	C/E (MN) R. III/3 or R.III/2(Y2)
	Second Engineer	1	R.III/1 or R.III/3(Y3)
	Yacht Rating	2	Yacht Rating Certificate

2.5 ≥500GT <3000GT and <6000kW

Miles from a Safehaven	Personnel	No.	Minimum Qualifications
Up to 60	Master	1	R.II/2 or R.II/2(Y)
	Chief Mate	1	R.II/1 or OOW(Y)
	Chief Engineer	1	C/E (MN) R. III/3 or R. III/2(Y2) ^{c)}
	Second Engineer	1	R.III/1 or R.III/2(Y3) ^{c)}
	Yacht Rating	2	Yacht Rating Certificate

Up to 150	Master	1	R.II/2 or R. II/2(Y)
	Chief Mate	1	R.II/2 or R.Chief Mate (Y)
	Chief Engineer	1	C/E (MN) R. III/3 or R. III/2(Y2) ^{c)}
	Second Engineer	1	R.III/1 or R.III/3(Y3) ^{c)}
	Yacht Rating	2	Yacht Rating Certificate
Unlimited	Master	1	R. II/2 or R. II/2(Y)
	Chief Mate	1	R. II/2 or Chief Mate (Y)
	OOW (Nav)	1	R.II/1 or OOW(Y)
	Chief Engineer	1	C/E (MN) R. III/3 or R.III/2(Y1)
	Second Engineer	1	R.III/1 or R.III/3(Y3) ^{c)}
	Yacht Rating	2	Yacht Rating Certificate

2.6 ≥500GT <3000GT and <9000kW

Miles from a Safehaven	Personnel	No.	Minimum Qualifications
Up to 60	Master	1	R.II/2 or R.II/2(Y)
	Chief Mate	1	R.II/1 or OOW(Y)
	Chief Engineer	1	C/E (MN) R. III/2 ^{d)} or R. III/2(Y1)
	Second Engineer	1	2/E (MN) R. III/2 ^{d)} or R. III/2(Y1)
	Yacht Rating	2	Yacht Rating Certificate
Up to 150	Master	1	R.II/2 or R. II/2(Y)
	Chief Mate	1	R.II/2 or R.Chief Mate (Y)
	Chief Engineer	1	2/E (MN) R. III/2 ^{d)} or R. III/2(Y1)
	Second Engineer	1	2/E (MN) R. III/2d) or R. III/2(Y2) c)
	Yacht Rating	2	Yacht Rating Certificate

Unlimited	Master	1	R. II/2 or R. II/2(Y)
	Chief Mate	1	R. II/2 or Chief Mate (Y)
	OOW (Nav)	1	R.II/1 or OOW(Y)
	Chief Engineer	1	2/E (MN) R.III ^d or R. III/2(Y1)
	Second Engineer	1	2/E (MN) R.III or R. III/2(Y1)
	Yacht Rating	2	Yacht Rating Certificate

3.0 MINIMUM SAFE MANNING SCALE FOR SAILING YACHTS

3.1 <200GT and <750kW

Miles from a Safehaven	Personnel	No.	Minimum Qualifications
Up to 60	Master	1	Yachtmaster Offshore
	Chief Mate	1	Coastal Skipper
	Chief Engineer	1	AEC ^{a)}
	Yacht Rating	2	Yacht Rating Certificate
Up to 150	Master	1	Yachtmaster Offshore
	Chief Mate	1	Coastal Skipper
	Chief Engineer	1	MEOL(Y)
	Yacht Rating	1	Yacht Rating Certificate
Unlimited	Master	1	Yachtmaster Ocean
	Chief Mate	1	Yachtmaster Offshore
	Chief Engineer	1	MEOL(Y)
	Second Engineer	1	AEC ^{a)}
	Yacht Rating	1	Yacht Rating Certificate

3.2 ≥200GT <500GT and <1500kW

Miles from a Safehaven	Personnel	No.	Minimum Qualifications
Up to 60	Master	1	R.II/2 or R.II/2(Y)
	Chief Mate	1	Coastal Skipper
	Chief Engineer	1	R.III/1 or R.III/3(Y4)
	Assistant Eng. Off.	1	AEC ^{a)}
	Yacht Rating	2	Yacht Rating Certificate
Ass Up to 150	Master	1	R.II/2 or R.II/2(Y)
	Chief Mate	1	Yachtmaster Offshore
	Chief Engineer	1	2/E (MN) R.III/3 or R.III/2(Y3)
	Assistant Eng. Off.		AEC ^{a)}
	Yacht Rating	2	Yacht Rating Certificate
Unlimited	Master	1	R.II/2 or R.II/2(Y)
	Chief Mate	1	R.II/1 or OOW(Y)
	OOW (Nav)	1	Yachtmaster Offshore
	Chief Engineer	1	2/E (MN) R.III/3 or R.III/2(Y3)
	Second Engineer	1	MEOL(Y) ^{a)}
	Yacht Rating	2	Yacht Rating Certificate

3.3 ≥500GT <1000GT and <1500kW

Miles from a Safehaven	Personnel	No.	Minimum Qualifications
Up to 60	Master	1	R.II/2 or R.II/2(Y)
	Chief Mate	1	Coastal Skipper

	Chief Engineer	1	R.III/1 or R.III/3(Y4)
	Assistant Eng. Off.	1	AEC ^{a)}
	Yacht Rating	2	Yacht Rating Certificate
Up to 150	Master	1	R.II/2 or R.II/2(Y)
	Chief Mate	1	Yachtmaster Offshore
	Chief Engineer	1	2/E (MN) R.III/3 or R.III/2(Y3)
	Yacht Rating	2	Yacht Rating Certificate
Unlimited	Master	1	R.II/2 or R.II/2(Y)
	Chief Mate	1	R.II/1 or OOW(Y)
	OOW (Nav)	1	Yachtmaster Offshore
	Chief Engineer	1	2/E (MN) R.III/3 or R.III/2(Y3)
	Second Engineer	1	MEOL(Y) ^{a)}
	Yacht Rating	2	Yacht Rating Certificate

3.4 ≥1000GT <3000GT and <3000kW

Miles from a Safehaven	Personnel	No.	Minimum Qualifications
Up to 60	Master	1	R.II/2 or R.II/2(Y)
	Chief Mate	1	R.II/1 or OOW(Y)
	Chief Engineer	1	2/E (MN) R. III/3 or R. III/2 (Y2)
	Assistant Eng. Off.	1	MEOLY(Y) ^{a)}
	Yacht Rating	2	Yacht Rating Certificate
Up to 150	Master	1	R.II/2 or R.II/2(Y)
	Chief Mate	1	R.II/2 or Chief Mate (Y)

	Chief Engineer	1	2/E (MN) R.III/3 or R.III/2(Y2)
	Assistant Eng. Off.	1	R.III/1 or R.III/2(Y3)
	Yacht Rating	3	Yacht Rating Certificate
Unlimited	Master	1	R.II/2 or R.II/2(Y)
	Chief Mate	1	R.II/2 or Chief Mate (Y)
	OOW (Nav)	1	R.II/1 or OOW(Y)
	Chief Engineer	1	2/E (MN) R.III/3 or R.III/2(Y1)
	Second Engineer	1	R.III/1 or R.III/2(Y3)
	Yacht Rating	3	Yacht Rating Certificate

**ANNEX 5
TABLE OF CONVENTIONS**

Convention	Certificate/ Manual/ Record	Limits
Tonnage ITC 69	International Tonnage Certificate	≥24 metres
Load Line ILLC '66	International Load Line Certificate	≥24 metres
MARPOL Annex I – Pollution	International Oil Pollution Prevention Certificate	≥400GT
	Approved shipboard Oil Pollution Emergency Plan (SOPEP)	≥400GT
	Oil Record Book	≥400GT
MARPOL Annex IV – Sewage	International Sewage Pollution Prevention Document of Compliance	≥400GT or >15 persons
MARPOL Annex V – Garbage	Garbage Management Plan	≥400GT
	Garbage record books	≥400GT
	Garbage Management Plan Letter of approval (optional)	≥400GT
MARPOL VI – Air Pollution	International Air Pollution Prevention Certificate	≥400GT
	International Energy Efficiency Certificate	≥400GT
	Engine International Air Pollution Prevention Certificate	≥130kW
	Engine technical files	≥400GT
	Shipboard Energy Efficiency Management Plan (SEEMP)	≥400GT
	Engine Technical Files	
1988 SOLAS Protocol, regulation I/12	Large Yacht Safety Certificate ≥500GT (Includes Safety Equipment, Safety construction and Safety Radio)	≥500GT
SOLAS Chapter II – Construction	Cargo Ship Safety Construction Certificate	≥500GT
SOLAS Chapter III – Life Saving	Cargo Ship Safety Equipment Certificate	≥500GT

SOLAS Chapter IV - Radio	Cargo Ship Safety Radio Certificate	≥300GT
SOLAS Chapter V – Navigation	Regulation 19-1 (LRIT)	≥300GT
	AIS Compliance (Certificate optional)	≥300GT
	Minimum Safe Manning Certificate	All commercial yachts
SOLAS Chapter IX – ISM	Document of Compliance	≥500GT
	Safety Management Certificate	≥500GT
	ISM Manual	≥500GT
SOLAS Chapter IX -2 Maritime Security (ISPS)	International Ship Security Certificate	≥500GT
	ISPS Manual	≥500GT
SOLAS Chapter XI-1 Special Measurement to Enhance Maritime Safety	Continuous Synopsis Record	≥500GT
Maritime Labour Convention, 2006*	DMLC, Parts I and II	All commercial Yachts
	MLC Certificate – Interim	
	MLC Certificate - full term	
Civil Liability Bunker Convention, 2001	Civil Liability certificate for Bunker Oil Pollution Damage	≥1000GT
Anti-Fouling Convention	International Anti-Fouling System Certificate	≥24m and <400GT
	Anti-Fouling Declaration	≥24m and >400GT
STCW 1978	Crew Certification	≥500GT
Cook Islands Ship Registration Act, 1997	Vessel Safety Certificate	<500GT
	Radio Equipment Certificate	<300GT
Cook Islands Large Yacht Code	Large Yacht Statement of Compliance	≥24m

* MLC surveys need to be done for all commercial yachts but for yachts <500GT, certification is not required.

NOTE: A Certificate of Registry is not a document of title. It does not necessarily contain notice of all changes of ownership and in no case does it contain an official record of any mortgages affecting the ship. In case of any change of ownership, it is important for the change to be registered. Should the vessel be lost, sold to foreigners or broken up, notice thereof, together with the Certificate of Registry, if in existence, should immediately be given to the Registrar of Ships at the ship's Port of Registry.

ANNEX 6

MEDICAL STORES

1.0 All Yachts should carry a first aid kit as follows:

Quantity

Name of Item and Description Required

FIRST AID KIT

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

- 1
- (1) 4 x triangular bandages with sides of about 90cm and a base of about 127cm.
 - (2) 6 x standard dressings no 8 or 13 BPC
 - (3) 2 x standard dressings no 9 or 14 BPC
 - (4) 2 x extra large sterile unmediated dressings 28cm x 17.7cm
 - (5) 6 medium size safety pins, rustless
 - (6) 20 assorted adhesive dressing strips medicated BPC
 - (7) 2 sterile pads with attachments
 - (8) 2 x packages each containing 15g sterile cotton wool
 - (9) 5 pairs of large, disposable Polythene gloves.

PARACETAMOL

High strength aspirin or equivalent; 500mg tablets; 50

SEASICKNESS REMEDY

Tablets (Hyoscine hydro bromide 0.3mg recommended); 50

BUTTERFLY CLOSURES

Adhesive skin closures, length about 5cm individually sealed sterile, in a container; 20

FORCEPS

Epilation with oblique ends, 12.5cm of stainless steel throughout; 1

SCISSORS

About 18cm, one blade sharp pointed and the other round-ended; 1

THERMOMETRE

Ordinary range clinical thermometre, stubby bulb pattern; 1

FIRST AID MANUAL 1

Yachts operating unlimited should 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
Aluminum 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
Aneroid Blood Pressure Monitor #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
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 5.5 yd -Each	Each	6

Product	Size	Quantity
Elastic Bandage 2" x 5.5 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
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
Thermometre 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