

# World Sailing Offshore Special Regulations

Extract for **Category 1 Multihulls**

**JANUARY 2024 – DECEMBER 2025**

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**Version 1.13 – 24 February 2024**



**Because this is an extract not all paragraph numbers will be present**

The inspection card is attached as [Appendix F](#) below.

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## Language & Abbreviations Used

Mo – Monohulls

Mu – Multihulls

\*\* – means the item applies to all types of boat in all Categories except 5 for which see Appendix B or 6 for which see Appendix C.

**RED TYPE indicates a significant change in 2024.**

DOUBLE UNDERLINE TYPE indicates a term defined in Offshore Special Regulation 1.03.1.

*ITALIC TYPE indicates a term defined in the Racing Rules of Sailing.*

Other than in headings or in offshore special regulation 1.02.1, **BOLD BLACK TYPE indicates a term defined in the Equipment Rules of Sailing.**

**BOLD BLUE TYPE indicates a {state your MNA here} prescription.**

**BOLD Green TYPE indicates a {state your race here} prescription.**

*Guidance notes and recommendations have been removed from the Regulations and are available on*

<https://www.sailing.org/inside-world-sailing/rules-regulations/offshore-special-regulations/>

The use of the masculine gender shall be taken to mean either gender.

## Administration

The Offshore Special Regulation are administered by the World Sailing Special Regulation Sub-Committee whose terms of reference (available at: <https://www.sailing.org/inside-world-sailing/rules-regulations/constitution-regulations/>) are as follows:

World Sailing Regulation 6.9.8.3 - The Special Regulations Sub-Committee shall:

- (a) be responsible for the maintenance, revision and changes to the World Sailing Offshore Special Regulations governing offshore racing, under licence from ORC Ltd. Such changes shall be biennial with revised editions published in January of each even year, except that matters of an urgent nature affecting safety may be dealt with by changes to the Regulations on a shorter time scale.
- (b) monitor developments in offshore racing relative to the standards of safety and seaworthiness.

Any queries please email: [technical@sailing.org](mailto:technical@sailing.org)

## SECTION 1 – FUNDAMENTAL AND DEFINITIONS

Categories	<b>1.01 Purpose and Use</b>																																
**	1.01.1 The purpose of the Offshore Special Regulations ( <u>OSR</u> ) is to establish uniform minimum equipment, accommodation and training standards for <b>monohull</b> and <b>multihull</b> (excluding proa [asymmetrical catamaran]) boats racing offshore.																																
**	1.01.2 The <u>OSR</u> do not replace, but supplement, the requirements of governmental authority, Classification Society certification, the Racing Rules of Sailing ( <u>RRS</u> ), Equipment Rules of Sailing (ERS), class rules and rating systems.																																
**	1.01.3 Use of the <u>OSR</u> does not guarantee total safety of the boat and her crew. Particular attention is drawn to the description of <u>OSR</u> for inshore racing which includes that adequate shelter and or effective rescue is available all along the course. This is not included in more onerous <u>OSR</u> categories.																																
	<b>1.02 Responsibility of Person in Charge</b>																																
**	<u>1.02.1</u> <b>Under <u>RRS</u> 3 the responsibility for a boat's decision to participate in a race or continue racing is hers alone. The safety of a boat and her crew is the sole and inescapable responsibility of the <i>person in charge</i> who shall do his best to ensure that the boat is fully found, thoroughly seaworthy and manned by an experienced and appropriately trained crew who are physically fit to face all weather. The <i>person in charge</i> shall also assign a person to take over his responsibilities in the event of his incapacitation.</b>																																
**	<u>1.02.2</u> Neither the establishment of the <u>OSR</u> , nor their use by <i>organising authorities</i> , nor the inspection of a boat under the <u>OSR</u> in any way limits or reduces the complete and unlimited responsibility of the <i>person in charge</i> .																																
**	1.02.3 By participating in a race conducted under the <u>OSR</u> , the <i>person in charge</i> , each competitor and boat owner agrees to reasonably cooperate with the <i>organising authority</i> and World Sailing in the development of an independent incident report as specified in <u>OSR</u> 2.02.																																
	<b>1.03 Definitions, Abbreviations, Word Usage</b>																																
**	1.03.1 <b>Table 1 – Definitions of Terms used in this document</b>																																
<table border="1"> <thead> <tr> <th>Abbreviation</th><th>Description</th></tr> </thead> <tbody> <tr> <td>#</td><td>Pound force (lbf)</td></tr> <tr> <td>ABS</td><td>American Bureau of Shipping</td></tr> <tr> <td>AIS</td><td>Automatic Identification Systems</td></tr> <tr> <td>Coaming</td><td>The part of the cockpit, including the transverse after limit, over which water would run when the boat is floating level and the cockpit is filled to overflowing</td></tr> <tr> <td>COLREGS</td><td>International Regulations for Preventing Collisions at Sea</td></tr> <tr> <td>Contained Cockpit</td><td>A cockpit where the combined area open aft to the sea is less than 50% maximum cockpit depth x maximum cockpit width</td></tr> <tr> <td>Crewmember</td><td>Every person on board</td></tr> <tr> <td>DSC</td><td>Digital Selective Calling</td></tr> <tr> <td>EN</td><td>European Norm</td></tr> <tr> <td>EPIRB</td><td>Emergency Position-Indicating Radio Beacon</td></tr> <tr> <td>ERS</td><td>World Sailing - Equipment Rules of Sailing</td></tr> <tr> <td>First Launch</td><td>Month &amp; year of the first launching when the individual boat, was completed and equipped for sailing</td></tr> <tr> <td>GMDSS</td><td>Global Maritime Distress &amp; Safety System</td></tr> <tr> <td>GNSS</td><td>Global Navigation Satellite System</td></tr> <tr> <td>GPS</td><td>Global Positioning System</td></tr> </tbody> </table>		Abbreviation	Description	#	Pound force (lbf)	ABS	American Bureau of Shipping	AIS	Automatic Identification Systems	Coaming	The part of the cockpit, including the transverse after limit, over which water would run when the boat is floating level and the cockpit is filled to overflowing	COLREGS	International Regulations for Preventing Collisions at Sea	Contained Cockpit	A cockpit where the combined area open aft to the sea is less than 50% maximum cockpit depth x maximum cockpit width	Crewmember	Every person on board	DSC	Digital Selective Calling	EN	European Norm	EPIRB	Emergency Position-Indicating Radio Beacon	ERS	World Sailing - Equipment Rules of Sailing	First Launch	Month & year of the first launching when the individual boat, was completed and equipped for sailing	GMDSS	Global Maritime Distress & Safety System	GNSS	Global Navigation Satellite System	GPS	Global Positioning System
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## SECTION 1 – FUNDAMENTAL AND DEFINITIONS

### Categories

Hatch	The term hatch includes the entire hatch assembly including the lid or cover as part of that assembly
HMPE	High Modulus Polyethylene (Dyneema®/Spectra® or equivalent)
IBRD	International Beacon Registration Database
IMO	International Maritime Organization
ISAF	International Sailing Federation – (now World Sailing)
ISO	International Standard Organization or International Organization for Standardization
Jackstay	A <u>securely fastened</u> webbing or rope which permits a <u>crewmember</u> to move from one part of the boat to another without having to unclip a safety harness <u>tether</u>
L <sub>H</sub>	Hull Length as defined by the ERS
Lifeline	Rope or wire line rigged as guardrail/guardline around the deck
LSA	<u>IMO</u> International Life-Saving Appliance Code
L <sub>WL</sub>	(Length of) loaded <b>waterline</b>
Moveable Ballast	Material carried for the sole purpose of increasing weight and/or influencing stability and/or trim and which may be moved transversely but not varied in weight while a boat is racing
ORC	Offshore Racing Congress (formerly Offshore Racing Council)
OSR	Offshore Special Regulation(s)
Permanently Installed	The item is effectively built-in by e.g. bolting, welding, glassing etc. and may not be removed for or during racing
PLB	Personal Locator Beacon
Rode	Rope, chain, or a combination of both, which is used to connect an anchor to the boat
RRS	World Sailing – Racing Rules of Sailing
Securely Fastened	Held strongly in place by a method (e.g. rope lashings, wing nuts) which will safely retain the fastened object in severe conditions including a 180° capsize and allows for the item to be removed and replaced during racing
SOLAS	Safety of Life at Sea Convention
STCW	Standards of Training, Certification and Watchkeeping for Seafarers
SSS	The Safety and Stability Screening numeral
STIX	ISO 12217-2 Stability Index
Tether	A safety line used to connect a safety harness to a strong point or <u>Jackstay</u>
Variable Ballast	Water carried for the sole purpose of influencing stability and/or trim and which may be varied in weight and/or moved while a boat is racing.
World Sailing	formerly the International Sailing Federation or <u>ISAF</u>

1.03.2 The words “shall” and “must” are mandatory, and “should” and “may” are permissive.

## SECTION 2 – APPLICATION & GENERAL REQUIREMENTS

Categories	<b>2.01 Categories of Events</b>	<i>Organising authorities</i> shall select from one of the following categories and may modify the <u>QSR</u> to suit local conditions.
**		
MoMu1	<b>2.01.2 Category 1</b>	Races of long distance and well offshore, where boats must be completely self-sufficient for extended periods of time, capable of withstanding heavy storms and prepared to meet serious emergencies without the expectation of outside assistance.
	<b>2.02 Incident Reporting</b>	The <i>organising authority</i> of a race will establish whether any incidents occurred, which if reported would likely be relevant to evolving the Offshore Special Regulations, the plan review process, or in increasing safety. The <i>organising authority</i> will follow any guidelines issued by World Sailing concerning incident reporting.
**		
	<b>2.03 Inspection</b>	A boat may be inspected at any time. If she fails to comply with the <u>QSR</u> her entry may be rejected, or she will be subject to protest.
**		
**	<b>2.04 General Requirements</b>	
**	2.04.1	All equipment required by <u>QSR</u> shall:
**		a) function properly,
**		b) be regularly checked, cleaned and serviced,
**		c) if it has an expiry date, it will not have exceeded its expiry date whilst racing,
**		d) when not in use be stowed in conditions in which deterioration is minimised,
**		e) be readily accessible, and
**		f) be of a type, size and capacity suitable and adequate for the intended use and size of the boat.
**	<b>2.04.2</b>	Heavy items shall be <u>permanently installed</u> or <u>securely fastened</u> .

## SECTION 3 – STRUCTURAL FEATURES, STABILITY, FIXED EQUIPMENT

Categories		A boat shall be/have:
	<b>3.01</b>	<b>Strength of Build and Rig</b>
**	3.01.1	Properly rigged, fully seaworthy and shall meet the <u>OSR</u> .
**	3.01.2	Equipped with <b>shrouds</b> and at least one <b>forestay</b> that shall remain connected to the mast and the boat while racing (not applicable to boats with free-standing masts).
**	3.01.3	The <b>forestay</b> referenced above shall be sized and connected in a way that ensures it is capable of withstanding the full sailing loads independent of any headsail luff load capacity.
	<b>3.02</b>	<b>Watertight and Structural Integrity of a Boat</b>
**	3.02.1	Essentially watertight and all openings shall be capable of being immediately secured. <b>centreboard</b> or <b>daggerboard</b> trunks and the like shall not open into the interior of a hull except via a watertight maintenance <u>hatch</u> with the opening entirely above the <b>waterline</b> .
	<b>3.03</b>	<b>Hull Construction Standards (Scantlings)</b>
MoMu0,1,2	3.03.2	A <b>monohull</b> with <b>series date</b> between 1987 and 2010, and all <b>multihulls</b> , shall have been designed, built, maintained, modified or repaired in accordance with the requirements of:
MoMu0,1,2		c) the EC Recreational Craft Directive for Category A having obtained the CE mark, or
MoMu0,1,2		d) <u>ISO 12215</u> Category A, with written statements signed by the designer and builder confirming that they have respectively designed and built the boat in accordance with the <u>ISO</u> standard, and
MoMu0,1,2		e) have written statements or approvals in accordance with a), or b) or c) and d) above for all significant repairs or modifications to the hull, deck, coachroof, keel or appendages, on board, except
MoMu0,1,2		f) that an <i>organising authority</i> or class rules may accept, when that described in a), b), c), d) or e) above is not available, the signed statement by a naval architect or other person familiar with the standards listed above that the boat fulfils these requirements.
	<b>3.05</b>	<b>Stability and Flotation – Multihulls</b>
Mu0,1,2,3,4	<b>3.05.1</b>	Watertight bulkheads and compartments (which may include <u>permanently installed</u> flotation material) in each hull, to ensure that the boat is effectively unsinkable and capable of floating in a stable position with at least half the length of one hull flooded (see <u>OSR</u> 3.13.2).
Mu0,1,2,3,4	3.05.2	If <u>first launched</u> after 1998, a boat shall have transverse watertight bulkheads at intervals of not more than 4 m (13'-3") in every hull without accommodations.
Mu0,1,2,3,4	3.05.3	Designed and built to resist capsize.
	<b>3.07</b>	<b>Exits, Escape Hatches, Underside Clipping Points and Handholds – Multihulls</b>
	<b>3.07.1</b>	<b>Exits</b>
Mu0,1,2,3		a) At least two exits in each hull which contains accommodations.
	<b>3.07.2</b>	<b>Escape Hatches – General</b>
Mu0,1,2,3,4		a) If 12 m (39'-4") <u>L<sub>H</sub></u> and greater each hull which contains accommodation shall have:
Mu0,1,2,3,4		i an escape <u>hatch</u> for access to and from the hull in the event of an inversion,
Mu0,1,2,3,4		ii if <u>first launched</u> after 2002, a minimum clearance diameter through each escape <u>hatch</u> of 450 mm (18") or when an escape <u>hatch</u> is not circular, sufficient clearance to allow a <u>crewmember</u> to pass through fully clothed,
Mu0,1,2,3,4		iii each escape <u>hatch</u> to be above the <b>waterline</b> when the boat is inverted,
Mu0,1,2,3,4		iv if <u>first launched</u> after 2000, each escape <u>hatch</u> to be at or near the midships station.
Mu0,1,2,3,4		b) Each escape <u>hatch</u> shall have been opened both from inside and outside within 6 months prior to the race.
	<b>3.07.3</b>	<b>Escape Hatches – Catamarans</b>
Mu0,1,2,3,4		If <u>first launched</u> after 2002, each escape <u>hatch</u> to be on the side nearest the vessel's central axis.
	<b>3.07.4</b>	<b>Escape Hatches – Trimarans</b>
Mu0,1,2,3,4		a) If <u>first launched</u> after 2002 with <u>L<sub>H</sub></u> 12 m (39'-4") and greater, at least two escape <u>hatches</u> in compliance with the dimensions in <u>OSR</u> 3.07.2 a) ii,

## SECTION 3 – STRUCTURAL FEATURES, STABILITY, FIXED EQUIPMENT

Categories	A boat shall be/have:
Mu0,1	b) If <u>first launched</u> after 2002 with <u>L<sub>H</sub></u> less than 12 m (39'-4"), at least one escape <u>hatch</u> in compliance with the dimensions in <u>OSR</u> 3.07.2 a) ii,
	<b>3.07.5 Underside Clipping Points and Handholds</b>
Mu0,1,2,3,4	On the underside, appropriate handholds and clipping points of sufficient capacity to enable all <u>crewmembers</u> to hold on and/or clip on securely.
Mu0,1,2,3,4	a) On a trimaran these shall be around the central hull.
Mu0,1,2,3,4	b) On a catamaran <u>first launched</u> after 2002, with a central nacelle, these shall be around the central nacelle.
	<b>3.08 Hatches &amp; Companionways</b>
**	<b>3.08.1</b> <u>Hatch</u> covers forward of the maximum beam station shall not open toward the interior of the boat, except <u>hatches</u> in the side of a coachroof or ports having an area of less than 0.071 m <sup>2</sup> (110 in <sup>2</sup> ).
**	<b>3.08.2</b> A <u>hatch</u> , including a <u>hatch</u> over a locker shall be:
**	a) permanently attached and capable of being firmly shut immediately and remaining firmly shut in a 180° capsized,
**	<b>3.08.3</b> <u>Hatches</u> not conforming with <u>OSR</u> 3.08.1 and <u>OSR</u> 3.08.2 shall be clearly labelled and used in accordance with the following instruction "NOT TO BE OPENED AT SEA".
**	<b>3.08.4</b> Companionway <u>hatches</u> :
**	a) fitted with a strong securing arrangement which shall be operable from the exterior and interior even when the boat is inverted,
**	b) blocking devices:
**	i capable of being retained in position with the <u>hatch</u> open or shut,
**	ii secured to the boat (e.g. by lanyard) for the duration of the race, and
**	iii permit exit in the event of inversion.
Mu0,1,2,3,4	<b>3.08.7</b> If a <b>multihull</b> with a companionway <u>hatch</u> extending below the local sheerline a boat shall either:
Mu0,1,2,3,4	a) have a minimum sill height of 300 mm (12") and be capable of being blocked off up to the level of the local sheerline whilst giving access to the interior with the blocking device(s) in place, or
Mu0,1,2,3	b) be in compliance with <u>ISO</u> 11812 to design category A.
	<b>3.09 Cockpits</b>
	<b>3.09.1 General</b>
**	a) cockpits shall self-drain quickly by gravity at all angles of heel and are permanently incorporated as an integral part of the boat,
**	b) a cockpit sole shall be at least 2% <u>L<sub>WL</sub></u> above the <b>waterline</b> (or in IMS boats with <u>first launch</u> before 2003, at least 2% L above the <b>waterline</b> ), and
**	c) a bow, lateral, central, or stern well is a cockpit for the purposes of <u>OSR</u> 3.09.
	<b>3.09.2 Cockpit Volume</b>
**	The maximum combined volume below lowest <u>coamings</u> of all <u>contained cockpits</u> shall be:
MoMu0,1	a) <b>series date</b> before April 1992: 6% ( <u>L<sub>WL</sub></u> x maximum beam x freeboard abreast the cockpit),
**	c) <b>series date</b> after March 1992 as above for the appropriate category except that "lowest <u>coamings</u> " shall not include any aft of the FA station (the transverse station at which the upper corner of the transom meets the sheerline) and no extension of a cockpit aft of the working deck shall be included in calculation of cockpit volume.
	<b>3.09.3 Cockpit Drains</b>
**	Cockpit drain cross section area of unobstructed openings (after allowance for screens if fitted) shall be at least that of:
**	a) if less than 8.5 m (28') <u>L<sub>H</sub></u> : 2 x 25 mm (1") diameter or equivalent,
**	b) if 8.5 m (28') <u>L<sub>H</sub></u> or greater: 4 x 20 mm (3/4") diameter or equivalent.
	<b>3.10 Sea Cocks or Valves</b>
**	<u>Permanently installed</u> sea cocks or valves on all through-hull openings below the <b>waterline</b> except for integral deck scuppers and instrument through-hulls.

## SECTION 3 – STRUCTURAL FEATURES, STABILITY, FIXED EQUIPMENT

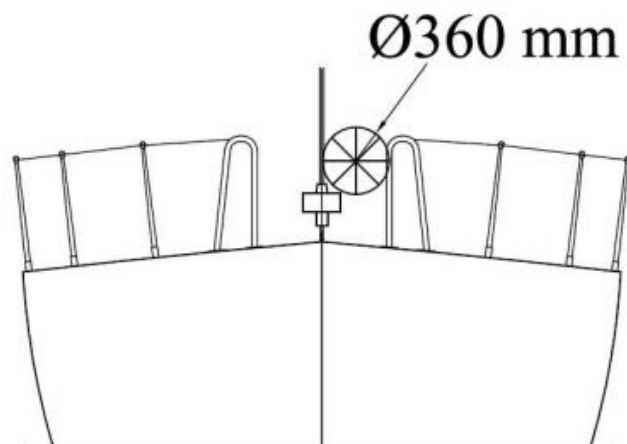
Categories		A boat shall be/have:
**	<b>3.11 Sheet Winches</b>	Sheet winches mounted in such a way that an operator is not required to be substantially below deck.
**	<b>3.12 Mast Step</b>	The heel of a keel stepped mast <u>securely fastened</u> to the mast step or adjoining structure.
Mo0Mu**	<b>3.13 Watertight Bulkheads</b>	
	<b>3.13.1</b>	Either a watertight “crash” bulkhead within 15% of $L_H$ from the bow and abaft the forward end of $L_{WL}$ , or <u>permanently installed</u> closed-cell foam buoyancy effectively filling the forward 30% $L_H$ of the hull.
Mo0Mu**	<b>3.13.2</b>	Any required watertight bulkhead to be strongly built to take a full head of water pressure without allowing any leakage into the adjacent compartment.
	<b>3.14 Pulpits, Stanchions, Lifelines</b>	
	<b>3.14.1 General</b>	
**		The perimeter of the deck surrounded by system of <u>lifelines</u> and pulpits as follows:
**		a) continuous <u>lifelines</u> fixed only at (or near) the bow and stern. However, a gate on each side of a boat is permitted. Except at its end fittings and at gates, the movement of a <u>lifeline</u> in a fore-and-aft direction shall not be constrained. Temporary sleeving shall not modify tension in the <u>lifeline</u> ,
**		b) minimum heights of <u>lifelines</u> and pulpit rails above the working deck and vertical openings:
**		i upper: 600 mm (24”),
**		ii intermediate: 230 mm (9”),
**		iii vertical opening: no greater than 380 mm (15”) except that on a boat with a <b>series date</b> before 1993 where it shall be no greater than 560 mm (22”),
**		c) <u>lifelines</u> permanently supported at intervals of not more than 2.2 m (7'-2 1/2”) and not passing outboard of supporting stanchions,
**		d) pulpit and stanchion bases <u>permanently installed</u> with pulpits and stanchions mechanically retained in their bases,
**		e) <u>if a boat's first launch date is after 2024</u> , the outside of pulpit and stanchion base tubes no further inboard from the <b>perimeter of the deck</b> than 5% of <b>boat beam</b> or 150 mm (6”), whichever is greater, nor further outboard than the <b>perimeter of the deck, where the perimeter of the deck is defined as the hull and deck intersection at an angle of not more than 15 degrees to the horizontal in a transverse plane when the yacht is upright</b> ,
**		f) stanchions straight and vertical except that:
**		i within the first 50 mm (2”) from the deck, stanchions shall not be displaced horizontally from the point at which they emerge from the deck or stanchion base by more than 10 mm (3/8”),
**		ii stanchions may be angled to not more than 10° from vertical at any point above 50 mm (2”) from the deck.
**		g) a bow pulpit may be open provided the opening between the pulpit and any part of the boat does not exceed 360 mm (14”),



## SECTION 3 – STRUCTURAL FEATURES, STABILITY, FIXED EQUIPMENT

### Categories

A boat shall be/have:



**Figure 2 – Diagram Showing Pulpit Opening**

- h) lifelines may terminate at or pass through adequately braced stanchions set inside and overlapping the bow pulpit,
- i) when a deflecting force of 4 kg (8.8 #) is applied to a lifeline at the mid-point of the longest span between supports that are aft of the mast, the deflection shall not exceed:
  - i 50 mm (2") for an upper or single lifeline,
  - ii 120 mm (4 ¾") for an intermediate lifeline.

### 3.14.2 Special Requirements for Pulpits, Stanchions, Lifelines on Multihulls

When on a boat it is impractical to precisely follow OSR regarding pulpits, stanchions, lifelines, the regulations for monohulls shall be followed as closely as possible.

### 3.14.3 Lifeline Specifications

- b) lifelines of either:
  - i stranded stainless steel wire, or
  - ii HMPE,
- c) The minimum diameter is specified in table 4 below,
- d) Stainless steel lifelines shall be uncoated and used without close-fitting sleeving, however, temporary sleeving may be fitted provided it is regularly removed for inspection,
- e) A lanyard of synthetic rope may be used to secure lifelines provided the gap it closes does not exceed 100 mm (4"). This lanyard shall be replaced annually,
- f) All components of the lifeline enclosure system shall have a breaking strength no less than the lifeline,
- g) When HMPE is used, it shall be protected from chafe and spliced in accordance with the manufacturer's recommended procedures.

**Table 4 – Lifeline Diameter Requirements**

<u>L<sub>H</sub></u>	Wire Min. <u>lifeline</u> diameter	<u>HMPE</u> rope (Single braid) min. <u>lifeline</u> diameter	<u>HMPE</u> Core (Braid on braid) min. <u>lifeline</u> <u>outside</u> diameter
under 8.5 m (28')	3 mm (1/8")	4 mm (5/32")	6 mm (1/4")
8.5m – 13 m	4 mm (5/32")	5 mm (3/16")	7 mm (9/32")
over 13 m (42' 8")	5 mm (3/16")	5 mm (3/16")	7 mm (9/32")

## 3.15 Multihull Nets or Trampolines

### 3.15.1 General

The words "net" and "trampoline" are interchangeable. A net shall be:

- a) essentially horizontal,



## SECTION 3 – STRUCTURAL FEATURES, STABILITY, FIXED EQUIPMENT

Categories	
Mu0,1,2,3,4	A boat shall be/have:
	b) made from durable woven webbing, water permeable fabric, or mesh with openings not larger than 5 cm (2") in any dimension. Attachment points shall be planned to avoid chafe. The junction between a net and a boat shall present no risk of foot trapping,
Mu0,1,2,3,4	c) solidly fixed at regular intervals on transverse and longitudinal support lines and shall be fine stitched to a bolt rope, and
Mu0,1,2,3,4	d) able to carry the full weight of the crew either in normal working conditions at sea or in case of capsized when the boat is inverted.
	<b>3.15.2 Trimarans with Double Crossbeams</b>
Mu0,1,2,3,4	A trimaran with double crossbeams shall have nets on each side covering:
Mu0,1,2,3,4	a) the area formed by the crossbeams, central hull and outriggers,
Mu0,1,2,3,4	b) the triangles formed by the aft end of the central pulpit, the mid-point of each forward crossbeam, and the intersection of the crossbeam and the central hull,
Mu0,1,2,3,4	c) the triangles formed by the aftermost part of the cockpit or steering position (whichever is furthest aft), the mid-point of each after crossbeam, and the intersection of the crossbeam and the central hull, except that:
Mu0,1,2,3,4	d) <u>OSR 3.15.2(c)</u> is not a requirement when cockpit <u>coamings</u> and/or <u>lifelines</u> are present which comply with the minimum height requirements in <u>OSR 3.14</u> .
	<b>3.15.3 Trimarans with Single Crossbeams</b>
Mu0,1,2,3,4	A trimaran with a single crossbeam shall have nets between the central hull and each outrigger on each side between two straight lines from the intersection of the crossbeam and the outrigger, respectively to the aft end of the pulpit on the central hull, and to the aftermost point of the cockpit or steering position on the central hull (whichever is furthest aft).
	<b>3.15.4 Catamarans</b>
Mu0,1,2,3,4	A catamaran shall have nets covering the area defined laterally by the hulls and longitudinally by transverse stations through the forestay base and the aftermost point of the boom lying fore and aft. However, a catamaran with a central nacelle (non-immersed) may satisfy the regulations for a trimaran.
**	3.16 Spare
	<b>3.18 Toilet</b>
MoMu0,1,2	<u>3.18.1</u> Permanently installed toilet.
	<b>3.19 Bunks</b>
MoMu1,2,3,4	<u>3.19.1</u> Permanently installed bunks.
	<b>3.20 Cooking Facilities</b>
MoMu0,1,2,3	<u>Permanently installed</u> cooking stove, capable of being operated safely at sea, with fuel shutoff control.
	<b>3.21 Drinking Water Tanks &amp; Drinking Water</b>
	<b>3.21.1 Drinking Water Tanks</b>
MoMu1	b) <u>permanently installed</u> delivery pump and water tanks dividing the water supply into at least two compartments.
	<b>3.21.3 Emergency Drinking Water</b>
MoMu1,2,3	a) at least <b>2 L (0.5 US Gal) per person</b> of drinking water for emergency use in a dedicated and sealed container or container(s).
	<b>3.22 Hand Holds</b>
**	Adequate hand holds fitted below deck.
	<b>3.23 Bilge Pumps and Buckets</b>
**	<u>3.23.1</u>
Mo3Mu0,1,2	a) two strong buckets, each with a lanyard and of at least 9 L (2.4 US Gal) capacity,
Mu0,1,2,3,4	c) one <u>permanently installed</u> manual bilge pump,
	e) provision to pump out all watertight compartments (except those filled with impermeable buoyancy).
**	<u>3.23.2</u> All required <u>permanently installed</u> bilge pumps shall be operable with all cockpit seats, <u>hatches</u> and companionways shut and with <u>permanently installed</u> discharge pipe(s) of sufficient capacity.

## SECTION 3 – STRUCTURAL FEATURES, STABILITY, FIXED EQUIPMENT

Categories		A boat shall be/have:
**	3.23.3	Bilge pumps shall not be connected to cockpit drains and shall not discharge into a <u>contained cockpit</u> .
**	3.23.4	Bilge pumps shall be readily accessible for maintenance and for clearing out debris.
**	3.23.5	All removable bilge pump handles retained by a lanyard.
	<b>3.24</b>	<b>Compass</b>
MoMu0,1,2,3		Marine magnetic compass capable of being used as a steering compass:
**	a)	<u>Permanently installed</u> marine magnetic steering compass, independent of any power supply, correctly adjusted with deviation card,
MoMu0,1,2,3	b)	a second compass which may be hand-held and/or electronic.
	<b>3.25</b>	<b>Halyards</b>
**	3.25.1	A minimum of two halyards, each capable of hoisting a sail, on each mast.
MoMu0,1,2,3	3.25.2	No halyard shall be locked, lashed, or otherwise secured to the mast in a way that requires a person to go aloft to lower a sail in a controlled manner, except for a headsail in use with a furling device.
	<b>3.27</b>	<b>Navigation Lights</b>
**	<b>3.27.1</b>	That conform to the International Regulations for Preventing Collisions at Sea (Part C and Technical Annex I) and shall be exhibited as required by those regulations.
**	3.27.2	Mounted above sheerline and so that they will not be masked by sails or the heeling of the boat.
MoMu0,1,2,3	<b>3.27.3</b>	Reserve lights having the same specifications as above, and that can be powered independently.
**	<b>3.27.4</b>	Spare bulbs (not required for LED).
	<b>3.28</b>	<b>Engines, Generators, Fuel</b>
	<b>3.28.1</b>	<b>Propulsion Engines</b>
**	a)	engines and associated systems installed in accordance with their manufacturers' guidelines and suitable for the size and intended use of the boat,
MoMu0,1,2,3	b)	an engine which provides a minimum speed in knots of $(1.8 \times \sqrt{L_{WL}} \text{ in metres})$ or $(\sqrt{L_{WL}} \text{ in feet})$ ,
Mu1,2,3	d)	inboard engine, however, if less than 12.0 m (39'-4") $L_H$ either an inboard engine, or an outboard engine together with <u>permanently installed</u> power supply systems,
**	f)	an inboard combustion engine shall have a <u>permanently installed</u> exhaust, cooling system, fuel supply, fuel tank(s) and shall have adequate heavy weather protection,
**	g)	an inboard electrical engine, when fitted, shall be provided with a <u>permanently installed</u> power supply, adequate heavy weather protection and have an engine control system.
	<b>3.28.2</b>	<b>Generator</b>
**		If an optional generator separate from the propulsion engine is carried, it shall be installed in accordance with the manufacturer's guidelines.
	<b>3.28.3</b>	<b>Liquid Fuel Systems</b>
MoMu0,1,2,3	a)	all fuel tanks for storage of liquid fuels shall be rigid (but may have <u>permanently installed</u> flexible linings) and shall have a shutoff valve,
MoMu0,1,2,3	b)	at the start a boat with a combustion engine shall carry sufficient fuel to meet charging requirements for the duration of the race and to motor at the above minimum speed for at least 5 hours.
	<b>3.28.4</b>	<b>Battery Systems</b>
**	a)	batteries installed after 2011 shall be of the sealed type from which liquid electrolyte cannot escape,
**	b)	At the start a boat with an electric engine shall carry sufficient capacity to meet electrical requirements for the duration of the race and to motor at the above minimum speed for at least 5 hours.
MoMu0,1,2,3	c)	a dedicated engine/generator starting battery when an electric starter is the only method for starting the engine and/or separate generator,

## SECTION 3 – STRUCTURAL FEATURES, STABILITY, FIXED EQUIPMENT

Categories		A boat shall be/have:
	<b>3.29</b>	<b>Communications Equipment, GPS, Radar, AIS</b>
Mo1,2,3 Mu1,2,3,4	<a href="#">3.29.1</a>	A hand-held marine VHF transceiver <b>for each grab bag</b> , watertight or with a waterproof cover. When not in use to be stowed in the grab bag <del>or emergency container</del> (see <u>OSR</u> 4.21).
**	<a href="#">3.29.4</a>	A second radio receiver, which may be the handheld VHF in <u>OSR</u> 3.29.1 above, capable of receiving weather bulletins.
MoMu0,1,2,3	<a href="#">3.29.5</a>	A marine radio transceiver with an emergency antenna when the regular antenna depends upon the mast.
MoMu0,1,2,3 MoMu0,1,2,3 MoMu1,2,3 MoMu0,1,2	<a href="#">3.29.6</a>	If the marine radio transceiver is a VHF: a) a minimum rated output power of 25 W, b) if installed after 2015 be <u>DSC</u> capable, d) a masthead antenna not less than 38 cm (15") in length and co-axial feeder cable with not more than 40% power loss,
MoMu1,2,3		f) <u>DSC</u> capable VHF transceivers shall be programmed with an assigned MMSI (unique to the boat), be connected to a <u>GPS</u> receiver and be capable of making distress alert calls as well as sending and receiving a <u>DSC</u> position report with another <u>DSC</u> equipped station,
Mo0,1,2,3 Mu1,2,3 MoMu0,1,2,3 MoMu0,1,2,3	<a href="#">3.29.7</a>	An <u>AIS</u> Transponder which either: a) shares the masthead VHF antenna via a low loss <u>AIS</u> antenna splitter, or b) has a dedicated <u>AIS</u> antenna not less than 38 cm (15") in length mounted with its base not less than 3 m (10') above the <b>waterline</b> and co-axial feeder cable with not more than 40% power loss.
MoMu1	<a href="#">3.29.9</a>	A hand-held satellite telephone for each grab bag, watertight or with waterproof cover and internal battery. Stow in the grab bag (see <u>OSR</u> 4.21) when not in use.

## SECTION 4 – PORTABLE EQUIPMENT

Categories		A boat shall have:
	<b>4.01</b>	<b>Sail Letters &amp; Numbers</b>
**	<a href="#">4.01.1</a>	Identification on sails which complies with <u>RRS</u> 77 and <u>RRS</u> Appendix G.
MoMu0,1,2,3	<a href="#">4.01.2</a>	An alternative means of displaying identification as required under <u>RRS</u> Appendix G for a mainsail, to be displayed when none of the numbered sails are set.
	<b>4.02</b>	<b>Search and Rescue Visibility</b>
Mo1Mu1,2	<a href="#">4.02.2</a>	A 1 m <sup>2</sup> (11 ft <sup>2</sup> ) solid area of highly visible pink, orange or yellow capable of being displayed on the coachroof and/or deck.
Mu0,1,2,3,4	<a href="#">4.02.3</a>	A 1 m <sup>2</sup> (11 ft <sup>2</sup> ) area of highly visible pink, orange or yellow showing when the boat is inverted.
	<b>4.03</b>	<b>Soft Wood Plugs</b>
**		A tapered soft wood plug stowed adjacent to every through-hull opening.
	<b>4.04</b>	<b>Jackstays and Clipping Points</b>
MoMu0,1,2,3	<a href="#">4.04.1</a>	<u>Permanently Installed</u> fittings for <u>jackstay</u> ends and clipping points.
MoMu0,1,2,3	<a href="#">4.04.2</a>	<u>Jackstays</u> which shall:
MoMu0,1,2,3		a) be independent on each side of the deck,
MoMu0,1,2,3		b) enable a <u>crewmember</u> to move readily between the working areas on deck and the cockpit(s) with the minimum of clipping and unclipping operations,
MoMu0,1,2,3		c) have a breaking strength of 2040 kg (4500#) and be uncoated and non-sleeved stainless steel 1 x 19 wire of minimum diameter 5 mm (3/16"), webbing or <u>HMPE</u> rope.
MoMu0,1,2,3	<a href="#">4.04.3</a>	Clipping points which shall:
MoMu0,1,2,3		a) be adjacent to stations such as the helm, sheet winches and masts, where <u>crewmembers</u> work,
MoMu0,1,2,3		b) enable a <u>crewmember</u> to clip on before coming on deck and unclip after going below,
MoMu0,1,2,3		c) enable two-thirds of the crew to be simultaneously clipped on without depending on <u>jackstays</u> ,
Mu0,1,2,3		d) on a trimaran with a rudder on the outrigger, permit a <u>crewmember</u> to repair the steering mechanism whilst attached to a clipping point.
	<b>4.05</b>	<b>Fire Fighting Equipment</b>
**	<a href="#">4.05.1</a>	A fire blanket adjacent to every cooking device.
MoMu1,2,3	<a href="#">4.05.2</a>	2 fire extinguishers, each with 2 kg of dry powder or equivalent, in different parts of the boat.
	<b>4.06</b>	<b>Anchors</b>
MoMu1,2,3	<a href="#">4.06.1</a>	2 un-modified anchors that meet the anchor manufacturer's recommendation based on the boat's dimensions with suitable combination of chain and rope, ready for immediate assembly, and ready for deployment within 5 minutes except that for a boat less than 8.5 m (28') <u>L<sub>H</sub></u> there shall be 1 anchor meeting the same criteria.
	<b>4.07</b>	<b>Flashlights and Searchlights</b>
Mo0,1,2,3		Watertight lights ( <b>minimum IP67 rated</b> ) with spare batteries and bulbs as follows, <b>or a watertight (minimum IP67 rated) rechargeable LED torch, of at least 400 Lumens.</b>
Mu**		a) a searchlight, suitable for searching for a person overboard at night and for collision avoidance,
MoMu0,1,2,3		b) <b>stowed in each grab bag</b> (see <u>OSR 4.21</u> ), a flashlight in addition to <u>OSR</u> 4.07 a).
Mo0,1,2,3		c) the flashlight in <u>OSR</u> 4.07 b) shall be stowed in the grab bag (see <u>OSR 4.21</u> ).
Mu**		
	<b>4.08</b>	<b>First Aid Manual and First Aid Kit</b>
**		A First Aid Manual and First Aid Kit. The contents and storage of the First Aid Kit shall reflect the likely conditions and duration of the passage, and the number of <u>crewmembers</u> .
	<b>4.09</b>	<b>Foghorn</b>
**		A foghorn.
	<b>4.10</b>	<b>Radar Reflector</b>
**	<a href="#">4.10.1</a>	A passive radar reflector with:

## SECTION 4 – PORTABLE EQUIPMENT

Categories	
**	A boat shall have:
**	a) octahedral circular plates of minimum diameter 30 cm (12”),
**	b) octahedral rectangular plates of minimum diagonal dimension 40 cm (16”), or
	c) a non-octahedral reflector with a documented root mean square minimum Radar Cross Section (RCS) area of 2 m <sup>2</sup> (22 ft <sup>2</sup> ) from 0–360° of azimuth and ±20° of heel.
	<b>4.11 Navigation Equipment</b>
MoMu0,1,2,3	<a href="#">4.11.1</a> Navigational charts (not solely electronic), <del>light list</del> and chart plotting equipment.
	<b>4.12 Safety Equipment Location Chart</b>
**	A safety equipment location diagram in durable waterproof material, clearly displayed in the main accommodation, marked with the location of principal items of safety equipment.
	<b>4.13 Depth, Speed and Distance Instruments</b>
MoMu0,1,2,3	<a href="#">4.13.1</a> A knotmeter or distance measuring instrument (log).
MoMu1,2,3,4	<a href="#">4.13.2</a> A depth sounder.
	4.14 Spare Number
	<b>4.15 Emergency Steering</b>
MoMu0,1,2,3	<a href="#">4.15.1</a> An emergency tiller capable of being fitted to the rudder stock except when:
MoMu0,1,2,3	a) the principal method of steering is by means of an unbreakable metal tiller,
MoMu0,1,2,3	b) there are two methods (e.g. tillers, wheels) of controlling a rudder, neither of which shares components with the other except for the rudder stock.
MoMu0,1,2,3	<a href="#">4.15.2</a> A proven method of emergency steering with the rudder disabled.
	<b>4.16 Tools and Spare Parts</b>
**	<a href="#">4.16.1</a> Tools and spare parts, suitable for the duration and nature of the passage.
**	4.16.2 An effective means to quickly disconnect or sever the standing rigging from the boat.
	<b>4.17 Boat's Name</b>
**	The boat's name on miscellaneous buoyant equipment, such as lifejackets, cushions, lifebuoys, recovery slings, grab bags, etc.
	<b>4.18 Retro-Reflective Material</b>
**	Marine grade retro-reflective material on lifebuoys, recovery slings, liferafts and lifejackets.
	<b>4.19 EPIRBs</b>
MoMu1,2	<a href="#">4.19.2</a> A water and manually activated 406 MHz <u>EPIRB</u> .
MoMu0,1,2	4.19.3 A 406 MHz <u>EPIRB</u> registered after 2015 shall include an internal <u>GPS</u> .
MoMu0,1,2	<a href="#">4.19.4</a> All <u>EPIRBs</u> registered with the appropriate authority associated with the country code in the hexadecimal identification (15 Hex ID) of the beacon. A beacon can be registered online with the Cospas-Sarsat <u>IBRD</u> if the country does not provide a registration facility and the country has allowed direct registration in the <u>IBRD</u> .
	<b>4.20 Liferafts</b>
	<b>4.20.1 Liferaft Construction</b>
MoMu1,2	a) one or more inflatable liferafts with a total capacity to accommodate at least the total number of people on board which complies with:
MoMu1,2	i <u>LSA</u> Code 1997 Chapter IV or later version,
MoMu1,2	ii <u>ISO</u> 9650-1:2005, Type 1, Group A – Small Craft – Inflatable,
MoMu1,2	iii <u>ISAF</u> liferafts manufactured before 2016 until replacement is due at end of service life, or
MoMu1,2	iv <u>ORC</u> liferafts manufactured before 2003 until replacement is due at end of service life.
	<b>4.20.2 Minimum Liferaft Equipment</b>
MoMu0,1,2	a) a <u>SOLAS</u> liferaft shall contain as a minimum a <u>SOLAS</u> A pack,
MoMu1	b) an <u>ISO</u> 9650 liferaft shall contain as a minimum Pack 1 (greater than 24 hours pack),
MoMu1,2	d) the minimum contents of the <u>ISO</u> liferaft equipment packs are listed below. Some items, as indicated below, may be carried within accompanying waterproof grab bag(s) which shall be in a readily accessible location:
MoMu1,2	i portable buoyant bailer easily operable by hand,
MoMu1,2	ii 2 sponges,
MoMu1,2	iii pair of buoyant paddles with handles (not mitts) tied into raft adjacent to an entrance,

## SECTION 4 – PORTABLE EQUIPMENT

Categories	A boat shall have:
MoMu1,2	iv whistle,
MoMu1	v 2 waterproof torches with 6 h duration, and
MoMu1	vi 2 spare waterproof torches or 2 spare batteries and bulbs,
MoMu1,2	vii signalling mirror,
MoMu1,2	viii 6 anti-seasickness pills per person, *
MoMu1,2	ix seasickness bag per person, each with a simple, effective, closure system, *
MoMu1	x 6 red hand flares in accordance with <u>LSA</u> Code Chapter III, 3.2. 3 may be stowed in the grab bag,
MoMu1,2	xi 2 red parachute flares in accordance with <u>LSA</u> Code Chapter III, 3.1 – 1 may be stowed in the grab bag,
MoMu1,2	xii kit to repair leaks in most inflatable compartments, operable in wet conditions and during violent motion,
MoMu1,2	xiii hand operable air pump, capable of and ready for immediate use to inflate most compartments – Loose parts captive to the pump,
MoMu1	xiv First-Aid Kit including at least 2 tubes of sunscreen. All dressings shall be capable of being effectively used in wet conditions. The first aid kit shall be clearly marked and shall be re-sealable,
MoMu1	xv 2 thermal protective aids in accordance with <u>LSA</u> Code Chapter III, 2.5, *
MoMu1	xvi 500 mL container of drinking water per person,
MoMu1	xvii 2 additional 500 mL container of drinking water per person, or desalinator, *
MoMu1	xviii 10 000 kJ food per person, *
MoMu1,2	* may be packed in grab bag instead of liferaft.
	<b>4.20.3 Liferaft Packing and Stowage</b>
MoMu0,1,2	a) Each liferaft shall be packed either in:
MoMu0,1,2	i a rigid container securely stowed on the working deck, in the cockpit or in an open space, or
MoMu0,1,2	ii a rigid container or valise securely stowed in a dedicated weather tight locker containing liferaft and abandon ship equipment only which is readily accessible and opens onto the cockpit or working deck, or transom.
MoMu0,1,2	b) On a <b>monohull</b> with <u>moveable ballast</u> or a <b>multihull</b> , the liferaft shall be readily deployable whether or not the boat is inverted.
MoMu0,1,2	c) The end of each liferaft painter should be <u>securely fastened</u> to the boat.
MoMu0,1,2	d) Each raft shall be capable of being moved to the <u>lifelines</u> or launched within 15 seconds.
MoMu1,2	e) In a boat with <b>series date</b> before June 2001, a liferaft may be packed in a valise not exceeding 40 kg securely stowed below deck adjacent to a companionway.
	<b>4.20.4 Liferaft Servicing</b>
MoMu0,1,2	a) A liferaft shall be serviced at a manufacturer authorized service station at the following maximum intervals:
MoMu0,1,2	i <u>SOLAS</u> liferafts annually,
MoMu0,1,2	ii <u>ISO</u> 9650 canister packed liferafts every 3 years,
MoMu0,1,2	iii <u>ISO</u> 9650 valise packed liferafts every 3 years except that hired liferafts shall be serviced annually,
MoMu0,1,2	iv <u>ISAF</u> liferafts annually,
MoMu0,1,2	v <u>ORC</u> liferafts annually.
MoMu0,1,2	b) Servicing certificates (original or a copy) on board.
	<b>4.21 Grab Bags</b>
Mo0,1,2,3	<b>4.21.1</b> A grab bag shall have inherent flotation, at least 0.1 m <sup>2</sup> (1 ft <sup>2</sup> ) area of highly visible colour (e.g. dayglo yellow or orange) on the outside, shall be marked with the name of the boat, and shall have a lanyard and clip. <b>If a grab bag has to accompany a specific life raft, it shall be clearly marked with the identity of its corresponding raft.</b>
Mu**	<b>4.21.2</b> A grab bag for each liferaft, readily accessible whether or not the boat is inverted.
Mo1,2	
Mu1,2	



## SECTION 4 – PORTABLE EQUIPMENT

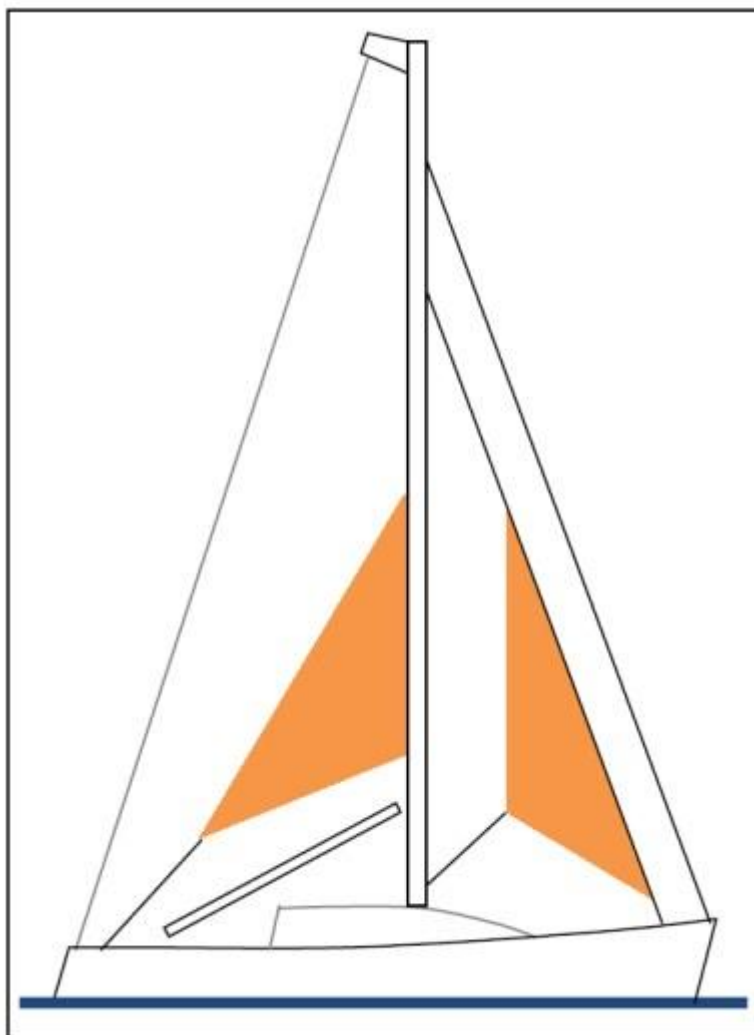
Categories	
	A boat shall have:
	<b>4.22 Crew Overboard Identification and Recovery</b>
MoMu0,1,2 MoMu0,1,2	<b>4.22.1 Locator Beacons</b> a) an <u>AIS</u> personal crew overboard beacon for each <u>crewmember</u> , Where possible every <u>PLB</u> shall be registered with the appropriate authority associated with the country code in the hexadecimal identification (15 Hex ID) of the beacon. A beacon can be registered online with the Cospas-Sarsat <u>IBRD</u> if the country does not provide a registration facility and the country has allowed direct registration in the <u>IBRD</u> .
Mo1,2,3 Mu1,2,3	<b>4.22.2 GPS Crew Overboard Position</b> a) For boats with only two <u>crewmembers</u> , a GPS capable of recording a crew overboard position, within 10 seconds, and monitoring that position without having to go below deck.
MoMu1,2	b) a <u>GPS</u> capable of recording a crew overboard position within 10 seconds and monitoring that position.
MoMu0,1,2 MoMu0,1,2	<b>4.22.3 Lifebuoys</b> b) a lifebuoy with a self-igniting light, a whistle, and a drogue, c) in addition to <u>OSR</u> 4.22.3 b) above, within reach of the helmsman and ready for immediate use, a second lifebuoy equipped with: i a whistle, a drogue, a self-igniting light, and ii a pole and flag. The pole shall be either permanently extended or be capable of being fully automatically extended,
MoMu0,1,2 MoMu0,1,2	d) at least one lifebuoy shall depend entirely on permanent buoyancy (e.g. foam), e) each inflatable lifebuoy and any automatic device shall be tested and serviced at intervals in accordance with its manufacturer's instructions.
MoMu0,1,2 **	<b>4.22.4 Heaving Line</b> A heaving line, no less than 6 mm (1/4") diameter, 15–25 m (50–75') long, readily accessible to cockpit.
MoMu0,1,2,3 MoMu0,1,2,3 MoMu0,1,2,3 MoMu0,1,2,3	<b>4.22.5 Recovery Sling</b> A recovery sling which includes a: a) buoyant line of length no less than the shorter of 4 times <u>L<sub>H</sub></u> or 36m (120'), b) buoyancy section (horseshoe) with no less than 90 N (20#) buoyancy, c) minimum strength capable to hoist a <u>crewmember</u> aboard.
MoMu0,1,2,3 **	<b>4.23 Pyrotechnic and Light Signals</b> Pyrotechnic signals shall be provided conforming to <u>LSA</u> Code Chapter III Visual Signals and not older than the stamped expiry date (if any) or if no expiry date stamped, not older than 4 years:
MoMu0,1,2,3 **	a) 2 orange smoke <u>LSA</u> III 3.3, b) 4 red hand flares <u>LSA</u> III 3.2.
4.24	Spare Number
MoMu0,1,2,3 **	<b>4.25 Cockpit Knife</b> A strong, sharp knife, in a securely restrained sheath shall be readily accessible from the deck or a cockpit.
MoMu1,2 **	<b>4.26 Storm &amp; Heavy Weather Sail Inventory</b> the following storm & heavy weather sails as specified in <u>OSR</u> 4.27:
MoMu0,1,2,3 MoMu0,1,2	<b>4.26.1</b> either a storm trysail or mainsail reefing to reduce the luff by at least 50% (or rotating wing mast if suitable), <b>4.26.2</b> heavy weather jib, <b>4.26.3</b> storm jib.
	<b>4.27 Storm &amp; Heavy Weather Sail Specifications</b> Where required by <u>OSR</u> 4.26, the specifications of heavy weather sails shall follow:



## SECTION 4 – PORTABLE EQUIPMENT

### Categories

A boat shall have:



**Figure 3 – Storm Sails**

#### **4.27.1 Design**

- a) the material of the body of a storm sail purchased after 2013 shall have a highly visible colour (e.g. dayglo pink, orange or yellow),
- b) aromatic polyamides, carbon and similar fibres shall not be used in a trysail or storm jib, but HMPE and similar materials are permitted,
- c) sheeting positions on deck for each storm and heavy-weather sail,
- d) sheeting positions for the trysail independent of the boom, and
- e) the maximum area of storm and heavy weather sails shall be lesser of the areas below or as specified by the boat designer or sailmaker.

#### **4.27.2 A Storm Trysail with:**

- a) area not greater than 17.5% mainsail hoist (P) x mainsail foot length (E),
- b) for sails made after 2011: The storm trysail area calculated as (0.5 x leech length x shortest distance between tack point and leech),
- c) no headboard,
- d) no battens,
- e) sail number and letters on both sides, as large as practicable, and
- f) in the case of a boat with an in-mast furling mainsail, the storm trysail shall be capable of being set while the mainsail is furled.

#### **4.27.3 A Heavy Weather Jib (or Heavy Weather Sail in a Boat with no Forestay) with:**

- a) area, **in unreefed condition**, of 13.5% height of the **foretriangle** squared, and
  - b) readily available method, independent of a luff groove, to attach to the stay.
- For sails made after 2011: Storm and heavy weather jib areas calculated as: (0.255 x luff length x (luff perpendicular + 2 x half width)).

## SECTION 4 – PORTABLE EQUIPMENT

Categories	A boat shall have:
MoMu0,1,2	<b>4.27.4 A Storm Jib with:</b>
MoMu0,1,2	a) area of 5% (height of the <b>foretriangle</b> ) squared,
MoMu0,1,2	b) maximum luff length 65% of height of the <b>foretriangle</b> , and
MoMu0,1,2	c) permanently attached method, independent of a luff groove, to attach to the stay.
MoMu0,1,2	For sails made after 2011: Storm and heavy weather jib areas calculated as: $(0.255 \times \text{luff length} \times (\text{luff perpendicular} + 2 \times \text{half width}))$ .

## SECTION 5 – PERSONAL EQUIPMENT

Categories		Each <u>crewmember</u> shall have:
**	<b>5.01</b>	<b>Lifejacket</b>
**	<b>5.01.1</b>	A lifejacket which shall:
**		a) i if manufactured before 2012 comply with <u>ISO</u> 12402-3 (Level 150) or equivalent, including <u>EN</u> 396 or UL 1180 and:
**		• if inflatable have a gas inflation system
**		• have crotch/thigh straps (ride up prevention system)
MoMu0,1,2		• have an integral safety harness in compliance with <u>OSR</u> 5.02
**		ii if manufactured after 2011 comply with <u>ISO</u> 12402-3 (Level 150) and be fitted with a whistle, lifting loop, reflective material automatic/manual gas inflation system:
**		• crotch/thigh straps (ride up prevention system)
MoMu0,1,2		• an integral safety harness in compliance with <u>OSR</u> 5.02
MoMu0,1,2,3		b) have an emergency position indicating light in accordance with either <u>ISO</u> 12402-8 or <u>LSA</u> code 2.2.3,
**		c) be clearly marked with the boat's or wearer's name,
MoMu0,1,2,3		d) have a sprayhood in accordance with <u>ISO</u> 12402-8,
**		f) if inflatable, be regularly checked for air retention.
MoMu0,1,2,3	<b>5.01.2</b>	A boat shall carry at least one gas inflatable lifejacket spare cylinder and, if appropriate, spare activation head for each type of lifejacket on board.
MoMu0,1,2	<b>5.01.3</b>	A boat shall carry at least one spare lifejacket as required in <u>OSR</u> 5.01.1, (a spare <u>PLB</u> described in <u>OSR</u> 5.01.1 e) is not required),
**	<b>5.01.4</b>	The <i>person in charge</i> shall personally check each lifejacket at least once annually.
	<b>5.02</b>	<b>Safety Harness and Tethers</b>
MoMu0,1,2,3	<b>5.02.1</b>	A harness that complies with <u>ISO</u> 12401 or equivalent.
MoMu0,1,2,3	<b>5.02.2</b>	A <u>tether</u> that shall:
MoMu0,1,2,3		a) comply with <u>ISO</u> 12401 or equivalent,
MoMu0,1,2,3		b) not exceed 2 m (6'-6") including the length of the hooks,
MoMu0,1,2,3		c) have self-closing hooks,
MoMu0,1,2,3		d) have overload indicator flag embedded in the stitching, and
MoMu0,1,2,3		e) be manufactured after 2000.
MoMu0,1,2,3	<b>5.02.3</b>	either:
MoMu0,1,2,3		a) a <u>tether</u> not exceeding 1 m (3'-3") including the length of the hooks, or
MoMu0,1,2,3		b) an intermediate self-closing hook on a 2 m (6'-6") <u>tether</u> .
MoMu0,1,2,3	<b>5.02.5</b>	A <u>tether</u> which has been overloaded shall be replaced.

## SECTION 6 – TRAINING

Categories	<b>6.01 Training</b>	
MoMu1,2	<b>6.01.2</b>	At least 30% but not fewer than two <u>crewmembers</u> , including the <i>person in charge</i> shall have undertaken training within the five years before the start of the race in <u>OSR</u> 6.02 Training Topics.
MoMu0,1,2	6.01.4	Except as otherwise provided in the Notice of Race, an in-date certificate gained at a World Sailing approved Offshore Personal Survival Training course shall be accepted by an event Organising Authority as evidence of compliance with <u>OSR</u> 6.01. See Appendix G – Model Training Course, for further details.
Mo0,1,2 Mu0,1,2	6.01.5	A refresher course may be taken to renew a certificate if the refresher course is completed within 2 years of the expiration of the individual's most recent Offshore Personal Survival Course certificate.
	<b>6.02 Training Topics</b>	
MoMu0,1,2,3	6.02.1	Giving Assistance to Other Craft
MoMu0,1,2,3	6.02.2	Personal Safety Gear, theory and practice
MoMu0,1,2,3	6.02.3	Care and Maintenance of Safety Gear
MoMu0,1,2,3	6.02.4	Fire Precautions and Firefighting, theory and practical
MoMu0,1,2,3	6.02.5	Crew Overboard Prevention and Recovery
MoMu0,1,2,3	6.02.6	Hypothermia, Cold Shock and Drowning
MoMu0,1,2,3	6.02.7	Crew Health
MoMu0,1,2,3	6.02.8	Marine Weather
MoMu0,1,2,3	6.02.9	Heavy Weather
MoMu0,1,2,3	6.02.10	Storm Sails
MoMu0,1,2,3	6.02.11	Damage Control
MoMu0,1,2,3	6.02.12	Search and Rescue Organisation
MoMu0,1,2,3	6.02.13	Pyrotechnics and Signalling Gear, theory and practical
MoMu0,1,2,3	6.02.14	Emergency Communications, theory and practical
MoMu0,1,2,3	6.02.15	Liferafts and Abandon Ship, theory and practical
	6.03	Spare Number
	<b>6.04 Routine Training On-Board</b>	
**		At least annually the crews shall practice the drills for:
**		a) crew-overboard recovery, and
**		b) abandonment of vessel.
	<b>6.05 Medical Training</b>	
MoMu1	<b>6.05.2</b>	At least two <u>crewmembers</u> shall have a valid first aid certificate completed within the last five years meeting:
MoMu0,1,2	a)	A certificate listed on the <u>WS</u> website <a href="https://www.sailing.org/inside-world-sailing/activities-services/technical-offshore/technical-services/technical-and-offshore-safety/offshore-safety/osr-recognised-first-aid-qualifications/">https://www.sailing.org/inside-world-sailing/activities-services/technical-offshore/technical-services/technical-and-offshore-safety/offshore-safety/osr-recognised-first-aid-qualifications/</a> of MNA recognised courses, or
MoMu0,1,2	b)	<u>STCW</u> First Aid Training complying with A-VI/1-3 - Elementary First Aid or higher <u>STCW</u> level.

## LIST OF APPENDICES

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*The appendices, other than appendix F, listed below are included in the "Complete" version of the current World Sailing OSR available at <https://www.sailing.org/inside-world-sailing/rules-regulations/offshore-special-regulations/>*

*Appendix F begins on the next page.*

### **APPENDICES TO THE OFFSHORE SPECIAL REGULATIONS**

**APPENDIX A – Moveable and Variable Ballast**

**APPENDIX B – For Inshore Racing**

**APPENDIX C – For Inshore Dinghy Racing**

**APPENDIX D – A Guide to ISO and other Standards**

**APPENDIX E – World Sailing Code for the Organisation of Oceanic Races**

**APPENDIX F – Standard Inspection Card**

**APPENDIX G – Model Training Course**

**APPENDIX H – Model First Aid Training Course**

**APPENDIX J – Hypothermia**

**APPENDIX K – Drogues and Sea Anchors**

**APPENDIX L – Model Keel and Rudder Inspection Procedure**

**APPENDIX M – Optional Wording for Organising Authorities' NoRs or SIs**

## World Sailing Appendix F

### Inspection Card

For **Category 1 Multihulls**

**JANUARY 2024 – DECEMBER 2025**

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**Version 1.13 – 24 February 2024**



#### Instructions

- **PERSON IN CHARGE** (see Racing Rules of Sailing 46): please fill in this form, prepare the boat, initial above each underline and sign where indicated.
- **INSPECTORS** mark each inspected item with a checkmark or cross. Note any deficiencies on the *Deficiency Report*. Show the *Deficiency Report* to the *Person in Charge*, then return the report to the *Race Committee* as soon as possible.

**Boat** \_\_\_\_\_

**Sail Number** \_\_\_\_\_

**No of persons on board** \_\_\_\_\_

**Disclaimer of Liability** The inspection is carried out as a courtesy. An inspector cannot limit or reduce the complete and unlimited responsibility of the owner and the person in charge.

"I hereby declare that I am the *Person in Charge*, that wherever I initial an item on this checklist it conforms to its associated Offshore Special Regulations (OSR), that I have read and understand the OSRs and in particular [1.02.1](#) and [1.02.2](#)

**Signed** \_\_\_\_\_ **Date** \_\_\_\_\_

**Printed Name** \_\_\_\_\_

**Note:** PURPLE text indicates additional requirements to category 2

**Precedence:** The checklist below is in point form. In all cases the full text in the Offshore Special Regulations takes precedence.

Inspector only ↴

Person in Charge initials here ↴

#### Lay out on Chart Table or Other Surface

<a href="#">4.11.1</a>	Charts (not solely electronic), plotting equipment	_____	<input type="checkbox"/>
<a href="#">4.19.4</a>	Proof of EPIRB registration with rescue authority	_____	<input type="checkbox"/>
<a href="#">4.20.4</a>	Servicing certificate for each liferaft	_____	<input type="checkbox"/>
<a href="#">6.01.2</a>	WS approved survival training certificate for 30% of the crew (minimum 2)	_____	<input type="checkbox"/>
<a href="#">6.04</a>	Proof that crew-overboard recovery has been practiced within past year	_____	<input type="checkbox"/>
6.04	Proof that abandonment of vessel has been practiced within past year	_____	<input type="checkbox"/>
<a href="#">6.05.2</a>	Elementary First Aid, or equivalent, certificate for 2 crew	_____	<input type="checkbox"/>

#### Lay out on Bunk(s)

<a href="#">3.29.4</a>	2nd radio capable of receiving weather, could be the handheld VHF	_____	<input type="checkbox"/>
<a href="#">3.29.5</a>	Emergency antenna for each type of installed radio transceiver	_____	<input type="checkbox"/>

<a href="#">4.08</a>	First Aid Manual and First Aid Kit	_____	<input type="checkbox"/>
<a href="#">4.09</a>	Foghorn	_____	<input type="checkbox"/>
<a href="#">4.16.1</a>	Tools, spare parts, method to disconnect/sever standing rigging	_____	<input type="checkbox"/>
<a href="#">4.22.1</a>	AIS personal crew overboard beacon for each crewmember	_____	<input type="checkbox"/>
4.22.1	Every (optional) PLB on board registered with rescue authority	_____	<input type="checkbox"/>
<a href="#">4.23</a>	Flares, 4 red hand-held and 2 orange smoke, LSA III	_____	<input type="checkbox"/>
<a href="#">5.01</a>	Lifejacket c/w lights, whistle etc., 1 for each crew, marked with name	_____	<input type="checkbox"/>
<a href="#">5.01.1</a>	Each lifejacket has crotch or thigh straps & harness	_____	<input type="checkbox"/>
5.01.1	Each lifejacket has a sprayhood	_____	<input type="checkbox"/>
<a href="#">5.01.2</a>	Spare cylinder and activation head for each type on board	_____	<input type="checkbox"/>
<a href="#">5.01.3</a>	Spare lifejacket	_____	<input type="checkbox"/>
<a href="#">5.01.4</a>	Each lifejacket inspected by the person in charge within past 12 months	_____	<input type="checkbox"/>
<a href="#">5.02.1</a>	Safety harness for each crewmember	_____	<input type="checkbox"/>
<a href="#">5.02.2</a>	2 m (6'-6") tether, with coloured overload flag, for each crewmember	_____	<input type="checkbox"/>
<a href="#">5.02.3</a>	Mid-tether hook on 2 m tether, or 1 m (3'-3") tether for each crewmember	_____	<input type="checkbox"/>
<b>Grab Bag</b>			
<a href="#">3.29.1</a>	Watertight handheld VHF radio transceiver stowed in each grab bag	_____	<input type="checkbox"/>
<a href="#">3.29.9</a>	<b>Watertight handheld satellite telephones stowed in grab bag</b>	_____	<input type="checkbox"/>
<a href="#">4.07</a>	2nd watertight (IP67) flashlight with spare batteries and bulbs	_____	<input type="checkbox"/>
<a href="#">4.21.1</a>	Grab bag for each raft, with inherent flotation and 0.1 m <sup>2</sup> (1 ft <sup>2</sup> ) bright colour	_____	<input type="checkbox"/>
<b>Below Deck Inspection</b>			
<a href="#">3.07.1</a>	2 exits in each hull which contains accommodations	_____	<input type="checkbox"/>
<a href="#">3.07.2</a>	Escape hatch in each hull which contains accommodations	_____	<input type="checkbox"/>
<a href="#">3.08.3</a>	Portlights that open inward labelled "NOT TO BE OPENED AT SEA"	_____	<input type="checkbox"/>
<a href="#">3.10</a>	Sea cocks or valves on through-hull openings below waterline	_____	<input type="checkbox"/>
<a href="#">3.12</a>	Heel of keel-stepped mast is securely fastened to structure	_____	<input type="checkbox"/>
<a href="#">3.13.1</a>	Crash bulkhead or permanently installed foam buoyancy	_____	<input type="checkbox"/>
<a href="#">3.18.1</a>	Toilet, permanently installed	_____	<input type="checkbox"/>
<a href="#">3.19.1</a>	Bunks, permanently installed	_____	<input type="checkbox"/>
<a href="#">3.20</a>	Cooking stove, permanently installed, with fuel shut-off	_____	<input type="checkbox"/>
<a href="#">3.21.1</a>	<b>Water delivery pump and tanks divided into at least 2 compartments</b>	_____	<input type="checkbox"/>



<a href="#">3.22</a>	Hand holds below deck	_____	<input type="checkbox"/>
<a href="#">3.27.4</a>	Spare bulbs for navigation lights (not required for LED)	_____	<input type="checkbox"/>
<a href="#">3.28.4</a>	Batteries are of sealed type	_____	<input type="checkbox"/>
3.28.4	Separate engine starting battery or hand-starting device	_____	<input type="checkbox"/>
<a href="#">3.29.6</a>	25W DSC enabled VHF w/ masthead antenna & programmed MMSI	_____	<input type="checkbox"/>
<a href="#">3.29.7</a>	AIS Transponder w/ shared masthead or raised dedicated antenna	_____	<input type="checkbox"/>
<a href="#">4.03</a>	Tapered soft wood plug at each through-hull opening	_____	<input type="checkbox"/>
<a href="#">4.05.1</a>	Fire blanket adjacent to every cooking device	_____	<input type="checkbox"/>
<a href="#">4.05.2</a>	2 fire extinguishers, 2 kg each in different parts of the boat	_____	<input type="checkbox"/>
<a href="#">4.12</a>	Safety equipment location chart	_____	<input type="checkbox"/>
<b>At Helm or Ready for Rapid Deployment</b>			
<a href="#">4.19.2</a>	406 MHz EPIRB, with internal GPS	_____	<input type="checkbox"/>
<a href="#">4.22.2</a>	For double handed, GPS to track crew overboard from on deck	_____	<input type="checkbox"/>
4.22.2	GPS with crew overboard locating feature (MOB button)	_____	<input type="checkbox"/>
<a href="#">4.22.3</a>	Lifebuoy with self-igniting light, whistle and drogue	_____	<input type="checkbox"/>
4.22.3	Lifebuoy with self-igniting light, whistle, drogue and, pole and flag	_____	<input type="checkbox"/>
<a href="#">4.22.4</a>	Heaving line, pref. 'Throwing sock' type, 6mm (1/4") 15–25m (50–75')	_____	<input type="checkbox"/>
<a href="#">4.22.5</a>	Recovery Sling (Lifesling® or equivalent)	_____	<input type="checkbox"/>
<a href="#">4.25</a>	Strong, sharp knife, sheathed and securely restrained	_____	<input type="checkbox"/>
<b>On Deck, Where Stowed or Ready for Deployment</b>			
<a href="#">3.08.4</a>	Hatch blocking devices (panels) attached and can be secured in place	_____	<input type="checkbox"/>
<a href="#">4.02.2</a>	1 m <sup>2</sup> fluorescent pink, orange, or yellow showing on deck	_____	<input type="checkbox"/>
<a href="#">4.06.1</a>	2 suitably sized anchors and rode ready for immediate use	_____	<input type="checkbox"/>
4.07	Watertight (IP67) searchlight to find person overboard or collision avoidance	_____	<input type="checkbox"/>
<a href="#">4.20.1</a>	Liferaft(s) capable of carrying the whole crew	_____	<input type="checkbox"/>
<a href="#">4.20.2</a>	Liferaft SOLAS Pack A or ISO Pack 1 (greater than 24 hours)	_____	<input type="checkbox"/>
<a href="#">4.20.3</a>	Liferaft(s) stowed in rigid container, or valise in dedicated locker	_____	<input type="checkbox"/>
<b>Rigged/Fitted to Demonstrate Use</b>			
<a href="#">3.27.1</a>	Navigation lights, above sheerline and not obscured when sailing	_____	<input type="checkbox"/>
<a href="#">3.27.3</a>	Reserve navigation lights, can be powered separately	_____	<input type="checkbox"/>
<a href="#">4.01.2</a>	Alternate method for displaying sail letters and numbers	_____	<input type="checkbox"/>

<a href="#">4.04.2</a>	Jack stays are independent on each side of the deck	_____	<input type="checkbox"/>
4.04.2	Jack stays to permit crew to move between workstations while clipped	_____	<input type="checkbox"/>
<a href="#">4.04.3</a>	Clipping points at workstations so that 2/3 can clip on without jack stays	_____	<input type="checkbox"/>
<a href="#">4.10.1</a>	Radar reflector, 30 cm (12") dia. octahedral or minimum RCS of 2 m <sup>2</sup>	_____	<input type="checkbox"/>
<a href="#">4.15.1</a>	Emergency tiller	_____	<input type="checkbox"/>
<a href="#">4.15.2</a>	Proven method of emergency steering with the rudder disabled	_____	<input type="checkbox"/>
<a href="#">4.26.1</a>	Either a storm trysail or reefing to reduce mainsail luff by 50%	_____	<input type="checkbox"/>
<a href="#">4.26.2</a>	Heavy weather jib, attachable independent of luff groove	_____	<input type="checkbox"/>
<a href="#">4.26.3</a>	Storm jib, attachable independent of luff groove (permanent)	_____	<input type="checkbox"/>
<a href="#">4.27.1</a>	Sheeting positions for each heavy/storm sail	_____	<input type="checkbox"/>
<b>General</b>			
<a href="#">2.04</a>	All equipment is readily available, adequately sized, in date and functions	_____	<input type="checkbox"/>
<a href="#">2.04.2</a>	Heavy items are permanently installed or securely fastened	_____	<input type="checkbox"/>
<a href="#">3.02</a>	Boat is strongly built, seaworthy and watertight	_____	<input type="checkbox"/>
<a href="#">3.05.1</a>	Transverse watertight bulkheads 4 m (13'-3") in non-accommodation hulls	_____	<input type="checkbox"/>
<a href="#">3.07.5</a>	Handholds and clipping points on underside of boat	_____	<input type="checkbox"/>
<a href="#">3.08.1</a>	Forward hatches open outward only	_____	<input type="checkbox"/>
<a href="#">3.08.2</a>	Hatches are attached, above water at 90° heel & operable if capsized	_____	<input type="checkbox"/>
<a href="#">3.08.7</a>	Companionway sill is above local sheerline, or acceptable alternative	_____	<input type="checkbox"/>
<a href="#">3.09</a>	Cockpit is strong, watertight and meets OSR size and drainage	_____	<input type="checkbox"/>
<a href="#">3.14</a>	Double lifelines & pulpits, surround entire deck, 600 mm (24") high	_____	<input type="checkbox"/>
<a href="#">3.15</a>	Nets (trampolines) meet OSR	_____	<input type="checkbox"/>
<a href="#">3.21.3</a>	Emergency drinking water 2 L (0.5 US Gal) per person, in dedicated, sealed containers	_____	<input type="checkbox"/>
<a href="#">3.23.1</a>	2 strong buckets, each with lanyard and 9 L (2.4 US Gal) capacity	_____	<input type="checkbox"/>
3.23.1	Permanently installed manual bilge pump	_____	<input type="checkbox"/>
3.23.1	Provision to pump out all watertight compartments (excluding foam filled)	_____	<input type="checkbox"/>
<a href="#">3.23.2</a>	Permanently installed manual bilge pump operable with all hatches closed	_____	<input type="checkbox"/>
<a href="#">3.24</a>	Magnetic compass, unpowered, with deviation chart	_____	<input type="checkbox"/>
3.24	2nd magnetic compass, may be hand-held and/or electronic	_____	<input type="checkbox"/>
<a href="#">3.25</a>	2 halyards per mast, each capable of hoisting a sail	_____	<input type="checkbox"/>
<a href="#">3.28.1</a>	Propulsion engine provides minimum speed of 3/4 hull speed	_____	<input type="checkbox"/>

## APPENDIX F – INSPECTION CARD

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3.28.1	Propulsion engine, inboard if LH is 12 m or over	_____	<input type="checkbox"/>
<a href="#">3.28.3</a>	Fuel or battery capacity to motor at 3/4 hull speed for 5 hours + electric needs	_____	<input type="checkbox"/>
<a href="#">4.01.1</a>	Sail letters and numbers meeting RRS 77 & RRS G	_____	<input type="checkbox"/>
<a href="#">4.02.3</a>	1 m <sup>2</sup> fluorescent pink, orange or yellow on underside	_____	<input type="checkbox"/>
<a href="#">4.13.1</a>	Knotmeter or log	_____	<input type="checkbox"/>
<a href="#">4.13.2</a>	Depth sounder	_____	<input type="checkbox"/>
<a href="#">4.17</a>	Boat's name on buoyant equipment	_____	<input type="checkbox"/>
<a href="#">4.18</a>	Marine grade retro-reflective material on buoyant equipment	_____	<input type="checkbox"/>