

World Sailing Offshore Special Regulations

Extract for **Category 2 Monohulls**

JANUARY 2024 – DECEMBER 2025

© ORC Ltd. 2002, amendments 2003-2024 © World Sailing Limited

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.

Copyright

When reprinting these regulations Member National Authorities and Organising Authorities should:

- When reprinting these regulations Member National Authorities and Organising Authorities should:
- request copyright permission from World Sailing and ORC Ltd (normally given free of charge),
- display a copyright acknowledgement with the reprint (similar to © ORC Ltd. 2002, amendments 2003-2024 © World Sailing Limited),
- make any amendments by deleting contrary provisions,
- indicate that changes have been made, and
- supply a copy of the reprint to each of World Sailing and ORC Ltd.

Official interpretations shall take precedence over these Special Regulations and will be indexed, numbered, dated and displayed on the World Sailing website:

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

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

SECTION 1 – FUNDAMENTAL AND DEFINITIONS

Categories	1.01 Purpose and Use																																
**	1.01.1 The purpose of the Offshore Special Regulations (<u>OSR</u>) is to establish uniform minimum equipment, accommodation and training standards for monohull and multihull (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.																																
	1.02 Responsibility of Person in Charge																																
**	<u>1.02.1</u> Under <u>RRS 3</u> 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.																																
**	<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 2.02</u> .																																
	1.03 Definitions, Abbreviations, Word Usage																																
**	1.03.1 Table 1 – Definitions of Terms used in this document																																
	<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 & 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 & 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
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																																

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 _H	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 _{WL}	(Length of) loaded waterline
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	2.01 Categories of Events
**	<i>Organising authorities</i> shall select from one of the following categories and may modify the <u>OSR</u> to suit local conditions.
MoMu2	2.01.3 Category 2
	Races of extended duration along or not far removed from shorelines or in large, unprotected bays or lakes, where a high degree of self-sufficiency is required of the boats.
**	2.02 Incident Reporting
	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.
**	2.03 Inspection
	A boat may be inspected at any time. If she fails to comply with the <u>OSR</u> her entry may be rejected, or she will be subject to protest.
**	2.04 General Requirements
**	2.04.1 All equipment required by <u>OSR</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.
**	2.04.2 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:
	3.01	Strength of Build and Rig
**	3.01.1	Properly rigged, fully seaworthy and shall meet the <u>OSR</u> .
**	3.01.2	Equipped with shrouds and at least one forestay that shall remain connected to the mast and the boat while racing (not applicable to boats with free-standing masts).
**	3.01.3	The forestay 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.
	3.02	Watertight and Structural Integrity of a Boat
**	3.02.1	Essentially watertight and all openings shall be capable of being immediately secured. centreboard or daggerboard 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 waterline .
Mo0,1,2	<u>3.02.2</u>	Structural Inspection – Consult the owner’s manual for any instructions for keel bolt checking and re-tightening. The following inspection to be conducted by a qualified person externally with the boat out of the water. Check that there are no visible stress cracks particularly around the keel, hull/keel attachment, hull appendages and other stress points, inside the hull, backing plates, bolting arrangements and keel floors. (See Appendix L – Model Keel and Rudder Inspection Procedure).
Mo0,1,2	3.02.3	Evidence of a structural inspection in accordance with 3.02.2 within 24 months before the start of the race or after a grounding whichever is the later.
Mo0,1,2,3	3.02.5	Inspection after Grounding – an appropriately qualified person shall conduct an internal and external inspection after each unintentional grounding.
	3.03	Hull Construction Standards (Scantlings)
Mo0,1,2	3.03.1	A monohull with a series date after 2009
Mo0,1,2		a) of less than 24 m (78’-9”) <u>L_H</u> shall have:
Mo0,1,2		i been designed, built and maintained in accordance with the requirements of <u>ISO</u> 12215 Category A, and
Mo0,1,2		ii a World Sailing/ <u>ISAF</u> building plan review certificate issued from an organisation recognised by World Sailing. Plan review certificates can be found at <u>World Sailing</u> .
Mo0,1,2		b) of 24 m (78’-9”) <u>L_H</u> and greater shall have been designed, built and maintained in accordance with the requirements of a Classification Society recognised by World Sailing.
Mo0,1,2		c) shall have a builder’s declaration signed and dated by the builder to confirm the boat is built in accordance with the reviewed plans. In cases when a builder no longer exists, an organising authority or class rules may accept a signed statement by a naval architect or other person familiar with the requirements of above in lieu of the builder’s declaration, and
Mo0,1,2		d) shall have an additional World Sailing/ <u>ISAF</u> certificate of building plan review in accordance with a) or b), and c) above for all significant repairs or modifications to the hull, deck, coachroof or appendages .
MoMu0,1,2	3.03.2	A monohull with series date between 1987 and 2010, and all multihulls , shall have been designed, built, maintained, modified or repaired in accordance with the requirements of:
Mo0,1,2		a) <u>OSR</u> 3.03.1, or
Mo0,1,2		b) the <u>ABS</u> Guide for Building and Classing Offshore Yachts and have on board either an <u>ABS</u> certificate of plan approval, or written statements signed by the designer and builder confirming that they have respectively designed and built the boat in accordance with the <u>ABS</u> Guide, or
MoMu0,1,2		c) the EC Recreational Craft Directive for Category A having obtained the CE mark, or
MoMu0,1,2		d) <u>ISO</u> 12215 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

SECTION 3 – STRUCTURAL FEATURES, STABILITY, FIXED EQUIPMENT

- Categories A boat shall be/have:
- 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 *organising authority* 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.

3.04 Stability – Monohulls

- Mo0,1,2 [3.04.1](#) a) Able to demonstrate compliance with ISO 12217-2* design category A or higher, either by EC Recreational Craft Directive certification having obtained the CE mark or the designer’s declaration

Mo0,1,2,3 * The latest effective version of ISO 12217-2 should be used unless the boat was already designed to a previous version.

- Mo0,1,2,3 3.04.2 Where compliance in accordance with QSR 3.04.1 cannot be demonstrated, a boat shall be able to demonstrate either:

Table 2 – STIX, AVS and m*Agz Requirements

a)	Race Category	0,1,2	3
	minimum <u>ISO</u> 12217-2 Stability Index (STIX)	32	23
	minimum <u>ISO</u> 12217-2 Angle of Vanishing Stability (AVS)	130-0.002*m	130-0.005*m
	but AVS always >=	100°	95°
	a minimum righting energy m*Agz (where Agz is the positive area under the righting lever curve in the minimum operating condition, expressed in kg metre degrees from upright to AVS)	172000	57000

or

Table 3 – ORC Stability Index or SSS Requirements

b)	Race Category	0	1	2	3
	minimum Stability Index in <u>ORC</u> Rating System, or	120	115	110	103
	minimum IRC Safety and Stability Screening numeral (SSS) Base value	35		28	15
	SSS may only be used if the series date is before			1995	2000

3.06 Exits – Monohulls

- Mo0,1,2,3,4 3.06.1 If the **series date** is after 1994 and L_H is 8.5 m (28’) and greater, a boat shall have at least two exits. One exit shall be located forward of the foremost mast except where structural features prevent its installation.

- Mo0,1,2,3,4 3.06.2 If first launched after 2013, the minimum clear hatch openings shall be:

- Mo0,1,2,3,4 a) a circular hatch with diameter 450 mm (18”), or
- Mo0,1,2,3,4 b) any other shape with minimum dimension of 380 mm (15”) and minimum area of 0.18 m² (1.9 ft²) (see figure 1).

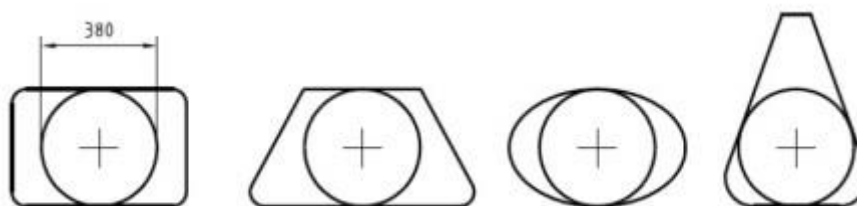


Figure 1 – Measurements of Minimum Clear Opening

SECTION 3 – STRUCTURAL FEATURES, STABILITY, FIXED EQUIPMENT

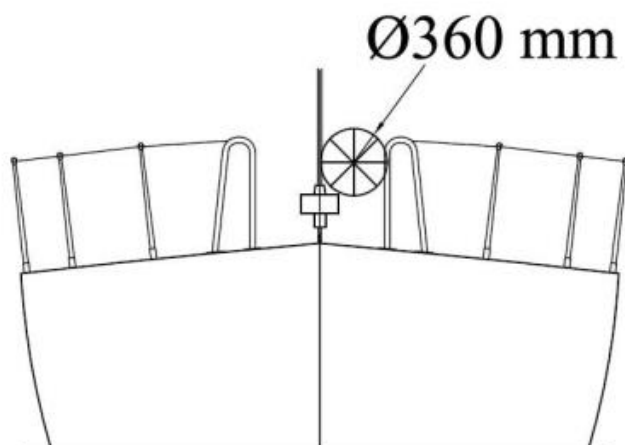
Categories	
	A boat shall be/have:
	3.08 Hatches & Companionways
**	3.08.1 <u>Hatch</u> covers forward of the maximum beam station shall not open toward the interior of the boat, except <u>hatches</u> in the side of a coachroof or ports having an area of less than 0.071 m ² (110 in ²).
**	3.08.2 A <u>hatch</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° capsize,
Mo0,1,2,3,4	b) above the water when the boat is heeled 90°.
Mo0,1,2,3,4	A boat may have a maximum of two <u>hatches</u> on each side of centerline that do not conform to the requirement in b), provided that the opening of each is less than 0.071 m ² (110 in ²).
**	3.08.3 <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".
**	3.08.4 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.
Mo0,1,2,3,4	3.08.5 If a monohull with cockpit(s) that is/are not <u>contained cockpit(s)</u> a boat shall have:
Mo0,1,2,3,4	a) a companionway sill that does not extend below the local sheerline, or
Mo0,1,2,3,4	b) a companionway in full compliance with <u>ISO</u> 11812 category A.
Mo0,1,2,3,4	3.08.6 If a monohull with <u>contained cockpit(s)</u> where the companionway extends below the local sheerline, a boat shall have panels capable of blocking the companionway up to the level of the local sheerline whilst giving access to the interior.
	3.09 Cockpits
	3.09.1 General
**	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_{WL}</u> above the waterline (or in IMS boats with <u>first launch</u> before 2003, at least 2% L above the waterline), and
**	c) a bow, lateral, central, or stern well is a cockpit for the purposes of <u>OSR</u> 3.09.
	3.09.2 Cockpit Volume
**	The maximum combined volume below lowest <u>coamings</u> of all <u>contained cockpits</u> shall be:
MoMu2,3,4	b) series date before April 1992: 9% (<u>L_{WL}</u> x maximum beam x freeboard abreast the cockpit),
**	c) series date 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.
	3.09.3 Cockpit Drains
**	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_H</u> : 2 x 25 mm (1") diameter or equivalent,
**	b) if 8.5 m (28') <u>L_H</u> or greater: 4 x 20 mm (3/4") diameter or equivalent.
	3.10 Sea Cocks or Valves
**	<u>Permanently installed</u> sea cocks or valves on all through-hull openings below the waterline except for integral deck scuppers and instrument through-hulls.
	3.11 Sheet Winches
**	Sheet winches mounted in such a way that an operator is not required to be substantially below deck.
	3.12 Mast Step
**	The heel of a keel stepped mast <u>securely fastened</u> to the mast step or adjoining structure.

Categories

A boat shall be/have:

3.14 Pulpits, Stanchions, Lifelines**3.14.1 General**The perimeter of the deck surrounded by system of lifelines and pulpits as follows:

- a) continuous lifelines 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 lifeline in a fore-and-aft direction shall not be constrained. Temporary sleeving shall not modify tension in the lifeline,
- b) minimum heights of lifelines 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 **series date** before 1993 where it shall be no greater than 560 mm (22"),
- c) lifelines 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 permanently installed with pulpits and stanchions mechanically retained in their bases,
- e) **if a boat's first launch date is after 2024**, the outside of pulpit and stanchion base tubes no further inboard from the **perimeter of the deck** than 5% of **boat beam** or 150 mm (6"), whichever is greater, nor further outboard than the **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,
- 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"),

**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 3/4") for an intermediate lifeline.

SECTION 3 – STRUCTURAL FEATURES, STABILITY, FIXED EQUIPMENT

Categories	A boat shall be/have:																	
Mo0,1,2,3 ** ** ** ** ** **	3.14.3 Lifeline Specifications	<p>a) <u>lifelines</u> of stranded stainless steel wire,</p> <p>c) The minimum diameter is specified in table 4 below,</p> <p>d) Stainless steel <u>lifelines</u> shall be uncoated and used without close-fitting sleeving, however, temporary sleeving may be fitted provided it is regularly removed for inspection,</p> <p>e) A lanyard of synthetic rope may be used to secure <u>lifelines</u> provided the gap it closes does not exceed 100 mm (4"). This lanyard shall be replaced annually,</p> <p>f) All components of the <u>lifeline</u> enclosure system shall have a breaking strength no less than the <u>lifeline</u>,</p>																
	Table 4 – Lifeline Diameter Requirements																	
		<table border="1"> <thead> <tr> <th>L_H</th> <th>Wire Min. <u>lifeline</u> diameter</th> <th>HMPE rope (Single braid) min. <u>lifeline</u> diameter</th> <th>HMPE Core (Braid on braid) min. <u>lifeline</u> <u>outside</u> diameter</th> </tr> </thead> <tbody> <tr> <td>under 8.5 m (28')</td> <td>3 mm (1/8")</td> <td>4 mm (5/32")</td> <td>6 mm (1/4")</td> </tr> <tr> <td>8.5m – 13 m</td> <td>4 mm (5/32")</td> <td>5 mm (3/16")</td> <td>7 mm (9/32")</td> </tr> <tr> <td>over 13 m (42' 8")</td> <td>5 mm (3/16")</td> <td>5 mm (3/16")</td> <td>7 mm (9/32")</td> </tr> </tbody> </table>	L _H	Wire Min. <u>lifeline</u> diameter	HMPE rope (Single braid) min. <u>lifeline</u> diameter	HMPE 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")
L _H	Wire Min. <u>lifeline</u> diameter	HMPE rope (Single braid) min. <u>lifeline</u> diameter	HMPE 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")															
**	3.16	Spare																
	3.17 Toe Rail or Foot-Stop																	
Mo0,1,2,3	3.17.1	<u>Permanently installed</u> toe rail of minimum height 25 mm (1"), located at or no more than 100 mm (4") inboard of the perimeter of the deck from at least forward of the mast.																
Mo0,1,2,3	3.17.2	On a boat with series date before 1984, an additional <u>lifeline</u> of between 25–50 mm (1–2") high is permitted in lieu of a toe rail																
	3.18 Toilet																	
MoMu0,1,2	3.18.1	<u>Permanently installed</u> toilet.																
	3.19 Bunks																	
MoMu1,2,3,4	3.19.1	<u>Permanently installed</u> bunks.																
	3.20 Cooking Facilities																	
MoMu0,1,2,3		<u>Permanently installed</u> cooking stove, capable of being operated safely at sea, with fuel shutoff control.																
	3.21 Drinking Water Tanks & Drinking Water																	
	3.21.1 Drinking Water Tanks																	
MoMu2,3		c) <u>permanently installed</u> delivery pump and water tank(s)), or reusable container(s) capable of providing sufficient amount of drinking water per person per day for the likely duration of the voyage.																
	3.21.3 Emergency Drinking Water																	
MoMu1,2,3		a) at least 2 L (0.5 US Gal) per person of drinking water for emergency use in a dedicated and sealed container or container(s).																
	3.22 Hand Holds																	
**		Adequate hand holds fitted below deck.																
	3.23 Bilge Pumps and Buckets																	
**	3.23.1	a) two strong buckets, each with a lanyard and of at least 9 L (2.4 US Gal) capacity, b) two <u>permanently installed</u> manual bilge pumps, one operable from above, the other from below deck,																
Mo0,1,2																		
**	3.23.2	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.																
**	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.																

SECTION 3 – STRUCTURAL FEATURES, STABILITY, FIXED EQUIPMENT

Categories	
	A boat shall be/have:
MoMu0,1,2,3 **	3.24 Compass 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, b) a second compass which may be hand-held and/or electronic.
MoMu0,1,2,3 **	3.25 Halyards 3.25.1 A minimum of two halyards, each capable of hoisting a sail, on each mast. 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.
MoMu0,1,2,3 **	3.27 Navigation Lights 3.27.1 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 **	3.27.3 Reserve lights having the same specifications as above, and that can be powered independently. 3.27.4 Spare bulbs (not required for LED).
MoMu0,1,2,3 **	3.28 Engines, Generators, Fuel 3.28.1 Propulsion Engines a) engines and associated systems installed in accordance with their manufacturers' guidelines and suitable for the size and intended use of the boat, b) an engine which provides a minimum speed in knots of $(1.8 \times \sqrt{L_{WL}}$ in metres) or $(\sqrt{L_{WL}}$ in feet), c) inboard engine, 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.
Mo0,1,2Mu0 **	3.28.2 Generator If an optional generator separate from the propulsion engine is carried, it shall be installed in accordance with the manufacturer's guidelines.
MoMu0,1,2,3 MoMu0,1,2,3	3.28.3 Liquid Fuel Systems 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, 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.
MoMu0,1,2,3 **	3.28.4 Battery Systems 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 Mo1,2,3 Mu1,2,3,4 **	3.29 Communications Equipment, GPS, Radar, AIS 3.29.1 A hand-held marine VHF transceiver for each grab bag , watertight or with a waterproof cover. When not in use to be stowed in the grab bag or emergency container (see <u>OSR</u> 4.21). 3.29.4 A second radio receiver, which may be the handheld VHF in <u>OSR</u> 3.29.1 above, capable of receiving weather bulletins.

SECTION 3 – STRUCTURAL FEATURES, STABILITY, FIXED EQUIPMENT

Categories		A boat shall be/have:
MoMu0,1,2,3	3.29.5	A marine radio transceiver with an emergency antenna when the regular antenna depends upon the mast.
MoMu0,1,2,3	3.29.6	If the marine radio transceiver is a VHF:
MoMu0,1,2,3		a) a minimum rated output power of 25 W,
MoMu1,2,3		b) if installed after 2015 be <u>DSC</u> capable,
MoMu0,1,2		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	3.29.7	An <u>AIS</u> Transponder which either:
Mu1,2,3		a) shares the masthead VHF antenna via a low loss <u>AIS</u> antenna splitter, or
MoMu0,1,2,3		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 waterline and co-axial feeder cable with not more than 40% power loss.
MoMu0,1,2,3		

SECTION 4 – PORTABLE EQUIPMENT

Categories		A boat shall have:
	4.01	Sail Letters & Numbers
**	4.01.1	Identification on sails which complies with <u>RRS 77</u> and <u>RRS Appendix G</u> .
MoMu0,1,2,3	4.01.2	An alternative means of displaying identification as required under <u>RRS Appendix G</u> for a mainsail, to be displayed when none of the numbered sails are set.
	4.03	Soft Wood Plugs
**		A tapered soft wood plug stowed adjacent to every through-hull opening.
	4.04	Jackstays and Clipping Points
MoMu0,1,2,3	4.04.1	<u>Permanently Installed</u> fittings for <u>jackstay</u> ends and clipping points.
MoMu0,1,2,3	4.04.2	<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	4.04.3	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> ,
	4.05	Fire Fighting Equipment
**	4.05.1	A fire blanket adjacent to every cooking device.
MoMu1,2,3	4.05.2	2 fire extinguishers, each with 2 kg of dry powder or equivalent, in different parts of the boat.
	4.06	Anchors
MoMu1,2,3	4.06.1	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_H</u> there shall be 1 anchor meeting the same criteria.
	4.07	Flashlights and Searchlights
Mo0,1,2,3		Watertight lights (minimum IP67 rated) with spare batteries and bulbs as follows, or a watertight (minimum IP67 rated) rechargeable LED torch, of at least 400 Lumens.
Mu**		a) a searchlight, suitable for searching for a person overboard at night and for collision avoidance,
MoMu0,1,2,3		b) stowed in each grab bag (see <u>OSR 4.21</u>), a flashlight in addition to <u>OSR 4.07 a</u>).
Mo0,1,2,3		c) the flashlight in <u>OSR 4.07 b</u> shall be stowed in the grab bag (see <u>OSR 4.21</u>).
Mu**		
	4.08	First Aid Manual and First Aid Kit
**		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> .
	4.09	Foghorn
**		A foghorn.
	4.10	Radar Reflector
**	4.10.1	A passive radar reflector with:
**		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 ² (22 ft ²) from 0–360° of azimuth and ±20° of heel.
	4.11	Navigation Equipment
MoMu0,1,2,3	4.11.1	Navigational charts (not solely electronic), light list and chart plotting equipment.

SECTION 4 – PORTABLE EQUIPMENT

Categories	
	A boat shall have:
**	4.12 Safety Equipment Location Chart 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.
MoMu0,1,2,3	4.13 Depth, Speed and Distance Instruments
MoMu1,2,3,4	4.13.1 A knotmeter or distance measuring instrument (log). 4.13.2 A depth sounder.
	4.14 Spare Number
MoMu0,1,2,3	4.15 Emergency Steering
MoMu0,1,2,3	4.15.1 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, 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	4.15.2 A proven method of emergency steering with the rudder disabled.
**	4.16 Tools and Spare Parts
**	4.16.1 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.
**	4.17 Boat's Name The boat's name on miscellaneous buoyant equipment, such as lifejackets, cushions, lifebuoys, recovery slings, grab bags, etc.
**	4.18 Retro-Reflective Material Marine grade retro-reflective material on lifebuoys, recovery slings, liferafts and lifejackets.
MoMu1,2	4.19 EPIRBs
MoMu0,1,2	4.19.1 A water and manually activated 406 MHz <u>EPIRB</u> .
MoMu0,1,2	4.19.2 A 406 MHz <u>EPIRB</u> registered after 2015 shall include an internal <u>GPS</u> .
MoMu0,1,2	4.19.3 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> .
	4.20 Liferafts
MoMu1,2	4.20.1 Liferaft Construction
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.
MoMu0,1,2	4.20.2 Minimum Liferaft Equipment
MoMu2	a) a <u>SOLAS</u> liferaft shall contain as a minimum a <u>SOLAS</u> A pack,
MoMu1,2	c) an <u>ISO</u> 9650 liferaft shall contain as a minimum Pack 2 (less 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,
MoMu1,2	iv whistle,
MoMu2	v waterproof torch with 6 h duration, and
MoMu2	vi spare waterproof torch or spare battery and bulb,
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, *

SECTION 4 – PORTABLE EQUIPMENT

Categories	A boat shall have:
MoMu2	x 3 red hand flares in accordance with <u>LSA</u> Code Chapter III, 3.2,
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,
MoMu1,2	* may be packed in grab bag instead of liferaft.
	4.20.3 Liferaft Packing and Stowage
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 monohull with <u>moveable ballast</u> or a multihull , 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 series date before June 2001, a liferaft may be packed in a valise not exceeding 40 kg securely stowed below deck adjacent to a companionway.
	4.20.4 Liferaft Servicing
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 9650</u> canister packed liferafts every 3 years,
MoMu0,1,2	iii <u>ISO 9650</u> 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.
	4.21 Grab Bags
Mo0,1,2,3	4.21.1 A grab bag shall have inherent flotation, at least 0.1 m ² (1 ft ²) 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. If a grab bag has to accompany a specific life raft, it shall be clearly marked with the identity of its corresponding raft.
Mu**	
MoMu1,2	4.21.2 A grab bag for each liferaft, readily accessible whether or not the boat is inverted.
	4.22 Crew Overboard Identification and Recovery
	4.22.1 Locator Beacons
MoMu0,1,2	a) an <u>AIS</u> personal crew overboard beacon for each <u>crewmember</u> ,
MoMu0,1,2	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> .
	4.22.2 GPS Crew Overboard Position
MoMu1,2,3	a) For boats with only two crewmembers, 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.
	4.22.3 Lifebuoys
MoMu0,1,2	b) a lifebuoy with a self-igniting light, a whistle, and a drogue,

SECTION 4 – PORTABLE EQUIPMENT

Categories	A boat shall have:
MoMu0,1,2	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:
MoMu0,1,2	i a whistle, a drogue, a self-igniting light, and
MoMu0,1,2	ii a pole and flag. The pole shall be either permanently extended or be capable of being fully automatically extended,
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.
**	4.22.4 Heaving Line 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	4.22.5 Recovery Sling A recovery sling which includes a:
MoMu0,1,2,3	a) buoyant line of length no less than the shorter of 4 times L_H or 36m (120'),
MoMu0,1,2,3	b) buoyancy section (horseshoe) with no less than 90 N (20#) buoyancy,
MoMu0,1,2,3	c) minimum strength capable to hoist a <u>crewmember</u> aboard.
**	4.23 Pyrotechnic and Light Signals 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:
**	a) 2 orange smoke <u>LSA</u> III 3.3,
MoMu0,1,2,3	b) 4 red hand flares <u>LSA</u> III 3.2.
4.24	Spare Number
**	4.25 Cockpit Knife A strong, sharp knife, in a securely restrained sheath shall be readily accessible from the deck or a cockpit.
**	4.26 Storm & Heavy Weather Sail Inventory the following storm & heavy weather sails as specified in <u>OSR</u> 4.27:
MoMu1,2	4.26.1 either a storm trysail or mainsail reefing to reduce the luff by at least 50% (or rotating wing mast if suitable),
MoMu0,1,2,3	4.26.2 heavy weather jib,
MoMu0,1,2	4.26.3 storm jib.
	4.27 Storm & Heavy Weather Sail Specifications 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:

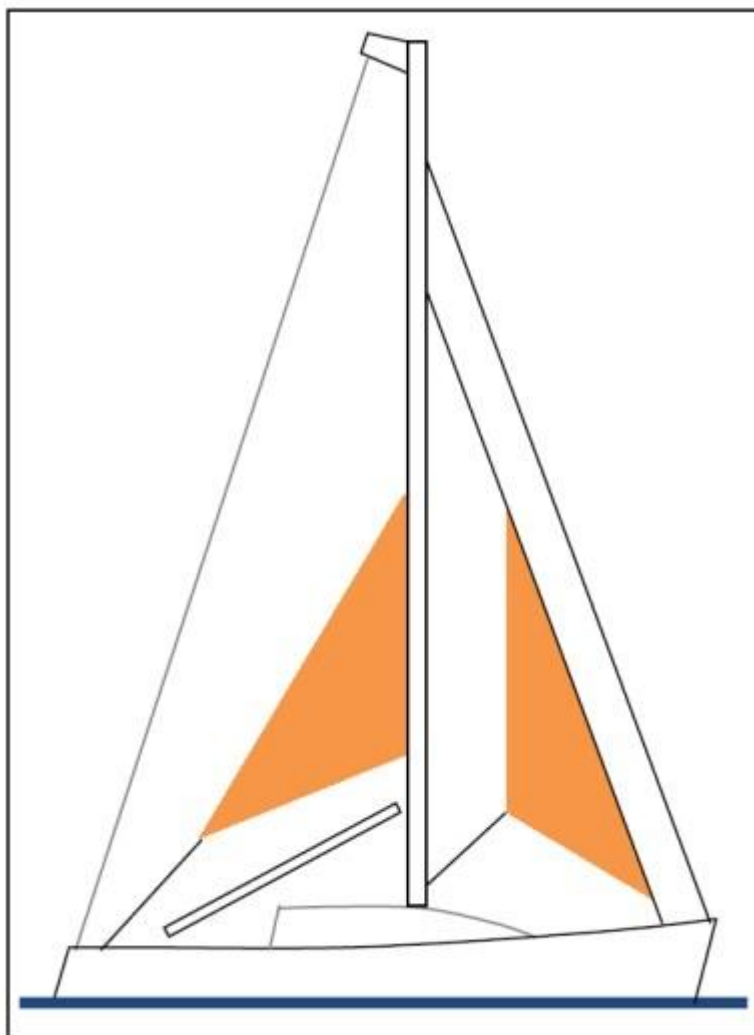


Figure 3 – Storm Sails

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:

- MoMu0,1,2,3 a) area not greater than 17.5% mainsail hoist (P) x mainsail foot length (E),
- MoMu0,1,2,3 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),
- MoMu0,1,2,3 c) no headboard,
- MoMu0,1,2,3 d) no battens,
- MoMu0,1,2,3 e) sail number and letters on both sides, as large as practicable, and
- MoMu1,2,3 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 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2	4.27.4 A Storm Jib with: a) area of 5% (height of the foretriangle) squared, b) maximum luff length 65% of height of the foretriangle , and c) permanently attached method, independent of a luff groove, to attach to the stay. For sails made after 2011: Storm and heavy weather jib areas calculated as: $(0.255 \times \text{luff length} \times (\text{luff perpendicular} + 2 \times \text{half width}))$.
Mo0,1,2 Mo0,1,2 Mo0,1,2 Mo0,1,2 Mo0,1,2	4.30 Emergency Pumps, either fixed or portable pump to remove ingress water from any compartment. This pump shall: a) have a minimum rated capacity of 200 l/min (3200 US gph), b) be operated by battery, main engine powered or a separate engine, c) if portable electric-powered, power cables to be terminated with alligator clips, and d) have sufficient hose to discharge directly overboard or into the cockpit. A combination of <u>permanently installed</u> and portable pumps may be combined to meet the above requirement.

SECTION 5 – PERSONAL EQUIPMENT

Categories		Each <u>crewmember</u> shall have:
**	5.01	Lifejacket
**	5.01.1	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	5.01.2	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	5.01.3	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),
**	5.01.4	The <i>person in charge</i> shall personally check each lifejacket at least once annually.
	5.02	Safety Harness and Tethers
MoMu0,1,2,3	5.02.1	A harness that complies with <u>ISO</u> 12401 or equivalent.
MoMu0,1,2,3	5.02.2	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	5.02.3	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	5.02.5	A <u>tether</u> which has been overloaded shall be replaced.

SECTION 6 – TRAINING

Categories	6.01 Training
MoMu1,2	6.01.2 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.
MoMu0,1,2	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.
	6.02 Training Topics
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
	6.04 Routine Training On-Board
**	At least annually the crews shall practice the drills for:
**	a) crew-overboard recovery, and
**	b) abandonment of vessel.
	6.05 Medical Training
MoMu2	6.05.2 At least one <u>crewmember</u> shall be familiar with first aid procedures, hypothermia, drowning, cardio-pulmonary resuscitation and relevant communications systems, and in addition, one other <u>crewmember</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 https://www.sailing.org/inside-world-sailing/activities-services/technical-offshore/technical-services/technical-and-offshore-safety/offshore-safety/osr-recognised-first-aid-qualifications/ 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

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 2 Monohulls**

JANUARY 2024 – DECEMBER 2025

© ORC Ltd. 2002, amendments 2003-2024 © World Sailing

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 3

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

3.02.2	Keel and rudder inspection certificate	_____	<input type="checkbox"/>
3.03	Certificate that boat meets accepted construction standards	_____	<input type="checkbox"/>
3.04.1	Proof that boat meets ISO 12217-2 category A or equivalent stability	_____	<input type="checkbox"/>
4.11.1	Charts (not solely electronic), plotting equipment	_____	<input type="checkbox"/>
4.19.4	Proof of EPIRB registration with rescue authority	_____	<input type="checkbox"/>
4.20.4	Servicing certificate for each liferaft	_____	<input type="checkbox"/>
6.01.2	WS approved survival training certificate for 30% of the crew (minimum 2)	_____	<input type="checkbox"/>
6.04	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"/>
6.05.2	Elementary 1st Aid, or equivalent, certificate for 1 crew + familiarity for 2nd	_____	<input type="checkbox"/>

Lay out on Bunk(s)

- [3.29.4](#) 2nd radio capable of receiving weather, could be the handheld VHF _____
- [3.29.5](#) Emergency antenna for each type of installed radio transceiver _____
- [4.08](#) First Aid Manual and First Aid Kit _____
- [4.09](#) Foghorn _____
- [4.16.1](#) Tools, spare parts, method to disconnect/sever standing rigging _____
- [4.22.1](#) AIS personal crew overboard beacon for each crewmember _____
- 4.22.1 Every (optional) PLB on board registered with rescue authority _____
- [4.23](#) Flares, 4 red hand-held and 2 orange smoke, LSA III _____
- [5.01](#) Lifejacket c/w lights, whistle etc., 1 for each crew, marked with name _____
- [5.01.1](#) Each lifejacket has crotch or thigh straps & harness _____
- 5.01.1 Each lifejacket has a sprayhood _____
- [5.01.2](#) Spare cylinder and activation head for each type on board _____
- [5.01.3](#) Spare lifejacket _____
- [5.01.4](#) Each lifejacket inspected by the person in charge within past 12 months _____
- [5.02.1](#) Safety harness for each crewmember _____
- [5.02.2](#) 2 m (6'-6") tether, with coloured overload flag, for each crewmember _____
- [5.02.3](#) Mid-tether hook on 2 m tether, or 1 m (3'-3") tether for each crewmember _____

Grab Bag

- [3.29.1](#) Watertight handheld VHF radio transceiver stowed in each grab bag _____
- [4.07](#) 2nd watertight (IP67) flashlight with spare batteries and bulbs _____
- [4.21.1](#) Grab bag for each raft, with inherent flotation and 0.1 m² (1 ft²) bright colour _____

Below Deck Inspection

- [3.06](#) 2 exits, at least 1 forward of the foremost mast _____
- [3.08.3](#) Portlights that open inward labelled "NOT TO BE OPENED AT SEA" _____
- [3.10](#) Sea cocks or valves on through-hull openings below waterline _____
- [3.12](#) Heel of keel-stepped mast is securely fastened to structure _____
- [3.18.1](#) Toilet, permanently installed _____
- [3.19.1](#) Bunks, permanently installed _____
- [3.20](#) Cooking stove, permanently installed, with fuel shut-off _____
- [3.21.1](#) Sufficient drinking water (in water tank or reusable containers) _____

3.22	Hand holds below deck	_____	<input type="checkbox"/>
3.27.4	Spare bulbs for navigation lights (not required for LED)	_____	<input type="checkbox"/>
3.28.4	Batteries are of sealed type	_____	<input type="checkbox"/>
3.28.4	Separate engine starting battery or hand-starting device	_____	<input type="checkbox"/>
3.29.6	25W DSC enabled VHF w/ masthead antenna & programmed MMSI	_____	<input type="checkbox"/>
3.29.7	AIS Transponder w/ shared masthead or raised dedicated antenna	_____	<input type="checkbox"/>
4.03	Tapered soft wood plug at each through-hull opening	_____	<input type="checkbox"/>
4.05.1	Fire blanket adjacent to every cooking device	_____	<input type="checkbox"/>
4.05.2	2 fire extinguishers, 2 kg each in different parts of the boat	_____	<input type="checkbox"/>
4.12	Safety equipment location chart	_____	<input type="checkbox"/>
At Helm or Ready for Rapid Deployment			
4.19.2	406 MHz EPIRB, with internal GPS	_____	<input type="checkbox"/>
4.22.2	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"/>
4.22.3	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"/>
4.22.4	Heaving line, pref. 'Throwing sock' type, 6mm (1/4") 15–25m (50–75')	_____	<input type="checkbox"/>
4.22.5	Recovery Sling (Lifesling® or equivalent)	_____	<input type="checkbox"/>
4.25	Strong, sharp knife, sheathed and securely restrained	_____	<input type="checkbox"/>
On Deck, Where Stowed or Ready for Deployment			
3.08.4	Hatch blocking devices (panels) attached and can be secured in place	_____	<input type="checkbox"/>
4.06.1	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"/>
4.20.1	Liferaft(s) capable of carrying the whole crew	_____	<input type="checkbox"/>
4.20.2	Liferaft SOLAS Pack A or ISO Pack 2 (less than 24 hours)	_____	<input type="checkbox"/>
4.20.3	Liferaft(s) stowed in rigid container, or valise in dedicated locker	_____	<input type="checkbox"/>
Rigged/Fitted to Demonstrate Use			
3.27.1	Navigation lights, above sheerline and not obscured when sailing	_____	<input type="checkbox"/>
3.27.3	Reserve navigation lights, can be powered separately	_____	<input type="checkbox"/>
4.01.2	Alternate method for displaying sail letters and numbers	_____	<input type="checkbox"/>
4.04.2	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"/>
4.04.3	Clipping points at workstations so that 2/3 can clip on without jack stays	_____	<input type="checkbox"/>
4.10.1	Radar reflector, 30 cm (12") dia. octahedral or minimum RCS of 2 m ²	_____	<input type="checkbox"/>
4.15.1	Emergency tiller	_____	<input type="checkbox"/>
4.15.2	Proven method of emergency steering with the rudder disabled	_____	<input type="checkbox"/>
4.26.1	Either a storm trysail or reefing to reduce mainsail luff by 50%	_____	<input type="checkbox"/>
4.26.2	Heavy weather jib, attachable independent of luff groove	_____	<input type="checkbox"/>
4.26.3	Storm jib, attachable independent of luff groove (permanent)	_____	<input type="checkbox"/>
4.27.1	Sheeting positions for each heavy/storm sail	_____	<input type="checkbox"/>
General			
2.04	All equipment is readily available, adequately sized, in date and functions	_____	<input type="checkbox"/>
2.04.2	Heavy items are permanently installed or securely fastened	_____	<input type="checkbox"/>
3.02	Boat is strongly built, seaworthy and watertight	_____	<input type="checkbox"/>
3.08.1	Forward hatches open outward only	_____	<input type="checkbox"/>
3.08.2	Hatches are attached, above water at 90° heel & operable if capsized	_____	<input type="checkbox"/>
3.08.5	Companionway sill is above local sheerline, or acceptable alternative	_____	<input type="checkbox"/>
3.09	Cockpit is strong, watertight and meets OSR size and drainage	_____	<input type="checkbox"/>
3.14	Double lifelines & pulpits, surround entire deck, 600 mm (24") high	_____	<input type="checkbox"/>
3.14.3	Lifeline materials and diameters meet OSR	_____	<input type="checkbox"/>
3.17.1	25 mm (1") toe rail around foredeck	_____	<input type="checkbox"/>
3.21.3	Emergency drinking water 2 L (0.5 US Gal) per person, in dedicated, sealed containers	_____	<input type="checkbox"/>
3.23.1	2 strong buckets, each with lanyard and 9 L (2.4 US Gal) capacity	_____	<input type="checkbox"/>
3.23.1	Permanently installed manual bilge pumps, 1 operable above, 1 below deck	_____	<input type="checkbox"/>
3.23.2	Permanently installed manual bilge pump operable with all hatches closed	_____	<input type="checkbox"/>
3.24	Magnetic compass, unpowered, with deviation chart	_____	<input type="checkbox"/>
3.24	2nd magnetic compass, may be hand-held and/or electronic	_____	<input type="checkbox"/>
3.25	2 halyards per mast, each capable of hoisting a sail	_____	<input type="checkbox"/>
3.28.1	Propulsion engine provides minimum speed of 3/4 hull speed	_____	<input type="checkbox"/>
3.28.1	Inboard propulsion engine	_____	<input type="checkbox"/>
3.28.3	Fuel or battery capacity to motor at 3/4 hull speed for 5 hours + electric needs	_____	<input type="checkbox"/>
4.01.1	Sail letters and numbers meeting RRS 77 & RRS G	_____	<input type="checkbox"/>

APPENDIX F – INSPECTION CARD

- | | | | |
|------------------------|---|-------|--------------------------|
| 4.13.1 | Knotmeter or log | _____ | <input type="checkbox"/> |
| 4.13.2 | Depth sounder | _____ | <input type="checkbox"/> |
| 4.17 | Boat's name on buoyant equipment | _____ | <input type="checkbox"/> |
| 4.18 | Marine grade retro-reflective material on buoyant equipment | _____ | <input type="checkbox"/> |
| 4.30 | Emergency pump, electric or engine powered, 200 L/min (3200 US gph) | _____ | <input type="checkbox"/> |