



World Sailing Offshore Special Regulations

Extract for **Category 3 Monohulls**

JANUARY 2024 – DECEMBER 2025

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With Sail Canada Prescriptions



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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.

Green TYPE indicates a Swiftsure Organizing Authority prescription.

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

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SECTION 1 – FUNDAMENTAL AND DEFINITIONS

- Categories
- 1.01 Purpose and Use**
- 1.01 Purpose and Use**
- ** 1.01.1 The purpose of the Offshore Special Regulations (OSR) 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 OSR do not replace, but supplement, the requirements of governmental authority, Classification Society certification, the Racing Rules of Sailing (RRS), Equipment Rules of Sailing (ERS), class rules and rating systems.
- ** 1.01.3 Use of the OSR does not guarantee total safety of the boat and her crew. Particular attention is drawn to the description of OSR 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 OSR categories.
- 1.02 Responsibility of Person in Charge**
- ** 1.02.1 **Under RRS 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 *person in charge* 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 *person in charge* shall also assign a person to take over his responsibilities in the event of his incapacitation.**
- ** 1.02.2 Neither the establishment of the OSR, nor their use by *organizing authorities*, nor the inspection of a boat under the OSR in any way limits or reduces the complete and unlimited responsibility of the *person in charge*.
- ** 1.02.3 By participating in a race conducted under the OSR, the *person in charge*, each competitor and boat owner agrees to reasonably cooperate with the *organizing authority* and World Sailing in the development of an independent incident report as specified in OSR 2.02.
- ** 1.03 **Definitions, Abbreviations, Word Usage**
- 1.03.1 **Table 1 – Definitions of Terms used in this document**

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

SECTION 1 – FUNDAMENTAL AND DEFINITIONS

Categories

GPS	Global Positioning System
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 securely fastened webbing or rope which permits a crewmember 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 Jackstay
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 Organizing authorities shall select from one of the following categories and may modify the <u>OSR</u> to suit local conditions.
MoMu3	2.01.4 Category 3 Races across open water, most of which is relatively protected or close to shorelines.
**	2.02 Incident Reporting The organizing authority 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 organizing authority 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 minimized,
**	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 OSR.
**	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 hatch with the opening entirely above the waterline .
Mo3	
Mo0,1,2,3	3.02.4 At a haul-out within 2 years prior to the event, the owner or his/her representative shall inspect the integrity of the keel and rudder following the recommendations in Appendix L.
Mo3	3.02.5 Inspection after Grounding – an appropriately qualified person shall conduct an internal and external inspection after each unintentional grounding.
	3.04 Stability – Monohulls Recommended
Mo0,1,2,3	3.04.1 b) A boat shall be able to demonstrate compliance with ISO 12217-2* design category B 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 OSR 3.04.1 cannot be demonstrated, a boat shall be able to demonstrate either:

Table 2 – STIX, AVS and m*Agz Requirements

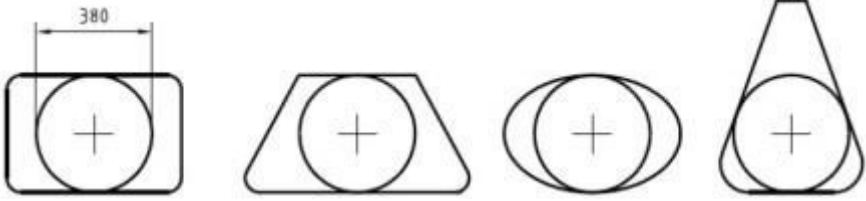
a)			
	Race Category	0,1,2	3
	minimum ISO 12217-2 Stability Index (STIX)	32	23
	minimum ISO 12217-2 Angle of Vanishing Stability (AVS)	130-0.002*m	130-0.005*m
	but AVS always >=	100°	95°
	a minimum righting energy m*Agz (where Agz is the positive area under the righting lever curve in the minimum operating condition, expressed in kg metre degrees from upright to AVS)	172000	57000
	For tables 2 and 3, Sail Canada Prescribes that if the minimum righting energy (above) is not available, the boat shall have a minimum sailing weight “m” of:	3,000 kg	1,500 kg

or

Table 3 – ORC Stability Index or SSS Requirements

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

SECTION 3 – STRUCTURAL FEATURES, STABILITY, FIXED EQUIPMENT

Categories	A boat shall be/have:
	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 <u>first launched</u> 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 m ² (1.9 ft ²) (see figure 1).
Mo0,1,2,3,4	
	Figure 1 – Measurements of Minimum Clear Opening
	3.08 Hatches & Companionways
**	3.08.1 Hatch covers forward of the maximum beam station shall not open toward the interior of the boat, except hatches 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 hatch, including a hatch 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 hatches 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 Hatches not conforming with OSR 3.08.1 and OSR 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 hatches:
**	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 hatch 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 contained cockpit(s) 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 ISO 11812 category A.
Mo0,1,2,3,4	3.08.6 If a monohull with contained cockpit(s) 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% L_{WL} above the waterline (or in IMS boats with first launch 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

SECTION 3 – STRUCTURAL FEATURES, STABILITY, FIXED EQUIPMENT

Categories	A boat shall be/have:
**	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% (L_{WL} x maximum beam x freeboard abreast the cockpit),
**	c) series date after March 1992 as above for the appropriate category except that "lowest coamings" 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') L_H : 2 x 25 mm (1") diameter or equivalent,
**	b) if 8.5 m (28') L_H or greater: 4 x 20 mm (3/4") diameter or equivalent.
**	3.10 Sea Cocks or Valves
**	Permanently installed 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.
**	3.14 Pulpits, Stanchions, Lifelines
**	3.14.1 General
**	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 series date before 1993 where it shall be no greater than 560 mm (22"),
MoMu3,4	iv a boat less than 8.5 m (28') L_H may use a single <u>lifeline</u> system with a height between 450 mm (18") and 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) 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

SECTION 3 – STRUCTURAL FEATURES, STABILITY, FIXED EQUIPMENT

50 mm (2") from the deck.

Categories

**

A boat shall be/have:

- 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"),

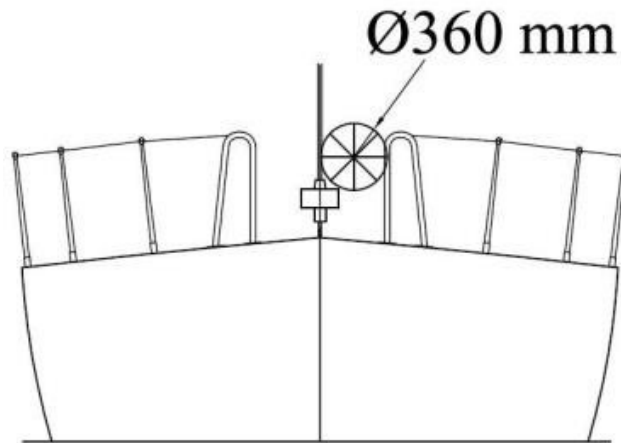


Figure 2 – Diagram Showing Pulpit Opening

- 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.

3.14.3 Lifeline Specifications

- a) Lifelines of stranded stainless steel wire,
- 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,

Table 4 – Lifeline Diameter Requirements

<u>L_H</u>	Wire Min. <u>lifeline</u> diameter	HMPE rope (Single braid) min. <u>lifeline</u> diameter	HMPE Core (Braid on braid) min. <u>lifeline</u> outside 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 Permanently installed 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 lifeline of between 25–50 mm (1–

SECTION 3 – STRUCTURAL FEATURES, STABILITY, FIXED EQUIPMENT

	2") high is permitted in lieu of a toe rail
Categories	A boat shall be/have:
MoMu3,4	3.18 Toilet 3.18.2 <u>Securely installed</u> toilet or fitted bucket.
MoMu1,2,3,4	3.19 Bunks 3.19.1 <u>Securely installed</u> bunks.
MoMu0,1,2,3	3.20 Cooking Facilities <u>Securely installed</u> cooking stove, capable of being operated safely at sea, with fuel shutoff control.
MoMu2,3	3.21 Drinking Water Tanks & Drinking Water 3.21.1 Drinking Water Tanks c) <u>Securely 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.
MoMu1,2,3	3.21.3 Emergency Drinking Water Recommended 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, c) one <u>permanently installed</u> manual bilge pump,
Mo3Mu0,1,2	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.
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,
MoMu0,1,2,3	b) a second compass which may be hand-held and/or electronic.
**	3.25 Halyards 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.
**	3.27 Navigation Lights 3.27.1 <u>Shall carry navigation lights that meet Coast Guard/National Safety Authority of the Organizing Authority requirements.</u>
**	3.27.2 <u>Mounted above so that they will not be obscured by sails.</u>
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).
**	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,
MoMu0,1,2,3	b) an engine which provides a minimum speed in knots of $(1.8 \times \sqrt{L_{WL}}$ in metres) or

SECTION 3 – STRUCTURAL FEATURES, STABILITY, FIXED EQUIPMENT

($\sqrt{L_{WL}}$ in feet),

Categories		A boat shall be/have:
Mo3		e) either an inboard or outboard engine, with associated power supply systems, all <u>securely fastened</u> ,
**		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.
		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.
		3.28.3 Liquid Fuel Systems
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.
		3.28.4 Battery Systems
**		a) batteries installed after 2011 shall be of the sealed type from which liquid electrolyte cannot escape, Recommended
**		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,
		3.29 Communications Equipment, GPS, Radar, AIS
Mo1,2,3	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 (see <u>OSR</u> 4.21). Recommended
Mu1,2,3,4		
**	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.
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,
MoMu3		e) a masthead antenna 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: Recommended
Mu1,2,3		
MoMu0,1,2,3		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.
MoMu3	3.29.8	A <u>GPS</u> .

SECTION 3 – STRUCTURAL FEATURES, STABILITY, FIXED EQUIPMENT

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</u> 77 and <u>RRS</u> Appendix G.
MoMu0,1,2,3	4.01.2	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. Recommended
	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. Recommended
MoMu1,2,3	4.05.2	Fire Extinguishers that meet Coast Guard/National Safety Authority of the Organizing Authority requirements for the size of boat.
	4.06	Anchors
MoMu1,2,3	4.06.1	1-un-modified anchor 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
	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**		
Mo0,1,2,3		
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

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Categories	A boat shall have:
**	c) A tubular radar reflector is acceptable if securely mounted within 15 degrees of vertical.
	4.11 Navigation Equipment
MoMu0,1,2,3	4.11.1 Navigational charts and chart plotting equipment.
	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.
	4.13 Depth, Speed and Distance Instruments
MoMu0,1,2,3	4.13.1 A knotmeter or distance measuring instrument (log).
MoMu1,2,3,4	4.13.2 A depth sounder.
	4.14 Spare Number
	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,
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	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.
	4.21 Grab Bags Recommended
Mo0,1,2,3 Mu**	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.
Mo3	4.21.4 The following shall either be stowed with a liferaft or a in grab bag. The grab bag shall be readily accessible whether or not the boat is inverted:
Mo3Mu3,4	a) 3 hand flares,
Mo3Mu3,4	b) watertight strobe light with spare batteries (may be part of the flashlight),
Mo3Mu3,4	c) knife, and
Mo3Mu3,4	d) whistle.
	4.22 Crew Overboard Identification and Recovery
MoMu1,2,3	4.22.2 a) For boats with only two crew members, a GPS capable of recording a crew overboard position, within 10 seconds, and monitoring that position without having to go below deck.
	4.22.3 Lifebuoys
MoMu3,4	a) a lifebuoy with a self-igniting light, a whistle, and a drogue within reach of the helmsman and ready for immediate use,
**	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.
	4.22.5 Recovery Sling
MoMu0,1,2,3	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'),

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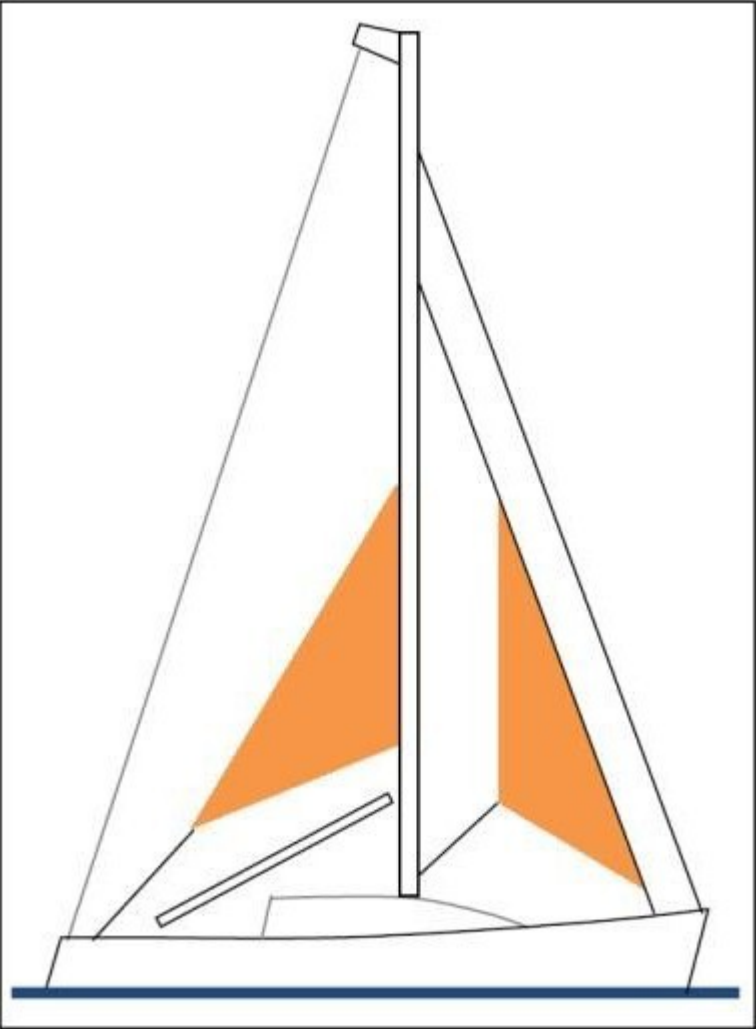
<p>Categories MoMu0,1,2,3 MoMu0,1,2,3</p>	<p>A boat shall have: b) buoyancy section (horseshoe) with no less than 90 N (20#) buoyancy, c) minimum strength capable to hoist a <u>crewmember</u> aboard.</p>
<p>**</p>	<p>4.23 Pyrotechnic and Light Signals A boat shall carry the number and type of flares required by its National Safety Authority for day and night requirements at a minimum. They shall not be older than 4 years.</p>
<p>** MoMu0,1,2,3</p>	<p>4.24 Spare Number</p>
<p>**</p>	<p>4.25 Cockpit Knife A strong, sharp knife, in a securely restrained sheath shall be readily accessible from the deck or a cockpit.</p>
<p>**</p>	<p>4.26 Storm & Heavy Weather Sail Inventory Recommended the following storm & heavy weather sails as specified in <u>OSR</u> 4.27:</p>
<p>MoMu3</p>	<p>4.26.1 either a storm trysail or mainsail reefing to reduce the luff by at least 40% (or rotating wing mast if suitable),</p>
<p>MoMu0,1,2,3</p>	<p>4.26.2 heavy weather jib,</p>
	<p>4.27 Storm & Heavy Weather Sail Specifications Recommended Where required by <u>OSR</u> 4.26, the specifications of heavy weather sails shall follow:</p>
	 <p>The diagram shows a side view of a sailboat's rigging. It features a vertical mast with a boom extending from the base. Two sails are attached to the mast and boom, both shaded in orange. The sails are triangular in shape. The boat's hull is shown at the bottom, with a blue line representing the waterline.</p>

Figure 3 – Storm Sails

Categories	A boat shall have:
**	4.27.1 Design Recommended
**	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 <u>HMPE</u> 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.
MoMu0,1,2,3	4.27.2 A Storm Trysail with: Recommended
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)
**	Recommended
**	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 5 – PERSONAL EQUIPMENT

Categories		Each crewmember 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)
**		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)
**		or
**		iii if manufactured after 2011 comply with UL 1180 and be fitted with a whistle, reflective material and:
**		• crotch/thigh straps (ride up prevention system)
**		• an integral safety harness in compliance with OSR 5.02
MoMu0,1,2,3		Sail Canada note - ISO 12402 is not currently approved by Transport Canada.
**	b)	have an emergency position indicating light in accordance with either <u>ISO</u> 12402-8 or <u>LSA</u> code 2.2.3,
MoMu0,1,2,3	c)	be clearly marked with the boat's or wearer's name,
**	d)	have a sprayhood in accordance with <u>ISO</u> 12402-8,
MoMu0,1,2,3	f)	if inflatable, be regularly checked for air retention.
**	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.
**	5.01.4	The <i>person in charge</i> shall personally check each lifejacket at least once annually.
MoMu0,1,2,3	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> . Recommended
MoMu0,1,2,3	5.02.5	A <u>tether</u> which has been overloaded shall be replaced.

Categories	6.01 Training Recommended
MoMu3	6.01.2 Sail Canada prescribes that at least 30% but not fewer than two crewmembers, including the Person in Charge, shall have undertaken a Sail Canada accredited Coastal Personal Survival Training course, or training accepted as equivalent by the <i>Organizing Authority</i>, within the five years before the start of the race. This training meets the requirement of <u>OSR 6.01.3</u> below.
MoMu3	6.01.3 When there are only two <u>crewmembers</u> , at least one shall have undertaken training within the five years before the start of the race in <u>OSR 6.02 Training Topics</u> .
	6.02 Training Topics Recommended
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 Organization
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 Recommended
**	At least annually the crews shall practice the drills for:
**	a) crew-overboard recovery, and
**	b) abandonment of vessel.
	6.05 Medical Training Recommended
MoMu3,4	6.05.3 At least two <u>crewmembers</u> shall be familiar with First Aid procedures, hypothermia, drowning, cardio-pulmonary resuscitation, and relevant communications systems.