Extract for Race Category 3 Monohulls
JANUARY 2020 - DECEMBER 2021

Version 0.2 - 16 December 2019

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

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Language & Abbreviations Used

Mo - Monohull
Mu - Multihull
" ** " 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 significant changes in 2020

Guidance notes and recommendations have been removed from the Regulations and are available on www.sailing.org/documents/offshorespecialregs/index.php

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 are as follows: (www.sailing.org/regulations)
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 E-Mail: technical@sailing.org

SECTION 1 - FUNDAMENTAL AND DEFINITIONS

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) boats racing offshore.

** 1.01.2 The OSR do not replace, but rather 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 OSRs 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 4 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 bad 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 2.02

1.03 Definitions, Abbreviations, Word Usage

** 1.03.1 Definitions of Terms used in this document

Abbreviation	Description
#	Pound force (lbf)
ABS	American Bureau of Shipping
Age Date	Month/year of first launch
AIS	Automatic Identification Systems
CEN	Comité Européen de Normalisation
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
CPR	Cardio-Pulmonary Resuscitation
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
FA Station	The transverse station at which the upper corner of the transom meets the sheerline.
First Launch	Month & year of first launch of the individual boat
Foul-Weather Suit	Clothing designed to keep the wearer dry and may consist of one piece or several
GMDSS	Global Maritime Distress & Safety System
GNSS	Global Navigation Satellite System
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)
IMO	International Maritime Organisation
IMSO	The International Mobile Satellite Organisation, the independent, intergovernmental organisation that oversees Inmarsat's performance of its Public Service Obligations for the GMDSS and reports on these to IMO
INMARSAT	Inmarsat Global Limited is the private company that provides GMDSS satellite distress and safety communications, plus general communications via voice, fax and data
ISAF	International Sailing Federation- (now World Sailing)
ISO	International Standard Organization or International Organization for Standardization.
ITU	International Telecommunications Union
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 tether.
	LH	Hull Length as defined by the ERS
	Lifeline	Rope or wire line rigged as guardrail / guardline around the deck
	LSA	IMO International Life-Saving Appliance Code
	LWL	(Length of) loaded waterline
	Monohull	A boat with one hull
	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
	Multihull	A boat with more than one hull
	Open Cockpit	A cockpit that is not a Contained Cockpit.
	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
	Primary Launch	Month & Year of first launch of the first boat of the production series or first launch of a non-series boat
	Proa	Asymmetric Catamaran
	Rode	Rope, chain, or a combination of both, which is used to connect an anchor to the boat.
	RRS	ISAF - Racing Rules of Sailing
	Safety Line	A tether used to connect a safety harness to a strong point
	SAR	Search and Rescue
	SART	Search and Rescue Transponder
	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
	SSS	The Safety and Stability Screening numeral
	Static Ballast	Material carried for the sole purpose of increasing weight and/or to influencing stability and/or trim and which is not moved or varied in weight while a boat is racing
	Static Safety Line	A safety line (usually shorter than a safety line carried with a harness) kept clipped on at a work-station
	STIX	ISO 12217-2 Stability Index
	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.
	Waterline	The water surface when the boat is floating in measurement trim
	World Sailing	formerly the International Sailing Federation or ISAF

** 1.03.2 The words "shall" and "must" are mandatory, and "should" and "may" are permissive.

** 1.03.3 The word "yacht" shall be taken as fully interchangeable with the word "boat".

SECTION 2 - APPLICATION & GENERAL REQUIREMENTS

2.01 Categories of Events

** 2.01 Organizing Authorities shall select from one of the following categories and may modify the OSR to suit local conditions

2.01.4 Category 3

MoMu3 Races across open water, most of which is relatively protected or close to shorelines.

2.02 Incident Reporting

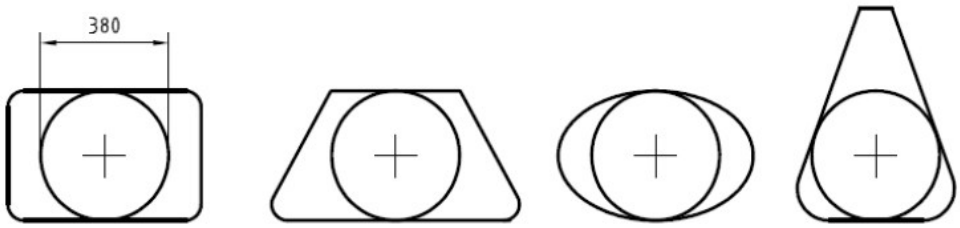
2.02 The Organizing Authority of a race will establish whether any incidents occurred, which if reported would be likely to be relevant to evolving the Offshore Special Regulations, the plan review process, or in increasing safety. The Organizing Authority will follow any guidelines issued by World Sailing concerning incident reporting.

2.03 Inspection

**	2.03	A boat may be inspected at any time. If she fails to comply with the OSR her entry may be rejected or she will be subject to protest
	2.04	**General Requirements**
**	2.04.1	All equipment required by OSR 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
**	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 permanently installed or securely fastened

SECTION 3 - STRUCTURAL FEATURES, STABILITY, FIXED EQUIPMENT

**		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
	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, 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
Mo0,1,2,3	3.02.2	Effective 1 January 2021: 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	3.02.3	Effective 1 January 2021: 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	3.02.4	Effective 1 January 2021: Inspection after Grounding – an appropriately qualified person shall conduct an internal and external inspection after each unintentional grounding
	3.04	**Stability - Monohulls**
Mo3	3.04.1	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 * 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 3.04.1 cannot be demonstrated, able to demonstrate either:
Mo3	a)	i a STIX value not less than 23; and
Mo3		ii AVS not less than 130 - 0.005*m, but always >= 95°, (where "m" is the mass of the boat in the minimum operating condition as defined by ISO 12217-2); and
Mo3		iii a minimum righting energy not less than m*AGZ>57000 (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); or
Extract Mo3	b)	Stability Index in ORC Rating System of not less than 103; or
Extract Mo3	c)	IRC SSS Base value of not less than 15
	3.06	**Exits - Monohulls**
Mo0,1,2,3,4	3.06.1	At least two exits if 8.5 m (28') LH and greater and with a Primary Launch after 1994. 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	The following minimum clear hatch openings if First Launch after 2013:
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)
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 m² (110 in²)
**	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 0.071² m (110 in²)
	3.08.3	Hatches not conforming with 3.08.1 and 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
**	iii	permit exit in the event of inversion
Mo0,1,2,3,4	3.08.5	if a monohull with Open Cockpit(s):
Mo0,1,2,3,4	3.08.5 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, 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	Cockpits that self-drain quickly by gravity at all angles of heel and are permanently incorporated as an integral part of the boat
**	3.09.2	A cockpit sole at least 2% LWL above the waterline (or in IMS boats with First Launch before 2003, at least 2% L above the waterline)
**	3.09.3	A bow, lateral, central or stern well is a cockpit for the purposes of OSR 3.09
****	**3.09.4**	**Cockpit Volume**
**		The maximum combined volume below lowest coamings of all contained cockpits shall be:
Extract MoMu2,3,4	a)	primary launch before April 1992: 9% (LWL x maximum beam x freeboard abreast the cockpit)
**	b)	primary launch after March 1992 as above for the appropriate category except that "lowest coamings" shall not include any aft of the FA station and no extension of a cockpit aft of the working deck shall be included in calculation of cockpit volume
	3.09.5	**Cockpit Drains**
**		Cockpit drain cross section area of unobstructed openings (after allowance for screens if fitted) shall be at least that of:
**	a)	2 x 25 mm (1") diameter or equivalent for a boat less than 8.5 m (28') LH
**	b)	4 x 20 mm (3/4") diameter or equivalent for a boat 8.5 m (28') LH or greater
	3.10	**Sea Cocks or Valves**
**	3.10	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**
**	3.11	Sheet winches mounted in such a way that an operator is not required to be substantially below deck
	3.12	**Mast Step**
**	3.12	The heel of a keel stepped mast securely fastened to the mast step or adjoining structure
	3.14	**Pulpits, Stanchions, Lifelines**
**	3.14.1	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 Primary Launch before 1993 where it shall be no greater than 560 mm (22″)
MoMu3,4	iv	a boat less than 8.5 m (28′) LH may use a single lifeline system with a height between 450 mm (18″) and 560 mm (22″)
**	c)	Lifelines permanently supported at intervals of not more than 2.2 m (7'-2 1/2″) and shall not pass outboard of supporting stanchions
**	d)	Pulpit and stanchion bases permanently installed with pulpits and stanchions mechanically retained in their bases
**	e)	The outside of pulpit and stanchion base tubes no further inboard from the edge of the working deck than 5% of maximum beam or 150 mm (6″), whichever is greater, nor further outboard than the edge of the working deck
**	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″)

**

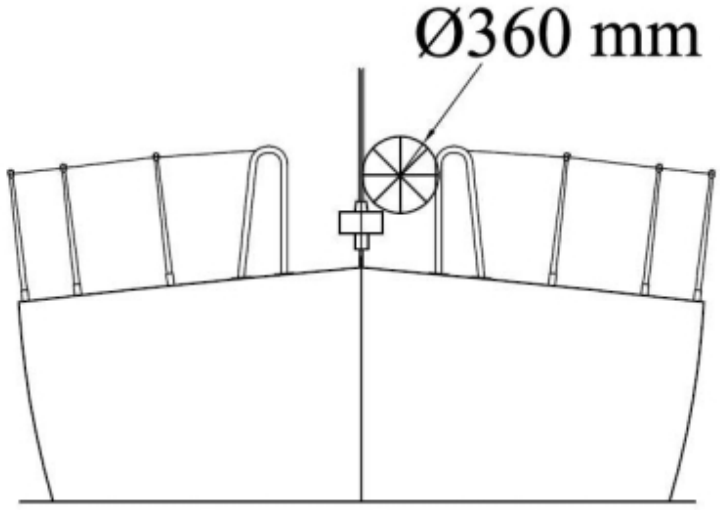


Figure 2 - Diagram Showing Pulpit Opening

**	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 ¾″) for an intermediate lifeline
	3.14.3	Spare number
	3.14.4	Spare number
	3,14.5	Spare number
	3.14.6	**Lifeline Specifications**
Mo0,1,2,3	3.14.6 a)	Lifelines of stranded stainless steel wire
**	3.14.6 b)	The minimum diameter is specified in table 8 below
**	3.14.6 c)	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.
**	3.14.6 d)	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
**	3.14.6 e)	All components of the lifeline enclosure system shall have a breaking strength no less than the lifeline

LH	Wire Min. lifeline diameter	HMPE rope (Single braid) min. lifeline diameter	HMPE Core (Braid on braid) min. lifeline diameter
under 8.5m (28')	3mm (1/8")	4mm (5/32")	4mm (5/32")
8.5m - 13m	4mm (5/32")	5mm (3/16")	5mm (3/16")
over 13m (42' 8")	5mm (3/16")	5mm (3/16")	5mm (3/16")

	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 as close as practicable to the stanchion bases, around the foredeck from abreast the mast
Mo0,1,2,3	3.17.2	An additional lifeline of between 25-50 mm (1-2″) high is permitted in lieu of a toe rail on a boat with Primary Launch before 1984.
	3.18	**Toilet**
MoMu3,4	3.18.2	Permanently installed toilet or fitted bucket
	3.19	**Bunks**
MoMu1,2,3,4	3.19.2	Permanently installed bunks
	3.20	**Cooking Facilities**
MoMu0,1,2,3	3.20	Permanently installed 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	3.21.1 a)	Permanently installed delivery pump and water tank(s)
	3.21.3	**Emergency Drinking Water**
MoMu1,2,3	3.21.3 a)	At least 9 l (2.4 US Gal) of drinking water for emergency use in a dedicated and sealed container or container(s)
	3.22	**Hand Holds**
**	3.22	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
Mo3Mu0,1,2	3.23.1 b)	one permanently installed manual bilge pump
**	3.23.2	All required permanently installed bilge pumps shall be operable with all cockpit seats, hatches and companionways shut and with permanently installed discharge pipe(s) of sufficient capacity
**	3.23.3	Bilge pumps shall not be connected to cockpit drains and shall not discharge into a Closed Cockpit
**	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

	3.24	**Compass**
MoMu0,1,2,3	3.24 a)	Marine magnetic compass capable of being used as a steering compass:
MoMu0,1,2,3,4	3.24 b)	Permanently installed marine magnetic steering compass, independent of any power supply, correctly adjusted with deviation card
MoMu0,1,2,3	3.24 c)	a second compass which may be hand-held and/or electronic
	3.25	**Halyards.**
**	3.25 a)	A minimum of two halyards, each capable of hoisting a sail, on each mast
MoMu0,1,2,3	3.25 b)	No halyard shall be locked, lashed or otherwise secured to the mast in a way that requires a person to go aloft in order 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	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)
	3.28	**Engines, Generators, Fuel**
	3.28.1	**Propulsion Engines**
**	3.28.1 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	3.28.1 b)	an engine which provides a minimum speed in knots of (1.8 x √LWL in metres) or (√ LWL in feet)
Mo3	3.28.1 c)	either an inboard or outboard engine, with associated power supply systems, all securely fastened
**	3.28.1 d)	an inboard combustion engine shall have a permanently installed exhaust, cooling system, fuel supply, fuel tank(s) and shall have adequate heavy weather protection
**	3.28.1 e)	an inboard electrical engine, when fitted, shall be provided with a permanently installed power supply, adequate heavy weather protection and have an engine control system.
	3.28.2	**Generator**
**	3.28.2	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	3.28.3 a)	All fuel tanks for storage of liquid fuels shall be rigid (but may have permanently installed flexible linings) and shall have a shutoff valve
MoMu0,1,2,3	3.28.3 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**
MoMu0,1,2,3	3.28.4 a)	a dedicated engine/generator starting battery when an electric starter is the only method for starting the engine and/or separate generator
**	3.28.4 b)	batteries installed after 2011 shall be of the sealed type from which liquid electrolyte cannot escape
**	3.28.4 c)	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
	3.29	**Communications Equipment, GPS, Radar, AIS**
MoMu0,1,2,3	3.29.1	a marine radio transceiver with an emergency antenna when the regular antenna depends upon the mast
MoMu0,1,2,3	3.29.2	if the marine radio transceiver is a VHF:
MoMu0,1,2,3	3.29.2 a)	a minimum rated output power of 25 W
MoMu3	3.29.2 b)	a masthead antenna and co-axial feeder cable with not more than 40% power loss

MoMu1,2,3	3.29.2 c)	be DSC capable if installed after 2015
MoMu1,2,3	3.29.2 d)	DSC capable VHF transceivers shall be programmed with an assigned MMSI (unique to the boat), be connected to a GPS receiver and be capable of making distress alert calls as well as sending and receiving a DSC position report with another DSC equipped station
MoMu1,2,3,4	3.29.5	a hand-held marine VHF transceiver, watertight or with a waterproof cover. When not in use to be stowed in a grab bag or emergency container (see OSR 4.21)
**	3.29.6	a second radio receiver, which may be the handheld VHF in 3.29.5 above, capable of receiving weather bulletins
MoMu3	3.29.8	a GPS
Mo0,1,2,3 Mu1,2,3	3.29.13	an AIS Transponder which either:
MoMu0,1,2,3	3.29.13 a)	shares the masthead VHF antenna via a low loss AIS antenna splitter; or
MoMu0,1,2,3	3.29.13 b)	has a dedicated AIS 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

SECTION 4 - PORTABLE EQUIPMENT

A boat shall have:

	4.01	**Sail Letters & Numbers**
**	4.01.1	Identification on sails which complies with RRS 77 and RRS Appendix G
MoMu0,1,2,3	4.01.2	An alternative means of displaying identification as required under RRS Appendix G for a mainsail, to be displayed when none of the numbered sails are set
	4.02	**Search and Rescue Visibility**
	4.03	**Soft Wood Plugs**
**	4.03	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	Permanently Installed fittings for jackstay ends and clipping points
MoMu0,1,2,3	4.04.2	Jackstays which shall:
MoMu0,1,2,3	4.04.2 a)	be independent on each side of the deck
MoMu0,1,2,3	4.04.2 b)	enable a crewmember 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	4.04.2 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 HMPE rope
MoMu0,1,2,3	4.04.3	Clipping points which shall:
MoMu0,1,2,3	4.04.3 a)	be adjacent to stations such as the helm, sheet winches and masts, where crewmembers work
MoMu0,1,2,3	4.04.3 b)	enable a crewmember to clip on before coming on deck and unclip after going below
MoMu0,1,2,3	4.04.3 c)	enable two-thirds of the crew to be simultaneously clipped on without depending on jackstays
	4.05	**Fire Fighting Equipment**
**	4.05.1	A fire blanket adjacent to every cooking device with an open flame
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	4.06.2	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') LH there shall be 1 anchor meeting the same criteria.
	4.07	**Flashlights and Searchlights**
**	4.07.1	Watertight lights with spare batteries and bulbs as follows:
MoMu0,1,2,3	4.07.1 a)	a searchlight, suitable for searching for a person overboard at night and for collision avoidance

MoMu0,1,2,3	4.07.1 b)	a flashlight in addition to 4.07 a)
	4.08	**First Aid Manual and First Aid Kit**
**	4.08	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 crew
	4.09	**Foghorn**
**	4.09	A foghorn
	4.10	**Radar Reflector**
**	4.10.1	A passive radar reflector with:
**	4.10.1 a)	octahedral circular plates of minimum diameter 30 cm (12”), or
**	4.10.1 b)	octahedral rectangular plates of minimum diagonal dimension 40 cm (16”), or
**	4.10.1 c)	a non-octahedral reflector with a documented Root Mean Square minimum Radar Cross Section (RCS) area of 2 m² (22 ft²) from 0-360° of azimuth and ±20° of heel
	4.11	**Navigation Equipment**
**	4.11	Navigational charts (not solely electronic), light list and chart plotting equipment
	4.12	**Safety Equipment Location Chart**
**	4.12	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)
MoMu,1,2,3,4	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	4.15.1 a)	the principal method of steering is by means of an unbreakable metal tiller
MoMu0,1,2,3	4.15.1 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**
**	4.17	The boat’s name on miscellaneous buoyant equipment, such as lifejackets, cushions, lifebuoys, recovery slings, grab bags etc.
	4.18	**Retro-reflective material**
**	4.18	Marine grade retro-reflective material on lifebuoys, recovery slings, liferafts and lifejackets
	4.19	**EPIRBs**
	4.20	**Liferafts**
	4.20.1	**Liferaft Construction**
	4.20.2	**Minimum Liferaft Equipment**
	4.20.3	**Liferaft Packing and Stowage**
	4.20.4	**Spare Number**
	4.21	**Grab Bags**
Mo3Mu3,4	4.21	Either a watertight compartment or a grab bag, readily accessible whether or not the boat is inverted, with the following minimum contents:
Mo3Mu3,4	4.21 a)	a watertight hand-held marine VHF transceiver with spare batteries
Mo3Mu3,4	4.21 b)	a watertight flashlight with spare batteries and bulb
Mo3Mu3,4	4.21 c)	3 red hand flares
Mo3Mu3,4	4.21 d)	a watertight strobe light with spare batteries
Mo3Mu3,4	4.21 e)	a knife
**	4.21 f)	If a grab bag is provided it shall have inherent flotation, at least 0.1 m² (1 ft²)

area of fluorescent orange colour on the outside, shall be marked with the name of the boat, and shall have a lanyard and clip

4.22 Crew Overboard Identification and Recovery

4.22.1 Locator Beacons

4.22.2 GPS Crew Overboard Position

MoMu3,4 4.22.3 a lifebuoy with a self-igniting light, a whistle and a drogue within reach of the helmsman and ready for immediate use

** 4.22.6 Each inflatable lifebuoy and any automatic device shall be tested and serviced at intervals in accordance with its manufacturer's instructions

** 4.22.7 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 4.22.8 A recovery sling which includes a:

MoMu0,1,2,3 4.22.8 a) buoyant line of length no less than the shorter of 4 times LH or 36m (120')

MoMu0,1,2,3 4.22.8 b) buoyancy section (horseshoe) with no less than 90 N (20#) buoyancy

MoMu0,1,2,3 4.22.9 c) minimum strength capable to hoist a crewmember aboard

4.23 Pyrotechnic and Light Signals

** 4.23 Pyrotechnic signals shall be provided conforming to SOLAS LSA 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.

Race Category	Red Hand Flares LSA III 3.2	Orange Smoke Flares LSA III 3.3
MoMu0,1,2,3	4	2
MoMu4		2

4.24 Spare Number

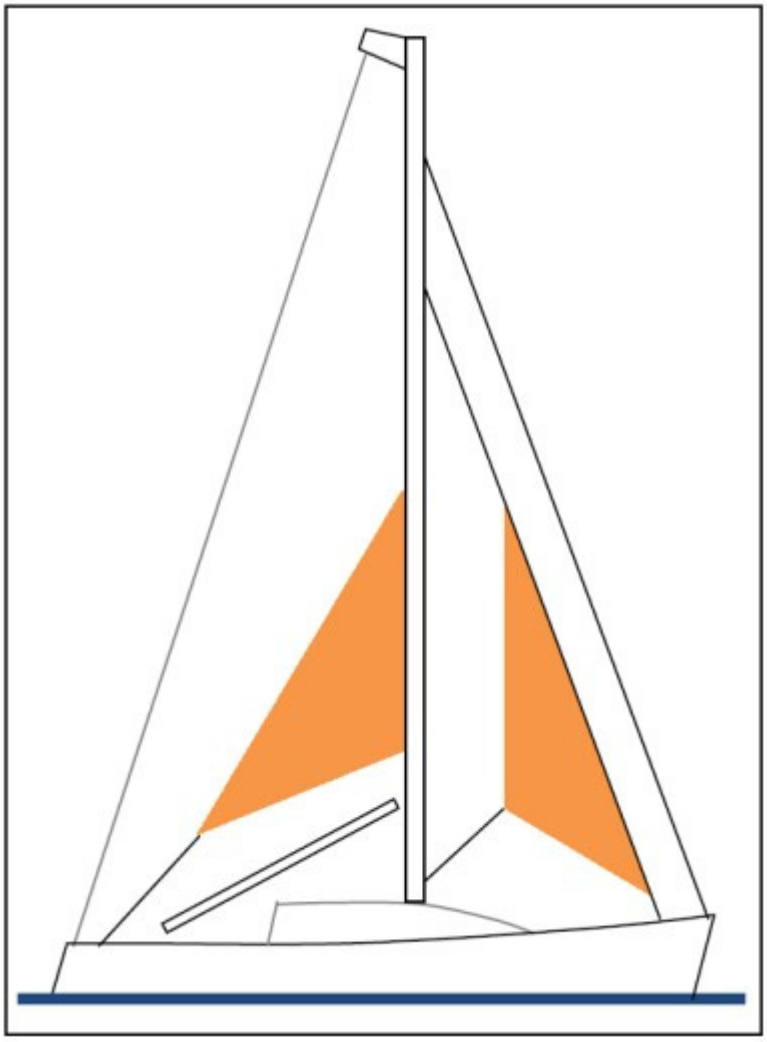
4.25 Cockpit Knife

** 4.25 A strong, sharp knife, sheathed and securely restrained shall be provided readily accessible from the deck or a cockpit.

4.26 Storm & Heavy Weather Sails

4.26.1 Design

Figure 3



**	4.26.1 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)
**	4.26.1 b)	Aromatic polyamides, carbon and similar fibres shall not be used in a trysail or storm jib but HMPE and similar materials are permitted
**	4.26.1 c)	Sheeting positions on deck for each storm and heavy-weather sail
**	4.26.1 d)	Sheeting positions for the trysail independent of the boom
**		
	4.26.2	**Sail Areas**
**	4.26.2	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	**4.26.2 a)**	**A heavy-weather jib (or heavy-weather sail in a boat with no forestay) with:**
**	4.26.2 a) i	area of 13.5% height of the foretriangle (IG) squared
**	4.26.2 a) ii	readily available means, independent of a luff groove, to attach to the stay
**	4.26.2 c)	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))
	4.26.3	**Sail Inventory**
MoMu3	4.26.3 a) ii	either a storm trysail as defined in OSR 4.26.2 d), or mainsail reefing to reduce the luff by at least 40% (or rotating wing mast if suitable)
	4.28	Spare Number
	4.29	**Deck Bags**
	4.30	**Emergency Pumps**
	4.30.1	either fixed or portable pump to remove ingress water from any compartment.
	4.30.1 a)	This pump shall:

	4.30.1 b)	have a minimum rated capacity of 200 l/min
	4.30.1 c)	be operated by battery, main engine powered or a separate engine
	4.30.1 d)	if portable electric-powered, power cables to be terminated with alligator clips
	4.30.1 e)	have sufficient hose to discharge directly overboard or into the cockpit.
	4.30.1 f)	A combination of permanently installed and portable pumps may be combined to meet the above requirement.
		SECTION 5 - PERSONAL EQUIPMENT
**		Each crew member shall have:
	5.01	**Lifejacket**
**	5.01.1	A lifejacket which shall:
**	5.01.1 a)i)	if manufactured before 2012 comply with ISO 12402 - 3 (Level 150) or equivalent, including EN 396 or UL 1180 and:
**	5.01.1 a)i)	if inflatable have a gas inflation system
**	5.01.1 a)i)	have crotch/thigh straps (ride up prevention system (RUPS))
**	5.01.1 a) ii	if manufactured after 2011 comply with ISO 12402-3 (Level 150) and be fitted with a whistle, lifting loop, reflective material automatic/manual gas inflation system
**	5.01.1 a) ii	crotch/thigh straps (ride up prevention system (RUPS))
MoMu0,1,2,3	5.01.1 b)	have an emergency position indicating light in accordance with either ISO 12402-8 or SOLAS LSA code 2.2.3
**	5.01.1 c)	be clearly marked with the boat's or wearer's name
MoMu0,1,2,3	5.01.1 d)	have a sprayhood in accordance with ISO 12402-8
**	5.01.1 f)	if inflatable, regulalrly 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.
**	5.01.4	The person in charge 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 ISO 12401 or equivalent
MoMu0,1,2,3	5.02.2	A tether that shall:
MoMu0,1,2,3	5.02.2 a)	comply with ISO 12401 or equivalent
MoMu0,1,2,3	5.02.2 b)	not exceed 2 m (6'-6") including the length of the hooks
MoMu0,1,2,3	5.02.2 c)	have self-closing hooks
MoMu0,1,2,3	5.02.2 d)	have overload indicator flag embedded in the stitching
MoMu0,1,2,3	5.02.2 e)	be manufactured after 2000
MoMu0,1,2,3	5.02.3	All of the crew shall have either:
MoMu0,1,2,3	a)	a tether not exceeding 1m(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") tether
MoMu0,1,2,3	5.02.5	A tether which has been overloaded shall be replaced
	5.07	**Survival Equipment**
		SECTION 6 - TRAINING
MoMu3	6.01.3	When there are only two crewmembers, at least one shall have undertaken training within the five years before the start of the race in OSR 6.02 Training Topics

	6.02	**Training Topics**
	6.03	Spare Number
	6.04	**Routine Training On-Board**
**	6.04	At least annually the crews shall practice the drills for:
**	6.04 a)	Crew-Overboard Recovery
**	6.04 b)	Abandonment of vessel
	6.05	**Medical Training**
MoMu3,4	6.05.3	At least one member of the crew shall be familiar with First Aid procedures, hypothermia, drowning, cardio-pulmonary resuscitation and relevant communications systems
	6.06	**Diving Training**

APPENDICES TO 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 Rudder and Keel Inspection Procedure

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