Extract for Race Category 1 Monohulls JANUARY 2020 - DECEMBER 2021

© ORC Ltd. 2002, amendments 2003-2020 © World Sailing Limited Version 0.3 - 17 December 2020

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

Copyright

When reprinting these regulations National Authorities and Race Organizers 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 2003-2020 © World Sailing Limited)
- make any amendments by deleting contrary provisions and indicating that changes have been made
- 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 web site www.sailing.org/specialregs

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. The OSR do not replace, but rather supplement, the requirements of ** 1.01.2 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 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 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 Month/year of first launch Age Date 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 International Regulations for Preventing Collisions at Sea COLREGS A cockpit where the combined area open aft to the sea is less than Contained Cockpit 50% maximum cockpit depth x maximum cockpit width CPR Cardio-Pulmonary Resuscitation Crewmember Every person on board DSC **Digital Selective Calling** ΕN European Norm **EPIRB** Emergency Position-Indicating Radio Beacon World Sailing - Equipment Rules of Sailing ERS FA Station The transverse station at which the upper corner of the transom meets the sheerline.

First LaunchMonth & year of first launch of the individual boat

Foul-Weather 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
- HMPEHigh Modulus Polyethylene (Dyneema®/Spectra® or equivalent)IMOInternational Maritime Organisation
- IMSOThe 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
IMOINMARSATInmarsat Clobal Limited is the private company that provides CMDSS
- INMARSATInmarsat Global Limited is the private company that provides GMDSS
satellite distress and safety communications, plus general
communications via voice, fax and dataISAFInternational 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
	Monohul	I	A boat with one hull
	Moveable	e	Material carried for the sole purpose of increasing weight and/or
	Ballast		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 Co	ckpit	A cockpit that is not a Contained Cockpit.
	ORC	•	Offshore Racing Congress (formerly Offshore Racing Council)
	OSR		Offshore Special Regulation(s)
	Permane	ently	The item is effectively built-in by e.g. bolting, welding, glassing etc.
	Installed		and may not be removed for or during racing.
	PLB		Personal Locator Beacon
	Primary		Month & Year of first launch of the first boat of the production series or
	Launch		first launch of a non-series boat
	Proa		Asymmetric Catamaran
	Rode		Rope, chain, or a combination of both, which is used to connect an
	Roue		anchor to the boat.
	RRS		ISAF - Racing Rules of Sailing
	Safety Li	ne	A tether used to connect a safety harness to a strong point
	SAR	iic ii	Search and Rescue
	SART		Search and Rescue Transponder
	Securely		Held strongly in place by a method (e.g. rope lashings, wing-nuts)
	Fastened		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
		llact	Material carried for the sole purpose of increasing weight and/or to
	Static Ballast		influencing stability and/or trim and which is not moved or varied in
			weight while a boat is racing
	Static Sa	foty	A safety line (usually shorter than a safety line carried with a harness)
	Line	iety	kept clipped on at a work-station
	STIX		ISO 12217-2 Stability Index
	Variable	Pallact	
	variable	Dallast	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
			, 5 ,
	Waterline	•	racing.
	World Sa		The water surface when the boat is floating in measurement trim formerly the International Sailing Federation or ISAF
**	1.03.2		ords "shall" and "must" are mandatory, and "should" and "may" are
	1.05.2	permise	•••••••••••••••••••••••••••••••••••••••
**	1.03.3		ord "yacht" shall be taken as fully interchangeable with the word "boat".
			ENERAL REQUIREMENTS
	2.01		pries of Events
	2.01	_	zing Authorities shall select from one of the following categories and may
	2.01	-	the OSR to suit local conditions
	2.01.2	Catego	
MoMu1	2.01.2	-	of long distance and well offshore, where boats must be completely self-
Momui			nt for extended periods of time, capable of withstanding heavy storms
			epared to meet serious emergencies without the expectation of outside
		assista	
	2.02		nt Reporting
	2.02		ganizing Authority of a race will establish whether any incidents occurred,
	2.02		f reported would be likely to be relevant to evolving the Offshore Special
			tions, the plan review process, or in increasing safety. The Organizing
			ty will follow any guidelines issued by World Sailing concerning incident
			c, cherr any galacines locace by trend cump concerning inclucit

		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
	1)	size of the boat.
**	2 04 2	
	2.04.2	Heavy items shall be permanently installed or securely fastened
SECTION 3 -	SIRUCIU	RAL FEATURES, STABILITY, FIXED EQUIPMENT
1. T.	2.01	A boat shall be/have:
**	3.01	Strength of Build and Rig
**	3.01.1	Properly rigged, fully seaworthy and shall meet the OSR
ጥጥ	3.01.2	Equipped with shrouds and at least one forestay that shall remain connected to
		the mast and the boat while racing
. de de	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 2022: 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 2022: 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 2022: 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	If a monohull with a Primary Launch after 2009
Mo0,1,2	a)	less than 24 m (78'-9") LH shall:
	a) i)	be designed, built and maintained in accordance with the requirements of ISO
		12215 Category A
	a) ii)	have a World Sailing / ISAF building plan review certificate issued from a
		notified body recognized by World Sailing, unless higher classification has been
		obtained from a Classification Society recognised by World Sailing. World Sailing
		will publish a list of waived plan review certificates.
Mo0,1,2	b)	24 m (78'-9") LH and greater shall be designed, built and maintained in
	-	accordance with the requirements of a Classification Society recognized by
		World Sailing
Mo0,1,2	c)	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, a race organizer 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)	have an additional World Sailing/ISAF certificate of building plan review in
···/ -/ -)	accordance with a) or b) and c) above for any significant repair of modification
		to the hull, deck, coachroof, keel or appendages.
MoMu0,1,2	3.03.2	A monohull with Primary Launch between 1987 and 2010, and all multihulls,
· · · · · / = / =		

Mo0,1,2	a)	shall have been designed, built, maintained, modified or repaired in according with the requirements of: OSR 3.03.1, or	ordance
Mo0,1,2	b)	the ABS Guide for Building and Classing Offshore Yachts and have on be either an ABS certificate of plan approval, or written statements signed designer and builder confirming that they have respectively designed an the boat in accordance with the ABS Guide, or	by the
MoMu0,1,2	c)	the EC Recreational Craft Directive for Category A having obtained the C or	Έ mark,
MoMu0,1,2	d)	ISO 12215 Category A, with written statements signed by the designer a builder confirming that they have respectively designed and built the bo accordance with the ISO standard, and	
MoMu0,1,2	e)	have written statements or approvals in accordance with a), or b) or c) above for all significant repairs or modifications to the hull, deck, coach keel or appendages, on board, except	
MoMu0,1,2	f)	that a race organizer or class rules may accept, when that described in a c), d) or e) above is not available, the signed statement by a naval arch other person familiar with the standards listed above that the boat fulfils requirements	itect or
Ma0 1 2	3.04	Stability - Monohulls	r highor
Mo0,1,2	3.04.1	Able to demonstrate compliance with ISO 12217-2* design category A c either by EC Recreational Craft Directive certification having obtained th mark or the designer's declaration * The latest effective version of ISO 12217-2 should be used unless the	e CE
Ma0 1 2 2	2 04 2	was already designed to a previous version	abla ta
Mo0,1,2,3	3.04.2	Where compliance in accordance with 3.04.1 cannot be demonstrated, a demonstrate either:	
Mo0,1,2	a)	i a STIX value not less than 32; and ii AVS not less than 130, 0.002 *m, but always > -100 % (where "m" is	the
Mo0,1,2		ii AVS not less than 130 - 0.002 *m, but always >= 100° , (where "m" is mass of the boat in the minimum operating condition as defined by ISO 2); and	
Mo0,1,2		 iii a minimum righting energy m*AGZ>172000 (where AGZ is the positi under the righting lever curve in the minimum operating condition, expr kg metre degrees from upright to AVS); or 	
Extract Mo1	b)	Stability Index in ORC Rating System of not less than 115; or	
Extract Mo0,1	c)	IRC SSS Base value of not less than 35	
	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 Laun 1994. One exit shall be located forward of the foremost mast except wh 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 minimu of 0.18 m ² (1.9 ft ²) (see figure 1)	m area
Mo0,1,2,3,4		. 380 .	٦
			1

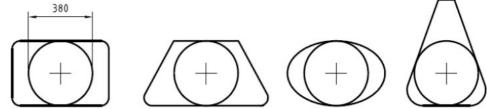


Figure 1 - Measurements of Minimum Clear Opening

		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

Mo0,1,2,3,4	b)	remaining firmly shut in a 180° capsize 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 0.071^2 m (110 in ²)
	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 a)	Companionway hatches: 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	a)	primary launch before April 1992: 6% (LWL x maximum beam x freeboard
MoMu0,1 **	b)	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
باد باد	3.10	Sea Cocks or Valves
**	3.10 3.11	Permanently installed sea cocks or valves on all through-hull openings below the waterline except for integral deck scuppers and instrument through-hulls Sheet Winches
**	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
**	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.
**	b)	Temporary sleeving shall not modify tension in the lifeline. Minimum heights of lifelines and pulpit rails above the working deck and vertical openings:

** upper: 600 mm (24") i ** ii intermediate: 230 mm (9") vertical opening: no greater than 380 mm (15") except that on a boat with a ** iii Primary Launch before 1993 where it shall be no greater than 560 mm (22") ** Lifelines permanently supported at intervals of not more than 2.2 m (7'-2 1/2'')c) and shall not pass outboard of supporting stanchions ** Pulpit and stanchion bases permanently installed with pulpits and stanchions d) mechanically retained in their bases The outside of pulpit and stanchion base tubes no further inboard from the edge ** e) 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 ** A bow pulpit may be open provided the opening between the pulpit and any g) part of the boat does not exceed 360 mm (14") **

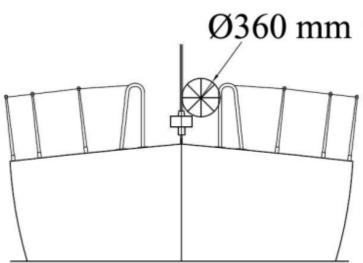


		Figure 2 - Diagram Showing Pulpit Opening
**	h)	Lifelines may terminate at or pass through adequately braced stanchions set
		inside and overlapping the bow pulpit
**	i)	When a deflecting force of 4 kg (8.8 #) is applied to a lifeline at the mid-point of
	,	the longest span between supports that are 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	Spare number
	3.14.4	Spare number
	3,14.5	Spare number
	3.14.6	Lifeline Specifications
Mo0,1,2,3	3.14.6	Lifelines of stranded stainless steel wire
	a)	
**	3.14.6	The minimum diameter is specified in table 8 below
	b)	·
**	3.14.6	Stainless steel lifelines shall be uncoated and used without close-fitting sleeving,
	c)	however, temporary sleeving may be fitted provided it is regularly removed for
		inspection.
**	3.14.6	A lanyard of synthetic rope may be used to secure lifelines provided the gap it
	d)	closes does not exceed 100 mm (4"). This lanyard shall be replaced annually
**	3.14.6	All components of the lifeline enclosure system shall have a breaking strength
	e)	no less than the lifeline
	ĹĦ	Wire Min. lifeline HMPE rope (Single braid) HMPE Core (Braid on braid)

	under	diameter 3mm (1/8")	min. lifeline diameter 4mm (5/32")	min. lifeline diameter 4mm (5/32")
	8.5m (28 8.5m - 13m	4mm (5/32")	5mm (3/16")	5mm (3/16")
	over 13m (42' 8")	n 5mm (3/16")	5mm (3/16")	5mm (3/16")
	3.17	Toe Rail or Foot - St	op	
Mo0,1,2,3	3.17.1	Permanently installed	•	5 mm (1"), located as close foredeck from abreast the
Mo0,1,2,3	3.17.2	An additional lifeline of	f between 25-50 mm (1-2") Primary Launch before 1984	high is permitted in lieu of a 4.
	3.18	Toilet		
MoMu0,1,2	3.18.1	Permanently installed	toilet	
	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 with fuel shutoff control	cooking stove, capable of be ol	ing operated safely at sea,
	3.21	Drinking Water Tan	ks & Drinking Water	
	3.21.1	Drinking Water Tan	ks	
MoMu1	3.21.1	Permanently installed	delivery pump and water tar	nks dividing the water supply
	a)	into at least two comp	artments	
	3.21.3	Emergency Drinking	g Water	
MoMu1,2,3	3.21.3	At least 9 I (2.4 US Ga	I) of drinking water for emer	gency use in a dedicated and
	a)	sealed container or co		2
	3.22	Hand Holds		
**	3.22	Adequate hand holds f	fitted below deck	
	3.23	Bilge Pumps and Bu		
**	3.23.1 a)			least 9 I (2.4 US Gal) capacity
Mo0,1,2	3.23.1 b)	two permanently insta other from below deck	lled manual bilge pumps, on	e operable from above, the
**	3.23.2	seats, hatches and cor	mpanionways shut and with	II be operable with all cockpit permanently installed
**	3.23.3	discharge pipe(s) of su Bilge pumps shall not into a Closed Cockpit	be connected to cockpit drai	ns and shall not discharge
**	3.23.4		eadily accessible for mainter	nance and for clearing out
**	3.23.5		mp handles retained by a la	nvard
	3.24	Compass	inp nanales retained by a la	i yara
MoMu0,1,2,3	3.24 a)	-	ass capable of being used a	s a steering compass:
MoMu0,1,2,3,	3.24 b)		marine magnetic steering co	
4	512 1 5)		y adjusted with deviation ca	
MoMu0,1,2,3	3.24 c) 3.25		ich may be hand-held and/o	
**	3.25 a)	-	yards, each capable of hoist	ing a sail, on each mast
MoMu0,1,2,3	3.25 b)	No halyard shall be loo that requires a person	ked, lashed or otherwise se	-
	3.27	Navigation Lights		
	3.27.1	that conform to the In	ternational Regulations for F Annex I) and shall be exhibi	
**	3.27.2		ine and so that they will not	be masked by sails or the

MoMu0,1,2,3	3.27.3	reserve lights having the same specifications as above, and that can be powered independently
**	3.27.4 3.28	spare bulbs (not required for LED) 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 \sqrt{LWL} in metres) or (\sqrt{LWL} in feet)
Mo0,1,2Mu0	3.28.1 c)	inboard engine
**	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
MoMu0,1,2	3.29.2 b)	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	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	3.29.3 b)	One hand-held satellite telephone, watertight or with waterproof cover and internal battery.
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
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
Mo1,Mu1,2	4.02.1	A 1 m ² (11 ft ²) solid area of highly-visible pink, orange or yellow capable of being displayed on the coachroof and/or deck.
	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	be independent on each side of the deck
	a)	
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
	4.06	parts of the boat 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 searchlight, suitable for searching for a person overboard at night and for
1101100/12/2/0	a)	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	octahedral rectangular plates of minimum diagonal dimension 40 cm (16"), or

	b)	
**	4.10.1	a non-octahedral reflector with a documented Root Mean Square minimum
	c)	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
**	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)
	4.13.2	A depth sounder
MoMu,1,2,3,4	4.14	Spare Number
	4.15	Emergency Steering
MoMu0 1 2 2	4.15.1	
MoMu0,1,2,3		An emergency tiller capable of being fitted to the rudder stock except when
MoMu0,1,2,3	4.15.1	the principal method of steering is by means of an unbreakable metal tiller
M-M-0 1 2 2	a)	the second second state of a fact that the second sector is the second state of the second
MoMu0,1,2,3	4.15.1	there are two methods (e.g. tillers, wheels) of controlling a rudder, neither of
	b)	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
MoMu1,2	4.19.1	A water and manually activated 406 MHz EPIRB
MoMu0,1,2	4.19.2	A 406 MHz EPIRB registered after 2015 shall include an internal GPS
MoMu0,1,2	4.19.3	All EPIRBs 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 IBRD if the country does not
		provide a registration facility and the country has allowed direct registration in
		the IBRD
	4.20	Liferafts
	4.20.1	Liferaft Construction
MoMu1,2	4.20.1	One or more inflatable liferafts with a total capacity to accommodate at least the
11011011/2	a)	total number of people on board which complies with:
MoMu1,2	4.20.1	SOLAS LSA Code 1997 Chapter IV or later version; or
	a) i	
MoMu1,2	4.20.1	ISO 9650-1:2005, Type 1, Group A - Small Craft - Inflatable; or
1101111,2		
MoMu1 2	a) ii 4.20.1	ICAE liferafte manufactured before 2016 until replacement is due at end of
MoMu1,2		ISAF liferafts manufactured before 2016 until replacement is due at end of
MaMul D	a) iii	service life; or
MoMu1,2	4.20.1	ORC liferafts manufactured before 2003 until replacement is due at end of
	a) iv	service life
	4.20.2	Minimum Liferaft Equipment
MoMu0,1,2	4.20.2	A SOLAS liferaft shall contain as a minimum a SOLAS A pack;
	a)	
MuMo1	4.20.2	An ISO 9650 liferaft shall contain as a minimum Pack 1 (greater than 24 hour
	b)	pack);
MoMu1,2	4.20.2	The minimum contents of the ISO liferaft equipment packs are listed below. Not
	d)	all items are necessarily packed within the liferaft. Some items are permitted to
		be carried within an accompanying waterproof grab bag which shall be in a

	readily accessible location:				
Equipme	ent	Pack 1	Pack 2	In liferaft	In liferaft
		> 24h	< 24h		or in grab bag
	buoyant baler easily operable by hand	1	1	Х	2.9
Sponge Pair of h	puoyant paddles with handles (not mitts) tied	2 1	2 1	X X	
into raft	adjacent to an entrance				
dressing wet con	Kit including at least 2 tubes of sunscreen. All s must be capable of being effectively used in ditions. The first aid kit shall be clearly marked Il be re-sealable.	1	0		Х
Whistle		1	1	Х	
•	oof torch with 6 h duration and separate and bulb or complementary torch	2	1	Х	
Signallin	g mirror	1	1	Х	
	sickness pills, per person	6	6		X
per pers	ness bag with simple effective closure system,	1	1		Х
	d flares in accordance with SOLAS LSA Code	6	3	3 min	Х
Red para	achute flares in accordance with SOLAS LSA	2	2	1 min	Х
Thermal	apter III, 3.1 protective aids in accordance with SOLAS LSA	2	0		Х
Repair of or all of must wo	apter III, 2.5 butfit to enable survivors to repair leaks in any the inflatable compartments. Repair systems brk when wet and be capable of being applied	1	1	Х	
Air pum complete shall be instant u of the in bellows	iolent motion. p or bellows which shall be simple, robust and e, with all necessary connections (loose parts captive to the main apparatus) ready for use to enable air to be pumped into any or all iflatable compartments. The air pump or shall be designed and built specifically for eration by hand	1	1	х	
Drinking	water per person, in containers of each not	1.5 L	0	X 0.5	Ха
	an 500mL r person	10 000	0	L	Х
		kJ			
replaced 4.20.2	ng water in the grab bag (if any) may be l with a desalinator device Portable buoyant bailer easily operable by har	nd			
d) i 4.20.2	2 monage				
d)ii	2 sponges				
4.20.2	Pair of buoyant paddles with handles (not mit	ts) tied	into raf	t adjacer	nt to an
d)iii 4.20.2	entrance Whistle				
d)iv					
4.20.2	2 waterproof torches with 6 h duration and				
d)v 4.20.2 d)vi	.20.2 2 spare waterproof torches or 2 spare batteries and bulbs				
4.20.2 d)vii	Signalling mirror				
ujvii					

MoMu1,2

MoMu1,2

MoMu1,2

MoMu1,2

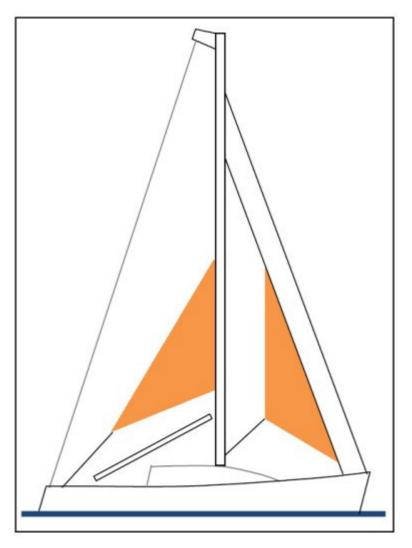
MoMu1

MoMu1

MoMu1,2

MoMu1,2	4.20.2	6 anti-seasickness pills per person *
MoMu1,2	d)viii 4.20.2 d)ix	Seasickness bag per person, each with a simple, effective, closure system st
MoMu1	4.20.2 d)x	6 hand flares in accordance with SOLAS LSA Code Chapter III, 3.2. 3 may be stowed in the grab bag.
MoMu1,2	4.20.2 d)xi	2 red parachute flares in accordance with SOLAS LSA Code Chapter III, 3.1. 1 may be stowed in the grab bag.
MoMu1,2	4.20.2 d)xii	Kit to repair leaks in most inflatable compartments, operable in wet conditions and during violent motion
MoMu1,2	4.20.2 d)xiii	Hand operable air pump, capable of and ready for immediate use to inflate most compartments. Loose parts captive to the pump.
MoMu1	4.20.2 d)xiv	First-Aid Kit including at least 2 tubes of sunscreen. All dressings shall be capable of being effectively used in wet conditions. The first aid kit shall be clearly marked and shall be re-sealable.
MoMu1	4.20.2 d)xv	2 thermal protective aids in accordance with SOLAS LSA Code Chapter III, 2.5 *
MoMu1	4.20.2 d)xvi	500 ml container of drinking water per person
MoMu1	4.20.2 d)xvii	2 additional 500 ml container of drinking water per person, or desalinator st
MoMu1	4.20.2 d)xviii	10 000 kJ food per person *
MoMu1,2	4.20.3	* may be packed in grab bag instead of liferaft Liferaft Packing and Stowage
MoMu0,1,2	4.20.3 a)	Each liferaft shall be packed either in:-
MoMu0,1,2	4.20.3 a) i	a rigid container securely stowed on the working deck, in the cockpit or in an open space; or:-
MoMu0,1,2	4.20.3 a) 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
MoMu1,2	4.20.3 b)	In a boat with primary launch before June 2001, a liferaft may be packed in a valise not exceeding 40 kg securely stowed below deck adjacent to a companionway
MoMu0,1,2	4.20.3 c)	On a multihull or on a monohull with moveable ballast the liferaft shall be readily deployable whether or not the boat is inverted
MoMu0,1,2	4.20.3 d)	The end of each liferaft painter should be securely fastened to the boat
MoMu0,1,2	4.20.3 e)	Each raft shall be capable of being got to the lifelines or launched within 15 seconds
MaM-0 1 2	4.20.4	Spare Number
MoMu0,1,2 MoMu0,1,2	4.20.5 4.20.5	Liferaft Servicing A liferaft shall be serviced at a manufacturer authorized service station at the
1101100,1,2	a)	following maximum intervals:
MoMu0,1,2	4.20.5 a) i	SOLAS liferafts annually
MoMu0,1,2	4.20.5 a) ii	ISO 9650 canister packed liferafts every 3 years
MoMu0,1,2	4.20.5 a) iii	ISO 9650 valise packed liferafts every 3 years except that hired liferafts shall be serviced annually
MoMu0,1,2	4.20.5 a) iv	ISAF liferafts annually
MoMu0,1,2	4.20.5 a) v	ORC liferafts annually
MoMu0,1,2	4.20.5 b)	Servicing certificates (original or a copy) on board
**	4.21 4.21 f)	Grab Bags If a grab bag is provided it shall have inherent flotation, at least 0.1 m ² (1 ft ²)

4.22 Crew Overboard Identification and Recovery 4.22.1 Locator Beacons MoMu0,1,2 4.22.1 An AIS personal crew overboard beacon for each crew member b) MoMu0,1,2 4.22.1 Where possible every PLB 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 IBRD if the country does not provide a registration facility and the country has allowed direct registration in the IBRD. 4.22.2 A GPS capable of recording a crew overboard position, within 10 seconds, and monitoring that position MoMu0,1,2 4.22.4 A addition to 4.22.3 above, within reach of the helmsman and ready for immediate use, a second lifebuoy equipped with: MoMu0,1,2 4.22.4 a vinsite, a drogue, a self-ignitting light and a) MoMu0,1,2 4.22.5 A Least one lifebuoy shall depend entirely on permanent buoyancy (e.g. foam) *** 4.22.6 A Least one lifebuoy shall depend entirely on permanent buoyancy (e.g. foam) *** 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 2.2.8 A recovery sling which includes a			area of fluorescent orange colour on the outside, shall be marked with the name of the boat, and shall have a lanyard and clip
MoMu0,1,2 4.22.1 An AIS personal crew overboard beacon for each crew member b) MoMu0,1,2 4.22.1 Where possible every PLB 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 IBRD if the country does not provide a registration facility and the country has allowed direct registration in the IBRD. 4.22.2 GPS Crew Overboard Position MoMu1,2 4.22.2 4.22.4 In Society overboard Position MoMu0,1,2 4.22.4 MoMu0,1,2 4.22.4 MoMu0,1,2 4.22.4 MoMu0,1,2 4.22.4 In addition to 4.22.3 above, within reach of the helmsman and ready for immediate use, a second lifebuoy equipped with: MoMu0,1,2 4.22.4 a pole and flag. The pole shall be either permanently extended or be capable of being fully automatically extended MoMu0,1,2 4.22.5 At least one lifebuoy shall depend entirely on permanent buoyancy (e.g. foam) ** 4.22.6 A recovery sling which includes a: MoMu0,1,2,3 4.22.8 A recovery sling which includes a: MoMu0,1,2,3 4.22.8 buoyant line of length no less than 6 mm (1/4")diameter, 15 - 25			Crew Overboard Identification and Recovery
b) 4.22.1d) Where possible every PLB 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 IBRD if the country does not provide a registration facility and the country has allowed direct registration in the IBRD. MoMu1,2 4.22.2 GPS Crew Overboard Position 4.22.2 GPS Crew Overboard Position MoMu0,1,2 4.22.3 a lifebuoy with a self-igniting light, a whistle and a drogue MoMu0,1,2 4.22.4 a pole and flag. The pole shall be either permanently extended or be capable of recording a crew overboard position, within 10 seconds, and monitoring that position MoMu0,1,2 4.22.4 a pole and flag. The pole shall be either permanently extended or be capable of being fully automatically extended MoMu0,1,2 4.22.5 At least one lifebuoy shall depend entirely on permanent buoyancy (e.g. foam) *** 4.22.6 A recovery sling which includes a: MoMu0,1,2,3 4.22.8 buoyant line of length 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 buoyancy section (horseshoe) with no less than 90 N (20#) buoyancy b) MoMu0,1,2,3 4.22.8 buoyancy section (horseshoe) with no less than 90 N (20#) buoyancy b) MoMu0,1,2,3 4.22.9			
 MoMu0,1,2 4.22.1d) Where possible every PLB 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 IBRD if the country does not provide a registration facility and the country has allowed direct registration in the IBRD. 4.22.2 GPS Crew Overboard Position MoMu1,2 4.22.3 A GPS capable of recording a crew overboard position, within 10 seconds, and monitoring that position MoMu0,1,2 4.22.4 In addition to 4.22.3 above, within reach of the helmsman and ready for immediate use, a second lifebuoy equipped with: MoMu0,1,2 4.22.4 a pole and flag. The pole shall be either permanently extended or be capable of being fully automatically extended MoMu0,1,2 4.22.5 At least one lifebuoy shall depend entirely on permanent buoyancy (e.g. foam) ** 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 4.22.9 minimum strength capable to hoist a crewmember aboard c) minimum strength capable to hoist a crewmember aboard c) MoMu0,1,2,3 4.22.9 Red Hand Flares LSA III 3.2 Orange Smoke Flares LSA III 3.3 MoMu0,1,2,3 4.23 Pyrotechnic and Light Signals ** ** 4.23 Forechnic and Light Signals ** ** 4.23 Cockpit Knife ** 4.24 Spare Number 2 A strong, sharp knife, sheathed and securely restrained shall be provided readily accessible from the deck or a cockpit. ** *** 	MOMUU,1,2		An AIS personal crew overboard beacon for each crew member
MoMu1,2 4.22.2 A GPS capable of recording a crew overboard position, within 10 seconds, and monitoring that position MoMu0,1,2 4.22.3 a lifebuoy with a self-igniting light, a whistle and a drogue MoMu0,1,2 4.22.4 In addition to 4.22.3 above, within reach of the helmsman and ready for immediate use, a second lifebuoy equipped with: MoMu0,1,2 4.22.4 In addition to 4.22.3 above, within reach of the helmsman and ready for immediate use, a second lifebuoy equipped with: MoMu0,1,2 4.22.4 a whistle, a drogue, a self-igniting light and a whistle, a drogue, a self-igniting light and all seconds, and monitoring that position MoMu0,1,2 4.22.4 a pole and flag. The pole shall be either permanently extended or be capable of b being fully automatically extended MoMu0,1,2 4.22.5 At least one 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 buoyancy section (horseshoe) with no less than 90 N (20#) buoyancy b) MoMu0,1,2,3 4.22.9 minimum strength capable to hoist a crewmember aboard c) 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	MoMu0,1,2		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 IBRD if the country does not provide a registration facility and the country has allowed
 c) monitoring that position MoMu0,1,2 4.22.3 a lifebuoy with a self-igniting light, a whistle and a drogue MoMu0,1,2 4.22.4 In addition to 4.22.3 above, within reach of the helmsman and ready for immediate use, a second lifebuoy equipped with: MoMu0,1,2 4.22.4 a whistle, a drogue, a self-igniting light and a) MoMu0,1,2 4.22.4 a vanistle, a drogue, a self-igniting light and a) MoMu0,1,2 4.22.5 At least one lifebuoy shall depend entirely on permanent buoyancy (e.g. foam) ** 4.22.7 A heaving line, no less than 6 mm (1/4")diameter, 15 - 25 m (50 - 75') long, readily accordance with its manufacturer's instructions ** 4.22.8 A recovery sling which includes a: MoMu0,1,2,3 4.22.8 buoyancy section (horseshoe) with no less than 90 N (20#) buoyancy b) MoMu0,1,2,3 4.22.9 minimum strength capable to hoist a crewmember aboard c) ** 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 4.25 A strong, sharp knife, sheathed and securely restrained shall be provided readily accessible from the deck or a cockpit. 4.25 A strong, sharp knife, sheathed and securely restrained shall be provided readily accessible from the deck or a cockpit. 4.26.1 Design 			
MoMu0,1,2 4.22.4 In addition to 4.22.3 above, within reach of the helmsman and ready for immediate use, a second lifebuoy equipped with: MoMu0,1,2 4.22.4 a whistle, a drogue, a self-igniting light and a) a vole and flag. The pole shall be either permanently extended or be capable of being fully automatically extended MoMu0,1,2 4.22.4 a pole and flag. The pole shall be either permanently extended or be capable of being fully automatically extended MoMu0,1,2 4.22.5 At least one lifebuoy shall depend entirely on permanent buoyancy (e.g. foam) ** 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 buoyancy section (horseshoe) with no less than 90 N (20#) buoyancy b) MoMu0,1,2,3 4.22.8 buoyancy section (horseshoe) with no less than 90 N (20#) buoyancy b) MoMu0,1,2,3 4.22.9 minimum strength capable to hoist a crewmember aboard c) () 9 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 stampeed expiry date (if any) or if no expiry date stamped , not o	MoMu1,2		
 immediate use, a second lifebuoy equipped with: a whistle, a drogue, a self-igniting light and a) MoMu0,1,2 4.22.4 a pole and flag. The pole shall be either permanently extended or be capable of being fully automatically extended MoMu0,1,2 4.22.5 At least one lifebuoy shall depend entirely on permanent buoyancy (e.g. foam) ** 4.22.6 At least one 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 buoyant line of length no less than the shorter of 4 times LH or 36m (120') a) MoMu0,1,2,3 4.22.8 buoyancy section (horseshoe) with no less than 90 N (20#) buoyancy b) MoMu0,1,2,3 4.22.9 minimum strength capable to hoist a crewmember aboard c) ** 4.23 Pyrotechnic and Light Signals ** 4.23 Pyrotechnic signals shall be provided conforming to SOLAS LSA Code Chapter III Visual Signals and no 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 ** 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 Storm & Heavy Weather Sails 	MoMu0,1,2		a lifebuoy with a self-igniting light, a whistle and a drogue
 a) a pole and flag. The pole shall be either permanently extended or be capable of being fully automatically extended MoMu0,1,2 4.22.5 At least one lifebuoy shall depend entirely on permanent buoyancy (e.g. foam) 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 buoyancy section (horseshoe) with no less than 90 N (20#) buoyancy b) MoMu0,1,2,3 4.22.9 minimum strength capable to hoist a crewmember aboard c) a) 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 4.24 Spare Number 4.25 Cockpit Knife 4.26 Storm & Heavy Weather Sails 4.26 Storm & Heavy Weather Sails 	MoMu0,1,2	4.22.4	•
MoMu0,1,2 4.22.4 a pole and flag. The pole shall be either permanently extended or be capable of being fully automatically extended MoMu0,1,2 4.22.5 At least one lifebuoy shall depend entirely on permanent buoyancy (e.g. foam) ** 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 buoyant line of length no less than the shorter of 4 times LH or 36m (120') a) MoMu0,1,2,3 4.22.8 buoyancy section (horseshoe) with no less than 90 N (20#) buoyancy b) MoMu0,1,2,3 4.22.9 minimum strength capable to hoist a crewmember aboard c) vb 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 MoMu4 2 4.24 Spare Number 2 4.25 A strong, sharp knife, sheathed an	MoMu0,1,2		a whistle, a drogue, a self-igniting light and
 b) being fully automatically extended MoMu0,1,2 4.22.5 At least one lifebuoy shall depend entirely on permanent buoyancy (e.g. foam) ** 4.22.6 At least one 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: buoyancy section (horseshoe) with no less than 90 N (20#) buoyancy b) MoMu0,1,2,3 4.22.9 minimum strength capable to hoist a crewmember aboard c) 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 4.24 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 			
MoMu0,1,2 4.22.5 At least one lifebuoy shall depend entirely on permanent buoyancy (e.g. foam) ** 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 buoyant line of length no less than the shorter of 4 times LH or 36m (120') a) a) buoyancy section (horseshoe) with no less than 90 N (20#) buoyancy b) MoMu0,1,2,3 4.22.9 minimum strength capable to hoist a crewmember aboard c) 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 *** 4.25 Cockpit Knife 4.24 Spare Number 2 ** 4.25 A strong, sharp knife, sheathed and securely restrained shall be provided readily accessible from the	MoMu0,1,2		
 ** 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: buoyant line of length no less than the shorter of 4 times LH or 36m (120') a) MoMu0,1,2,3 4.22.8 buoyancy section (horseshoe) with no less than 90 N (20#) buoyancy b) MoMu0,1,2,3 4.22.9 minimum strength capable to hoist a crewmember aboard c) ** 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 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. 4.26.1 Design 	MaMuO 1 D	•	• •
 ** 4.22.0 Each minimum label includey and any additionate device shall be reviced 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: buoyant line of length no less than the shorter of 4 times LH or 36m (120') a) MoMu0,1,2,3 4.22.9 minimum strength capable to hoist a crewmember aboard c) MoMu0,1,2,3 4.22.9 minimum strength capable to hoist a crewmember aboard c) ** 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 ** ** 4.24 Spare Number 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 			
 readily accessible to cockpit MoMu0,1,2,3 4.22.8 A recovery sling which includes a: MoMu0,1,2,3 4.22.8 buoyant line of length no less than the shorter of 4 times LH or 36m (120') a) MoMu0,1,2,3 4.22.8 buoyancy section (horseshoe) with no less than 90 N (20#) buoyancy b) MoMu0,1,2,3 4.22.9 minimum strength capable to hoist a crewmember aboard c) 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 4.24 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 		4.22.0	
MoMu0,1,2,3 4.22.8 buoyant line of length no less than the shorter of 4 times LH or 36m (120') a) a) buoyancy section (horseshoe) with no less than 90 N (20#) buoyancy MoMu0,1,2,3 4.22.8 buoyancy section (horseshoe) with no less than 90 N (20#) buoyancy MoMu0,1,2,3 4.22.9 minimum strength capable to hoist a crewmember aboard c) 4.23 Pyrotechnic and Light Signals ** 4.23 Pyrotechnic and Light Signals and not older than the stamped expiry date (if any) or if no expiry date stamped , 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 MoMu4 2 MoMu4 2 4.24 Spare Number 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	**	4.22.7	
 a) MoMu0,1,2,3 MoMu0,1,2,3 4.22.8 buoyancy section (horseshoe) with no less than 90 N (20#) buoyancy b) MoMu0,1,2,3 4.22.9 minimum strength capable to hoist a crewmember aboard c) 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 	MoMu0,1,2,3	4.22.8	A recovery sling which includes a:
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 MoMu0,1,2,3 Orange Smoke Flares LSA III 3.3 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	MoMu0,1,2,3	4.22.8	buoyant line of length no less than the shorter of 4 times LH or 36m (120')
 b) MoMu0,1,2,3 4.22.9 minimum strength capable to hoist a crewmember aboard c) 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 			
 ** ** ** 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 	MoMu0,1,2,3		buoyancy section (horseshoe) with no less than 90 N (20#) buoyancy
 ** 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 	MoMu0,1,2,3		minimum strength capable to hoist a crewmember aboard
 ** 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 			Duratashnis and Light Signals
 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 	**		
 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 		4.23	Visual Signals and not older than the stamped expiry date (if any) or if no
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		Race Ca	
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			5 /
 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 		•	
 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 		4.24	Spare Number
 ** 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 		4.25	Cockpit Knife
4.26 Storm & Heavy Weather Sails 4.26.1 Design	**	4.25	A strong, sharp knife, sheathed and securely restrained shall be provided readily
4.26.1 Design		4.26	
Figure 3			
			Figure 3



MoMu1,2

**	4.26.1	The material of the body of a storm sail purchased after 2013 shall have a
	a)	highly-visible colour (e.g. dayglo pink, orange or yellow)
**	4.26.1	Aromatic polyamides, carbon and similar fibres shall not be used in a trysail or
	b)	storm jib but HMPE and similar materials are permitted
**	4.26.1	Sheeting positions on deck for each storm and heavy-weather sail
	c)	
**	4.26.1	Sheeting positions for the trysail independent of the boom
	d)	
**	,	
	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 heavy-weather jib (or heavy-weather sail in a boat with no forestay)
	a)	with:
**	4.26.2	area of 13.5% height of the foretriangle squared
	a) i	5 5 1
**	4.26.2	readily available means, independent of a luff groove, to attach to the stay
	a) ii	, , , , , , , , , , , , , , , , , , , ,
MoMu0,1,2	4.26.2	A storm jib with:
, ,	b)	
MoMu0,1,2	4.26.2	area of 5% height of the foretriangle squared
/ /	b) i	
MoMu0,1,2	4.26.2	maximum luff length 65% of height of the foretiangle
/ /	b) ii	
MoMu0,1,2	4.26.2	permanently attached means, independent of a luff groove, to attach to the stay
/ /	b) iii	,
**	4.26.2	For sails made after 2011: Storm and heavy weather jib areas calculated as:
	c)	(0.255 x luff length x (luff perpendicular + 2 x half width))
	,	

MoMu0,1,2	4.26.2 d)	A storm trysail with:
MoMu0,1,2	4.26.2 d) i	area not greater than 17.5% mainsail hoist (P) x mainsail foot length (E)
MoMu0,1,2	4.26.2 d) ii	For sails made after 2011:The storm trysail are calculated as (0.5 x leech length x shortest distance between tack point and leech)
MoMu0,1,2	4.26.2 d) iii	no headboard
MoMu0,1,2	4.26.2 d) iv	no battens
MoMu0,1,2	4.26.2 d) v	sail number and letters on both sides, as large as practicable
MoMu0,1,2	4.26.2 d) vi	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
MoMu1,2	4.26.3 4.26.3 a) i 4.28 4.29	Sail Inventory either a storm trysail as defined in OSR 4.26.2 d), or mainsail reefing to reduce the luff by at least 50% (or rotating wing mast if suitable) Spare Number Deck Bags
	4.30	Emergency Pumps
Mo0,1,2	4.30.1	either fixed or portable pump to remove ingress water from any compartment.
Mo0,1,2	4.30.1 a)	This pump shall:
Mo0,1,2	4.30.1 b)	have a minimum rated capacity of 200 l/min
Mo0,1,2	4.30.1 c)	be operated by battery, main engine powered or a separate engine
Mo0,1,2	4.30.1 d)	if portable electric-powered, power cables to be terminated with alligator clips
Mo0,1,2	4.30.1 e)	have sufficient hose to discharge directly overboard or into the cockpit.
Mo0,1,2	4.30.1 f)	A combination of permanently installed and portable pumps may be combined to meet the above requirement. SECTION 5 - PERSONAL EQUIPMENT
**	5.01	Each crew member shall have: 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))
MoMu0,1,2	5.01.1 a)i)	have an integral safety harness in compliance with OSR 5.02
**	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	crotch/thigh straps (ride up prevention system (RUPS))
MoMu0,1,2	a) ii 5.01.1 a) ii	an integral safety harness in compliance with OSR 5.02
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	if inflatable, regulalrly checked for air retention

	f)	
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 OSR 5.01.1, (a
		spare PLB described in 5.01.1(e) is not required)
**	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	comply with ISO 12401 or equivalent
	a)	
MoMu0,1,2,3	5.02.2	not exceed 2 m (6'-6") including the length of the hooks
M-M-0 1 2 2	b)	have all the inclusion
MoMu0,1,2,3	5.02.2	have self-closing hooks
M-M-0 1 2 2	c)	have evenled indicator flag, eveloped and in the attraction
MoMu0,1,2,3	5.02.2	have overload indicator flag embedded in the stitching
	d)	he manufactured after 2000
MoMu0,1,2,3	5.02.2	be manufactured after 2000
MoMu0 1 2 2	e) 5.02.3	All of the crew shall have either:
MoMu0,1,2,3		
MoMu0,1,2,3	a)	a tether not exceeding 1m(3'3") including the length of the hooks, or an intermediate self-closing hook on a 2 m (6'-6") tether
MoMu0,1,2,3 MoMu0,1,2,3	b) 5.02.5	A tether which has been overloaded shall be replaced
1101100,1,2,3	5.02.5 5.07	Survival Equipment
	5.08	Diving Equipment
	5.00	SECTION 6 - TRAINING
MoMu0,1,2	6.01.2	At least 30% but not fewer than two members of a crew, including the Person in
1101100/1/2	010112	Charge shall have undertaken training within the five years before the start of
		the race in OSR 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 / ISAF Approved Offshore Personal Survival Training course
		shall be accepted by a race organizing authority as evidence of compliance with
		Special Regulation 6.01. See Appendix G - Model Training Course, for further
		details.
	6.02	Training Topics
	6.02.1	Giving Assistance to Other Craft
	6.02.2	Personal Safety Gear, theory and practice
	6.02.3	Care and Maintenance of Safety Gear
	6.02.4	Fire Precautions and Firefighting, theory and practical
	6.02.5	Crew Overboard Identification and Recovery
	6.02.6	Hypothermia, Cold Shock and Drowning
	6.02.7	Crew Health
	6.02.8	Marine Weather
	6.02.9	Heavy Weather
	6.02.10	Storm Sails
	6.02.11	Damage Control
	6.02.12	Search and Rescue Organization
	6.02.13	Pyrotechnics and Signalling Gear, theory and practical
	6.02.14	Emergency Communications, theory and practical
	6.02.15	Liferafts and Abandon Ship, theory and practical
	6.03	Spare Number Routine Training On-Roard
**	6.04 6.04	Routine Training On-Board
**	6.04 6.04 a)	At least annually the crews shall practice the drills for: Crew-Overboard Recovery
**	6.04 a) 6.04 b)	Abandonment of vessel
	6.04 D) 6.05	Medical Training
MoMu1	6.05.2	At least two crewmembers shall have a valid first aid certificate completed
	0.05.2	within the last five years meeting:

MoMu0,1,2	6.05.2 a)	A certificate listed on the World Sailing website www.sailing.org/specialregs of MNA recognised courses
MoMu0,1,2	6.05.2 b)	STCW First Aid Training complying with A-VI/1-3 - Elementary First Aid or higher STCW level
	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

17 Dec 20 – 1.02.1 RRS 4 to 3, 3.02.2 3.02.3, 3.02.4 Dates changed to 2022 4.26.2 'IG' deleted