Extract for Race Category 3 Monohulls with Life Raft JANUARY 2022 - DECEMBER 2023

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

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Official interpretations shall take precedence over these Special Regulations and will be indexed, numbered, dated and displayed on the World Sailing web site https://www.sailing.org/inside-world-sailing/rules-regulations/

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 2022

Guidance notes and recommendations have been removed from the Regulations and are available on https://www.sailing.org/inside-world-sailing/rules-regulations/offshore-special-regulations/

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

Administration

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

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- 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 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			
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 lic 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 a 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	World Sailing - 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		

Secure Fasten		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	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
Variab 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.
Waterl	ine	The water surface when the boat is floating in measurement trim
World	Sailing	formerly the International Sailing Federation or ISAF
1.03.2 1.03.3 SECTIO 2.01	permissi The wor N 2 - API Catego	d "yacht" shall be taken as fully interchangeable with the word "boat PLICATION & GENERAL REQUIREMENTS ries of Events
		ng Authorities shall select from one of the following categories and dify the OSR to suit local conditions
2.01.4	Catego	
	Races ac	cross open water, most of which is relatively protected or close to

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

2.02 Incident Reporting

The Organizing Authority of a race will establish whether any incidents occurred, which if reported would 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

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 (not applicable to boats with freestanding masts)

**	3.01.3	The forestay referenced above shall be sized and connected in a way that ensures it is capable of withstanding the full sailing loads independent of any
		headsail luff load capacity
**	3.02 3.02.1	Watertight and Structural Integrity of a Boat 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
Мо3	3.02.2	entirely above the Waterline Effective 1 January 2023, at a haul-out within two years prior to the event, the owner or his/her representative shall inspect the integrity of the keel and rudder following the recommendations in Appendix L.
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
	3.04	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
Mo0,1,2,3		* The latest effective version of ISO 12217-2 should be used unless the boat was already designed to a previous version
Mo0,1,2,3	3.04.2	Where compliance in accordance with 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
Mo3	b)	Stability Index in ORC Rating System of not less than 103; or
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 m^2 (1.9 ft ²) (see figure 1)
Mo0,1,2,3,4		~
	_	380
		+ $+$ $+$ $+$
	Figure 1 3.08	- Measurements of Minimum Clear Opening Hatches & Companionways
**	3.08.1	Hatch covers forward of the maximum beam station shall not open toward the interior of the boat, except hatches in the side of a coachroof or ports having an area of less than 0.071 m ² (110 in ²)
**	3.08.2	A hatch, including a hatch over a locker shall be:
**	a)	permanently attached and capable of being firmly shut immediately and remaining firmly shut in a 180° capsize
Mo0,1,2,3,4	b)	above the water when the boat is heeled 90°
Mo0,1,2,3,4	- /	A boat may have a maximum of two hatches on each side of centerline that

		do not conform to the requirement in b), provided that the opening of each is
		less than 0.071 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
**	2.00.4	SEA"
**	3.08.4	Companionway hatches:
44	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	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
**	2 00 2	permanently incorporated as an integral part of the boat
11-11-	3.09.2	A cockpit sole at least 2% LWL above the waterline (or in IMS boats with First
**	3.09.3	Launch before 2003, at least 2% L above the waterline) A bow, lateral, central or stern well is a cockpit for the purposes of OSR 3.09
	3.09.4	Cockpit Volume
**	3.03.4	The maximum combined volume below lowest coamings of all contained
		cockpits shall be:
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
**	2)	screens if fitted) shall be at least that of: 2 x 25 mm (1") diameter or equivalent for a boat less than 8.5 m (28') LH
**	a) b)	$4 \times 20 \text{ mm } (3/4'')$ 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
**		Sheet winches mounted in such a way that an operator is not required to be
		substantially below deck
	3.12	Mast Step
**		The heel of a keel stepped mast securely fastened to the mast step or
		adjoining structure
aleale	3.14	Pulpits, Stanchions, Lifelines
**	3.14.1	The perimeter of the deck surrounded by system of lifelines and pulpits as
**	2)	follows: Continuous lifelines fixed only at (or near) the how and storn. However a gate
71.11	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
	٥,	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
**	e)	mechanically retained in their bases 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")
**		0260
		Ø360 mm
		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 3.14.6	Spare number Lifeline Specifications
Mo0,1,2,3	a)	Lifelines of stranded stainless steel wire
**	b)	The minimum diameter is specified in table 8 below
**	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.
**	d)	A lanyard of synthetic rope may be used to secure lifelines provided the gap it
**	e)	closes does not exceed 100 mm (4"). This lanyard shall be replaced annually All components of the lifeline enclosure system shall have a breaking strength
		no less than the lifeline

LH Wire Min. lifeline diameter Under 8.5m (28') Arm (5/32") Arm (3/16") Arm (3	**	7	Table 8		
8.5m (28) 8.5m -		LH	lifeline	braid) min. lifeline	braid) min. lifeline
13m			\ ' '	4mm (5/32")	4mm (5/32")
Mo0,1,2,3 3.17.1 Toe Rail or Foot - Stop Permanently installed toe rail of minimum height 25 mm (1"), located as clos as practicable to the stanchion bases, around the foredeck from abreast the mast An additional lifeline of between 25-50 mm (1-2") high is permitted in lieu of toe rail on a boat with Primary Launch before 1984.			4mm (5/32")	5mm (3/16")	5mm (3/16")
Mo0,1,2,3 3.17 Toe Rail or Foot - Stop Permanently installed toe rail of minimum height 25 mm (1"), located as clos 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 toe rail on a boat with Primary Launch before 1984. Toilet MoMu3,4 3.18.2 Permanently installed toilet or fitted bucket 3.19 MoMu1,2,3,4 3.19.2 Permanently installed bunks Cooking Facilities 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 MoMu2,3 a) Permanently installed delivery pump and water tank(s) 3.21.3 Emergency Drinking Water At least 9 I (2.4 US Gal) of drinking water for emergency use in a dedicated and sealed container or container(s) 4.22 Hand Holds Adequate hand holds fitted below deck 3.23 Bilge Pumps and Buckets 3.23.1 Mo3Mu0,1,2 ** 3.23.2 All required permanently installed manual bilge pump 3.23.2 All required permanently installed manual bilge pump 3.23.3 All required permanently installed manual bilge pumps shall be operable with all cockpit seats, hatches and companionways shut and with permanently installed dilscharge pipe(s) of sufficient capacity 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 Compass			n 5mm (3/16")	5mm (3/16")	5mm (3/16")
Mo0,1,2,3 3.17.1 Permanently installed toe rail of minimum height 25 mm (1"), located as closs 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 toe rail on a boat with Primary Launch before 1984. 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 Permanently installed cooking stove, capable of being operated safely at sea, with fuel shutoff control 3.21 Drinking Water Tanks a) Permanently installed delivery pump and water tank(s) 3.21.1 Drinking Water Tanks a) Permanently installed delivery pump and water tank(s) 3.21.3 Emergency Drinking Water At least 9 I (2.4 US Gal) of drinking water for emergency use in a dedicated and sealed container or container(s) 3.22 Hand Holds Adequate hand holds fitted below deck 3.23 Bilge Pumps and Buckets ** 3.23.1 two strong buckets, each with a lanyard and of at least 9 I (2.4 US Gal) capacity b) one permanently installed manual bilge pump Mo3Mu0,1,2 ** 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 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 All removable bilge pump handles retained by a lanyard Compass			Toe Rail or Foot - S	Stop	
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with fuel shutoff control 3.21 Drinking Water Tanks & Drinking Water 3.21.1 Drinking Water Tanks Permanently installed delivery pump and water tank(s) 3.21.3 Emergency Drinking Water MoMu1,2,3 a) At least 9 I (2.4 US Gal) of drinking water for emergency use in a dedicated and sealed container or container(s) 4. Hand Holds Adequate hand holds fitted below deck 3.23 Bilge Pumps and Buckets ** 3.23.1 two strong buckets, each with a lanyard and of at least 9 I (2.4 US Gal) capacity 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 Compass	MoMu1,2,3,4	3.19.2 F	Permanently installed	d bunks	
MoMu2,3 a) Permanently installed delivery pump and water tank(s) 3.21.3 Emergency Drinking Water At least 9 I (2.4 US Gal) of drinking water for emergency use in a dedicated and sealed container or container(s) 3.22 Hand Holds Adequate hand holds fitted below deck 3.23 Bilge Pumps and Buckets ** 3.23.1 two strong buckets, each with a lanyard and of at least 9 I (2.4 US Gal) a) capacity 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 Compass	MoMu0,1,2,3	ν	with fuel shutoff con	trol	f being operated safely at sea,
a) Permanently installed delivery pump and water tank(s) 3.21.3 Emergency Drinking Water At least 9 I (2.4 US Gal) of drinking water for emergency use in a dedicated and sealed container or container(s) 3.22 Hand Holds Adequate hand holds fitted below deck 3.23 Bilge Pumps and Buckets ** 3.23.1 two strong buckets, each with a lanyard and of at least 9 I (2.4 US Gal) capacity 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 Compass					
MoMu1,2,3 ** ** ** ** ** ** ** ** **	MoMu2,3				tank(s)
a) At least 9 I (2.4 US Gal) of drinking water for emergency use in a dedicated and sealed container or container(s) 3.22 Hand Holds Adequate hand holds fitted below deck 3.23 Bilge Pumps and Buckets ** 3.23.1 two strong buckets, each with a lanyard and of at least 9 I (2.4 US Gal) a) capacity 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 Compass			•		
** 3.23 Hand Holds Adequate hand holds fitted below deck 3.23 Bilge Pumps and Buckets ** 3.23.1 two strong buckets, each with a lanyard and of at least 9 I (2.4 US Gal) a) capacity 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 ** Compass	MoMu1,2,3			_	mergency use in a dedicated
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 3.23 Bilge Pumps and Buckets 3.23.1 two strong buckets, each with a lanyard and of at least 9 I (2.4 US Gal) capacity Mo3Mu0,1,2 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 Compass 					
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** 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 ** Compass	Mo3Mu0 1 2	•		alled manual hilge numn	
** 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 ** Compass		3.23.2 A	All required permane cockpit seats, hatche	ntly installed bilge pumps is and companionways shu	it and with permanently
 debris 3.23.5 All removable bilge pump handles retained by a lanyard 3.24 Compass 	**	3.23.3 E	Bilge pumps shall no	t be connected to cockpit	
3.24 Compass		C	debris	·	-
MoMu0,1,2,3 a) Marine magnetic compass capable of being used as a steering compass:		3.24	Compass		•
** h) Permanently installed marine magnetic steering compass, independent of any			_		<u> </u>
power supply, correctly adjusted with deviation card		ŗ	power supply, correc	tly adjusted with deviation	card
MoMu0,1,2,3 c) a second compass which may be hand-held and/or electronic 3.25 Halyards. ** A minimum of two halyards, each capable of hoisting a sail, on each mast		3.25 H	Halyards.	•	
MoMu0,1,2,3 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.		b) i t	No halyard shall be long that requires a perso manner, except for a	ocked, lashed or otherwise n to go aloft in order to lo	e secured to the mast in a way wer a sail in a controlled
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	
	012712	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	
**	a)	engines and associated systems installed in accordance with their	
		manufacturers' guidelines and suitable for the size and intended use of the	
MaN. 0 1 2 2	L \	boat	
MoMu0,1,2,3	b)	an engine which provides a minimum speed in knots of (1.8 x \sqrt{LWL} in metres) or (\sqrt{LWL} in feet)	
Mo3	c)	either an inboard or outboard engine, with associated power supply systems,	
1103	C)	all securely fastened	
**	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	
**	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 **Constitution of the Constitution	
^		If an optional generator separate from the propulsion engine is carried, it shall be installed in assertions with the manufacturer's guidelines.	
	3.28.3	be installed in accordance with the manufacturer's guidelines Liquid Fuel Systems	
MoMu0,1,2,3	a)	All fuel tanks for storage of liquid fuels shall be rigid (but may have	
1101140,1,2,3	u)	permanently installed flexible linings) and shall have a shutoff valve	
MoMu0,1,2,3	b)	At the start a boat with a combustion engine shall carry sufficient fuel to meet	
, , , -	,	charging requirements for the duration of the race and to motor at the above	
		minimum speed for at least 5 hours	
	3.28.4	Battery Systems	
MoMu0,1,2,3	a)	a dedicated engine/generator starting battery when an electric starter is the	
atasta.		only method for starting the engine and/or separate generator	
**	b)	batteries installed after 2011 shall be of the sealed type from which liquid	
**	6)	electrolyte cannot escape At the start a heat with an electric engine shall carry sufficient canacity to	
1-1-	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	a)	a minimum rated output power of 25 W	
MoMu3	b)	a masthead antenna and co-axial feeder cable with not more than 40% power	
M-M-1 2 2	- >	loss	
MoMu1,2,3	c)	be DSC capable if installed after 2015	
MoMu1,2,3	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.	
1 1-1		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,	
	2 22 5	capable of receiving weather bulletins	
MoMu3	3.29.8	a GPS	
Mo0,1,2,3Mu1,2,	3.29.13	an AIS Transponder which either:	

MoMu0,1,2,3 a) shares the masthead VHF antenna via a low loss AIS antenna splitter; or has a dedicated AIS antenna not less than 38 cm (15") in length mounted with the 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		3			
b) has a dedicated ALS 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 A naternative 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 5.0ft Wood Plugs A tapered soft wood plug stowed adjacent to every through-hull opening Jackstays and Clipping Points MoMu0,1,2,3 a) 4.04.2 Jackstays which shall: be independent on each side of the deck enable a crewmember to move readily between the working areas on deck and the cockpit(s) with the minimum of clipping and buncoated and non-sleeved stainless steel 1 x.19 wire of minimum diameter 5 mm (3/16"), webbing or HMPE rope MoMu0,1,2,3 a) a) Each step in the stations such as the helm, sheet winches and masts, where crewmembers work MoMu0,1,2,3 a) b) Eadjacent to stations such as the helm, sheet winches and masts, where crewmembers work MoMu0,1,2,3 a) b) Eadjacent to stations such as the helm, sheet winches and masts, where crewmembers work MoMu0,1,2,3 a) b) Fire Fighting Equipment 4.05.1 A fire blanket adjacent to every cooking device 4.05.2 Le rewmember to clip on before coming on deck and unclip after going below enable two-thirds of the crew to be simultaneously clipped on without depending on jackstays Fire Fighting Equipment 4.05.1 A fire blanket adjacent to every cooking device 4.06.2 Anchors 4.06.3 Anchors 4.06.4 Alice and the cooking device 4.07.5 Fire Fighting Equipment 4.08.6 Anchors 4.09.7 A fire standay 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 Foghorn A flophorn A 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 numbe			a)	shares the masthead VHF antenna via a low loss AIS antenna splitter; or	
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 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 50ft Wood Plugs A tapered soft wood plug stowed adjacent to every through-hull opening Jackstays and Clipping Points 4.04.1 Apered soft wood plug stowed adjacent to every through-hull opening Jackstays and Clipping Points 4.04.1 Apered soft wood plug stowed adjacent to every through-hull opening Jackstays which shall: be independent on each side of the deck and the cockpit(s) with the minimum of clipping and unclipping operations have a breaking strength of 2040 kg (450.0°) and be uncoated and non-sleeved stainless steel 1 x. 19 wire of minimum diameter 5 mm (3/16°), webbing or HMPE rope Clipping points which shall: be adjacent to stations such as the helm, sheet winches and masts, where crewmembers work enable a crewmember to clip on before coming on deck and unclip after going below enable enable as crewmember to every cooking device 4.05.1 MoMu0,1,2,3 MoMu0,			_		
SECTION 4 - PORTABLE EQUIPMENT A boat shall have: Sail Letters & Numbers 4.01.1 Identification on sails which compiles with RRS 77 and RRS Appendix G 4.01.2 An alternative means of displaying identification as required under RRS Appendix of for a mainsail, to be displayed when none of the numbered sails are set 4.0.2 Search and Rescue Visibility 4.0.3 Soft Wood Plugs A tapered soft wood plug stowed adjacent to every through-hull opening Jackstays and Clipping Points 4.0.4.1 Permanently Installed fittings for jackstay ends and clipping points MoMu0,1,2,3 double, and the cockpit(s) with the minimum of clipping and unclipping operations have a breaking strength of 2040 kg (4500#) and be uncated and non-sleeved stainless steel 1 x 19 wire of minimum diameter 5 mm (3/16"), webbing or HMPE rope Clipping points which shall: be adjacent to stations such as the helm, sheet winches and masts, where crewmembers work enable a crewmember to clip on before coming on deck and unclip after going below enable two-thirds of the crew to be simultaneously clipped on without depending on jackstays Fire Fighting Equipment 4.05.1 A fire blanket adjacent to every cooking device 4.05.2 2 fire extinguishers, each with 2 kg of dry powder or equivalent, in different parts of the boat Anchors 4.06.3 Anchors 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 Watertight lights with spare batteries and bulbs as follows: a searchlight, suitable for searching for a person overboard at night and for collision avoidance a flashlight in addition to 4.07 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 7.10.1			,	· · · · · · · · · · · · · · · · · · ·	
A boat shall have: Sail Letters & Numbers 4.01.1 Sail Letters & Numbers 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 ** MoMu0,1,2,3 4.04.2 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: be independent on each side of the deck enable a crewmember to move readily between the working areas on deck and the cockpit(s) with the minimum of clipping and unclipping operations 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 Clipping points which shall: be adjacent to stations such as the helm, sheet winches and masts, where crewmembers work enable a crewmember to clip on before coming on deck and unclip after going below MoMu0,1,2,3 a) MoMu0,1,2,3 c) MoMu0,1,2,3 c) MoMu1,2,3 c) MoMu0,1,2,3 c) MoMu1,2,3 c) MoMu0,1,2,3 c)				with not more than 40% power loss	
A boat shall have: Sail Letters & Numbers 4.01.1 Sail Letters & Numbers 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 ** MoMu0,1,2,3 4.04.2 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: be independent on each side of the deck enable a crewmember to move readily between the working areas on deck and the cockpit(s) with the minimum of clipping and unclipping operations 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 Clipping points which shall: be adjacent to stations such as the helm, sheet winches and masts, where crewmembers work enable a crewmember to clip on before coming on deck and unclip after going below MoMu0,1,2,3 a) MoMu0,1,2,3 c) MoMu0,1,2,3 c) MoMu1,2,3 c) MoMu0,1,2,3 c) MoMu1,2,3 c) MoMu0,1,2,3 c)			SECTION 4 - DODTABLE FOLLOWENT		
## 4.01. Sail Letters & Numbers 4.01.1 Identification on sails which complies with RRS 77 and RRS Appendix G 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 *** 4.04 Jackstays and Clipping Points 4.05 Permanently Installed fittings for jackstay ends and clipping points AboMu0,1,2,3 a) MoMu0,1,2,3 a) MoMu0,1,2,3 a) MoMu0,1,2,3 b) MoMu0,1,2,3 c) MoMu0,1,2,3 a) MoMu			SECTIO	<u>-</u>	
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 Jackstays and Clipping Points 4.04 Jackstays and Clipping Points 4.04.1 Permanently Installed fittings for jackstay ends and clipping points Jackstays which shall: be independent on each side of the deck enable a crewmember to move readily between the working areas on deck and the cockpit(s) with the minimum of clipping and unclipping operations 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 a) How Jone Jone Jone Jone Jone Jone Jone Jone			4.01		
Appendix G for a mainsail, to be displayed when none of the numbered sails are set 4.02 4.03 5Soft Wood Plugs A tapered soft wood plug stowed adjacent to every through-hull opening Jackstays and Clipping Points 4.04 MoMu0,1,2,3 MoMu0,1,2,3 MoMu0,1,2,3 MoMu0,1,2,3 MoMu0,1,2,3 MoMu0,1,2,3 MoMu0,1,2,3		**	4.01.1	Identification on sails which complies with RRS 77 and RRS Appendix G	
## 4.02 Search and Rescue Visibility 4.03 Soft Wood Plugs A tapered soft wood plug stowed adjacent to every through-hull opening Jackstays and Clipping Points Jackstays which shall: be independent on each side of the deck and the cockpit(s) with the minimum of clipping and unclipping operations 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 a) MoMu0,1,2,3 a) MoMu0,1,2,3 a) MoMu0,1,2,3 b) MoMu0,1,2,3 c)		MoMu0,1,2,3	4.01.2		
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#* 4.03 Soft Wood Plugs A tapered soft wood plug stowed adjacent to every through-hull opening 4.04 Jackstays and Clipping Points 4.04.1 Permanently Installed fittings for jackstay ends and clipping points MoMu0,1,2,3 a MoMu0,1,2,3 b MoMu0,1,2,3 b MoMu0,1,2,3 c MoMu0,1,2,3 c MoMu0,1,2,3 a MoMu0,1,2,3 d MoMu0,1,2,3 d MoMu0,1,2,3 a MoMu0,1,2,3 a MoMu0,1,2,3 b MoMu0,1,2,3 b MoMu0,1,2,3 b MoMu0,1,2,3 c MoMu0,1,2,3 a MoMu0,1,2,3 b MoMu0,1,2,3 a MoMu0,1,2,3 b MoMu0,1,2,3 b MoMu0,1,2,3 c MoMu0,1,2,3 c MoMu0,1,2,3 b MoMu0,1,2,3 c Mo			4.02		
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 4.04 Jackstays and Clipping Points MoMu0,1,2,3 MoMu0,1,2,3 MoMu0,1,2,3 MoMu0,1,2,3 MoMu0,1,2,3 b) eindependent on each side of the deck enable a crewmember to move readily between the working areas on deck and the cockpit(s) with the minimum of clipping and unclipping operations 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 a) 4.04.3 Clipping points which shall: be adjacent to stations such as the helm, sheet winches and masts, where crewmembers work MoMu0,1,2,3 b) enable a crewmember to clip on before coming on deck and unclip after going below MoMu0,1,2,3 c) enable two-thirds of the crew to be simultaneously clipped on without depending on jackstays 4.05.1 A fire blanket adjacent to severy cooking device 4.05.2 2 fire extinguishers, each with 2 kg of dry powder or equivalent, in different parts of the boat 4.06.4 Anchors 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 Watertight lights with spare batteries and bulbs as follows: a flashlight in addition to 4.07 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 Foghorn A passive radar reflector A passive radar reflector with:		**			
MoMu0,1,2,3 MoMu0,			4.04		
MoMu0,1,2,3 MoMu0,					
MoMu0,1,2,3 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 have a breaking strength of 2040 kg (450.0#) and be uncoated and non-sleeved stainless steel 1 x 19 wire of minimum diameter 5 mm (3/16"), webbing or HMPE rope Clipping points which shall: a) be adjacent to stations such as the helm, sheet winches and masts, where crewmembers work b) enable a crewmember to clip on before coming on deck and unclip after going below MoMu0,1,2,3 c) enable two-thirds of the crew to be simultaneously clipped on without depending on jackstays 4.05:1 A fire blanket adjacent to every cooking device 4.05.1 A fire blanket adjacent to every cooking device 4.06.2 4.06.3 Anchors 4.06.4 Anchors 4.06.4 Anchors 4.06.5 4.06.5 4.06.6 MoMu1,2,3 A fire blanket adjacent to every cooking device 4.06.6 Anchors 4.06.7 4.06.8 Anchors 4.06.9 Anchors 4.07 A passive radar reflector with: a) catalogian and First Aid Kit. A First Aid Manual and First Aid Kit. A First Aid Manual and First Aid Kit. A First Aid Manual and First Aid Kit. A Fight Aid Banual and First Aid Kit. A First Aid Manual and First Ai				•	
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** 4.10.1 A passive radar reflector with: ** octahedral circular plates of minimum diameter 30 cm (12"), or			4.10	<u> </u>	
		**			
b) octahedral rectangular plates of minimum diagonal dimension 40 cm (16"), or			-	•	
		**	b)	octahedral rectangular plates of minimum diagonal dimension 40 cm (16"), or	

**	c)	a non-octahedral reflector with a documented Root Mean Square minimum
		Radar Cross Section (RCS) area of 2 m ² (22 ft ²) from 0-360° of azimuth and
		±20° of heel
	4.11	Navigation Equipment
MoMu0,1,2,3	4.11.1	Navigational charts (not solely electronic), light list and chart plotting
1101100,1,2,3	11111	equipment
	4.12	Safety Equipment Location Chart
**	4.12	
71-11-		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	a)	the principal method of steering is by means of an unbreakable metal tiller
MoMu0,1,2,3	b)	there are two methods (e.g. tillers, wheels) of controlling a rudder, neither of
11011110,1,2,3	D)	
M M 0 4 2 2	4.45.0	which shares components with the other except for the rudder stock.
MoMu0,1,2,3	4.15.2	A proven method of emergency steering with the rudder disabled
	4.16	Tools and Spare Parts
**	4.16.1	Tools and spare parts, suitable for the duration and nature of the passage
**	4.16.2	An effective means to quickly disconnect or sever the standing rigging from
		the boat
	4.17	Boat's name
**		The boat's name on miscellaneous buoyant equipment, such as lifejackets,
		cushions, lifebuoys, recovery slings, grab bags etc.
	4.18	Retro-reflective material
**	0	
		Marine drade remo-remediive majerial on menilove recovery clinds meralis
		Marine grade retro-reflective material on lifebuoys, recovery slings, liferafts
	4 10	and lifejackets
	4.19	and lifejackets EPIRBs
	4.20	and lifejackets EPIRBs Liferafts
M.M. 1.2	4.20 4.20.1	and lifejackets EPIRBs Liferafts Liferaft Construction
MoMu1,2	4.20	and lifejackets EPIRBs Liferafts Liferaft Construction One or more inflatable liferafts with a total capacity to accommodate at least
,	4.20 4.20.1 a)	and lifejackets EPIRBs Liferafts Liferaft Construction One or more inflatable liferafts with a total capacity to accommodate at least the total number of people on board which complies with:
MoMu1,2	4.20 4.20.1 a)	and lifejackets EPIRBs Liferafts Liferaft Construction One or more inflatable liferafts with a total capacity to accommodate at least the total number of people on board which complies with: SOLAS LSA Code 1997 Chapter IV or later version; or
,	4.20 4.20.1 a)	and lifejackets EPIRBs Liferafts Liferaft Construction One or more inflatable liferafts with a total capacity to accommodate at least the total number of people on board which complies with: SOLAS LSA Code 1997 Chapter IV or later version; or ISO 9650-1:2005, Type 1, Group A - Small Craft - Inflatable; or
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MoMu1,2 MoMu1,2	4.20 4.20.1 a) i ii iii	and lifejackets EPIRBs Liferafts Liferaft Construction One or more inflatable liferafts with a total capacity to accommodate at least the total number of people on board which complies with: SOLAS LSA Code 1997 Chapter IV or later version; or ISO 9650-1:2005, Type 1, Group A - Small Craft - Inflatable; or ISAF liferafts manufactured before 2016 until replacement is due at end of
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MoMu1,2 MoMu1,2 MoMu1,2 MoMu1,2	4.20 4.20.1 a) i ii iii iv 4.20.2	and lifejackets EPIRBs Liferafts Liferaft Construction One or more inflatable liferafts with a total capacity to accommodate at least the total number of people on board which complies with: SOLAS LSA Code 1997 Chapter IV or later version; or ISO 9650-1:2005, Type 1, Group A - Small Craft - Inflatable; or ISAF liferafts manufactured before 2016 until replacement is due at end of service life; or ORC liferafts manufactured before 2003 until replacement is due at end of service life Minimum Liferaft Equipment
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MoMu1,2 MoMu1,2 MoMu1,2 MoMu1,2	4.20 4.20.1 a) i ii iii iv 4.20.2	and lifejackets EPIRBs Liferafts Liferaft Construction One or more inflatable liferafts with a total capacity to accommodate at least the total number of people on board which complies with: SOLAS LSA Code 1997 Chapter IV or later version; or ISO 9650-1:2005, Type 1, Group A - Small Craft - Inflatable; or ISAF liferafts manufactured before 2016 until replacement is due at end of service life; or ORC liferafts manufactured before 2003 until replacement is due at end of service life Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack; An ISO 9650 liferaft shall contain as a minimum Pack 2 (less than 24 hour
MoMu1,2 MoMu1,2 MoMu1,2 MoMu1,2 MoMu0,1,2 MoMu2	4.20 4.20.1 a) i ii iii iv 4.20.2 a) c)	and lifejackets EPIRBs Liferafts Liferaft Construction One or more inflatable liferafts with a total capacity to accommodate at least the total number of people on board which complies with: SOLAS LSA Code 1997 Chapter IV or later version; or ISO 9650-1:2005, Type 1, Group A - Small Craft - Inflatable; or ISAF liferafts manufactured before 2016 until replacement is due at end of service life; or ORC liferafts manufactured before 2003 until replacement is due at end of service life Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack; An ISO 9650 liferaft shall contain as a minimum Pack 2 (less than 24 hour pack);
MoMu1,2 MoMu1,2 MoMu1,2 MoMu1,2	4.20 4.20.1 a) i ii iii iv 4.20.2 a)	and lifejackets EPIRBs Liferafts Liferaft Construction One or more inflatable liferafts with a total capacity to accommodate at least the total number of people on board which complies with: SOLAS LSA Code 1997 Chapter IV or later version; or ISO 9650-1:2005, Type 1, Group A - Small Craft - Inflatable; or ISAF liferafts manufactured before 2016 until replacement is due at end of service life; or ORC liferafts manufactured before 2003 until replacement is due at end of service life Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack; An ISO 9650 liferaft shall contain as a minimum Pack 2 (less than 24 hour pack); The minimum contents of the ISO liferaft equipment packs are listed below.
MoMu1,2 MoMu1,2 MoMu1,2 MoMu1,2 MoMu0,1,2 MoMu2	4.20 4.20.1 a) i ii iii iv 4.20.2 a) c)	and lifejackets EPIRBs Liferafts Liferaft Construction One or more inflatable liferafts with a total capacity to accommodate at least the total number of people on board which complies with: SOLAS LSA Code 1997 Chapter IV or later version; or ISO 9650-1:2005, Type 1, Group A - Small Craft - Inflatable; or ISAF liferafts manufactured before 2016 until replacement is due at end of service life; or ORC liferafts manufactured before 2003 until replacement is due at end of service life Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack; An ISO 9650 liferaft shall contain as a minimum Pack 2 (less than 24 hour pack); The minimum contents of the ISO liferaft equipment packs are listed below. Not all items are necessarily packed within the liferaft. Some items are
MoMu1,2 MoMu1,2 MoMu1,2 MoMu1,2 MoMu0,1,2 MoMu2	4.20 4.20.1 a) i ii iii iv 4.20.2 a) c)	and lifejackets EPIRBs Liferafts Liferaft Construction One or more inflatable liferafts with a total capacity to accommodate at least the total number of people on board which complies with: SOLAS LSA Code 1997 Chapter IV or later version; or ISO 9650-1:2005, Type 1, Group A - Small Craft - Inflatable; or ISAF liferafts manufactured before 2016 until replacement is due at end of service life; or ORC liferafts manufactured before 2003 until replacement is due at end of service life Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack; An ISO 9650 liferaft shall contain as a minimum Pack 2 (less than 24 hour pack); The minimum contents of the ISO liferaft equipment packs are listed below. Not all items are necessarily packed within the liferaft. Some items are permitted to be carried within an accompanying waterproof grab bag which
MoMu1,2 MoMu1,2 MoMu1,2 MoMu1,2 MoMu0,1,2 MoMu2 MoMu1,2	4.20 4.20.1 a) i ii iii iv 4.20.2 a) c) d)	and lifejackets EPIRBs Liferafts Liferaft Construction One or more inflatable liferafts with a total capacity to accommodate at least the total number of people on board which complies with: SOLAS LSA Code 1997 Chapter IV or later version; or ISO 9650-1:2005, Type 1, Group A - Small Craft - Inflatable; or ISAF liferafts manufactured before 2016 until replacement is due at end of service life; or ORC liferafts manufactured before 2003 until replacement is due at end of service life Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack; An ISO 9650 liferaft shall contain as a minimum Pack 2 (less than 24 hour pack); The minimum contents of the ISO liferaft equipment packs are listed below. Not 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:
MoMu1,2 MoMu1,2 MoMu1,2 MoMu1,2 MoMu0,1,2 MoMu2 MoMu1,2	4.20 4.20.1 a) i ii iii iv 4.20.2 a) c) d)	and lifejackets EPIRBs Liferafts Liferaft Construction One or more inflatable liferafts with a total capacity to accommodate at least the total number of people on board which complies with: SOLAS LSA Code 1997 Chapter IV or later version; or ISO 9650-1:2005, Type 1, Group A - Small Craft - Inflatable; or ISAF liferafts manufactured before 2016 until replacement is due at end of service life; or ORC liferafts manufactured before 2003 until replacement is due at end of service life Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack; An ISO 9650 liferaft shall contain as a minimum Pack 2 (less than 24 hour pack); The minimum contents of the ISO liferaft equipment packs are listed below. Not 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: Portable buoyant bailer easily operable by hand
MoMu1,2 MoMu1,2 MoMu1,2 MoMu1,2 MoMu0,1,2 MoMu2 MoMu1,2	4.20 4.20.1 a) i ii iii iv 4.20.2 a) c) d)	and lifejackets EPIRBs Liferafts Liferaft Construction One or more inflatable liferafts with a total capacity to accommodate at least the total number of people on board which complies with: SOLAS LSA Code 1997 Chapter IV or later version; or ISO 9650-1:2005, Type 1, Group A - Small Craft - Inflatable; or ISAF liferafts manufactured before 2016 until replacement is due at end of service life; or ORC liferafts manufactured before 2003 until replacement is due at end of service life Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack; An ISO 9650 liferaft shall contain as a minimum Pack 2 (less than 24 hour pack); The minimum contents of the ISO liferaft equipment packs are listed below. Not 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: Portable buoyant bailer easily operable by hand 2 sponges
MoMu1,2 MoMu1,2 MoMu1,2 MoMu1,2 MoMu0,1,2 MoMu2 MoMu1,2	4.20 4.20.1 a) i ii iii iv 4.20.2 a) c) d)	and lifejackets EPIRBs Liferafts Liferaft Construction One or more inflatable liferafts with a total capacity to accommodate at least the total number of people on board which complies with: SOLAS LSA Code 1997 Chapter IV or later version; or ISO 9650-1:2005, Type 1, Group A - Small Craft - Inflatable; or ISAF liferafts manufactured before 2016 until replacement is due at end of service life; or ORC liferafts manufactured before 2003 until replacement is due at end of service life Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack; An ISO 9650 liferaft shall contain as a minimum Pack 2 (less than 24 hour pack); The minimum contents of the ISO liferaft equipment packs are listed below. Not 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: Portable buoyant bailer easily operable by hand
MoMu1,2 MoMu1,2 MoMu1,2 MoMu1,2 MoMu2,1,2 MoMu2 MoMu1,2 MoMu1,2	4.20 4.20.1 a) i ii iii iv 4.20.2 a) c) d)	and lifejackets EPIRBs Liferafts Liferaft Construction One or more inflatable liferafts with a total capacity to accommodate at least the total number of people on board which complies with: SOLAS LSA Code 1997 Chapter IV or later version; or ISO 9650-1:2005, Type 1, Group A - Small Craft - Inflatable; or ISAF liferafts manufactured before 2016 until replacement is due at end of service life; or ORC liferafts manufactured before 2003 until replacement is due at end of service life Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack; An ISO 9650 liferaft shall contain as a minimum Pack 2 (less than 24 hour pack); The minimum contents of the ISO liferaft equipment packs are listed below. Not 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: Portable buoyant bailer easily operable by hand 2 sponges
MoMu1,2 MoMu1,2 MoMu1,2 MoMu1,2 MoMu2,1,2 MoMu2 MoMu1,2 MoMu1,2	4.20 4.20.1 a) i ii iii iv 4.20.2 a) c) d)	and lifejackets EPIRBs Liferafts Liferaft Construction One or more inflatable liferafts with a total capacity to accommodate at least the total number of people on board which complies with: SOLAS LSA Code 1997 Chapter IV or later version; or ISO 9650-1:2005, Type 1, Group A - Small Craft - Inflatable; or ISAF liferafts manufactured before 2016 until replacement is due at end of service life; or ORC liferafts manufactured before 2003 until replacement is due at end of service life Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack; An ISO 9650 liferaft shall contain as a minimum Pack 2 (less than 24 hour pack); The minimum contents of the ISO liferaft equipment packs are listed below. Not 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: Portable buoyant bailer easily operable by hand 2 sponges Pair of buoyant paddles with handles (not mitts) tied into raft adjacent to an
MoMu1,2 MoMu1,2 MoMu1,2 MoMu1,2 MoMu2 MoMu1,2 MoMu1,2 MoMu1,2 MoMu1,2 MoMu1,2	4.20 4.20.1 a) i ii iii iv 4.20.2 a) c) d)	and lifejackets EPIRBs Liferafts Liferaft Construction One or more inflatable liferafts with a total capacity to accommodate at least the total number of people on board which complies with: SOLAS LSA Code 1997 Chapter IV or later version; or ISO 9650-1:2005, Type 1, Group A - Small Craft - Inflatable; or ISAF liferafts manufactured before 2016 until replacement is due at end of service life; or ORC liferafts manufactured before 2003 until replacement is due at end of service life Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack; An ISO 9650 liferaft shall contain as a minimum Pack 2 (less than 24 hour pack); The minimum contents of the ISO liferaft equipment packs are listed below. Not 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: Portable buoyant bailer easily operable by hand 2 sponges Pair of buoyant paddles with handles (not mitts) tied into raft adjacent to an entrance Whistle
MoMu1,2 MoMu1,2 MoMu1,2 MoMu1,2 MoMu2 MoMu1,2 MoMu1,2 MoMu1,2 MoMu1,2 MoMu1,2 MoMu1,2 MoMu1,2 MoMu1,2	4.20 4.20.1 a) i ii iii iv 4.20.2 a) c) d)	and lifejackets EPIRBs Liferafts Liferaft Construction One or more inflatable liferafts with a total capacity to accommodate at least the total number of people on board which complies with: SOLAS LSA Code 1997 Chapter IV or later version; or ISO 9650-1:2005, Type 1, Group A - Small Craft - Inflatable; or ISAF liferafts manufactured before 2016 until replacement is due at end of service life; or ORC liferafts manufactured before 2003 until replacement is due at end of service life Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack; An ISO 9650 liferaft shall contain as a minimum Pack 2 (less than 24 hour pack); The minimum contents of the ISO liferaft equipment packs are listed below. Not 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: Portable buoyant bailer easily operable by hand 2 sponges Pair of buoyant paddles with handles (not mitts) tied into raft adjacent to an entrance Whistle Waterproof torch with 6 h duration and
MoMu1,2 MoMu1,2 MoMu1,2 MoMu1,2 MoMu2,1,2 MoMu2 MoMu1,2 MoMu1,2 MoMu1,2 MoMu1,2 MoMu1,2	4.20 4.20.1 a) i ii iii iv 4.20.2 a) c) d)	and lifejackets EPIRBs Liferafts Liferaft Construction One or more inflatable liferafts with a total capacity to accommodate at least the total number of people on board which complies with: SOLAS LSA Code 1997 Chapter IV or later version; or ISO 9650-1:2005, Type 1, Group A - Small Craft - Inflatable; or ISAF liferafts manufactured before 2016 until replacement is due at end of service life; or ORC liferafts manufactured before 2003 until replacement is due at end of service life Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack; An ISO 9650 liferaft shall contain as a minimum Pack 2 (less than 24 hour pack); The minimum contents of the ISO liferaft equipment packs are listed below. Not 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: Portable buoyant bailer easily operable by hand 2 sponges Pair of buoyant paddles with handles (not mitts) tied into raft adjacent to an entrance Whistle

MaMul 2	viii	6 anti cancialmosa nilla nor norsan *	
MoMu1,2	Viii	6 anti-seasickness pills per person *	
MoMu1,2	ix	Seasickness bag per person, each with a simple, effective, closure system *	
MoMu2	X _.	3 hand flares in accordance with SOLAS LSA Code Chapter III, 3.2.	
MoMu1,2	χi	2 red parachute flares in accordance with SOLAS LSA Code Chapter III, 3.1. 1	
		may be stowed in the grab bag.	
MoMu1,2	xii	Kit to repair leaks in most inflatable compartments, operable in wet conditions	
		and during violent motion	
MoMu1,2	xiii	Hand operable air pump, capable of and ready for immediate use to inflate	
		most compartments. Loose parts captive to the pump.	
MoMu1,2		* may be packed in grab bag instead of liferaft	
	4.20.3	Liferaft Packing and Stowage	
MoMu0,1,2	a)	Each liferaft shall be packed either in:	
MoMu0,1,2	i	a rigid container securely stowed on the working deck, in the cockpit or in an	
		open space; or:	
MoMu0,1,2	ii	a rigid container or valise securely stowed in a dedicated weather tight locker	
		containing liferaft and abandon ship equipment only which is readily accessible	
		and opens onto the cockpit or working deck, or transom	
MoMu1,2	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	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	d)	The end of each liferaft painter should be securely fastened to the boat	
MoMu0,1,2	e)	Each raft shall be capable of being got to the lifelines or launched within 15	
		seconds	
	4.20.4		
	4.ZU.4	Spare number	
		•	
MoMu0.1.2	4.20.5	Liferaft Servicing	
MoMu0,1,2		Liferaft Servicing A liferaft shall be serviced at a manufacturer authorized service station at the	
	4.20.5 a)	Liferaft Servicing A liferaft shall be serviced at a manufacturer authorized service station at the following maximum intervals:	
MoMu0,1,2	4.20.5	Liferaft Servicing A liferaft shall be serviced at a manufacturer authorized service station at the following maximum intervals: SOLAS liferafts annually	
MoMu0,1,2 MoMu0,1,2	4.20.5 a)	Liferaft Servicing A liferaft shall be serviced at a manufacturer authorized service station at the following maximum intervals: SOLAS liferafts annually ISO 9650 canister packed liferafts every 3 years	
MoMu0,1,2	4.20.5 a) i ii	Liferaft Servicing A liferaft shall be serviced at a manufacturer authorized service station at the following maximum intervals: SOLAS liferafts annually ISO 9650 canister packed liferafts every 3 years ISO 9650 valise packed liferafts every 3 years except that hired liferafts shall	
MoMu0,1,2 MoMu0,1,2 MoMu0,1,2	4.20.5 a) i ii iii	Liferaft Servicing A liferaft shall be serviced at a manufacturer authorized service station at the following maximum intervals: SOLAS liferafts annually ISO 9650 canister packed liferafts every 3 years ISO 9650 valise packed liferafts every 3 years except that hired liferafts shall be serviced annually	
MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2	4.20.5 a) i ii iii iv	Liferaft Servicing A liferaft shall be serviced at a manufacturer authorized service station at the following maximum intervals: SOLAS liferafts annually ISO 9650 canister packed liferafts every 3 years ISO 9650 valise packed liferafts every 3 years except that hired liferafts shall be serviced annually ISAF liferafts annually	
MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2	4.20.5 a) i ii iii iv v	Liferaft Servicing A liferaft shall be serviced at a manufacturer authorized service station at the following maximum intervals: SOLAS liferafts annually ISO 9650 canister packed liferafts every 3 years ISO 9650 valise packed liferafts every 3 years except that hired liferafts shall be serviced annually ISAF liferafts annually ORC liferafts annually	
MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2	4.20.5 a) i ii iii v v b)	Liferaft Servicing A liferaft shall be serviced at a manufacturer authorized service station at the following maximum intervals: SOLAS liferafts annually ISO 9650 canister packed liferafts every 3 years ISO 9650 valise packed liferafts every 3 years except that hired liferafts shall be serviced annually ISAF liferafts annually ORC liferafts annually Servicing certificates (original or a copy) on board	
MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2	4.20.5 a) i ii iii v v b) 4.21	Liferaft Servicing A liferaft shall be serviced at a manufacturer authorized service station at the following maximum intervals: SOLAS liferafts annually ISO 9650 canister packed liferafts every 3 years ISO 9650 valise packed liferafts every 3 years except that hired liferafts shall be serviced annually ISAF liferafts annually ORC liferafts annually Servicing certificates (original or a copy) on board Grab Bags	
MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2	4.20.5 a) i ii iii v v b)	Liferaft Servicing A liferaft shall be serviced at a manufacturer authorized service station at the following maximum intervals: SOLAS liferafts annually ISO 9650 canister packed liferafts every 3 years ISO 9650 valise packed liferafts every 3 years except that hired liferafts shall be serviced annually ISAF liferafts annually ORC liferafts annually Servicing certificates (original or a copy) on board Grab Bags If a grab bag is provided it shall have inherent flotation, at least 0.1 m² (1 ft²)	
MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2	4.20.5 a) i ii iii v v b) 4.21	Liferaft Servicing A liferaft shall be serviced at a manufacturer authorized service station at the following maximum intervals: SOLAS liferafts annually ISO 9650 canister packed liferafts every 3 years ISO 9650 valise packed liferafts every 3 years except that hired liferafts shall be serviced annually ISAF liferafts annually ORC liferafts annually Servicing certificates (original or a copy) on board Grab Bags 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	
MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2	4.20.5 a) i ii iii v v b) 4.21 f)	Liferaft Servicing A liferaft shall be serviced at a manufacturer authorized service station at the following maximum intervals: SOLAS liferafts annually ISO 9650 canister packed liferafts every 3 years ISO 9650 valise packed liferafts every 3 years except that hired liferafts shall be serviced annually ISAF liferafts annually ORC liferafts annually Servicing certificates (original or a copy) on board Grab Bags 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	
MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2	4.20.5 a) i ii iii v b) 4.21 f)	Liferaft Servicing A liferaft shall be serviced at a manufacturer authorized service station at the following maximum intervals: SOLAS liferafts annually ISO 9650 canister packed liferafts every 3 years ISO 9650 valise packed liferafts every 3 years except that hired liferafts shall be serviced annually ISAF liferafts annually ORC liferafts annually Servicing certificates (original or a copy) on board Grab Bags 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 Crew Overboard Identification and Recovery	
MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2	4.20.5 a) i ii iii v v b) 4.21 f)	Liferaft Servicing A liferaft shall be serviced at a manufacturer authorized service station at the following maximum intervals: SOLAS liferafts annually ISO 9650 canister packed liferafts every 3 years ISO 9650 valise packed liferafts every 3 years except that hired liferafts shall be serviced annually ISAF liferafts annually ORC liferafts annually Servicing certificates (original or a copy) on board Grab Bags 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 Crew Overboard Identification and Recovery a lifebuoy with a self-igniting light, a whistle and a drogue within reach of the	
MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2	4.20.5 a) i ii iii v v b) 4.21 f)	Liferaft Servicing A liferaft shall be serviced at a manufacturer authorized service station at the following maximum intervals: SOLAS liferafts annually ISO 9650 canister packed liferafts every 3 years ISO 9650 valise packed liferafts every 3 years except that hired liferafts shall be serviced annually ISAF liferafts annually ORC liferafts annually Servicing certificates (original or a copy) on board Grab Bags 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 Crew Overboard Identification and Recovery a lifebuoy with a self-igniting light, a whistle and a drogue within reach of the helmsman and ready for immediate use	
MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 **	4.20.5 a) i ii iii v b) 4.21 f)	Liferaft Servicing A liferaft shall be serviced at a manufacturer authorized service station at the following maximum intervals: SOLAS liferafts annually ISO 9650 canister packed liferafts every 3 years ISO 9650 valise packed liferafts every 3 years except that hired liferafts shall be serviced annually ISAF liferafts annually ORC liferafts annually Servicing certificates (original or a copy) on board Grab Bags 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 Crew Overboard Identification and Recovery a lifebuoy with a self-igniting light, a whistle and a drogue within reach of the helmsman and ready for immediate use Each inflatable lifebuoy and any automatic device shall be tested and serviced	
MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 **	4.20.5 a) i ii iii iv v b) 4.21 f) 4.22 4.22.3	Liferaft Servicing A liferaft shall be serviced at a manufacturer authorized service station at the following maximum intervals: SOLAS liferafts annually ISO 9650 canister packed liferafts every 3 years ISO 9650 valise packed liferafts every 3 years except that hired liferafts shall be serviced annually ISAF liferafts annually ORC liferafts annually Servicing certificates (original or a copy) on board Grab Bags 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 Crew Overboard Identification and Recovery a lifebuoy with a self-igniting light, a whistle and a drogue within reach of the helmsman and ready for immediate use Each inflatable lifebuoy and any automatic device shall be tested and serviced at intervals in accordance with its manufacturer's instructions	
MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 ** MoMu3,4 **	4.20.5 a) i ii iii v v b) 4.21 f)	Liferaft Servicing A liferaft shall be serviced at a manufacturer authorized service station at the following maximum intervals: SOLAS liferafts annually ISO 9650 canister packed liferafts every 3 years ISO 9650 valise packed liferafts every 3 years except that hired liferafts shall be serviced annually ISAF liferafts annually ORC liferafts annually Servicing certificates (original or a copy) on board Grab Bags 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 Crew Overboard Identification and Recovery a lifebuoy with a self-igniting light, a whistle and a drogue within reach of the helmsman and ready for immediate use Each inflatable lifebuoy and any automatic device shall be tested and serviced at intervals in accordance with its manufacturer's instructions A heaving line, no less than 6 mm (1/4") diameter, 15 - 25 m (50 - 75') long,	
MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 ** MoMu3,4 **	4.20.5 a) i ii iii iv v b) 4.21 f) 4.22 4.22.3 4.22.6 4.22.7	Liferaft Servicing A liferaft shall be serviced at a manufacturer authorized service station at the following maximum intervals: SOLAS liferafts annually ISO 9650 canister packed liferafts every 3 years ISO 9650 valise packed liferafts every 3 years except that hired liferafts shall be serviced annually ISAF liferafts annually ORC liferafts annually Servicing certificates (original or a copy) on board Grab Bags 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 Crew Overboard Identification and Recovery a lifebuoy with a self-igniting light, a whistle and a drogue within reach of the helmsman and ready for immediate use Each inflatable lifebuoy and any automatic device shall be tested and serviced at intervals in accordance with its manufacturer's instructions A heaving line, no less than 6 mm (1/4") diameter, 15 - 25 m (50 - 75') long, readily accessible to cockpit	
MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 ** MoMu0,1,2 ** MoMu3,4 ** MoMu0,1,2,3	4.20.5 a) i ii iii iv v b) 4.21 f) 4.22 4.22.3 4.22.6 4.22.7 4.22.8	Liferaft Servicing A liferaft shall be serviced at a manufacturer authorized service station at the following maximum intervals: SOLAS liferafts annually ISO 9650 canister packed liferafts every 3 years ISO 9650 valise packed liferafts every 3 years except that hired liferafts shall be serviced annually ISAF liferafts annually ORC liferafts annually Servicing certificates (original or a copy) on board Grab Bags 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 Crew Overboard Identification and Recovery a lifebuoy with a self-igniting light, a whistle and a drogue within reach of the helmsman and ready for immediate use Each inflatable lifebuoy and any automatic device shall be tested and serviced at intervals in accordance with its manufacturer's instructions A heaving line, no less than 6 mm (1/4") diameter, 15 - 25 m (50 - 75') long, readily accessible to cockpit A recovery sling which includes a:	
MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 ** MoMu3,4 ** MoMu3,4 **	4.20.5 a) i ii iii iv v b) 4.21 f) 4.22 4.22.3 4.22.6 4.22.7 4.22.8 a)	Liferaft Servicing A liferaft shall be serviced at a manufacturer authorized service station at the following maximum intervals: SOLAS liferafts annually ISO 9650 canister packed liferafts every 3 years ISO 9650 valise packed liferafts every 3 years except that hired liferafts shall be serviced annually ISAF liferafts annually ORC liferafts annually Servicing certificates (original or a copy) on board Grab Bags 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 Crew Overboard Identification and Recovery a lifebuoy with a self-igniting light, a whistle and a drogue within reach of the helmsman and ready for immediate use Each inflatable lifebuoy and any automatic device shall be tested and serviced at intervals in accordance with its manufacturer's instructions A heaving line, no less than 6 mm (1/4") diameter, 15 - 25 m (50 - 75') long, readily accessible to cockpit A recovery sling which includes a: buoyant line of length no less than the shorter of 4 times LH or 36m (120')	
MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 ** MoMu0,1,2 ** MoMu3,4 ** MoMu0,1,2,3	4.20.5 a) i ii iii iv v b) 4.21 f) 4.22 4.22.3 4.22.6 4.22.7 4.22.8	Liferaft Servicing A liferaft shall be serviced at a manufacturer authorized service station at the following maximum intervals: SOLAS liferafts annually ISO 9650 canister packed liferafts every 3 years ISO 9650 valise packed liferafts every 3 years except that hired liferafts shall be serviced annually ISAF liferafts annually ORC liferafts annually Servicing certificates (original or a copy) on board Grab Bags 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 Crew Overboard Identification and Recovery a lifebuoy with a self-igniting light, a whistle and a drogue within reach of the helmsman and ready for immediate use Each inflatable lifebuoy and any automatic device shall be tested and serviced at intervals in accordance with its manufacturer's instructions A heaving line, no less than 6 mm (1/4") diameter, 15 - 25 m (50 - 75') long, readily accessible to cockpit A recovery sling which includes a:	

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MoMu3

MoMu0,1,2,3

4.23 Pyrotechnic and Light Signals

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

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

4.26 Storm & Heavy Weather Sail Inventory

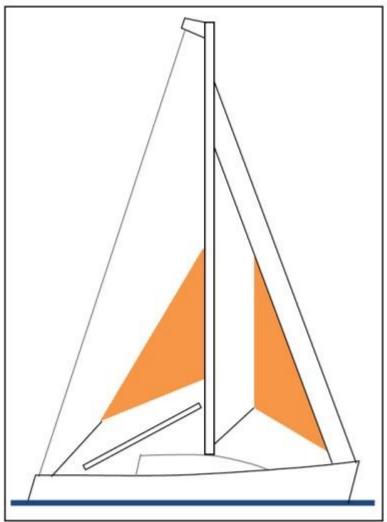
the following storm & heavy weather sails as specified in OSR 4.27:

- 4.26.1 either a storm trysail or mainsail reefing to reduce the luff by at least 40% (or rotating wing mast if suitable)
- 4.26.2 heavy weather jib

4.27 Storm & Heavy Weather Sail Specifications

4.27.1 **Design**

Figure 3



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

		areas below or as specified by the boat designer or sailmaker
**	f)	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))
	4.27.3	
		forestay) with:
**	a)	area of 13.5% height of the foretriangle squared
**	b)	readily available means, independent of a luff groove, to attach to the stay
	SECTION 5 - PERSONAL EQUIPMENT	
	520110	Each crew member shall have:
	5.01	Lifejacket
**	5.01.1	A lifejacket which shall:
**	a) i	if manufactured before 2012 comply with ISO 12402 - 3 (Level 150) or
**		equivalent, including EN 396 or UL 1180 and: if inflatable have a gas inflation system
**		have crotch/thigh straps (ride up prevention system (RUPS))
**	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
**	•	crotch/thigh straps (ride up prevention system (RUPS))
MoMu0,1,2,3	b)	have an emergency position indicating light in accordance with either ISO 12402-8 or SOLAS LSA code 2.2.3
**	c)	be clearly marked with the boat's or wearer's name
MoMu0,1,2,3	d)	have a sprayhood in accordance with ISO 12402-8
**	f)	if inflatable, regularly checked for air retention
MoMu0,1,2,3	5.01.2	A boat shall carry at least one gas inflatable lifejacket spare cylinder and, if
**	E 04 4	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	a)	comply with ISO 12401 or equivalent
MoMu0,1,2,3	b)	not exceed 2 m (6'-6") including the length of the hooks
MoMu0,1,2,3 MoMu0,1,2,3	c) d)	have self-closing hooks have overload indicator flag embedded in the stitching
MoMu0,1,2,3	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 5.07	A tether which has been overloaded shall be replaced Survival Equipment
	5.07	Sui vivai 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
	6.02	Topics Training Topics
	6.03	Spare Number
	6.04	Routine Training On-Board
**		At least annually the crews shall practice the drills for:
**	a)	Crew-Overboard Recovery
ጥ ጥ	b) 6.05	Abandonment of vessel Medical Training
MoMu3,4	6.05.3	At least one member of the crew shall be familiar with First Aid procedures,
	3.00.0	hypothermia, drowning, cardio-pulmonary resuscitation and relevant
		communications systems

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 Keel and Rudder Inspection Procedure

Tue 15 Feb 22 10:05:50 AM – Revised 3.02, updated links to World Sailing