## Extract for Race Category 0 Monohulls 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 <a href="https://www.sailing.org/inside-world-sailing/rules-regulations/">https://www.sailing.org/inside-world-sailing/rules-regulations/</a>

## **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

- 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.

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First Launch	Month & year of first launch of the individual boat			
Foul-Weather Suit	Clothing designed to keep the wearer dry and may consist of one piece or several			
GMDSS	Global Maritime Distress & Safety System			
GNSS	Global Navigation Satellite System			
GPS	Global Positioning System			
Hatch	The term hatch includes the entire hatch assembly including the lid or cover as part of that assembly			
HMPE	High Modulus Polyethylene (Dyneema®/Spectra® or equivalent)			
IMO	International Maritime Organisation			
IMSO	The International Mobile Satellite Organisation, the independent, intergovernmental organisation that oversees Inmarsat's performance of its Public Service Obligations for the GMDSS and reports on these to IMO			
INMARSAT	Inmarsat Global Limited is 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			

Securely Fastened		Held strongly in place by a method (e.g. rope lashings, wing-nuts) which will safely retain the fastened object in severe conditions including a 180° capsize and allows for the item to be removed and replaced during racing
SOLAS	5	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 Line	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 Ballas		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.
Water	line	The water surface when the boat is floating in measurement trim
World	Sailing	formerly the International Sailing Federation or ISAF
SECTIC		
2.01 2.01	Catego Organizi may mo Catego Trans-oc sea tem	ceanic races, including races which pass through areas in which air c peratures are likely to be less than 5°C (41°F) other than temporaril
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- 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 free-
**	204.2	standing masts)
<b>*</b>	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
	2.02	headsail luff load capacity
**	<b>3.02</b> 3.02.1	Watertight and Structural Integrity of a Boat Essentially watertight and all openings shall be capable of being immediately
	3.02.1	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	3.02.2	Effective 1 January 2022: Structural Inspection - Consult the owner's manual
	0.02.2	for any instructions for keel bolt checking and re-tightening. The following
		inspection to be conducted by a qualified person externally with the boat out
		of the water. Check that there are no visible stress cracks particularly around
		the keel, hull/keel attachment, hull appendages and other stress points, inside
		the hull, backing plates, bolting arrangements and keel floors. (See Appendix
		L - Model Keel and Rudder Inspection Procedure)
Mo0,1,2	3.02.3	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
Ma0 1 2 2	2 02 4	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:
	į	be designed, built and maintained in accordance with the requirements of ISO
		12215 Category 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.
Mo0,1,2	b)	World Sailing will publish a list of waived plan review certificates.  24 m (78'-9") LH and greater shall be designed, built and maintained in
1,100,1,2	D)	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
	15	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,
1101100/1/2	310312	shall have been designed, built, maintained, modified or repaired in
		accordance with the requirements of:
Mo0,1,2	a)	OSR 3.03.1, or
Mo0,1,2	b)	the ABS Guide for Building and Classing Offshore Yachts and have on board
		either an ABS certificate of plan approval, or written statements signed by the
		designer and builder confirming that they have respectively designed and built
Manage 1 2		the boat in accordance with the ABS Guide, or
MoMu0,1,2	c)	the EC Recreational Craft Directive for Category A having obtained the CE
MoMu0,1,2	d)	mark, or ISO 12215 Category A, with written statements signed by the designer and
1101100,1,2	u)	builder confirming that they have respectively designed and built the boat in
		accordance with the ISO standard, and

MoMu0,1,2	e)	have written statements or approvals in accordance with a), or b) or c) and d)
		above for all significant repairs or modifications to the hull, deck, coach roof,
MoMu0,1,2	f)	keel or appendages, on board, except that a race organizer or class rules may accept, when that described in a), b),
1101100,1,2	''	c), d) or e) above is not available, the signed statement by a naval architect
		or other person familiar with the standards listed above that the boat fulfils
		these requirements
Ma0 1 2	<b>3.04</b> 3.04.1	Stability - Monohulls  Able to demonstrate compliance with ISO 12217 2* design category A or
Mo0,1,2	3.04.1	Able to demonstrate compliance with ISO 12217-2* design category A or higher, either by EC Recreational Craft Directive certification having obtained
		the CE mark or the designer's declaration
Mo0,1,2,3		* The latest effective version of ISO 12217-2 should be used unless the boat
		was already designed to a previous version
Mo0,1,2,3	3.04.2	Where compliance in accordance with 3.04.1 cannot be demonstrated, able to
Mo0,1,2	a) i	demonstrate either: a STIX value not less than 32; and
Mo0,1,2	ii	AVS not less than 130 - $0.002*m$ , but always $>= 100°$ , (where "m" is the
		mass of the boat in the minimum operating condition as defined by ISO
		12217-2); and
Mo0,1,2	iii	a minimum righting energy m*AGZ>172000 (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
Mo0	b)	Stability Index in ORC Rating System of not less than 120; or
Mo0,1	c)	IRC SSS Base value of not less than 35
Mo0	3.04.3	Capable of self-righting from an inverted position with or without reasonable
	3.06	intervention from the crew and independent of the condition of the rig <b>Exits - Monohulls</b>
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
	0.00.1	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 Mo0,1,2,3,4	a) b)	a circular hatch with diameter 450 mm (18"); or any other shape with minimum dimension of 380 mm (15") and minimum
1100/1/2/3/1	, J	area of $0.18 \text{ m}^2$ ( $1.9 \text{ ft}^2$ ) (see figure 1)
Mo0,1,2,3,4		380
	-	/ \
	$\perp$	
		(+) $((+)$ $((+)$ $(+)$
	_	
	_	L - Measurements of Minimum Clear Opening
**	3.08	Hatches & Companionways
41.41.	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 <sup>2</sup> (110 in <sup>2</sup> )
**	3.08.2	A hatch, including a hatch over a locker shall be:
**	a)	permanently attached and capable of being firmly shut immediately and
Mo() 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 Mo0,1,2,3,4	U)	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
ata ta		less than 0.071 <sup>2</sup> m (110 in <sup>2</sup> )
**	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"
		<del></del>

**	3.08.4	Companionway batches
**	a)	Companionway hatches: fitted with a strong securing arrangement which shall be operable from the
	a)	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
ata.t.		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
**	2 00 2	Launch before 2003, at least 2% L above the waterline)
<b>ጥ</b> ጥ	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 valume below lowest comings of all contained
• •		The maximum combined volume below lowest coamings of all contained cockpits shall be:
MoMu0,1	a)	primary launch before April 1992: 6% (LWL x maximum beam x freeboard
1101100,1	u)	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
state		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 <b>Sea Cocks or Valves</b>
**	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
**	J.11	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
	3.13	Watertight Bulkheads
Mo0Mu0,1,2,3,4	3.13.1	Either a watertight "crash" bulkhead within 15% of LH from the bow and
		abaft the forward end of LWL, or permanently installed closed-cell foam
14 014 0 4 2 2 4	2 4 2 2	buoyancy effectively filling the forward 30% LH of the hull
Mo0Mu0,1,2,3,4	3.13.2	Any required watertight bulkhead to be strongly built to take a full head of
Mo0	3.13.3	water pressure without allowing any leakage into the adjacent compartment
14100	3.13.3	At least two watertight transverse main bulkheads in addition to any bulkheads positioned within the forward and aft 15% of LH
Mo0	3.13.4	Outside deck access for inspection and pumping shall be provided to every
1100	5.15.1	watertight compartment terminated by a hull section bulkhead, except that
		mater agric comparament committee by a man occitor building except that
		deck access to extreme end "crash" compartments is not required
Mo0	3.13.5	deck access to extreme end "crash" compartments is not required An access hatch in every required watertight bulkhead (except a "crash"
Mo0	3.13.5	deck access to extreme end "crash" compartments is not required An access hatch in every required watertight bulkhead (except a "crash" bulkhead). The access hatch shall have means of watertight closure
Mo0	3.13.5	An access hatch in every required watertight bulkhead (except a "crash"

	3.14	Pulpits, Stanchions, Lifelines
**	3.14.1	The perimeter of the deck surrounded by system of lifelines and pulpits as follows:
**	a)	Continuous lifelines fixed only at (or near) the bow and stern. However a gate on each side of a boat is permitted. Except at its end fittings and at gates, the movement of a lifeline in a fore-and-aft direction shall not be constrained. Temporary sleeving shall not modify tension in the lifeline.
**	b)	Minimum heights of lifelines and pulpit rails above the working deck and vertical openings:
**	i 	upper: 600 mm (24")
**	ii 	intermediate: 230 mm (9")
**	iii	vertical opening: no greater than 380 mm (15") except that on a boat with a
**	c)	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") and shall not pass outboard of supporting stanchions
**	d)	Pulpit and stanchion bases permanently installed with pulpits and stanchions mechanically retained in their bases
**	e)	The outside of pulpit and stanchion base tubes no further inboard from the edge of the working deck than 5% of maximum beam or 150 mm (6"),
**	6	whichever is greater, nor further outboard than the edge of the working deck
**	f) i	Stanchions straight and vertical except that: 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")
**		
		Ø360 mm
		Ø360 mm  Figure 2 - Diagram Showing Pulpit Opening
**	h)	Figure 2 - Diagram Showing Pulpit Opening Lifelines may terminate at or pass through adequately braced stanchions set
	,	Figure 2 - Diagram Showing Pulpit Opening Lifelines may terminate at or pass through adequately braced stanchions set inside and overlapping the bow pulpit
** **	h) i)	Figure 2 - Diagram Showing Pulpit Opening Lifelines may terminate at or pass through adequately braced stanchions set inside and overlapping the bow pulpit When a deflecting force of 4 kg (8.8 #) is applied to a lifeline at the mid-point
	,	Figure 2 - Diagram Showing Pulpit Opening Lifelines may terminate at or pass through adequately braced stanchions set inside and overlapping the bow pulpit 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
	,	Figure 2 - Diagram Showing Pulpit Opening Lifelines may terminate at or pass through adequately braced stanchions set inside and overlapping the bow pulpit 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)	Figure 2 - Diagram Showing Pulpit Opening Lifelines may terminate at or pass through adequately braced stanchions set inside and overlapping the bow pulpit 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: 50 mm (2") for an upper or single lifeline
**	,	Figure 2 - Diagram Showing Pulpit Opening Lifelines may terminate at or pass through adequately braced stanchions set inside and overlapping the bow pulpit 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) i ii 3.14.3 3.14.4	Figure 2 - Diagram Showing Pulpit Opening Lifelines may terminate at or pass through adequately braced stanchions set inside and overlapping the bow pulpit 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: 50 mm (2") for an upper or single lifeline 120 mm (4 ¾") for an intermediate lifeline Spare number Spare number
**	i) i ii 3.14.3 3.14.4 3,14.5	Figure 2 - Diagram Showing Pulpit Opening Lifelines may terminate at or pass through adequately braced stanchions set inside and overlapping the bow pulpit 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: 50 mm (2") for an upper or single lifeline 120 mm (4 ¾4") for an intermediate lifeline Spare number Spare number Spare number
**  **  **	i) i ii 3.14.3 3.14.4 3,14.5 <b>3.14.6</b>	Figure 2 - Diagram Showing Pulpit Opening Lifelines may terminate at or pass through adequately braced stanchions set inside and overlapping the bow pulpit 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: 50 mm (2") for an upper or single lifeline 120 mm (4 ¾") for an intermediate lifeline Spare number Spare number Spare number Spare number Lifeline Specifications
**	i) i ii 3.14.3 3.14.4 3,14.5	Figure 2 - Diagram Showing Pulpit Opening Lifelines may terminate at or pass through adequately braced stanchions set inside and overlapping the bow pulpit 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: 50 mm (2") for an upper or single lifeline 120 mm (4 ¾4") for an intermediate lifeline Spare number Spare number Spare number

**	sl			sed without close-fitting fitted provided it is regularly
**	d) A	lanyard of synthetic	rope may be used to secu	ure lifelines provided the gap it ard shall be replaced annually
**	e) A		lifeline enclosure system	shall have a breaking strength
**	Т	able 8		
	LH	Wire Min. lifeline diameter	HMPE rope (Single braid) min. lifeline diameter	HMPE Core (Braid on braid) min. lifeline diameter
	under 8.5m (28	3mm (1/8")	4mm (5/32")	4mm (5/32")
	8.5m - 13m	4mm (5/32")	5mm (3/16")	5mm (3/16")
	over 13m (42' 8")	5mm (3/16")	5mm (3/16")	5mm (3/16")
	3.17 T	oe Rail or Foot - S	top	
Mo0,1,2,3	a		_	at 25 mm (1"), located as close the foredeck from abreast the
Mo0,1,2,3	3.17.2 A	n additional lifeline o be rail on a boat with	of between 25-50 mm (1-2 n Primary Launch before 19	.") high is permitted in lieu of a 984.
M M 0 4 2		oilet		
MoMu0,1,2		ermanently installed unks	toilet	
MoMu0	3.19.1 P	-	bunk for each crewmemb	er
MoMu0,1,2,3	P w	ermanently installed ith fuel shutoff conti	rol	being operated safely at sea,
		_	nks & Drinking Water	
MoMu0		rinking Water Tar		tanks dividing the water
MOMUO	_	upply into at least th	delivery pump and water ree compartments	talks dividing the water
		rinking Water	ree comparaments	
MoMu0	a) E	quipment (which ma ermanently installed		B US Gal) of drinking water per
			e likely duration of the voy	rage
MoMu0		mergency Drinkin the absence of a po		at least 1 I (0.26 US Gal) per
1101140	•	=	· · · · · · · · · · · · · · · · · · ·	ers shall be provided for the
		xpected duration of t	=	•
MoMu0	p	er person per day in	at least two separate conf	at least 500 ml (0.13 US Gal) tainers shall be provided for
MoMu0	d) fa	ne expected duration acilities shall be provi when dismasted		or drinking purposes including
		and Holds		
**	A	dequate hand holds		
		ilge Pumps and Bu		
**	a) ca	apacity	ach with a lanyard and of	,
Mo0,1,2	0	ther from below decl	k	one operable from above, the
**			ntly installed bilge pumps s and companionways shut	•
		_		

		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
**	2 22 5	debris
1	3.23.5 <b>3.24</b>	All removable bilge pump handles retained by a lanyard <b>Compass</b>
MoMu0,1,2,3	a)	Marine magnetic compass capable of being used as a steering compass:
**	b)	Permanently installed marine magnetic steering compass, independent of any
		power supply, correctly adjusted with deviation card
MoMu0,1,2,3	c)	a second compass which may be hand-held and/or electronic
**	<b>3.25</b> a)	<b>Halyards.</b> A minimum of two halyards, each capable of hoisting a sail, on each mast
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.
	3.26	Bow Fairlead
Mo0		Bow fairlead, closed or closable and a cleat or securing arrangement, suitable
	3.27	for towing, permanently installed  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
atada		regulations.
**	3.27.2	mounted above sheerline and so that they will not be masked by sails or the heeling of the boat
MoMu0,1,2,3	3.27.3	reserve lights having the same specifications as above, and that can be
	0.127.13	powered independently
**	3.27.4	spare bulbs (not required for LED)
	3.28	Engines, Generators, Fuel
**	3.28.1	Propulsion Engines
**		Propulsion Engines engines and associated systems installed in accordance with their
**	3.28.1	Propulsion Engines
** MoMu0,1,2,3	3.28.1	Propulsion Engines engines and associated systems installed in accordance with their manufacturers' guidelines and suitable for the size and intended use of the boat an engine which provides a minimum speed in knots of (1.8 x √LWL in
MoMu0,1,2,3	<b>3.28.1</b> a) b)	<b>Propulsion Engines</b> engines and associated systems installed in accordance with their manufacturers' guidelines and suitable for the size and intended use of the boat an engine which provides a minimum speed in knots of $(1.8 \times \sqrt{LWL})$ in metres) or $(\sqrt{LWL})$ in feet)
	3.28.1 a) b)	<b>Propulsion Engines</b> engines and associated systems installed in accordance with their manufacturers' guidelines and suitable for the size and intended use of the boat an engine which provides a minimum speed in knots of $(1.8 \times \sqrt{LWL})$ in metres) or $(\sqrt{LWL})$ in feet) inboard engine
MoMu0,1,2,3 Mo0,1,2Mu0	<b>3.28.1</b> a) b)	Propulsion Engines engines and associated systems installed in accordance with their manufacturers' guidelines and suitable for the size and intended use of the boat an engine which provides a minimum speed in knots of (1.8 x √LWL in metres) or (√ LWL in feet) inboard engine an inboard combustion engine shall have a permanently installed exhaust,
MoMu0,1,2,3 Mo0,1,2Mu0	3.28.1 a) b)	<b>Propulsion Engines</b> engines and associated systems installed in accordance with their manufacturers' guidelines and suitable for the size and intended use of the boat an engine which provides a minimum speed in knots of $(1.8 \times \sqrt{LWL})$ in metres) or $(\sqrt{LWL})$ in feet) inboard engine
MoMu0,1,2,3 Mo0,1,2Mu0	3.28.1 a) b)	Propulsion Engines engines and associated systems installed in accordance with their manufacturers' guidelines and suitable for the size and intended use of the boat an engine which provides a minimum speed in knots of (1.8 x √LWL in metres) or (√ LWL in feet) inboard engine an inboard combustion engine shall have a permanently installed exhaust, cooling system, fuel supply, fuel tank(s) and shall have adequate heavy weather protection an inboard electrical engine, when fitted, shall be provided with a
MoMu0,1,2,3 Mo0,1,2Mu0 **	3.28.1 a) b) c) d)	Propulsion Engines engines and associated systems installed in accordance with their manufacturers' guidelines and suitable for the size and intended use of the boat an engine which provides a minimum speed in knots of (1.8 x √LWL in metres) or (√ LWL in feet) inboard engine an inboard combustion engine shall have a permanently installed exhaust, cooling system, fuel supply, fuel tank(s) and shall have adequate heavy weather protection an inboard electrical engine, when fitted, shall be provided with a permanently installed power supply, adequate heavy weather protection and
MoMu0,1,2,3 Mo0,1,2Mu0 **	3.28.1 a) b) c) d)	Propulsion Engines engines and associated systems installed in accordance with their manufacturers' guidelines and suitable for the size and intended use of the boat an engine which provides a minimum speed in knots of (1.8 x √LWL in metres) or (√ LWL in feet) inboard engine an inboard combustion engine shall have a permanently installed exhaust, cooling system, fuel supply, fuel tank(s) and shall have adequate heavy weather protection 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.
MoMu0,1,2,3 Mo0,1,2Mu0 **	3.28.1 a) b) c) d)	Propulsion Engines engines and associated systems installed in accordance with their manufacturers' guidelines and suitable for the size and intended use of the boat an engine which provides a minimum speed in knots of (1.8 x √LWL in metres) or (√ LWL in feet) inboard engine an inboard combustion engine shall have a permanently installed exhaust, cooling system, fuel supply, fuel tank(s) and shall have adequate heavy weather protection an inboard electrical engine, when fitted, shall be provided with a permanently installed power supply, adequate heavy weather protection and
MoMu0,1,2,3 Mo0,1,2Mu0 **	3.28.1 a) b) c) d) e) 3.28.2	Propulsion Engines engines and associated systems installed in accordance with their manufacturers' guidelines and suitable for the size and intended use of the boat an engine which provides a minimum speed in knots of (1.8 x √LWL in metres) or (√ LWL in feet) inboard engine an inboard combustion engine shall have a permanently installed exhaust, cooling system, fuel supply, fuel tank(s) and shall have adequate heavy weather protection 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.  Generator  If an optional generator separate from the propulsion engine is carried, it shall be installed in accordance with the manufacturer's guidelines
MoMu0,1,2,3 Mo0,1,2Mu0 **  **	3.28.1 a) b) c) d) e) 3.28.2	engines and associated systems installed in accordance with their manufacturers' guidelines and suitable for the size and intended use of the boat an engine which provides a minimum speed in knots of (1.8 x √LWL in metres) or (√ LWL in feet) inboard engine an inboard combustion engine shall have a permanently installed exhaust, cooling system, fuel supply, fuel tank(s) and shall have adequate heavy weather protection 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.  Generator  If an optional generator separate from the propulsion engine is carried, it shall be installed in accordance with the manufacturer's guidelines  Liquid Fuel Systems
MoMu0,1,2,3 Mo0,1,2Mu0 **	3.28.1 a) b) c) d) e) 3.28.2	engines and associated systems installed in accordance with their manufacturers' guidelines and suitable for the size and intended use of the boat an engine which provides a minimum speed in knots of (1.8 x √LWL in metres) or (√ LWL in feet) inboard engine an inboard combustion engine shall have a permanently installed exhaust, cooling system, fuel supply, fuel tank(s) and shall have adequate heavy weather protection 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.  Generator  If an optional generator separate from the propulsion engine is carried, it shall be installed in accordance with the manufacturer's guidelines  Liquid Fuel Systems  All fuel tanks for storage of liquid fuels shall be rigid (but may have
MoMu0,1,2,3 Mo0,1,2Mu0 **  **  MoMu0,1,2,3	3.28.1 a) b) c) d) e) 3.28.2 3.28.3 a)	Propulsion Engines engines and associated systems installed in accordance with their manufacturers' guidelines and suitable for the size and intended use of the boat an engine which provides a minimum speed in knots of (1.8 x √LWL in metres) or (√ LWL in feet) inboard engine an inboard combustion engine shall have a permanently installed exhaust, cooling system, fuel supply, fuel tank(s) and shall have adequate heavy weather protection 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.  Generator  If an optional generator separate from the propulsion engine is carried, it shall be installed in accordance with the manufacturer's guidelines  Liquid Fuel Systems  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 Mo0,1,2Mu0 **  **	3.28.1 a) b) c) d) e) 3.28.2	engines and associated systems installed in accordance with their manufacturers' guidelines and suitable for the size and intended use of the boat an engine which provides a minimum speed in knots of (1.8 x √LWL in metres) or (√ LWL in feet) inboard engine an inboard combustion engine shall have a permanently installed exhaust, cooling system, fuel supply, fuel tank(s) and shall have adequate heavy weather protection 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.  Generator  If an optional generator separate from the propulsion engine is carried, it shall be installed in accordance with the manufacturer's guidelines  Liquid Fuel Systems  All fuel tanks for storage of liquid fuels shall be rigid (but may have
MoMu0,1,2,3 Mo0,1,2Mu0 **  **  MoMu0,1,2,3	3.28.1 a) b) c) d) e) 3.28.2 3.28.3 a) b)	engines and associated systems installed in accordance with their manufacturers' guidelines and suitable for the size and intended use of the boat an engine which provides a minimum speed in knots of (1.8 x √LWL in metres) or (√ LWL in feet) inboard engine an inboard combustion engine shall have a permanently installed exhaust, cooling system, fuel supply, fuel tank(s) and shall have adequate heavy weather protection 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.  Generator  If an optional generator separate from the propulsion engine is carried, it shall be installed in accordance with the manufacturer's guidelines  Liquid Fuel Systems  All fuel tanks for storage of liquid fuels shall be rigid (but may have permanently installed flexible linings) and shall have a shutoff valve  At the start a boat with a combustion engine shall carry sufficient fuel to meet charging requirements for the duration of the race and to motor at the above minimum speed for at least 5 hours
MoMu0,1,2,3 Mo0,1,2Mu0 **  **  MoMu0,1,2,3 MoMu0,1,2,3	3.28.1 a) b) c) d) e) 3.28.2 3.28.3 a) b)	engines and associated systems installed in accordance with their manufacturers' guidelines and suitable for the size and intended use of the boat an engine which provides a minimum speed in knots of (1.8 x √LWL in metres) or (√ LWL in feet) inboard engine an inboard combustion engine shall have a permanently installed exhaust, cooling system, fuel supply, fuel tank(s) and shall have adequate heavy weather protection 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.  Generator  If an optional generator separate from the propulsion engine is carried, it shall be installed in accordance with the manufacturer's guidelines  Liquid Fuel Systems  All fuel tanks for storage of liquid fuels shall be rigid (but may have permanently installed flexible linings) and shall have a shutoff valve 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  Battery Systems
MoMu0,1,2,3 Mo0,1,2Mu0 **  **  MoMu0,1,2,3	3.28.1 a) b) c) d) e) 3.28.2 3.28.3 a) b)	engines and associated systems installed in accordance with their manufacturers' guidelines and suitable for the size and intended use of the boat an engine which provides a minimum speed in knots of (1.8 x √LWL in metres) or (√ LWL in feet) inboard engine an inboard combustion engine shall have a permanently installed exhaust, cooling system, fuel supply, fuel tank(s) and shall have adequate heavy weather protection 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.  Generator  If an optional generator separate from the propulsion engine is carried, it shall be installed in accordance with the manufacturer's guidelines  Liquid Fuel Systems  All fuel tanks for storage of liquid fuels shall be rigid (but may have permanently installed flexible linings) and shall have a shutoff valve  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  Battery Systems  a dedicated engine/generator starting battery when an electric starter is the
MoMu0,1,2,3 Mo0,1,2Mu0 **  **  MoMu0,1,2,3 MoMu0,1,2,3	3.28.1 a) b) c) d) e) 3.28.2 3.28.3 a) b) 3.28.4 a)	engines and associated systems installed in accordance with their manufacturers' guidelines and suitable for the size and intended use of the boat an engine which provides a minimum speed in knots of (1.8 x √LWL in metres) or (√ LWL in feet) inboard engine an inboard combustion engine shall have a permanently installed exhaust, cooling system, fuel supply, fuel tank(s) and shall have adequate heavy weather protection 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.  Generator  If an optional generator separate from the propulsion engine is carried, it shall be installed in accordance with the manufacturer's guidelines  Liquid Fuel Systems  All fuel tanks for storage of liquid fuels shall be rigid (but may have permanently installed flexible linings) and shall have a shutoff valve  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  Battery Systems  a dedicated engine/generator starting battery when an electric starter is the only method for starting the engine and/or separate generator
MoMu0,1,2,3 Mo0,1,2Mu0 **  **  MoMu0,1,2,3 MoMu0,1,2,3 MoMu0,1,2,3	3.28.1 a) b) c) d) e) 3.28.2 3.28.3 a) b)	engines and associated systems installed in accordance with their manufacturers' guidelines and suitable for the size and intended use of the boat an engine which provides a minimum speed in knots of (1.8 x √LWL in metres) or (√ LWL in feet) inboard engine an inboard combustion engine shall have a permanently installed exhaust, cooling system, fuel supply, fuel tank(s) and shall have adequate heavy weather protection 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.  Generator  If an optional generator separate from the propulsion engine is carried, it shall be installed in accordance with the manufacturer's guidelines  Liquid Fuel Systems  All fuel tanks for storage of liquid fuels shall be rigid (but may have permanently installed flexible linings) and shall have a shutoff valve  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  Battery Systems  a dedicated engine/generator starting battery when an electric starter is the

		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
MoMu0,1,2	b)	a masthead antenna not less than 38 cm (15") in length and co-axial feeder
		cable with not more than 40% power loss
MoMu0	e)	a marine VHF DSC radio covering all international and US marine channels
		and meeting ITU class D
MoMu0	3.29.3	at least two hand-held satellite telephones, watertight or with waterproof
	a)	covers and internal batteries. When not in use each to be stowed in a grab
		bag (see OSR 4.21)
MoMu0	3.29.4	at least two hand-held marine VHF transceivers each with min 5 W output
		power, watertight or with waterproof covers. When not in use to be stowed in
		a grab bag (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
MoMu0	3.29.7	a direction-finding radio receiver operating on 121.5 MHz to take a bearing on
		a PLB or EPIRB, or an alternative device for crew overboard location when
_		each crew member has an appropriate personal unit (see OSR 4.22.1);
MoMu0	3.29.9	a satellite device able to send and receive data and a tracking device shall be
		permanently installed and permanently powered up for the duration of the
		race and for which the race committee shall have polling authority.
MoMu0	3.29.10	an MF/HF marine SSB transceiver (GMDSS/DSC) with at least 125 W
		transmitter power and frequency range from at least 1.6 to 29.9 MHz with
		permanently installed antenna and earth.
MoMu0	3.29.11	an active radar set permanently installed either:
MoMu0	a)	a pulse (magnetron) unit with not less than 4 kW PEP and an antenna unit
		with a maximum dimension not less than 533 mm; or
MoMu0	b)	a frequency modulated continuous wave (FMCW) Broadband Radar™ unit.
		The radar antenna unit shall remain essentially horizontal when the boat is
		heeled and at least 7 m (23') above the water. Installations in place before
		January 2006 shall comply as closely as possible with OSR 3.29.11 a).
Mo0,1,2,3Mu1,2,3	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
MoMu0,1,2,3	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
	SECTIO	N 4 - PORTABLE EQUIPMENT
	4.04	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
MoMu0	4.02.1	A 4 m <sup>2</sup> (43 ft <sup>2</sup> ) area of highly-visible pink, orange or yellow on the coachroof
		and/or deck
slesle	4.03	Soft Wood Plugs
**		A tapered soft wood plug stowed adjacent to every through-hull opening
	4.04	Jackstays and Clipping Points
MoMu0,1,2,3	4.04.1	Permanently Installed fittings for jackstay ends and clipping points
MoMu0,1,2,3	4.04.2	Jackstays which shall:
MoMu0,1,2,3	a)	be independent on each side of the deck

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
MoMu0,1,2,3	c)	have a breaking strength of 2040 kg ( $4500\#$ ) and be uncoated and non-sleeved stainless steel 1 x 19 wire of minimum diameter 5 mm ( $3/16"$ ),
	4040	webbing or HMPE rope
MoMu0,1,2,3	4.04.3	Clipping points which shall:
MoMu0,1,2,3	a)	be adjacent to stations such as the helm, sheet winches and masts, where crewmembers work
MoMu0,1,2,3	b)	enable a crewmember to clip on before coming on deck and unclip after going
1101140717273	, J	below
MoMu0,1,2,3	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
MoMu0	4.05.2	3 fire extinguishers, each with 2 kg of dry powder or equivalent, in different parts of the boat, one system of which is to deal with fire in a machinery
	4.06	space
M - M - O	4.06	Anchors
MoMu0	4.06.1	Anchors, chain and rope which comply with relevant class rules or the rules of a recognised Classification Society (e.g. Lloyd's, DNV, etc.)
**	4.07	Flashlights and Searchlights
	-)	Watertight lights with spare batteries and bulbs as follows:
MoMu0,1,2,3	a)	a searchlight, suitable for searching for a person overboard at night and for collision avoidance
MoMu0,1,2,3	b)	a flashlight in addition to 4.07 a)
MoMu0	d)	a high-intensity heavy duty searchlight powered by the boat's batteries,
	/	instantly available for use on deck and in the cockpit
	4.08	First Aid Manual and First Aid Kit
**		A First Aid Manual and First Aid Kit. The contents and storage of the First Aid
		Kit shall reflect the likely conditions and duration of the passage, and the
		number of crew
	4.09	Foghorn
**		A foghorn
**	4.10	Radar Reflector
**	4.10.1	A passive radar reflector with:
**	a)	octahedral circular plates of minimum diameter 30 cm (12"), or octahedral rectangular plates of minimum diagonal dimension 40 cm (16"), or
**	b) c)	a non-octahedral reflector with a documented Root Mean Square minimum
	C)	Radar Cross Section (RCS) area of 2 m <sup>2</sup> (22 ft <sup>2</sup> ) from 0-360° of azimuth and
		±20° of heel
MoMu0	4.10.2	A Radar Target Enhancer (RTE) which complies with ISO 8729-2:2009 or
		equivalent
	4.11	Navigation Equipment
MoMu0,1,2,3	4.11.1	Navigational charts (not solely electronic), light list and chart plotting
		equipment
ata.t.	4.12	Safety Equipment Location Chart
**		A safety equipment location diagram in durable waterproof material, clearly
		displayed in the main accommodation, marked with the location of principal
	4 12	items of safety equipment
MoMu0,1,2,3	<b>4.13</b> 4.13.1	Depth, Speed and Distance Instruments A knotmeter or distance measuring instrument (log)
MoMu0	4.13.1	Two independent depth sounders
Tioriuo	<b>4.14</b>	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
	-	· · · · · · · · · · · · · · · · ·

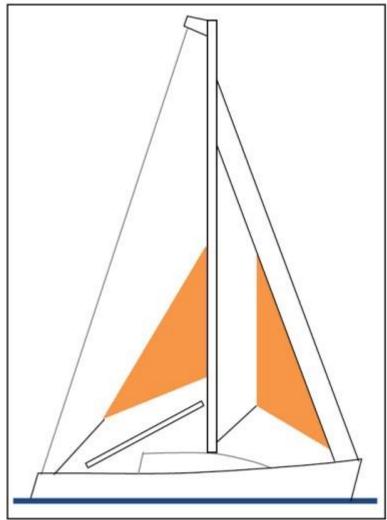
	4.45.0	which shares components with the other except for the rudder stock.
MoMu0,1,2,3	4.15.2	A proven method of emergency steering with the rudder disabled
	4.16	Tools and Spare Parts
**	4.16.1	Tools and spare parts, suitable for the duration and nature of the passage
**	4.16.2	An effective means to 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
**	7.10	Marine grade retro-reflective material on lifebuoys, recovery slings, liferafts
	4.40	and lifejackets
M - M - O	4.19	EPIRBs
MoMu0	4.19.1	Two water and manually activated 406 MHz EPIRBs
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
MoMu0	b)	A sufficient number of liferafts so that in the event of any one liferaft being
1.101.100	D)	lost or rendered unserviceable, sufficient aggregate capacity remains for all
		crewmembers
MaM	-\	
MoMu0	c)	Liferafts shall comply with SOLAS LSA code 1997 Chapter IV or later version
	4.20.2	Minimum Liferaft Equipment
MoMu0,1,2	a)	A SOLAS liferaft shall contain as a minimum a SOLAS A pack;
	4.20.3	Liferaft Packing and Stowage
MoMu0,1,2	a)	Each liferaft shall be packed either in:
MoMu0,1,2	i	a rigid container securely stowed on the working deck, in the cockpit or in an
		open space; or:
MoMu0,1,2	ii	a rigid container or valise securely stowed in a dedicated weather tight locker
		containing liferaft and abandon ship equipment only which is readily
		accessible and opens onto the cockpit or working deck, or transom
MoMu0,1,2	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
1101100,1,2	<i>C)</i>	seconds
	4.20.4	
		•
M-MO 1 2	4.20.5	Liferaft Servicing
MoMu0,1,2	a)	A liferaft shall be serviced at a manufacturer authorized service station at the
		following maximum intervals:
MoMu0,1,2	i 	SOLAS liferafts annually
MoMu0,1,2	ii	ISO 9650 canister packed liferafts every 3 years
MoMu0,1,2	iii	ISO 9650 valise packed liferafts every 3 years except that hired liferafts shall
		be serviced annually
MoMu0,1,2	iv	ISAF liferafts annually
MoMu0,1,2	V	ORC liferafts annually
MoMu0,1,2	b)	Servicing certificates (original or a copy) on board
, ,	4.21	Grab Bags
**	f)	If a grab bag is provided it shall have inherent flotation, at least 0.1 m <sup>2</sup> (1 ft <sup>2</sup> )
	.,	area of fluorescent orange colour on the outside, shall be marked with the
		name of the boat, and shall have a lanyard and clip
	4.22	Crew Overboard Identification and Recovery
	4.22.1	Locator Beacons
	7.22.1	בטכמנטו שבמכטווא

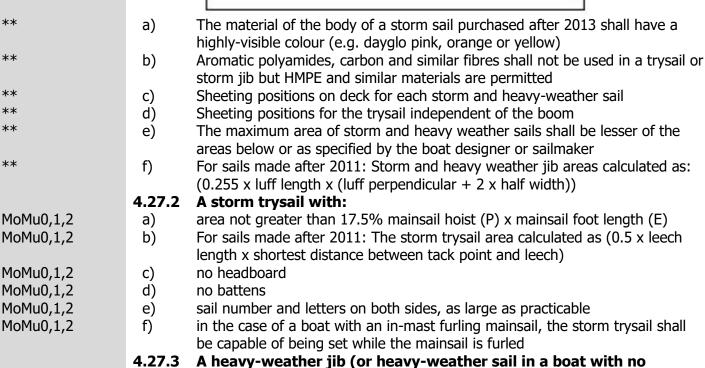
MoMu0	a)	•		ed with 406Mhz and 121.5Mhz for	
M-M-0 1 2	I-X		w member	C	
MoMu0,1,2	b)		personal crew overboard beacon for each crew member onal unit in addition to the PLB in OSR 4.22.1 b) if the location device		
MoMu0	c)				
MaMuO 1 2	۹)		by the boat in accordance with Os		
MoMu0,1,2	d)	•	•	ered with the appropriate authority lexadecimal identification (15 Hex ID)	
			•	ed online with the Cospas-Sarsat	
				egistration facility and the country has	
			direct registration in the IBRD.	igistration racinty and the country mas	
	4.22.2		w Overboard Position		
MoMu0	a)			oard position, within 10 seconds, and	
			ng that position, and		
MoMu0	b)			ediately accessible to a helmsman	
	,			accommodation and simultaneously	
		send an	appropriate signal to the GPS	•	
MoMu0,1,2	4.22.3	a lifebuo	y with a self-igniting light, a whis	stle and a drogue	
MoMu0,1,2	4.22.4	In additi	on to 4.22.3 above, within reach	of the helmsman and ready for	
			te use, a second lifebuoy equipp		
MoMu0,1,2	a)		e, a drogue, a self-igniting light a		
MoMu0,1,2	b)	•		permanently extended or be capable	
MaMiiO	۵)		fully automatically extended	schot of fluorogasin dua	
MoMu0 MoMu0,1,2	c) 4.22.5		buoy shall be equipped with a sa one lifebuoy shall depend entirely	•	
1101140,1,2	7.22.3	foam)	one meddoy shan depend endrer	y on permanent buoyancy (e.g.	
**	4.22.6			ic device shall be tested and serviced	
stasta	4 00 7		als in accordance with its manufa		
**	4.22.7			diameter, 15 - 25 m (50 - 75') long,	
MoMu0,1,2,3	4.22.8	,	ccessible to cockpit ry sling which includes a:		
MoMu0,1,2,3	a)		•	norter of 4 times LH or 36m (120')	
MoMu0,1,2,3	b)		y section (horseshoe) with no les		
MoMu0,1,2,3	c)	•	n strength capable to hoist a crev		
, , ,-	4.23		hnic and Light Signals		
**				forming to SOLAS LSA Code Chapter	
			<u> </u>	stamped expiry date (if any) or if no	
		expiry da	ate stamped, not older than 4 ye	ars.	
	Race C	Category	Red Hand Flares LSA III 3.2	Orange Smoke Flares LSA III 3.3	
	MoMu(	),1,2,3	4	2	
	MoMu4			2	
	4.24	Spare Nu	ımber		
	4.25	Cockpit			
**		_	, sharp knife, sheathed and secu	•	
	4.06	•	ccessible from the deck or a cocl	•	
**	4.26		k Heavy Weather Sail Inventorshing storm & heavy weather sails		
MoMu0	4.26.1		trysail (or rotating wing mast if s		
MoMu0,1,2,3	4.26.2		eather jib	anabicj	
MoMu0,1,2	4.26.3	storm jib			
, -,-					

## 4.27 Storm & Heavy Weather Sail Specifications

## 4.27.1 **Design**

Figure 3





area of 13.5% height of the foretriangle squared

readily available means, independent of a luff groove, to attach to the stay

forestay) with:

a)

b)

\*\*

\*\*

	4.27.4	A storm jib with:
MoMu0,1,2	a)	area of 5% (height of the foretriangle) squared
MoMu0,1,2	b)	maximum luff length 65% of height of foretriangle
MoMu0,1,2	c)	permanently attached means, independent of a luff groove, to attach to the
		stay
	4.28	Drogue, Sea Anchor
MoMu0		A drogue for deployment over the stern, or a sea anchor or parachute anchor
		for deployment at the bow, complete with all necessary gear (see Appendix K)
	4.29	Deck Bags
Mo0	4.29.1	If permitted by the Notice of Race, Sailing Instructions or Class Rules, bags
		for storing sails on deck shall be:
Mo0	a)	so constructed to ensure rapid draining of water
Mo0	b)	securely fastened in such a way that the integrity of deck fittings e.g.
		stanchions and lifelines, is not compromised
	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	a)	This pump shall:
Mo0,1,2	b)	have a minimum rated capacity of 200 l/min
Mo0,1,2	c)	be operated by battery, main engine powered or a separate engine
Mo0,1,2	d)	if portable electric-powered, power cables to be terminated with alligator clips
Mo0,1,2	e)	have sufficient hose to discharge directly overboard or into the cockpit.
Mo0,1,2	f)	A combination of permanently installed and portable pumps may be combined
		to meet the above requirement.
	SECTIO	N 5 - PERSONAL EQUIPMENT
		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))
MoMu0,1,2	•	have an integral safety harness in compliance with OSR 5.02
**	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	•	an integral safety harness in compliance with OSR 5.02
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
MoMu0	e)	have a PLB unit (as with other types of EPIRB, should be properly registered
		with the appropriate authority)
**	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
		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	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	c)	have self-closing hooks
MoMu0,1,2,3	d)	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	5.02.4	a boat shall carry spare harnesses and tethers as required in OSR 5.02 above
MoMu0,1,2,3	5.02.5	sufficient for at least 10% of the crewmembers (minimum one unit)  A tether which has been overloaded shall be replaced
1401410,1,2,3	5.02.3 <b>5.03</b>	Personal Location Lights
MoMu0	3.03	Two packs of miniflares or two personal location lights (either SOLAS or
, 101 1410		strobe): one to be attached to, or carried on, the person when on deck at
		night ´
	5.04	Foul Weather Suits
MoMu0		A foul weather suit with hood
M-M-O	5.05	Knife
MoMu0	5.06	A knife, to be worn on the person at all times
MoMu0	5.00	Flashlight A buoyant watertight flashlight
Mondo	5.07	Survival Equipment
MoMu0		an immersion suit (attention is drawn to EN ISO 15027-1 constant wear suits,
		and EN ISO 15027-2 abandonment suits and the LSA Code Chapter II, 2,3);
	5.08	Diving Equipment
MoMu0		The boat shall have at least two diving suits each to cover the entire body and
		including gloves, fins and portable air supplies
	SECTIO	N 6 - TRAINING
MoMu0	6.01.1	Every member of a crew including the Person in 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 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 6.02.5	Fire Precautions and Firefighting, theory and practical
	6.02.6	Crew Overboard Identification and Recovery Hypothermia, Cold Shock and Drowning
	6.02.7	Crew Health
	6.02.8	Marine Weather
	6.02.9	Heavy Weather
	6.02.10	
		Damage Control
	6.02.12	Search and Rescue Organization Pyrotechnics and Signalling Gear, theory and practical
	6.02.14	, , , , ,
	6.02.15	
	6.03	Spare Number
	6.04	Routine Training On-Board
**		At least annually the crews shall practice the drills for:
**	a)	Crew-Overboard Recovery
·6 45	b) <b>6.05</b>	Abandonment of vessel  Medical Training
	0.03	ricaicai iraining

MoMu0	6.05.1	At least one crewmember shall have a valid STCW A-VI/4-2 (Proficiency In
MoMu0	6.05.2	Medical Care) certificate or equivalent In addition to 6.05.1 another crewmember shall have a valid first aid certificate completed within the last five years meeting:
MoMu0,1,2	a)	A certificate listed on the World Sailing website <a href="https://www.sailing.org/inside-world-sailing/activities-services/technical-">https://www.sailing.org/inside-world-sailing/activities-services/technical-</a>
		offshore/technical-services/technical-and-offshore-safety/offshore-safety/osr-recognised-first-aid-qualifications/
MoMu0,1,2	b)	STCW First Aid Training complying with A-VI/1-3 - Elementary First Aid or higher STCW level
	6.06	Diving Training
MoMu0	6.06.1	At least 30% of the crew shall have received appropriate diving training to enable them to carry out basic repairs underwater and to provide assistance if necessary in recovery of a crew overboard
		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

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