Extract for Race Category 0 Multihulls JANUARY 2020 - DECEMBER 2021

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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 www.sailing.org/specialregs

Language & Abbreviations Used

Mo - Monohull

Mu - Multihull

" ** " means the item applies to all types of boat in all Categories except 5 for which see Appendix B or 6 for which see Appendix C.

RED TYPE indicates significant changes in 2020

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

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

Administration

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

World Sailing Regulation 6.9.8.3 - The Special Regulations Sub-Committee shall:

- (a) be responsible for the maintenance, revision and changes to the World Sailing Offshore Special Regulations governing offshore racing, under licence from ORC Ltd. Such changes shall be biennial with revised editions published in January of each even year, except that matters of an urgent nature affecting safety may be dealt with by changes to the Regulations on a shorter time scale;
- (b) monitor developments in offshore racing relative to the standards of safety and seaworthiness.

Any queries please E-Mail: technical@sailing.org

SECTION 1 - FUNDAMENTAL AND DEFINITIONS

	1.01	Purpose and Use
**	1.01.1	The purpose of the Offshore Special Regulations (OSR) is to establish uniform minimum equipment, accommodation and training standards for monohull and multihull (excluding proa) boats racing offshore.
**	1.01.2	The OSR do not replace, but rather supplement, the requirements of governmental authority, Classification Society certification, the Racing Rules of Sailing (RRS), Equipment Rules of Sailing(ERS), class rules and Rating Systems.
**	1.01.3	Use of the OSR does not guarantee total safety of the boat and her crew. Particular attention is drawn to the description of OSRs for inshore racing which includes that adequate shelter and or effective rescue is available all

along the course. This is not included in more onerous OSR categories.

1.02 Responsibility of Person in Charge

1.02.1 Under RRS 4 the responsibility for a boat's decision to participate in a race or continue racing is hers alone. The safety of a boat and her crew is the sole and inescapable responsibility of the Person in Charge who shall do his best to ensure that the boat is fully found, thoroughly seaworthy and manned by an experienced and appropriately trained crew who are physically fit to face bad weather. The person in charge shall also assign a person to take over his responsibilities in the event of his incapacitation.

1.02.2 Neither the establishment of the OSR, nor their use by Organizing Authorities, nor the inspection of a boat under the OSR in any way limits or reduces the complete and unlimited responsibility of the Person in Charge.

1.02.3 By participating in a race conducted under the OSR, the person in charge, each competitor and boat owner agrees to reasonably cooperate with the organizing authority and World Sailing in the development of an independent incident report as specified in 2.02

1.03 Definitions, Abbreviations, Word Usage

1.03.1 Definitions of Terms used in this document

Abbreviation Description # Pound force (lbf)

ABS American Bureau of Shipping
Age Date Month/year of first launch
AIS Automatic Identification Systems
CEN Comité Européen de Normalisation

Coaming The part of the cockpit, including the transverse after limit, over

which water would run when the boat is floating level and the cockpit

is filled to overflowing

COLREGS International Regulations for Preventing Collisions at Sea

Contained A cockpit where the combined area open aft to the sea is less than

Cockpit 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 Clothing designed to keep the wearer dry and may consist of one

Suit piece or several

GMDSS Global Maritime Distress & Safety System

GNSS Global Navigation Satellite System

GPS Global Positioning System

Hatch The term hatch includes the entire hatch assembly including the lid or

cover as part of that assembly

HMPE High Modulus Polyethylene (Dyneema®/Spectra® or equivalent)

IMO International Maritime Organisation

IMSO The International Mobile Satellite Organisation, the independent,

intergovernmental organisation that oversees Inmarsat's performance of its Public Service Obligations for the GMDSS and reports on these

to IMO

INMARSAT Inmarsat Global Limited is the private company that provides GMDSS

satellite distress and safety communications, plus general

communications via voice, fax and data

ISAF International Sailing Federation- (now World Sailing)

ISO International Standard Organization or International Organization for

Standardization.

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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.

Hull Length as defined by the ERS LH

Lifeline Rope or wire line rigged as guardrail / guardline around the deck

IMO International Life-Saving Appliance Code LSA

LWL (Length of) loaded waterline

Monohull A boat with one hull

Moveable Material carried for the sole purpose of increasing weight and/or **Ballast** influencing stability and/or trim and which may be moved transversely

but not varied in weight while a boat is racing

A boat with more than one hull Multihull

Open Cockpit A cockpit that is not a Contained Cockpit.

Offshore Racing Congress (formerly Offshore Racing Council) ORC

OSR Offshore Special Regulation(s)

Permanently The item is effectively built-in by e.g. bolting, welding, glassing etc.

and may not be removed for or during racing. Installed

PLB Personal Locator Beacon

Month & Year of first launch of the first boat of the production series Primary

Launch or first launch of a non-series boat

Proa Asymmetric Catamaran

Rode Rope, chain, or a combination of both, which is used to connect an

anchor to the boat.

RRS ISAF - Racing Rules of Sailing

Safety Line A tether used to connect a safety harness to a strong point

Search and Rescue SAR

SART Search and Rescue Transponder

Securely Held strongly in place by a method (e.g. rope lashings, wing-nuts) Fastened which will safely retain the fastened object in severe conditions

including a 180° capsize and allows for the item to be removed and

replaced during racing

SOLAS Safety of Life at Sea Convention

The Safety and Stability Screening numeral SSS

Material carried for the sole purpose of increasing weight and/or to Static Ballast

influencing stability and/or trim and which is not moved or varied in

weight while a boat is racing

A safety line (usually shorter than a safety line carried with a harness) Static Safety

Line kept clipped on at a work-station STIX ISO 12217-2 Stability Index

Variable Ballast Water carried for the sole purpose of influencing stability and/or trim

and which may be varied in weight and/or moved while a boat is

racina.

Waterline The water surface when the boat is floating in measurement trim

formerly the International Sailing Federation or ISAF World Sailing

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

permissive.

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

SECTION 2 - APPLICATION & GENERAL REQUIREMENTS

2.01 **Categories of Events**

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

2.01.1 Category 0

MoMu0

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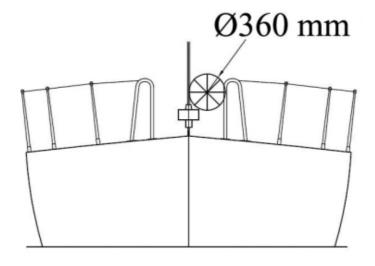
Trans-oceanic races, including races which pass through areas in which air or sea temperatures are likely to be less than 5°C (41°F) other than temporarily, where boats must be completely self-sufficient for very extended periods of time, capable of withstanding heavy storms and prepared to meet serious emergencies without the expectation of outside assistance

2.02 **Incident Reporting**

	2.02	The Organizing Authority of a race will establish whether any incidents occurred, which if reported would be likely to be relevant to evolving the Offshore Special Regulations, the plan review process, or in increasing safety. The Organizing Authority will follow any guidelines issued by World Sailing concerning incident reporting.
	2.03	Inspection
**	2.03	A boat may be inspected at any time. If she fails to comply with the OSR her
		entry may be rejected or she will be subject to protest
	2.04	General Requirements
**	2.04.1	All equipment required by OSR shall:
**	a)	function properly
**	b)	be regularly checked, cleaned and serviced
**	c)	if it has an expiry date, it will not have exceeded its expiry date whilst racing
**	d)	when not in use be stowed in conditions in which deterioration is minimised
** **	e)	be readily accessible
<i>ተተ</i>	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
	STRUCTUR	AL FEATURES, STABILITY, FIXED EQUIPMENT
**		A boat shall be/have:
ded	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
•	2.02	the mast and the boat while racing
**	3.02	Watertight and Structural Integrity of a Boat
ጥ ጥ	3.02.1	Essentially watertight and all openings shall be capable of being immediately
		secured. Centreboard, daggerboard trunks and the like shall not open into the interior of a hull except via a watertight maintenance hatch with the opening
		entirely above the Waterline
MoMu0,1,2	3.03.2	A monohull with Primary Launch between 1987 and 2010, and all multihulls,
1101100,1,2	5.05.2	shall have been designed, built, maintained, modified or repaired in accordance
		with the requirements of:
MoMu0,1,2	c)	the EC Recreational Craft Directive for Category A having obtained the CE
. 10. 100/2/2	٠,	mark, or
MoMu0,1,2	d)	ISO 12215 Category A, with written statements signed by the designer and
, ,	,	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,
		keel or appendages, on board, except
MoMu0,1,2	f)	that a race organizer or class rules may accept, when that described in a), b),
		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
	3.05	Stability and Flotation - Multihulls
Mu0,1,2,3,4	3.05.1	Watertight bulkheads and compartments (which may include permanently
		installed flotation material) in each hull, to ensure that the boat is effectively
		unsinkable and capable of floating in a stable position with at least half the
MuO 1 2 2 4	2 05 2	length of one hull flooded (see OSR 3.13.2)
Mu0,1,2,3,4	3.05.2	Transverse watertight bulkheads at intervals of not more than 4 m (13'-3") in every hull without accommodation if with a First Launch after 1998
Mu0,1,2,3,4	3.05.3	Designed and built to resist capsize
11110,1,2,3,7	3.03.3 3.07	Exits and Escape Hatches - Multihulls
	3.07.1	Exits and Escape fractiles - Multifiums
Mu0,1,2,3	3.07.1	At least two exits in each hull which contains accommodations
1.00/1/2/0	3.07.1	Escape Hatches, Underside Clipping Points & Handholds
Mu0,1,2,3,4	a)	If 12 m (39'-4") LH and greater each hull which contains accommodation:
Mu0,1,2,3,4	i	an escape hatch for access to and from the hull in the event of an inversion;
Mu0,1,2,3,4	ii	a minimum clearance diameter through each escape hatch of 450 mm (18") or
, ,		- · · · · · · · · · · · · · · · · · · ·

		when an escape hatch is not circular, sufficient clearance to allow a crewmember to pass through fully clothed on boats if First Launch after 2002
Mu0,1,2,3,4	iii	each escape hatch above the waterline when the boat is inverted;
Mu0,1,2,3,4	iv	each escape hatch at or near the midships station if First Launch after 2000
Mu0,1,2,3,4	V	each escape hatch on the side nearest the vessel's central axis for a catamaran
		if First Launch after 2002
Mu0,1,2,3,4	3.07.2	if a trimaran at least two escape hatches in compliance with the dimensions in
	b)	OSR 3.07.2 a) ii if 12 m (39'-4") LH and greater if First Launch after 2002
Mu0,1	3.07.2	if a trimaran at least one escape hatch in compliance with the dimensions in
	c)	OSR 3.07.2 a) ii if less than 12 m (39'-4") LH if First Launch after 2002
Mu0,1,2,3,4	c)	each escape hatch shall have been opened both from inside and outside within
MO 1 2 2 4	2.07.2	6 months prior to the race
Mu0,1,2,3,4	3.07.2 d)	appropriate handholds/clipping points on the underside sufficient for all crew (on a trimaran these shall be around the central hull)
Mu0,1,2,3,4	e)	a catamaran with a central nacelle first launched after 2002 shall have on the
11u0,1,2,5,4	C)	underside around the central nacelle, handholds of sufficient capacity to enable
		all persons on board to hold on and/or clip on securely
	3.08	Hatches & Companionways
**	3.08.1	Hatch covers forward of the maximum beam station shall not open toward the
		interior of the boat, except hatches in the side of a coachroof or ports having
		an area of less than 0.071 m ² (110 in ²)
**	3.08.2	A hatch, including a hatch over a locker shall be:
**	a)	permanently attached and capable of being firmly shut immediately and
		remaining firmly shut in a 180° capsize
	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
**	3.08.4	SEA"
**	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
Mu0,1,2,3,4	3.08.7	if a multihull with a companionway hatch extending below the local sheerline
		either:
Mu0,1,2,3,4	a)	have a minimum sill height of 300 mm (12") and be capable of being blocked
		off up to the level of the local sheerline whilst giving access to the interior with
M.,0 1 2 2	b)	the blocking device(s) in place; or
Mu0,1,2,3	b) 3.09	be in compliance with ISO 11812 to design category A Cockpits
**	3.09.1	Cockpits that self-drain quickly by gravity at all angles of heel and are
	5.05.1	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
	0.00.	Launch before 2003, at least 2% L above the waterline)
**	3.09.3	A bow, lateral, central or stern well is a cockpit for the purposes of OSR 3.09
**	3.09.4	Cockpit Volume
**		The maximum combined volume below lowest coamings of all contained
		cockpits shall be:
Extract	a)	primary launch before April 1992: 6% (LWL x maximum beam x freeboard
MoMu0,1 **	1.3	abreast the cockpit)
^	b)	primary launch after March 1992 as above for the appropriate category except
		that "lowest coamings" shall not include any aft of the FA station and no extension of a cockpit aft of the working deck shall be included in calculation of
		cockpit volume
	3.09.5	Cockpit Drains
**		Cockpit drain cross section area of unobstructed openings (after allowance for
		screens if fitted) shall be at least that of:
**	a)	2 x 25 mm (1") diameter or equivalent for a boat less than 8.5 m (28') LH

**	b) 3.10	4 x 20 mm (3/4") diameter or equivalent for a boat 8.5 m (28') LH or greater Sea Cocks or Valves
**		
	3.10	Permanently installed sea cocks or valves on all through-hull openings below
	244	the waterline except for integral deck scuppers and instrument through-hulls
slevie	3.11	Sheet Winches
**	3.11	Sheet winches mounted in such a way that an operator is not required to be
		substantially below deck
	3.12	Mast Step
**	3.12	The heel of a keel stepped mast securely fastened to the mast step or
		adjoining structure
	3.13	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 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
, , , ,		water pressure without allowing any leakage into the adjacent compartment
	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
	ω,	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
	U)	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
	111	Primary Launch before 1993 where it shall be no greater than 560 mm (22")
**	c)	Lifelines permanently supported at intervals of not more than 2.2 m (7'-2 1/2")
	c)	and shall not pass outboard of supporting stanchions
**	۵۱	· · · · · · · · · · · · · · · · · · ·
1	d)	Pulpit and stanchion bases permanently installed with pulpits and stanchions
**	۵)	mechanically retained in their bases
11-11-	e)	The outside of pulpit and stanchion base tubes no further inboard from the
		edge of the working deck than 5% of maximum beam or 150 mm (6"),
**	£)	whichever is greater, nor further outboard than the edge of the working deck
**	f) :	Stanchions straight and vertical except that:
1	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")
-115	ii	stanchions may be angled to not more than 10° from vertical at any point
**	>	above 50 mm (2") from the deck
-115	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")



**

		_	howing Pulpit Opening	
**	h)		ite at or pass through adequa	ately braced stanchions set
1.1.		inside and overlappin		
**	i)		rce of 4 kg (8.8 #) is applied	
			etween supports that are aft	of the mast, the deflection
ale ale		shall not exceed:		
**	i 	50 mm (2") for an up		
**	ii Daaa	• •	n intermediate lifeline	
Mu0,1,2,3,4	3.14.2		nts for Pulpits, Stanchion	•
Mu0,1,2,3,4	3.14.2		impractical to precisely follow	
	a)	-	the regulations for monohulls	s shall be followed as closely
	3.14.3	as possible Spare number		
	3.14.4	Spare number		
	3,14.5	Spare number		
	3.14.6	Lifeline Specification	ons	
Mo4,Mu**	3.14.6	Lifelines of either:	J.1.5	
	a)			
Mo4,Mu**	3.14.6	stranded stainles	ss steel wire	
,	a) i			
Mo4,Mu**	3.14.6	HMPE		
•	a) ii			
**	3.14.6	The minimum diamet	er is specified in table 8 belo	W
	b)			
**	3.14.6		s shall be uncoated and used	9
	c)	<u> </u>	emporary sleeving may be fitt	ed provided it is regularly
1.1.		removed for inspection		
**	3.14.6			e lifelines provided the gap it
ale ale	d)		ed 100 mm (4"). This lanyard	• • • • • • • • • • • • • • • • • • • •
**	3.14.6	•	e lifeline enclosure system sh	all have a breaking strength
M-4 M**	e)	no less than the lifeling		of and calicad in accordance
Mo4,Mu**	3.14.6 f)	-		afe and spliced in accordance
	LH		er's recommended procedures HMPE rope (Single braid)	HMPE Core (Braid on
	LII	diameter	min. lifeline diameter	braid) min. lifeline
		didiffecei	min. memie diametei	diameter
	under	3mm (1/8")	4mm (5/32")	4mm (5/32")
	8.5m (28		(3,32)	(5,52)
	8.5m -	4mm (5/32")	5mm (3/16")	5mm (3/16")
	13m		, ,	
	over 13r	m 5mm (3/16")	5mm (3/16")	5mm (3/16")
	(42' 8")			
	3.15	Multihull Nets or T		
Mu0,1,2,3,4	3.15.1		"trampoline" are interchange	eable. A net shall be:
Mu0,1,2,3,4	3.15.1	essentially horizontal		
M 0 1 2 2 1	a)			
Mu0,1,2,3,4	3.15.1		oven webbing, water perme	
	b)		han 5 cm (2") in any dimensi	
		present no risk of foc	chafe. The junction between	a fiet affu a boat Sfiail
Mu0,1,2,3,4	3.15.1	-	ir intervals on transverse and	longitudinal support lines
Mu0,1,2,5,7	c)	and shall be fine-stite		longitudinal support lines
Mu0,1,2,3,4	3.15.1		•	normal working conditions at
1 100/1/2/3/ 1	d)		size when the boat is inverted	_
	3.15.2	Trimarans with Do		-
	3.15.2		le crossbeams shall have net	s on each side covering:-
Mu0,1,2,3,4	3.15.2		he crossbeams, central hull a	_
- · · ·	a)			-
Mu0,1,2,3,4	3.15.2	the triangles formed	by the aft end of the central	pulpit, the mid-point of each

Mu0,1,2,3,4	b) 3.15.2 c)	forward crossbeam, and the intersection of the crossbeam and the central hull the triangles formed by the aftermost part of the cockpit or steering position (whichever is furthest aft), the mid-point of each after crossbeam, and the
Mu0,1,2,3,4	3.15.2 d) 3.15.3	intersection of the crossbeam and the central hull; except that:- OSR 3.15.2(c) is not a requirement when cockpit coamings and/or lifelines are present which comply with the minimum height requirements in OSR 3.14 Trimarans with Single Crossbeams
Mu0,1,2,3,4	3.15.3	A trimaran with a single crossbeam shall have nets between the central hull and each outrigger on each side between two straight lines from the intersection of the crossbeam and the outrigger, respectively to the aft end of the pulpit on the central hull, and to the aftermost point of the cockpit or steering position on the central hull (whichever is furthest aft)
	3.16	Catamarans
Mu0,1,2,3,4	3.16.1	A catamaran shall have nets covering the area defined:
Mu0,1,2,3,4	3.16.1	laterally by the hulls; and
	a)	
Mu0,1,2,3,4	3.16.2 b)	longitudinally by transverse stations through the forestay base, and the aftermost point of the boom lying fore and aft. However, a catamaran with a central nacelle (non-immersed) may satisfy the regulations for a trimaran
	3.18	Toilet
MoMu0,1,2	3.18.1	Permanently installed toilet
	3.19	Bunks
MoMu0	3.19.1	Permanently installed bunk for each crewmember
	3.20	Cooking Facilities
MoMu0,1,2,3	3.20	Permanently installed cooking stove, capable of being operated safely at sea,
	0.20	with fuel shutoff control
	3.21	Drinking Water Tanks & Drinking Water
	3.21.1	Drinking Water Tanks
MoMu0	3.21.1	Permanently installed delivery pump and water tanks dividing the water supply
เทอเทนอ	a)	into at least three compartments
	3.21.2	Drinking Water
ΜοΜυΩ	3.21.2	Equipment (which may include watermakers and tanks containing water)
MoMu0		
	a)	permanently installed to provide at least 3 I (0.8 US GaI) of drinking water per
	2 24 2	person per day for the likely duration of the voyage
MaMi	3.21.3	Emergency Drinking Water
MoMu0	3.21.3	in the absence of a power driven watermaker, at least 1 I (0.26 US Gal) per
	b)	person per day in at least two separate containers shall be provided for the expected duration of the voyage
MoMu0	3.21.3	when a power-driven watermaker is on board, at least 500 ml (0.13 US Gal)
	c)	per person per day in at least two separate containers shall be provided for the
		expected duration of the voyage
MoMu0	3.21.3	facilities shall be provided to collect rainwater for drinking purposes including
	d)	when dismasted
	3.22	Hand Holds
**	3.22	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
Mo3Mu0,1,2	3.23.1	one permanently installed manual bilge pump
1 1001 1007272	b)	one permanently metaned mandal singe pamp
Mu0,1,2,3,4	3.23.1	provision to pump out all watertight compartments (except those filled with
1140,1,2,3,7	c)	impermeable buoyancy).
**	3.23.2	All required permanently installed bilge pumps shall be operable with all
	J.∠J.∠	
		cockpit seats, hatches and companionways shut and with permanently installed
**	י ייי	discharge pipe(s) of sufficient capacity
-11-	3.23.3	Bilge pumps shall not be connected to cockpit drains and shall not discharge
**	2 22 4	into a Closed Cockpit
-prp	3.23.4	Bilge pumps shall be readily accessible for maintenance and for clearing out
		debris

**	3.23.5	All removable bilge pump handles retained by a lanyard
	3.24	Compass
MoMu0,1,2,3	3.24 a)	Marine magnetic compass capable of being used as a steering compass:
MoMu0,1,2,3,4	3.24 b)	Permanently installed marine magnetic steering compass, independent of any
		power supply, correctly adjusted with deviation card
MoMu0,1,2,3	3.24 c)	a second compass which may be hand-held and/or electronic
	3.25	Halyards.
**	3.25 a)	A minimum of two halyards, each capable of hoisting a sail, on each mast
MoMu0,1,2,3	3.25 b)	No halyard shall be locked, lashed or otherwise secured to the mast in a way
		that requires a person to go aloft in order to lower a sail in a controlled
		manner, except for a headsail in use with a furling device.
	2.26	Barrier Patricial
MaO	3.26	Bow Fairlead
Mo0	3.26	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
	3.27.1	(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
**	3.28.1	engines and associated systems installed in accordance with their
	a)	manufacturers' guidelines and suitable for the size and intended use of the
MaMuO 1 2 2	2 20 1	boat
MoMu0,1,2,3	3.28.1	an engine which provides a minimum speed in knots of (1.8 x \sqrt{LWL} in metres) or (\sqrt{LWL} in feet)
Mo0,1,2Mu0	b) 3.28.1	inboard engine
1100,1,21100	c)	inboard engine
**	3.28.1	an inboard combustion engine shall have a permanently installed exhaust,
	d)	cooling system, fuel supply, fuel tank(s) and shall have adequate heavy
	/	weather protection
**	3.28.1	an inboard electrical engine, when fitted, shall be provided with a permanently
	e)	installed power supply, adequate heavy weather protection and have an engine
		control system.
	3.28.2	Generator
**	3.28.2	If an optional generator separate from the propulsion engine is carried, it shall
		be installed in accordance with the manufacturer's guidelines
MaM.:0 1 2 2	3.28.3	Liquid Fuel Systems
MoMu0,1,2,3 MoMu0,1,2,3	3.28.3	All fuel tanks for storage of liquid fuels shall be rigid (but may have permanently installed flexible linings) and shall have a shutoff valve
ΜοΜυθ 1 2 3	a) 3.28.3	At the start a boat with a combustion engine shall carry sufficient fuel to meet
1101100,1,2,3	b)	charging requirements for the duration of the race and to motor at the above
	b)	minimum speed for at least 5 hours
	3.28.4	Battery Systems
MoMu0,1,2,3	3.28.4	a dedicated engine/generator starting battery when an electric starter is the
	a)	only method for starting the engine and/or separate generator
**	3.28.4	batteries installed after 2011 shall be of the sealed type from which liquid
	b)	electrolyte cannot escape
**	3.28.4	At the start a boat with an electric engine shall carry sufficient capacity to meet
	c)	electrical requirements for the duration of the race and to motor at the above
1	2.20	minimum speed for at least 5 hours
MaMile 1 2 2	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
		аптенна перениз прон тне низы

		with not more than 70 power 1055
	U)	with not more than 40% power loss
MoMu0,1,2,3	5.29.13 b)	its base not less than 3 m (10') above the Waterline and co-axial feeder cable
ΜοΜυθ 1 2 2	a) 3.29.13	has a dedicated AIS antenna not less than 38 cm (15") in length mounted with
MoMu0,1,2,3	3.29.13	shares the masthead VHF antenna via a low loss AIS antenna splitter; or
Mu0	3.29.12	a class A AIS Transponder which either:
Muo	2 20 12	2006 shall comply as closely as possible with OSR 3.29.11 a).
		and at least 7 m (23') above the water. Installations in place before January
	b)	radar antenna unit shall remain essentially horizontal when the boat is heeled
MoMu0	3.29.11	a frequency modulated continuous wave (FMCW) Broadband Radar™ unit. The
	a)	with a maximum dimension not less than 533 mm; or
MoMu0	3.29.11	a pulse (magnetron) unit with not less than 4 kW PEP and an antenna unit
MoMu0	3.29.11	an active radar set permanently installed either:
		permanently installed antenna and earth.
		transmitter power and frequency range from at least 1.6 to 29.9 MHz with
MoMu0	3.29.10	an MF/HF marine SSB transceiver (GMDSS/DSC) with at least 125 W
		committee shall have polling authority.
		permanently powered up for the duration of the race and for which the race
MoMu0	3.29.9	a Standard-C satellite terminal (GMDSS) shall be permanently installed and
		each crew member has an appropriate personal unit (see OSR 4.22.1);
		a PLB or EPIRB, or an alternative device for crew overboard location when
MoMu0	3.29.7	a direction-finding radio receiver operating on 121.5 MHz to take a bearing on
		capable of receiving weather bulletins
**	3.29.6	a second radio receiver, which may be the handheld VHF in 3.29.5 above,
		a grab bag (see OSR 4.21)
		power, watertight or with waterproof covers. When not in use to be stowed in
MoMu0	3.29.4	at least two hand-held marine VHF transceivers each with min 5 W output
	,	(see OSR 4.21)
	a)	covers and internal batteries. When not in use each to be stowed in a grab bag
MoMu0	3.29.3	at least two hand-held satellite telephones, watertight or with waterproof
1 101 100	e)	meeting ITU class D
MoMu0	3.29.2	a marine VHF DSC radio covering all international and US marine channels and
		another DSC equipped station
	d)	distress alert calls as well as sending and receiving a DSC position report with
MoMu1,2,3	3.29.2	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
MaNut 2.2	c)	DCC canable V/UE transceivers shall be are arranged with an assistant MANACT
MoMu1,2,3	3.29.2	be DSC capable if installed after 2015
	b)	cable with not more than 40% power loss
MoMu0,1,2	3.29.2	a masthead antenna not less than 38 cm (15") in length and co-axial feeder
	a)	
MoMu0,1,2,3	3.29.2	a minimum rated output power of 25 W
MoMu0,1,2,3	3.29.2	if the marine radio transceiver is a VHF:

SECTION 4 - PORTABLE EQUIPMENTA boat shall have:

**	4.01 4.01.1	Sail Letters & Numbers 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 ² (43 ft ²) area of highly-visible pink, orange or yellow on the coachroof and/or deck
Mu0,1,2,3,4	4.02.2	A 1 m ² (11 ft ²) area of highly-visible pink, orange or yellow showing when the boat is inverted
	4.03	Soft Wood Plugs
**	4.03	A tapered soft wood plug stowed adjacent to every through-hull opening
	4.04	Jackstays and Clipping Points
MoMu0,1,2,3	4.04.1	Permanently Installed fittings for jackstay ends and clipping points

MoMu0,1,2,3 MoMu0,1,2,3	4.04.2 4.04.2	Jackstays which shall: be independent on each side of the deck
MoMu0,1,2,3	a) 4.04.2 b)	enable a crewmember to move readily between the working areas on deck and the cockpit(s) with the minimum of clipping and unclipping operations
MoMu0,1,2,3	4.04.2 c)	have a breaking strength of 2040 kg (4500#) and be uncoated and non-sleeved stainless steel 1 x 19 wire of minimum diameter 5 mm (3/16"), webbing or HMPE rope
MoMu0,1,2,3	4.04.3	Clipping points which shall:
MoMu0,1,2,3	4.04.3 a)	be adjacent to stations such as the helm, sheet winches and masts, where crewmembers work
MoMu0,1,2,3	4.04.3 b)	enable a crewmember to clip on before coming on deck and unclip after going below
MoMu0,1,2,3	4.04.3 c)	enable two-thirds of the crew to be simultaneously clipped on without depending on jackstays
Mu0,1,2,3	4.04.3 d)	on a trimaran with a rudder on the outrigger, permit a crewmember to repair the steering mechanism whilst attached to a clipping point
	4.05	Fire Fighting Equipment
**	4.05.1	A fire blanket adjacent to every cooking device with an open flame
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 space
	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.)
MoMu1,2,3	4.06.2	2 un-modified anchors that meet the anchor manufacturer's recommendation based on the boat's dimensions with suitable combination of chain and rope, ready for immediate assembly, and ready for deployment within 5 minutes except that for a boat less than 8.5 m (28') LH there shall be 1 anchor meeting the same criteria.
	4.07	Flashlights and Searchlights
**	4.07.1	Watertight lights with spare batteries and bulbs as follows:
MoMu0,1,2,3	4.07.1 a)	a searchlight, suitable for searching for a person overboard at night and for collision avoidance
MoMu0,1,2,3	4.07.1 b)	a flashlight in addition to 4.07 a)
MoMu0	4.07.1 d)	a high-intensity heavy duty searchlight powered by the boat's batteries, instantly available for use on deck and in the cockpit First Aid Manual and First Aid Kit
**	4.08 4.08	A First Aid Manual and First Aid Kit. The contents and storage of the First Aid
	4.00	Kit shall reflect the likely conditions and duration of the passage, and the number of crew
	4.09	Foghorn
**	4.09	A foghorn
	4.10	Radar Reflector
**	4.10.1	A passive radar reflector with:
**	4.10.1 a)	octahedral circular plates of minimum diameter 30 cm (12"), or
**	4.10.1 b)	octahedral rectangular plates of minimum diagonal dimension 40 cm (16"), or
**	4.10.1 c)	a non-octahedral reflector with a documented Root Mean Square minimum Radar Cross Section (RCS) area of 2 m 2 (22 ft 2) from 0-360 $^\circ$ of azimuth and ± 20 $^\circ$ of heel
MoMu0	4.10.2	A Radar Target Enhancer (RTE) which complies with ISO 8729-2:2009 or equivalent
dada	4.11	Navigation Equipment
**	4.11	Navigational charts (not solely electronic), light list and chart plotting equipment
**	4.12 4.12	Safety Equipment Location Chart A safety equipment location diagram in durable waterproof material, clearly

	4.13	displayed in the main accommodation, marked with the location of principal items of safety equipment Depth, Speed and Distance Instruments
MoMu0,1,2,3	4.13.1	A knotmeter or distance measuring instrument (log)
MoMu0	4.13.2	Two independent depth sounders
	4.14	Spare Number
	4.15	Emergency Steering
MoMu0,1,2,3	4.15.1	An emergency tiller capable of being fitted to the rudder stock except when
MoMu0,1,2,3	4.15.1 a)	the principal method of steering is by means of an unbreakable metal tiller
MoMu0,1,2,3	4.15.1 b)	there are two methods (e.g. tillers, wheels) of controlling a rudder, neither of which shares components with the other except for the rudder stock.
MoMu0,1,2,3	4.15.2 4.16	A proven method of emergency steering with the rudder disabled 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
aleale	4.17	Boat's name
**	4.17	The boat's name on miscellaneous buoyant equipment, such as lifejackets,
	4.18	cushions, lifebuoys, recovery slings, grab bags etc. Retro-reflective material
**	4.18 4.18	Marine grade retro-reflective material on lifebuoys, recovery slings, liferafts and
	4.19	lifejackets 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
Mana	4.20.1	Liferaft Construction
MoMu0		Liferaft Construction A sufficient number of liferafts so that in the event of any one liferaft being lost or rendered unserviceable, sufficient aggregate capacity remains for all crewmembers
MoMu0 MoMu0	4.20.1 4.20.1	A sufficient number of liferafts so that in the event of any one liferaft being lost or rendered unserviceable, sufficient aggregate capacity remains for all crewmembers
	4.20.1 4.20.1 b)	A sufficient number of liferafts so that in the event of any one liferaft being lost or rendered unserviceable, sufficient aggregate capacity remains for all
	4.20.1 4.20.1 b) 4.20.1	A sufficient number of liferafts so that in the event of any one liferaft being lost or rendered unserviceable, sufficient aggregate capacity remains for all crewmembers
	4.20.1 4.20.1 b) 4.20.1 c) 4.20.2 4.20.2	A sufficient number of liferafts so that in the event of any one liferaft being lost or rendered unserviceable, sufficient aggregate capacity remains for all crewmembers Liferafts shall comply with SOLAS LSA code 1997 Chapter IV or later version
MoMu0	4.20.1 4.20.1 b) 4.20.1 c) 4.20.2 4.20.2 a)	A sufficient number of liferafts so that in the event of any one liferaft being lost or rendered unserviceable, sufficient aggregate capacity remains for all crewmembers Liferafts shall comply with SOLAS LSA code 1997 Chapter IV or later version Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack;
MoMu0 MoMu0,1,2	4.20.1 b) 4.20.1 c) 4.20.2 4.20.2 a) 4.20.3	A sufficient number of liferafts so that in the event of any one liferaft being lost or rendered unserviceable, sufficient aggregate capacity remains for all crewmembers Liferafts shall comply with SOLAS LSA code 1997 Chapter IV or later version Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack; Liferaft Packing and Stowage
MoMu0	4.20.1 b) 4.20.1 c) 4.20.2 4.20.2 a) 4.20.3 4.20.3	A sufficient number of liferafts so that in the event of any one liferaft being lost or rendered unserviceable, sufficient aggregate capacity remains for all crewmembers Liferafts shall comply with SOLAS LSA code 1997 Chapter IV or later version Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack;
MoMu0 MoMu0,1,2	4.20.1 b) 4.20.1 c) 4.20.2 4.20.2 a) 4.20.3 4.20.3 a) 4.20.3	A sufficient number of liferafts so that in the event of any one liferaft being lost or rendered unserviceable, sufficient aggregate capacity remains for all crewmembers Liferafts shall comply with SOLAS LSA code 1997 Chapter IV or later version Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack; Liferaft Packing and Stowage Each liferaft shall be packed either in:- a rigid container securely stowed on the working deck, in the cockpit or in an
MoMu0,1,2 MoMu0,1,2 MoMu0,1,2	4.20.1 4.20.1 b) 4.20.1 c) 4.20.2 4.20.2 a) 4.20.3 a) 4.20.3 a) i	A sufficient number of liferafts so that in the event of any one liferaft being lost or rendered unserviceable, sufficient aggregate capacity remains for all crewmembers Liferafts shall comply with SOLAS LSA code 1997 Chapter IV or later version Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack; Liferaft Packing and Stowage Each liferaft shall be packed either in:- a rigid container securely stowed on the working deck, in the cockpit or in an open space; or:-
MoMu0,1,2 MoMu0,1,2	4.20.1 b) 4.20.1 c) 4.20.2 4.20.2 a) 4.20.3 a) 4.20.3 a) i 4.20.3	A sufficient number of liferafts so that in the event of any one liferaft being lost or rendered unserviceable, sufficient aggregate capacity remains for all crewmembers Liferafts shall comply with SOLAS LSA code 1997 Chapter IV or later version Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack; Liferaft Packing and Stowage Each liferaft shall be packed either in:- a rigid container securely stowed on the working deck, in the cockpit or in an open space; or:- a rigid container or valise securely stowed in a dedicated weather tight locker
MoMu0,1,2 MoMu0,1,2 MoMu0,1,2	4.20.1 4.20.1 b) 4.20.1 c) 4.20.2 4.20.2 a) 4.20.3 a) 4.20.3 a) i	A sufficient number of liferafts so that in the event of any one liferaft being lost or rendered unserviceable, sufficient aggregate capacity remains for all crewmembers Liferafts shall comply with SOLAS LSA code 1997 Chapter IV or later version Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack; Liferaft Packing and Stowage Each liferaft shall be packed either in:- a rigid container securely stowed on the working deck, in the cockpit or in an open space; or:- a rigid container or valise securely stowed in a dedicated weather tight locker containing liferaft and abandon ship equipment only which is readily accessible
MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2	4.20.1 b) 4.20.1 c) 4.20.2 4.20.2 a) 4.20.3 a) 4.20.3 a) i 4.20.3 a) i 4.20.3 a) ii	A sufficient number of liferafts so that in the event of any one liferaft being lost or rendered unserviceable, sufficient aggregate capacity remains for all crewmembers Liferafts shall comply with SOLAS LSA code 1997 Chapter IV or later version Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack; Liferaft Packing and Stowage Each liferaft shall be packed either in:- a rigid container securely stowed on the working deck, in the cockpit or in an open space; or:- 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 MoMu0,1,2 MoMu0,1,2	4.20.1 b) 4.20.1 c) 4.20.2 4.20.2 a) 4.20.3 a) 4.20.3 a) i 4.20.3 a) ii 4.20.3	A sufficient number of liferafts so that in the event of any one liferaft being lost or rendered unserviceable, sufficient aggregate capacity remains for all crewmembers Liferafts shall comply with SOLAS LSA code 1997 Chapter IV or later version Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack; Liferaft Packing and Stowage Each liferaft shall be packed either in:- a rigid container securely stowed on the working deck, in the cockpit or in an open space; or:- 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 On a multihull or on a monohull with moveable ballast the liferaft shall be
MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2	4.20.1 4.20.1 b) 4.20.1 c) 4.20.2 4.20.2 a) 4.20.3 a) i 4.20.3 a) i 4.20.3 a) ii 4.20.3 c)	A sufficient number of liferafts so that in the event of any one liferaft being lost or rendered unserviceable, sufficient aggregate capacity remains for all crewmembers Liferafts shall comply with SOLAS LSA code 1997 Chapter IV or later version Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack; Liferaft Packing and Stowage Each liferaft shall be packed either in:- a rigid container securely stowed on the working deck, in the cockpit or in an open space; or:- 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 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 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2	4.20.1 b) 4.20.1 c) 4.20.2 4.20.2 a) 4.20.3 a) 4.20.3 a) i 4.20.3 a) ii 4.20.3 c) 4.20.3	A sufficient number of liferafts so that in the event of any one liferaft being lost or rendered unserviceable, sufficient aggregate capacity remains for all crewmembers Liferafts shall comply with SOLAS LSA code 1997 Chapter IV or later version Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack; Liferaft Packing and Stowage Each liferaft shall be packed either in:- a rigid container securely stowed on the working deck, in the cockpit or in an open space; or:- 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 On a multihull or on a monohull with moveable ballast the liferaft shall be
MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2	4.20.1 b) 4.20.1 c) 4.20.2 4.20.2 a) 4.20.3 a) 4.20.3 a) i 4.20.3 a) ii 4.20.3 c) 4.20.3 d)	A sufficient number of liferafts so that in the event of any one liferaft being lost or rendered unserviceable, sufficient aggregate capacity remains for all crewmembers Liferafts shall comply with SOLAS LSA code 1997 Chapter IV or later version Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack; Liferaft Packing and Stowage Each liferaft shall be packed either in:- a rigid container securely stowed on the working deck, in the cockpit or in an open space; or:- 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 On a multihull or on a monohull with moveable ballast the liferaft shall be readily deployable whether or not the boat is inverted The end of each liferaft painter should be securely fastened to the boat
MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2	4.20.1 b) 4.20.1 c) 4.20.2 4.20.2 a) 4.20.3 a) i 4.20.3 a) i 4.20.3 a) ii 4.20.3 c) 4.20.3 d) 4.20.3	A sufficient number of liferafts so that in the event of any one liferaft being lost or rendered unserviceable, sufficient aggregate capacity remains for all crewmembers Liferafts shall comply with SOLAS LSA code 1997 Chapter IV or later version Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack; Liferaft Packing and Stowage Each liferaft shall be packed either in:- a rigid container securely stowed on the working deck, in the cockpit or in an open space; or:- 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 On a multihull or on a monohull with moveable ballast the liferaft shall be readily deployable whether or not the boat is inverted The end of each liferaft painter should be securely fastened to the boat Each raft shall be capable of being got to the lifelines or launched within 15
MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2	4.20.1 b) 4.20.1 c) 4.20.2 4.20.2 a) 4.20.3 a) 4.20.3 a) i 4.20.3 a) ii 4.20.3 c) 4.20.3 d)	A sufficient number of liferafts so that in the event of any one liferaft being lost or rendered unserviceable, sufficient aggregate capacity remains for all crewmembers Liferafts shall comply with SOLAS LSA code 1997 Chapter IV or later version Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack; Liferaft Packing and Stowage Each liferaft shall be packed either in:- a rigid container securely stowed on the working deck, in the cockpit or in an open space; or:- 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 On a multihull or on a monohull with moveable ballast the liferaft shall be readily deployable whether or not the boat is inverted The end of each liferaft painter should be securely fastened to the boat Each raft shall be capable of being got to the lifelines or launched within 15 seconds
MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2	4.20.1 b) 4.20.1 c) 4.20.2 4.20.2 a) 4.20.3 a) 4.20.3 a) i 4.20.3 a) ii 4.20.3 c) 4.20.3 d) 4.20.3	A sufficient number of liferafts so that in the event of any one liferaft being lost or rendered unserviceable, sufficient aggregate capacity remains for all crewmembers Liferafts shall comply with SOLAS LSA code 1997 Chapter IV or later version Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack; Liferaft Packing and Stowage Each liferaft shall be packed either in:- a rigid container securely stowed on the working deck, in the cockpit or in an open space; or:- 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 On a multihull or on a monohull with moveable ballast the liferaft shall be readily deployable whether or not the boat is inverted The end of each liferaft painter should be securely fastened to the boat Each raft shall be capable of being got to the lifelines or launched within 15
MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2	4.20.1 b) 4.20.1 c) 4.20.2 4.20.2 a) 4.20.3 4.20.3 a) i 4.20.3 a) ii 4.20.3 c) 4.20.3 d) 4.20.3 d) 4.20.3	A sufficient number of liferafts so that in the event of any one liferaft being lost or rendered unserviceable, sufficient aggregate capacity remains for all crewmembers Liferafts shall comply with SOLAS LSA code 1997 Chapter IV or later version Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack; Liferaft Packing and Stowage Each liferaft shall be packed either in:- a rigid container securely stowed on the working deck, in the cockpit or in an open space; or:- 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 On a multihull or on a monohull with moveable ballast the liferaft shall be readily deployable whether or not the boat is inverted The end of each liferaft painter should be securely fastened to the boat Each raft shall be capable of being got to the lifelines or launched within 15 seconds Spare Number
MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2 MoMu0,1,2	4.20.1 4.20.1 b) 4.20.1 c) 4.20.2 4.20.2 a) 4.20.3 a) 4.20.3 a) i 4.20.3 a) ii 4.20.3 c) 4.20.3 d) 4.20.3 d) 4.20.3 e) 4.20.4 4.20.5	A sufficient number of liferafts so that in the event of any one liferaft being lost or rendered unserviceable, sufficient aggregate capacity remains for all crewmembers Liferafts shall comply with SOLAS LSA code 1997 Chapter IV or later version Minimum Liferaft Equipment A SOLAS liferaft shall contain as a minimum a SOLAS A pack; Liferaft Packing and Stowage Each liferaft shall be packed either in:- a rigid container securely stowed on the working deck, in the cockpit or in an open space; or:- 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 On a multihull or on a monohull with moveable ballast the liferaft shall be readily deployable whether or not the boat is inverted The end of each liferaft painter should be securely fastened to the boat Each raft shall be capable of being got to the lifelines or launched within 15 seconds Spare Number Liferaft Servicing

MoMu0,1,2	4.20.5 a) i	SOLAS liferafts annually
MoMu0,1,2	4.20.5 a) ii	ISO 9650 canister packed liferafts every 3 years
MoMu0,1,2	4.20.5 a) iii	ISO 9650 valise packed liferafts every 3 years except that hired liferafts shall be serviced annually
MoMu0,1,2	4.20.5 a) iv	ISAF liferafts annually
MoMu0,1,2	4.20.5 a) v	ORC liferafts annually
MoMu0,1,2	4.20.5 b)	Servicing certificates (original or a copy) on board
	4.21	Grab Bags
**	4.21 f)	If a grab bag is provided it shall have inherent flotation, at least 0.1 m ² (1 ft ²)
	1.211)	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
MoMu0	4.22.1	A PLB (Personal Locator Beacon) equipped with 406Mhz and 121.5Mhz for
เทอเทนบ	a)	each crew member
MoMu0,1,2	4.22.1	An AIS personal crew overboard beacon for each crew member
141014100,1,2	b)	All Als personal crew overboard beacon for each crew member
MoMu0	4.22.1	A personal unit in addition to the PLB in OSR 4.22.1 b) if the location device
riorido	c)	carried by the boat in accordance with OSR 3.29.07 requires it;
MoMu0,1,2	4.22.1d)	Where possible every PLB shall be registered with the appropriate authority
1101100,1,2	1122114)	associated with the country code in the hexadecimal identification (15 Hex ID)
		of the beacon. A beacon can be registered online with the Cospas-Sarsat IBRD
		if the country does not provide a registration facility and the country has
		allowed direct registration in the IBRD.
	4.22.2	GPS Crew Overboard Position
MoMu0	4.22.2	A GPS capable of recording a crew overboard position, within 10 seconds, and
1 101 140	a)	monitoring that position, and
MoMu0	4.22.2	connected to an emergency button immediately accessible to a helmsman
	b)	which will sound an audible alarm in the accommodation and simultaneously
	-,	send an appropriate signal to the GPS
MoMu0,1,2	4.22.3	a lifebuoy with a self-igniting light, a whistle and a drogue
MoMu0,1,2	4.22.4	In addition to 4.22.3 above, within reach of the helmsman and ready for
		immediate use, a second lifebuoy equipped with:
MoMu0,1,2	4.22.4	a whistle, a drogue, a self-igniting light and
	a)	
MoMu0,1,2	4.22.4	a pole and flag. The pole shall be either permanently extended or be capable
	b)	of being fully automatically extended
MoMu0	4.22.4	Each lifebuoy shall be equipped with a sachet of fluorescein dye
	c)	
MoMu0,1,2	4.22.5	At least one lifebuoy shall depend entirely on permanent buoyancy (e.g. foam)
**	4.22.6	Each inflatable lifebuoy and any automatic device shall be tested and serviced
ata da		at intervals in accordance with its manufacturer's instructions
**	4.22.7	A heaving line, no less than 6 mm (1/4")diameter, 15 - 25 m (50 - 75') long,
M M 0 1 2 2	4 22 0	readily accessible to cockpit
MoMu0,1,2,3	4.22.8	A recovery sling which includes a:
MoMu0,1,2,3	4.22.8	buoyant line of length no less than the shorter of 4 times LH or 36m (120')
MaMun 1 2 2	a) 4 22 9	hugyangy coction (horseshoo) with no loss than 00 N (20#) hugyangy
MoMu0,1,2,3	4.22.8	buoyancy section (horseshoe) with no less than 90 N (20#) buoyancy
MoMu0,1,2,3	b) 4.22.9	minimum strength capable to hoist a crewmember aboard
1101110,1,2,3	4.22.9 C)	minimum suchgur capable to hoist a crewincinber aboard
	4.23	Pyrotechnic and Light Signals
**	4.23	Pyrotechnic signals shall be provided conforming to SOLAS LSA Code Chapter
	5	III Visual Signals and not older than the stamped expiry date (if any) or if no
		222 1.288. Signals and het start the startiped expiry date (ii diff) of ii fio

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	
	1. 1. 1.	

4.25 Cockpit Knife

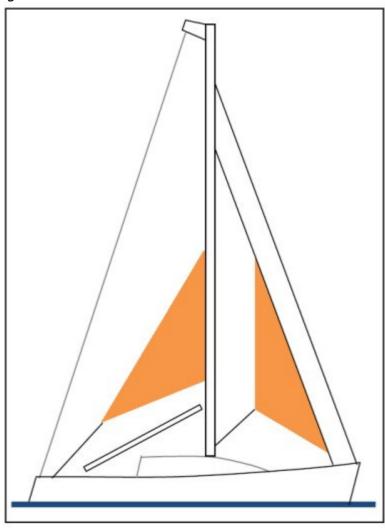
4.25 A strong, sharp knife, sheathed and securely restrained shall be provided readily accessible from the deck or a cockpit.

4.26 Storm & Heavy Weather Sails

4.26.1 Design

**

Figure 3



MoMu1,2		
**	4.26.1 a)	The material of the body of a storm sail purchased after 2013 shall have a highly-visible colour (e.g. dayglo pink, orange or yellow)
**	4.26.1	Aromatic polyamides, carbon and similar fibres shall not be used in a trysail or
	b)	storm jib but HMPE and similar materials are permitted
**	4.26.1	Sheeting positions on deck for each storm and heavy-weather sail
	c)	,
**	4.26.1	Sheeting positions for the trysail independent of the boom
	d)	
**		
	4.26.2	Sail Areas
**	4.26.2	The maximum area of storm and heavy weather sails shall be lesser of the
		areas below or as specified by the boat designer or sailmaker
MoMu0,1,2,3	4.26.2	A heavy-weather jib (or heavy-weather sail in a boat with no
	a)	forestay) with:
**	4.26.2	area of 13.5% height of the foretriangle (IG) squared
	a) i	
	•	
**	4.26.2	readily available means, independent of a luff groove, to attach to the stay

	a) ii	
MoMu0,1,2	4.26.2 b)	A storm jib with:
MoMu0,1,2	4.26.2 b) i	area of 5% height of the foretriangle (IG) squared
MoMu0,1,2	4.26.2 b) ii	maximum luff length 65% of IG
MoMu0,1,2	4.26.2 b) iii	permanently attached means, independent of a luff groove, to attach to the
**	4.26.2 c)	stay For sails made after 2011: Storm and heavy weather jib areas calculated as: (0.255×1)
MoMu0,1,2	4.26.2 d)	A storm trysail with:
MoMu0,1,2	4.26.2 d) i	area not greater than 17.5% mainsail hoist (P) x mainsail foot length (E)
MoMu0,1,2	4.26.2 d) ii	For sails made after 2011:The storm trysail are calculated as (0.5 x leech) length x shortest distance between tack point and leech)
MoMu0,1,2	4.26.2 d) iii	no headboard
MoMu0,1,2	4.26.2 d) iv	no battens
MoMu0,1,2	4.26.2 d) v	sail number and letters on both sides, as large as practicable
MoMu0,1,2 ■	4.26.2 d) vi 4.26.3	in the case of a boat with an in-mast furling mainsail, the storm trysail shall be capable of being set while the mainsail is furled Sail Inventory
MoMu1,2	4.26.3 a) i	either a storm trysail as defined in OSR 4.26.2 d), or mainsail reefing to reduce the luff by at least 50% (or rotating wing mast if suitable)
MoMu0	4.27 4.28	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) Spare Number
	4.29	Deck Bags
	4.30	Emergency Pumps
	4.30.1 4.30.1	either fixed or portable pump to remove ingress water from any compartment. This pump shall:
	a) 4.30.1	have a minimum rated capacity of 200 l/min
	b) 4.30.1	be operated by battery, main engine powered or a separate engine
	c) 4.30.1	if portable electric-powered, power cables to be terminated with alligator clips
	d) 4.30.1 e)	have sufficient hose to discharge directly overboard or into the cockpit.
	4.30.1	A combination of permanently installed and portable pumps may be combined
	f)	to meet the above requirement. SECTION 5 - PERSONAL EQUIPMENT
**	5.01	Each crew member shall have: Lifejacket
**	5.01.1	A lifejacket which shall:
**	5.01.1	if manufactured before 2012 comply with ISO 12402 - 3 (Level 150) or
**	a)i) 5.01.1	equivalent, including EN 396 or UL 1180 and: if inflatable have a gas inflation system
**	a)i) 5.01.1 a)i)	have crotch/thigh straps (ride up prevention system (RUPS))
MoMu0,1,2	5.01.1	have an integral safety harness in compliance with OSR 5.02
**	a)i) 5.01.1	if manufactured after 2011 comply with ISO 12402-3 (Level 150) and be fitted

	a) ii	with a whistle, lifting loop, reflective material automatic/manual gas inflation system
**	5.01.1	crotch/thigh straps (ride up prevention system (RUPS))
MoMu0,1,2	a) ii 5.01.1 a) ii	an integral safety harness in compliance with OSR 5.02
MoMu0,1,2,3	5.01.1 b)	have an emergency position indicating light in accordance with either ISO 12402-8 or SOLAS LSA code 2.2.3
**	5.01.1	be clearly marked with the boat's or wearer's name
MoMu0,1,2,3	c) 5.01.1 d)	have a sprayhood in accordance with ISO 12402-8
MoMu0	5.01.1 e)	have a PLB unit (as with other types of EPIRB, should be properly registered with the appropriate authority)
**	5.01.1 f)	if inflatable, regulalrly checked for air retention
MoMu0,1,2,3	5.01.2	A boat shall carry at least one gas inflatable lifejacket spare cylinder and, if appropriate, spare activation head for each type of lifejacket on board.
MoMu0,1,2	5.01.3	A boat shall carry at least one spare lifejacket as required in OSR 5.01.1, (a spare PLB described in 5.01.1(e) is not required)
**	5.01.4	The person in charge shall personally check each lifejacket at least once annually.
	5.02	Safety Harness and Tethers
MoMu0,1,2,3	5.02.1	A harness that complies with ISO 12401 or equivalent
MoMu0,1,2,3	5.02.2	A tether that shall:
MoMu0,1,2,3	5.02.2 a)	comply with ISO 12401 or equivalent
MoMu0,1,2,3	5.02.2 b)	not exceed 2 m (6'-6") including the length of the hooks
MoMu0,1,2,3	5.02.2 c)	have self-closing hooks
MoMu0,1,2,3	5.02.2 d)	have overload indicator flag embedded in the stitching
MoMu0,1,2,3	5.02.2 e)	be manufactured after 2000
MoMu0,1,2,3	5.02.3	All of the crew shall have either:
MoMu0,1,2,3	a)	a tether not exceeding 1m(3'3") including the length of the hooks, or
MoMu0,1,2,3	b)	an intermediate self-closing hook on a 2 m (6'-6") tether
MoMu0	5.02.4	a boat shall carry spare harnesses and tethers as required in OSR 5.02 above sufficient for at least 10% of the crewmembers (minimum one unit)
MoMu0,1,2,3	5.02.5 5.03	A tether which has been overloaded shall be replaced Personal Location Lights
MoMu0	5.03	Two packs of miniflares or two personal location lights (either SOLAS or strobe): one to be attached to, or carried on, the person when on deck at night
	5.04	Foul Weather Suits
MoMu0	5.04 5.05	A foul weather suit with hood Knife
MoMu0	5.05 5.06	A knife, to be worn on the person at all times Flashlight
MoMu0	5.06 5.07	A buoyant watertight flashlight Survival Equipment
MoMu0	5.07	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);
NA NA O	5.08	Diving Equipment
MoMu0	5.08	The boat shall have at least two diving suits each to cover the entire body and including gloves, fins and portable air supplies
		SECTION 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	6.01.2	At least 30% but not fewer than two members of a crew, including the Person
1101140,1,2	0.01.2	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
1101100,1,2	0.01.1	gained at a World Sailing / ISAF Approved Offshore Personal Survival Training
		course shall be accepted by a race organizing authority as evidence of
		compliance with Special Regulation 6.01. See Appendix G - Model Training
		Course, for further details.
	6.02	Training Topics
	6.02.1	Giving Assistance to Other Craft
	6.02.2	Personal Safety Gear, theory and practice
	6.02.3	Care and Maintenance of Safety Gear
	6.02.4	Fire Precautions and Firefighting, theory and practical
	6.02.5	Crew Overboard Identification and Recovery
	6.02.6	Hypothermia, Cold Shock and Drowning
	6.02.7	Crew Health
	6.02.8	Marine Weather
	6.02.9	Heavy Weather
	6.02.10	Storm Sails
	6.02.11	Damage Control
	6.02.12	Search and Rescue Organization
	6.02.13	Pyrotechnics and Signalling Gear, theory and practical
	6.02.14	Emergency Communications, theory and practical
	6.02.15	Liferafts and Abandon Ship, theory and practical
	6.03 6.04	Spare Number Routing Training On Board
**	6.0 4 6.04	Routine Training On-Board At least annually the crews shall practice the drills for:
**	6.04 a)	Crew-Overboard Recovery
**	6.04 b)	Abandonment of vessel
	6.05	Medical Training
MoMu0	6.05.2	In addition to 6.05.1 another crewmember shall have a valid first aid certificate
	0.00	completed within the last five years meeting:
MoMu0,1,2	6.05.2	A certificate listed on the World Sailing website www.sailing.org/specialregs of
, ,	a)	MNA recognised courses
MoMu0,1,2	6.05.2	STCW First Aid Training complying with A-VI/1-3 - Elementary First Aid or
	b)	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
		-