Extract for Race Category 0 Monohulls 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.

ITU International Telecommunications Union

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

but not varied in weight while a boat is racing

Multihull A boat with more than one hull

Open Cockpit A cockpit that is not a Contained Cockpit.

ORC Offshore Racing Congress (formerly Offshore Racing Council)

OSR Offshore Special Regulation(s)

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

Installed and may not be removed for or during racing.

PLB Personal Locator Beacon

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

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

SAR Search and Rescue

SART Search and Rescue Transponder

Securely Held strongly in place by a method (e.g. rope lashings, wing-nuts)

Fastened which will safely retain the fastened object in severe conditions

including a 1909 capsize and allows for the item to be removed and

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

replaced during racing

SOLAS Safety of Life at Sea Convention

SSS The Safety and Stability Screening numeral

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

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

weight while a boat is racing

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

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

World Sailing formerly the International Sailing Federation or ISAF

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

permissive.

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

SECTION 2 - APPLICATION & GENERAL REQUIREMENTS

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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

2.02

MoMu0 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

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
	2.03	entry may be rejected or she will be subject to protest
	2.04	, , ,
**		General Requirements
**	2.04.1	All equipment required by OSR shall:
**	a)	function properly
	b)	be regularly checked, cleaned and serviced
**	c)	if it has an expiry date, it will not have exceeded its expiry date whilst racing
**	d)	when not in use be stowed in conditions in which deterioration is minimised
**	e)	be readily accessible
**	f)	be of a type, size and capacity suitable and adequate for the intended use and
		size of the boat.
**	2.04.2	Heavy items shall be permanently installed or securely fastened
	FRUCTUR	AL FEATURES, STABILITY, FIXED EQUIPMENT
**		A boat shall be/have:
	3.01	Strength of Build and Rig
**	3.01.1	Properly rigged, fully seaworthy and shall meet the OSR
**	3.01.2	Equipped with shrouds and at least one forestay that shall remain connected to
		the mast and the boat while racing
	3.02	Watertight and Structural Integrity of a Boat
**	3.02.1	Essentially watertight and all openings shall be capable of being immediately
		secured. Centreboard, daggerboard trunks and the like shall not open into the
		interior of a hull except via a watertight maintenance hatch with the opening
		entirely above the Waterline
Mo0,1,2,3	3.02.2	Effective 1 January 2021: Structural Inspection - Consult the owner's manual
		for any instructions for keel bolt checking and re-tightening. The following
		inspection to be conducted by a qualified person externally with the boat out of
		the water. Check that there are no visible stress cracks particularly around the
		keel, hull/keel attachment, hull appendages and other stress points, inside the
		hull, backing plates, bolting arrangements and keel floors. (See Appendix L –
		Model Keel and Rudder Inspection Procedure)
Mo0,1,2,3	3.02.3	Effective 1 January 2021: Evidence of a structural inspection in accordance
	0.02.0	with 3.02.2 within 24 months before the start of the race or after a grounding
		whichever is the later
Mo0,1,2,3	3.02.4	Effective 1 January 2021: Inspection after Grounding – an appropriately
1.00/2/2/0	3.02.	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:
1100/1/2	a) i)	be designed, built and maintained in accordance with the requirements of ISO
	ω, ι,	12215 Category A
	a) ii)	have a World Sailing / ISAF building plan review certificate issued from a
	a)	notified body recognized by World Sailing, unless higher classification has been
		obtained from a Classification Society recognised by World Sailing. World
		Sailing will publish a list of waived plan review certificates.
Mo0,1,2	b)	24 m (78'-9") LH and greater shall be designed, built and maintained in
1400,1,2	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
11100,1,2	c)	<u> </u>
		boat is built in accordance with the reviewed plans. In cases when a builder no
		longer exists, a race organizer or class rules may accept a signed statement by
		a naval architect or other person familiar with the requirements of above in lieu
Ma0 1 2	۹)	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, 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 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 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
	3.04	Stability - Monohulls
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
		* The latest effective version of ISO 12217-2 should be used unless the boat was already designed to a previous version
Mo0,1,2,3	3.04.2	Where compliance in accordance with 3.04.1 cannot be demonstrated, able to demonstrate either:
Mo0,1,2	a)	i 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
Extract Mo0	b)	Stability Index in ORC Rating System of not less than 120; or
Extract 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 intervention from the crew and independent of the condition of the rig
	3.06	Exits - Monohulls
Mo0,1,2,3,4	3.06.1	At least two exits if 8.5 m (28') LH and greater and with a Primary Launch after 1994. One exit shall be located forward of the foremost mast except where structural features prevent its installation
Mo0,1,2,3,4	3.06.2	The following minimum clear hatch openings if First Launch after 2013:
Mo0,1,2,3,4	a)	a circular hatch with diameter 450 mm (18"); or
Mo0,1,2,3,4	b)	any other shape with minimum dimension of 380 mm (15") and minimum area of 0.18 m^2 (1.9 ft ²) (see figure 1)
Mo0,1,2,3,4		- 380

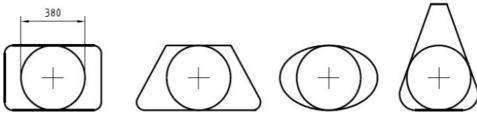


Figure 1 - Measurements of Minimum Clear Opening 3.08 Hatches & Companionways

**	3.08.1	Hatch covers forward of the maximum beam station shall not open toward the interior of the boat, except hatches in the side of a coachroof or ports having an area of less than 0.071 m^2 (110 in^2)
**	3.08.2	A hatch, including a hatch over a locker shall be:
**	a)	permanently attached and capable of being firmly shut immediately and
	/	remaining firmly shut in a 180° capsize
Mo0,1,2,3,4	b)	above the water when the boat is heeled 90°
Mo0,1,2,3,4	- /	A boat may have a maximum of two hatches on each side of centerline that do
		not conform to the requirement in b), provided that the opening of each is less
		than 0.071 ² m (110 in ²)
	3.08.3	Hatches not conforming with 3.08.1 and 3.08.2 shall be clearly labelled and
		used in accordance with the following instruction "NOT TO BE OPENED AT
1.1.		SEA"
**	3.08.4	Companionway hatches:
**	a)	fitted with a strong securing arrangement which shall be operable from the
**	L)	exterior and interior even when the boat is inverted
**	b) :	blocking devices:
**	i ii	capable of being retained in position with the hatch open or shut secured to the boat (e.g. by lanyard) for the duration of the race
**	iii	permit exit in the event of inversion
Mo0,1,2,3,4	3.08.5	if a monohull with Open Cockpit(s):
Mo0,1,2,3,4	3.08.5	a companionway sill that does not extend below the local sheerline; or
	a)	
Mo0,1,2,3,4	b)	a companionway in full compliance with ISO 11812 category A
Mo0,1,2,3,4	3.08.6	if a monohull with Contained Cockpit(s) where the companionway extends
		below the local sheerline, panels capable of blocking the companionway up to
		the level of the local sheerline whilst giving access to the interior.
	3.09	Cockpits
**	3.09.1	Cockpits that self-drain quickly by gravity at all angles of heel and are
**	2 00 2	permanently incorporated as an integral part of the boat
ጥ ጥ	3.09.2	A cockpit sole at least 2% LWL above the waterline (or in IMS boats with First
**	3.09.3	Launch before 2003, at least 2% L above the waterline) A bow, lateral, central or stern well is a cockpit for the purposes of OSR 3.09
**	3.09.3 3.09.4	Cockpit Volume
**	3.03.4	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	•	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
	2 00 E	cockpit volume
**	3.09.5	Cockpit Drains Cockpit drain cross section area of unobstructed openings (after allowance for
		screens if fitted) shall be at least that of:
**	a)	2 x 25 mm (1") diameter or equivalent for a boat less than 8.5 m (28') LH
**	b)	4 x 20 mm (3/4") diameter or equivalent for a boat 8.5 m (28') LH or greater
	3.10	Sea Cocks or Valves
**	3.10	Permanently installed sea cocks or valves on all through-hull openings below
		the waterline except for integral deck scuppers and instrument through-hulls
	3.11	Sheet Winches
**	3.11	Sheet winches mounted in such a way that an operator is not required to be
		substantially below deck
ale ale	3.12	Mast Step
**	3.12	The heel of a keel stepped mast securely fastened to the mast step or
	2 12	adjoining structure
MonMun 1 2 2	3.13 3.13.1	Watertight Bulkheads Either a watertight "crash" bulkhead within 15% of LH from the bow and abaft
Mo0Mu0,1,2,3, 4	2.12.1	the forward end of LWL, or permanently installed closed-cell foam buoyancy
•		the forward that of Live, or permanently installed dosed tell roam buoyancy

MaOM::0 1 2 2	2 12 2	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
Mo0	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 watertight compartment terminated by a hull section bulkhead, except that deck access to extreme end "crash" compartments is not required
Mo0	3.13.5	An access hatch in every required watertight bulkhead (except a "crash" bulkhead). The access hatch shall have means of watertight closure permanently attached to the main panel, or lid, or cover of the hatch. The closure shall not require tools to operate
	3.14	Pulpits, Stanchions, Lifelines
**	3.14.1	The perimeter of the deck surrounded by system of lifelines and pulpits as follows:
**	a)	Continuous lifelines fixed only at (or near) the bow and stern. However a gate on each side of a boat is permitted. Except at its end fittings and at gates, the movement of a lifeline in a fore-and-aft direction shall not be constrained. Temporary sleeving shall not modify tension in the lifeline.
**	b)	Minimum heights of lifelines and pulpit rails above the working deck and vertical openings:
**	i	upper: 600 mm (24")
**	ii	intermediate: 230 mm (9")
**	iii	vertical opening: no greater than 380 mm (15") except that on a boat with a Primary Launch before 1993 where it shall be no greater than 560 mm (22")
**	c)	Lifelines permanently supported at intervals of not more than 2.2 m (7'-2 1/2") and shall not pass outboard of supporting stanchions
**	d)	Pulpit and stanchion bases permanently installed with pulpits and stanchions mechanically retained in their bases
**	e)	The outside of pulpit and stanchion base tubes no further inboard from the edge of the working deck than 5% of maximum beam or 150 mm (6"), whichever is greater, nor further outboard than the edge of the working deck
**	f)	Stanchions straight and vertical except that:
**	i	within the first 50 mm (2") from the deck, stanchions shall not be displaced horizontally from the point at which they emerge from the deck or stanchion base by more than 10 mm (3/8")
**	ii	stanchions may be angled to not more than 10° from vertical at any point above 50 mm (2") from the deck
**	g)	A bow pulpit may be open provided the opening between the pulpit and any part of the boat does not exceed 360 mm (14")
**		0/4 / 0

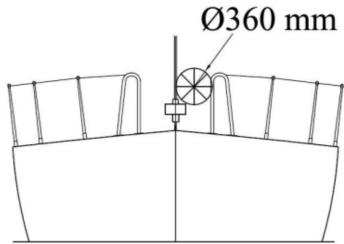


Figure 2 - Diagram Showing Pulpit Opening

**	h)	Lifelines may terminate at or pass through adequately braced stanchions set
		inside and overlapping the bow pulpit
**	i)	When a deflecting force of 4 kg (8.8 #) is applied to a lifeline at the mid-point

i) When a deflecting force of 4 kg (8.8 #) is applied to a lifeline at the mid-point

		of the langest span by	otwoon supports that are aft	of the mast, the deflection
		shall not exceed:	etween supports that are aft	or the mast, the deflection
**	i	50 mm (2") for an up	per or single lifeline	
**	ii	120 mm (4 ¾") for all		
	3.14.3	Spare number		
	3.14.4	Spare number		
	3,14.5	Spare number		
Ma0 1 2 2	3.14.6	Lifeline Specification Lifelines of stranded s		
Mo0,1,2,3	3.14.6 a)	Lifelines of Stranded s	stairiless steel wire	
**	3.14.6	The minimum diameter	er is specified in table 8 belo	w
	b)		·	
**	3.14.6		s shall be uncoated and used	
	c)		mporary sleeving may be fitt	ed provided it is regularly
**	3.14.6	removed for inspectio		e lifelines provided the gap it
•	d)		ed 100 mm (4"). This lanyard	
**	3.14.6		` ,	all have a breaking strength
	e)	no less than the lifeling		3 3
	LH		HMPE rope (Single braid)	HMPE Core (Braid on
		diameter	min. lifeline diameter	braid) min. lifeline
	under	3mm (1/8")	4mm (5/32")	diameter 4mm (5/32")
	8.5m (28		HIIII (3/32)	HIIII (3/32)
	8.5m -	4mm (5/32")	5mm (3/16")	5mm (3/16")
	13m		,	,
	over 13r	n 5mm (3/16")	5mm (3/16")	5mm (3/16")
	(42' 8") 3.17	Too Doll on Foot C	·	
Mo0,1,2,3	3.17.1	Toe Rail or Foot - S Permanently installed	<u>-</u>	25 mm (1"), located as close
1100,1,2,3	3.17.1	-	stanchion bases, around the	• • •
		mast	,	
Mo0,1,2,3	3.17.2		,	high is permitted in lieu of a
	2.40		n Primary Launch before 198	4.
MoMu0,1,2	3.18 3.18.1	Toilet Permanently installed	toilet	
1101140,1,2	3.10.1 3.19	Bunks	tolict	
MoMu0	3.19.1		bunk for each crewmember	
	3.20	Cooking Facilities		
MoMu0,1,2,3	3.20	-	cooking stove, capable of be	eing operated safely at sea,
	2 21	with fuel shutoff cont		
	3.21 3.21.1	Drinking Water Tar Drinking Water Tar	nks & Drinking Water	
MoMu0	3.21.1			nks dividing the water supply
	a)	into at least three cor		into arrianing the trace. Supply
	3.21.2	Drinking Water	•	
MoMu0	3.21.2		y include watermakers and t	
	a)		•	JS Gal) of drinking water per
	3.21.3	Emergency Drinkin	e likely duration of the voyag	je
MoMu0	3.21.3		ower driven watermaker, at I	least 1 I (0.26 US Gal) ner
1101140	b)	-	east two separate containers	` , .
	•	expected duration of	•	•
MoMu0	3.21.3		watermaker is on board, at	
	c)			ners shall be provided for the
MoMu0	3.21.3	expected duration of	tne voyage ided to collect rainwater for	drinking nurnoses including
Homu	d)	when dismasted	idea to confect rainwater for	armining purposes including
	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
Mo0,1,2	3.23.1	two permanently installed manual bilge pumps, one operable from above, the
1100,1,2	b)	other from below deck
**	•	
1-1	3.23.2	All required permanently installed bilge pumps shall be operable with all cockpit
		seats, hatches and companionways shut and with permanently installed
		discharge pipe(s) of sufficient capacity
**	3.23.3	Bilge pumps shall not be connected to cockpit drains and shall not discharge
		into a Closed Cockpit
**	3.23.4	Bilge pumps shall be readily accessible for maintenance and for clearing out
		debris
**	3.23.5	All removable bilge pump handles retained by a lanyard
	3.24	Compass
MoMu0,1,2,3	3.24 a)	Marine magnetic compass capable of being used as a steering compass:
MoMu0,1,2,3,4	3.24 b)	Permanently installed marine magnetic steering compass, independent of any
1101100/1/2/3/1	312 1 5)	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
1101100,1,2,3	3.25	Halyards.
**		•
_	3.25 a)	A minimum of two halyards, each capable of hoisting a sail, on each mast
MoMu0,1,2,3	3.25 b)	No halyard shall be locked, lashed or otherwise secured to the mast in a way
		that requires a person to go aloft in order to lower a sail in a controlled
		manner, except for a headsail in use with a furling device.
	3.26	Bow Fairlead
Mo0	3.26	Bow fairlead, closed or closable and a cleat or securing arrangement, suitable
		for towing, permanently installed
	3.27	Navigation Lights
	3.27.1	that conform to the International Regulations for Preventing Collisions at Sea
	5.27.1	that comorn to the international Regulations for Freventing Comsions at Sea
	3.27.1	
	3.27.1	(Part C and Technical Annex I) and shall be exhibited as required by those
**		(Part C and Technical Annex I) and shall be exhibited as required by those regulations.
**	3.27.2	(Part C and Technical Annex I) and shall be exhibited as required by those regulations. mounted above sheerline and so that they will not be masked by sails or the
	3.27.2	(Part C and Technical Annex I) and shall be exhibited as required by those regulations. mounted above sheerline and so that they will not be masked by sails or the heeling of the boat
** MoMu0,1,2,3		(Part C and Technical Annex I) and shall be exhibited as required by those regulations. mounted above sheerline and so that they will not be masked by sails or the heeling of the boat reserve lights having the same specifications as above, and that can be
MoMu0,1,2,3	3.27.2 3.27.3	(Part C and Technical Annex I) and shall be exhibited as required by those regulations. mounted above sheerline and so that they will not be masked by sails or the heeling of the boat reserve lights having the same specifications as above, and that can be powered independently
	3.27.2 3.27.3 3.27.4	(Part C and Technical Annex I) and shall be exhibited as required by those regulations. mounted above sheerline and so that they will not be masked by sails or the heeling of the boat reserve lights having the same specifications as above, and that can be powered independently spare bulbs (not required for LED)
MoMu0,1,2,3	3.27.2 3.27.3 3.27.4 3.28	(Part C and Technical Annex I) and shall be exhibited as required by those regulations. mounted above sheerline and so that they will not be masked by sails or the heeling of the boat reserve lights having the same specifications as above, and that can be powered independently spare bulbs (not required for LED) Engines, Generators, Fuel
MoMu0,1,2,3 **	3.27.2 3.27.3 3.27.4 3.28 3.28.1	(Part C and Technical Annex I) and shall be exhibited as required by those regulations. mounted above sheerline and so that they will not be masked by sails or the heeling of the boat reserve lights having the same specifications as above, and that can be powered independently spare bulbs (not required for LED) Engines, Generators, Fuel Propulsion Engines
MoMu0,1,2,3	3.27.2 3.27.3 3.27.4 3.28 3.28.1 3.28.1	(Part C and Technical Annex I) and shall be exhibited as required by those regulations. mounted above sheerline and so that they will not be masked by sails or the heeling of the boat reserve lights having the same specifications as above, and that can be powered independently spare bulbs (not required for LED) Engines, Generators, Fuel Propulsion Engines engines and associated systems installed in accordance with their
MoMu0,1,2,3 **	3.27.2 3.27.3 3.27.4 3.28 3.28.1	(Part C and Technical Annex I) and shall be exhibited as required by those regulations. mounted above sheerline and so that they will not be masked by sails or the heeling of the boat reserve lights having the same specifications as above, and that can be powered independently spare bulbs (not required for LED) Engines, Generators, Fuel Propulsion Engines engines and associated systems installed in accordance with their manufacturers' guidelines and suitable for the size and intended use of the
MoMu0,1,2,3 ** **	3.27.2 3.27.3 3.27.4 3.28 3.28.1 3.28.1 a)	(Part C and Technical Annex I) and shall be exhibited as required by those regulations. mounted above sheerline and so that they will not be masked by sails or the heeling of the boat reserve lights having the same specifications as above, and that can be powered independently spare bulbs (not required for LED) Engines, Generators, Fuel Propulsion Engines engines and associated systems installed in accordance with their manufacturers' guidelines and suitable for the size and intended use of the boat
MoMu0,1,2,3 **	3.27.2 3.27.3 3.27.4 3.28 3.28.1 3.28.1 a) 3.28.1	(Part C and Technical Annex I) and shall be exhibited as required by those regulations. mounted above sheerline and so that they will not be masked by sails or the heeling of the boat reserve lights having the same specifications as above, and that can be powered independently spare bulbs (not required for LED) Engines, Generators, Fuel 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 ** ** MoMu0,1,2,3	3.27.2 3.27.3 3.27.4 3.28 3.28.1 a) 3.28.1 b)	(Part C and Technical Annex I) and shall be exhibited as required by those regulations. mounted above sheerline and so that they will not be masked by sails or the heeling of the boat reserve lights having the same specifications as above, and that can be powered independently spare bulbs (not required for LED) Engines, Generators, Fuel 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)
MoMu0,1,2,3 ** **	3.27.2 3.27.3 3.27.4 3.28 3.28.1 3.28.1 a) 3.28.1	(Part C and Technical Annex I) and shall be exhibited as required by those regulations. mounted above sheerline and so that they will not be masked by sails or the heeling of the boat reserve lights having the same specifications as above, and that can be powered independently spare bulbs (not required for LED) Engines, Generators, Fuel 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 ** ** MoMu0,1,2,3	3.27.2 3.27.3 3.27.4 3.28 3.28.1 a) 3.28.1 b)	(Part C and Technical Annex I) and shall be exhibited as required by those regulations. mounted above sheerline and so that they will not be masked by sails or the heeling of the boat reserve lights having the same specifications as above, and that can be powered independently spare bulbs (not required for LED) Engines, Generators, Fuel 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)
MoMu0,1,2,3 ** ** MoMu0,1,2,3	3.27.2 3.27.3 3.27.4 3.28 3.28.1 3.28.1 a) 3.28.1 b) 3.28.1	(Part C and Technical Annex I) and shall be exhibited as required by those regulations. mounted above sheerline and so that they will not be masked by sails or the heeling of the boat reserve lights having the same specifications as above, and that can be powered independently spare bulbs (not required for LED) Engines, Generators, Fuel 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)
MoMu0,1,2,3 ** ** MoMu0,1,2,3	3.27.2 3.27.3 3.27.4 3.28 3.28.1 3.28.1 a) 3.28.1 b) 3.28.1 c)	(Part C and Technical Annex I) and shall be exhibited as required by those regulations. mounted above sheerline and so that they will not be masked by sails or the heeling of the boat reserve lights having the same specifications as above, and that can be powered independently spare bulbs (not required for LED) Engines, Generators, Fuel 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
MoMu0,1,2,3 ** ** MoMu0,1,2,3	3.27.2 3.27.3 3.27.4 3.28 3.28.1 3.28.1 a) 3.28.1 b) 3.28.1 c) 3.28.1	(Part C and Technical Annex I) and shall be exhibited as required by those regulations. mounted above sheerline and so that they will not be masked by sails or the heeling of the boat reserve lights having the same specifications as above, and that can be powered independently spare bulbs (not required for LED) Engines, Generators, Fuel 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
MoMu0,1,2,3 ** ** MoMu0,1,2,3	3.27.2 3.27.3 3.27.4 3.28 3.28.1 a) 3.28.1 b) 3.28.1 c) 3.28.1 d)	(Part C and Technical Annex I) and shall be exhibited as required by those regulations. mounted above sheerline and so that they will not be masked by sails or the heeling of the boat reserve lights having the same specifications as above, and that can be powered independently spare bulbs (not required for LED) Engines, Generators, Fuel 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
MoMu0,1,2,3 ** ** MoMu0,1,2,3	3.27.2 3.27.3 3.27.4 3.28 3.28.1 a) 3.28.1 b) 3.28.1 c) 3.28.1 d) 3.28.1	(Part C and Technical Annex I) and shall be exhibited as required by those regulations. mounted above sheerline and so that they will not be masked by sails or the heeling of the boat reserve lights having the same specifications as above, and that can be powered independently spare bulbs (not required for LED) Engines, Generators, Fuel 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
MoMu0,1,2,3 ** ** MoMu0,1,2,3	3.27.2 3.27.3 3.27.4 3.28 3.28.1 a) 3.28.1 b) 3.28.1 c) 3.28.1 d)	(Part C and Technical Annex I) and shall be exhibited as required by those regulations. mounted above sheerline and so that they will not be masked by sails or the heeling of the boat reserve lights having the same specifications as above, and that can be powered independently spare bulbs (not required for LED) Engines, Generators, Fuel 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
MoMu0,1,2,3 ** ** MoMu0,1,2,3	3.27.2 3.27.3 3.27.4 3.28 3.28.1 3.28.1 b) 3.28.1 c) 3.28.1 d) 3.28.1 e)	(Part C and Technical Annex I) and shall be exhibited as required by those regulations. mounted above sheerline and so that they will not be masked by sails or the heeling of the boat reserve lights having the same specifications as above, and that can be powered independently spare bulbs (not required for LED) Engines, Generators, Fuel 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 ** ** MoMu0,1,2,3	3.27.2 3.27.3 3.27.4 3.28 3.28.1 3.28.1 b) 3.28.1 c) 3.28.1 d) 3.28.1 e) 3.28.2	(Part C and Technical Annex I) and shall be exhibited as required by those regulations. mounted above sheerline and so that they will not be masked by sails or the heeling of the boat reserve lights having the same specifications as above, and that can be powered independently spare bulbs (not required for LED) Engines, Generators, Fuel 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
MoMu0,1,2,3 ** ** MoMu0,1,2,3 Mo0,1,2Mu0 ** **	3.27.2 3.27.3 3.27.4 3.28 3.28.1 3.28.1 b) 3.28.1 c) 3.28.1 d) 3.28.1 e)	(Part C and Technical Annex I) and shall be exhibited as required by those regulations. mounted above sheerline and so that they will not be masked by sails or the heeling of the boat reserve lights having the same specifications as above, and that can be powered independently spare bulbs (not required for LED) Engines, Generators, Fuel 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
MoMu0,1,2,3 ** ** MoMu0,1,2,3 Mo0,1,2Mu0 ** **	3.27.2 3.27.3 3.27.4 3.28 3.28.1 3.28.1 a) 3.28.1 c) 3.28.1 d) 3.28.1 e) 3.28.2	(Part C and Technical Annex I) and shall be exhibited as required by those regulations. mounted above sheerline and so that they will not be masked by sails or the heeling of the boat reserve lights having the same specifications as above, and that can be powered independently spare bulbs (not required for LED) Engines, Generators, Fuel 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 ** MoMu0,1,2,3 Mo0,1,2Mu0 ** **	3.27.2 3.27.3 3.27.4 3.28 3.28.1 3.28.1 a) 3.28.1 b) 3.28.1 c) 3.28.1 d) 3.28.2 3.28.2	(Part C and Technical Annex I) and shall be exhibited as required by those regulations. mounted above sheerline and so that they will not be masked by sails or the heeling of the boat reserve lights having the same specifications as above, and that can be powered independently spare bulbs (not required for LED) Engines, Generators, Fuel 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
MoMu0,1,2,3 ** MoMu0,1,2,3 Mo0,1,2Mu0 ** **	3.27.2 3.27.3 3.27.4 3.28 3.28.1 3.28.1 a) 3.28.1 b) 3.28.1 c) 3.28.1 d) 3.28.2 3.28.2	(Part C and Technical Annex I) and shall be exhibited as required by those regulations. mounted above sheerline and so that they will not be masked by sails or the heeling of the boat reserve lights having the same specifications as above, and that can be powered independently spare bulbs (not required for LED) Engines, Generators, Fuel 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
MoMu0,1,2,3 ** MoMu0,1,2,3 Mo0,1,2Mu0 ** **	3.27.2 3.27.3 3.27.4 3.28 3.28.1 3.28.1 a) 3.28.1 b) 3.28.1 c) 3.28.1 d) 3.28.2 3.28.2	(Part C and Technical Annex I) and shall be exhibited as required by those regulations. mounted above sheerline and so that they will not be masked by sails or the heeling of the boat reserve lights having the same specifications as above, and that can be powered independently spare bulbs (not required for LED) Engines, Generators, Fuel 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 VLWL in metres) or (V 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 ** ** MoMu0,1,2,3 Mo0,1,2Mu0 ** **	3.27.2 3.27.3 3.27.4 3.28 3.28.1 3.28.1 a) 3.28.1 b) 3.28.1 c) 3.28.1 d) 3.28.2 3.28.2	(Part C and Technical Annex I) and shall be exhibited as required by those regulations. mounted above sheerline and so that they will not be masked by sails or the heeling of the boat reserve lights having the same specifications as above, and that can be powered independently spare bulbs (not required for LED) Engines, Generators, Fuel 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

_		
	b)	charging requirements for the duration of the race and to motor at the above
		minimum speed for at least 5 hours
_	3.28.4	Battery Systems
MoMu0,1,2,3	3.28.4	a 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
		minimum speed for at least 5 hours
_	3.29	Communications Equipment, GPS, Radar, AIS
MoMu0,1,2,3	3.29.1	a marine radio transceiver with an emergency antenna when the regular
		antenna depends upon the mast
MoMu0,1,2,3	3.29.2	if the marine radio transceiver is a VHF:
MoMu0,1,2,3	3.29.2	a minimum rated output power of 25 W
	a)	
MoMu0,1,2	3.29.2	a masthead antenna not less than 38 cm (15") in length and co-axial feeder
	b)	cable with not more than 40% power loss
MoMu1,2,3	3.29.2	be DSC capable if installed after 2015
	c)	
MoMu1,2,3	3.29.2	DSC capable VHF transceivers shall be programmed with an assigned MMSI
1101141,2,3	d)	(unique to the boat), be connected to a GPS receiver and be capable of making
	u)	distress alert calls as well as sending and receiving a DSC position report with
		another DSC equipped station
MoMu0	3.29.2	a marine VHF DSC radio covering all international and US marine channels and
Mondo	e)	meeting ITU class D
MoMu0	3.29.3	at least two hand-held satellite telephones, watertight or with waterproof
Monuo	a)	covers and internal batteries. When not in use each to be stowed in a grab bag
	a)	(see OSR 4.21)
MoMu0	3.29.4	at least two hand-held marine VHF transceivers each with min 5 W output
เทอเทนบ	3.23.7	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,
	3.29.0	capable of receiving weather bulletins
MoMu0	3.29.7	, ,
เขอเขอ	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
MaMero	2 20 0	crew member has an appropriate personal unit (see OSR 4.22.1);
MoMu0	3.29.9	a Standard-C satellite terminal (GMDSS) shall be permanently installed and
		permanently powered up for the duration of the race and for which the race
	2 20 40	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
NA - NA - O	2 20 44	permanently installed antenna and earth.
MoMu0	3.29.11	an active radar set permanently installed either:
MoMu0	3.29.11	a pulse (magnetron) unit with not less than 4 kW PEP and an antenna unit with
	a)	a maximum dimension not less than 533 mm; or
MoMu0	3.29.11	a frequency modulated continuous wave (FMCW) Broadband Radar™ unit. The
	b)	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).
Mo0,1,2,3	3.29.13	an AIS Transponder which either:
Mu1,2,3		
MoMu0,1,2,3	3.29.13	shares the masthead VHF antenna via a low loss AIS antenna splitter; or
	a)	
MoMu0,1,2,3	3.29.13	has a dedicated AIS antenna not less than 38 cm (15") in length mounted with
	b)	its base not less than 3 m (10') above the Waterline and co-axial feeder cable
		with not more than 40% power loss

SECTION 4 - PORTABLE EQUIPMENT

		A boat shall have:
	4.01	Sail Letters & Numbers
**	4.01.1	Identification on sails which complies with RRS 77 and RRS Appendix G
MoMu0,1,2,3	4.01.2	An alternative means of displaying identification as required under RRS
, , , -		Appendix G for a mainsail, to be displayed when none of the numbered sails
		are set
	4.02	Search and Rescue Visibility
MaMuo		
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
	4.03	Soft Wood Plugs
**	4.03	A tapered soft wood plug stowed adjacent to every through-hull opening
	4.04	Jackstays and Clipping Points
MoMu0,1,2,3	4.04.1	Permanently Installed fittings for jackstay ends and clipping points
MoMu0,1,2,3	4.04.2	Jackstays which shall:
MoMu0,1,2,3	4.04.2	be independent on each side of the deck
1101140727275	a)	be independent on each olde of the dealt
MoMu0,1,2,3	4.04.2	enable a crewmember to move readily between the working areas on deck and
11011110,1,2,3		·
	b)	the cockpit(s) with the minimum of clipping and unclipping operations
MoMu0,1,2,3	4.04.2	have a breaking strength of 2040 kg (4500#) and be uncoated and non-
	c)	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	be adjacent to stations such as the helm, sheet winches and masts, where
, , ,	a)	crewmembers work
MoMu0,1,2,3	4.04.3	enable a crewmember to clip on before coming on deck and unclip after going
1 101 100,1,2,5	b)	below
MaMun 1 2 2	4.04.3	
MoMu0,1,2,3		enable two-thirds of the crew to be simultaneously clipped on without
	c)	depending on jackstays
	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
Monad	1.00.1	a recognised Classification Society (e.g. Lloyd's, DNV, etc.)
MaMud 2.2	4.06.2	2 un-modified anchors that meet the anchor manufacturer's recommendation
MoMu1,2,3	4.06.2	
		based on the boat's dimensions with suitable combination of chain and rope,
		ready for immediate assembly, and ready for deployment within 5 minutes
		except that for a boat less than 8.5 m (28') LH there shall be 1 anchor
		meeting the same criteria.
	4.07	Flashlights and Searchlights
**	4.07.1	Watertight lights with spare batteries and bulbs as follows:
MoMu0,1,2,3	4.07.1	a searchlight, suitable for searching for a person overboard at night and for
1 101 100/1/2/3	a)	collision avoidance
ΜοΜυΛ 1 2 2	4.07.1	
MoMu0,1,2,3	_	a flashlight in addition to 4.07 a)
M - M - O	b)	- Park Satura St., have a state a constitution of the the bands had a state
MoMu0	4.07.1	a high-intensity heavy duty searchlight powered by the boat's batteries,
	d)	instantly available for use on deck and in the cockpit
	4.08	First Aid Manual and First Aid Kit
**	4.08	A First Aid Manual and First Aid Kit. The contents and storage of the First Aid
		Kit shall reflect the likely conditions and duration of the passage, and the
		number of crew
	4.09	Foghorn
**	4.09	A foghorn
**	4.10	Radar Reflector
	4.10.1	A passive radar reflector with:
**	4.10.1	octahedral circular plates of minimum diameter 30 cm (12"), or
	a)	

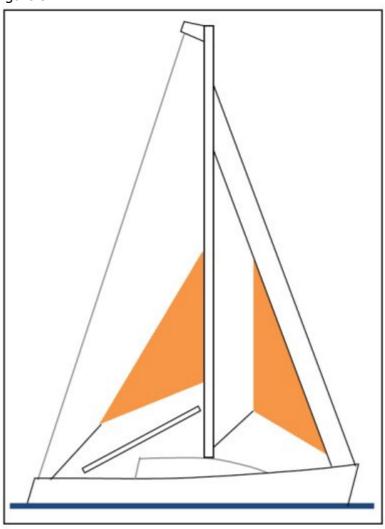
**	4.10.1	octahedral rectangular plates of minimum diagonal dimension 40 cm (16"), or
	b)	
**	4.10.1	a non-octahedral reflector with a documented Root Mean Square minimum
	c)	Radar Cross Section (RCS) area of 2 m ² (22 ft ²) from 0-360° of azimuth and
		±20° of heel
MoMu0	4.10.2	A Radar Target Enhancer (RTE) which complies with ISO 8729-2:2009 or
		equivalent
	4.11	Navigation Equipment
**	4.11	Navigational charts (not solely electronic), light list and chart plotting
		equipment
	4.12	Safety Equipment Location Chart
**	4.12	A safety equipment location diagram in durable waterproof material, clearly
		displayed in the main accommodation, marked with the location of principal
		items of safety equipment
	4.13	Depth, Speed and Distance Instruments
MoMu0,1,2,3	4.13.1	A knotmeter or distance measuring instrument (log)
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	the principal method of steering is by means of an unbreakable metal tiller
	a)	
MoMu0,1,2,3	4.15.1	there are two methods (e.g. tillers, wheels) of controlling a rudder, neither of
	b)	which shares components with the other except for the rudder stock.
_MoMu0,1,2,3	4.15.2	A proven method of emergency steering with the rudder disabled
	4.16	Tools and Spare Parts
**	4.16.1	Tools and spare parts, suitable for the duration and nature of the passage
**	4.16.2	An effective means to quickly disconnect or sever the standing rigging from the
		boat
	4.17	Boat's name
**	4.17	The boat's name on miscellaneous buoyant equipment, such as lifejackets,
		cushions, lifebuoys, recovery slings, grab bags etc.
	4.18	Retro-reflective material
**	4.18	Marine grade retro-reflective material on lifebuoys, recovery slings, liferafts and
		lifejackets
	4.19	EPIRBs
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
	4.20	the IBRD
	4.20	Liferafts
MaM	4.20.1	Liferaft Construction
MoMu0	4.20.1	A sufficient number of liferafts so that in the event of any one liferaft being lost
	b)	or rendered unserviceable, sufficient aggregate capacity remains for all crewmembers
MoMu0	4.20.1	Liferafts shall comply with SOLAS LSA code 1997 Chapter IV or later version
MOMUO		Liferalts shall comply with SOLAS LSA code 1997 Chapter IV of later version
	c) 4.20.2	Minimum Liferaft Equipment
MoMu0,1,2	4.20.2	A SOLAS liferaft shall contain as a minimum a SOLAS A pack;
1101100,1,2		A SOLAS IIICIAIT SHAII COITAIN AS A MIIIIIIIIIIII A SOLAS A PACK,
	a) 4.20.3	Liferaft Packing and Stowage
MoMu0,1,2	4.20.3	Each liferaft shall be packed either in:-
1 101 100/1/2	a)	243.1 morare orian de pacica cieren ini
MoMu0,1,2	4.20.3	a rigid container securely stowed on the working deck, in the cockpit or in an
	a) i	open space; or:-
MoMu0,1,2	4.20.3	a rigid container or valise securely stowed in a dedicated weather tight locker
-, ,-	- -	,

	a) ii	containing liferaft and abandon ship equipment only which is readily accessible and opens onto the cockpit or working deck, or transom
MoMu0,1,2	4.20.3 c)	On a multihull or on a monohull with moveable ballast the liferaft shall be readily deployable whether or not the boat is inverted
MoMu0,1,2	4.20.3 d)	The end of each liferaft painter should be securely fastened to the boat
MoMu0,1,2	4.20.3 e)	Each raft shall be capable of being got to the lifelines or launched within 15 seconds
	4.20.4	Spare Number
MoMu0,1,2	4.20.5	Liferaft Servicing
MoMu0,1,2	4.20.5 a)	A liferaft shall be serviced at a manufacturer authorized service station at the following maximum intervals:
MoMu0,1,2	4.20.5 a) i	SOLAS liferafts annually
MoMu0,1,2	4.20.5 a) ii	ISO 9650 canister packed liferafts every 3 years
MoMu0,1,2	4.20.5	ISO 9650 valise packed liferafts every 3 years except that hired liferafts shall
	a) iii	be serviced annually
MoMu0,1,2	4.20.5	ISAF liferafts annually
	a) iv	
MoMu0,1,2	4.20.5 a) v	ORC liferafts annually
MoMu0,1,2	4.20.5	Servicing certificates (original or a copy) on board
	b)	
	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)
		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 4.22.1	Crew Overboard Identification and Recovery Locator Beacons
MoMu0	4.22.1	A PLB (Personal Locator Beacon) equipped with 406Mhz and 121.5Mhz for each
1101140	a)	crew member
MoMu0,1,2	4.22.1	An AIS personal crew overboard beacon for each crew member
	b)	
MoMu0	4.22.1	A personal unit in addition to the PLB in OSR 4.22.1 b) if the location device
MoMu0,1,2	c) 4.22.1d)	carried by the boat in accordance with OSR 3.29.07 requires it; Where possible every PLB shall be registered with the appropriate authority
11011110,1,2	T.ZZ.1U)	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
	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
MoMu0,1,2	4.22.3	send an appropriate signal to the GPS 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
1101100,1,2	1,22,1	immediate use, a second lifebuoy equipped with:
MoMu0,1,2	4.22.4	a whistle, a drogue, a self-igniting light and
MoMu0,1,2	a) 4.22.4	a pole and flag. The pole shall be either permanently extended or be capable of
11011100,1,2	b)	being fully automatically extended
MoMu0	4.22.4	Each lifebuoy shall be equipped with a sachet of fluorescein dye
	c)	instate, shall be equipped that a sacret of hadrescell aye
MoMu0,1,2	4.22.5	At least one lifebuoy shall depend entirely on permanent buoyancy (e.g. foam)
**	4.22.6	Each inflatable lifebuoy and any automatic device shall be tested and serviced
		at intervals in accordance with its manufacturer's instructions

**	4.22.7		ng line, no less than 6 mm (1/4") accessible to cockpit	diameter, 15 - 25 m (50 - 75') long,
MoMu0,1,2,3	4.22.8	•	rery sling which includes a:	
MoMu0,1,2,3	4.22.8		, 3	norter of 4 times LH or 36m (120')
	a)	,		(=== ,
MoMu0,1,2,3	4.22.8	buoyan	cy section (horseshoe) with no le	ss than 90 N (20#) buoyancy
, , ,	b)	•	, ,	, , , ,
MoMu0,1,2,3	4.22.9	minimu	m strength capable to hoist a cre-	wmember aboard
	c)			
	4.23	Pyrote	chnic and Light Signals	
**	4.23	•		forming to SOLAS LSA Code Chapter
				stamped expiry date (if any) or if no
			date stamped , not older than 4 ye	
	Race Cat		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 N	lumber	
	4.25	Cockpi	it Knife	
**	4.25	A stron	g, sharp knife, sheathed and secu	rely restrained shall be provided
		readily	accessible from the deck or a coc	kpit.
	4.26	Storm	& Heavy Weather Sails	

4.26.1 **Design**

Design Figure 3



MoMu1,2		
**	4.26.1	The material of the body of a storm sail purchased after 2013 shall have a
	a)	highly-visible colour (e.g. dayglo pink, orange or yellow)
**	4.26.1	Aromatic polyamides, carbon and similar fibres shall not be used in a trysail or
	b)	storm jib but HMPE and similar materials are permitted
**	4.26.1	Sheeting positions on deck for each storm and heavy-weather sail

	c)	
**	4.26.1 d)	Sheeting positions for the trysail independent of the boom
**	4.06.0	
**	4.26.2 4.26.2	Sail Areas The maximum area of storm and heavy weather sails shall be lesser of the
	1.20.2	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) 4.26.2	forestay) with: area of 13.5% height of the foretriangle (IG) squared
	a) i	anea on 1919 to mengine on the remaining (19) equal ea
**	4.26.2 a) ii	readily available means, independent of a luff groove, to attach to the stay
MoMu0,1,2	4.26.2	A storm jib with:
	b)	
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	permanently attached means, independent of a luff groove, to attach to the
**	b) iii 4.26.2	stay For sails made after 2011, Storm and heavy weather jib areas calculated as
-1-1-	4.20.2 C)	For sails made after 2011: Storm and heavy weather jib areas calculated as: $(0.255 \text{ x luff length x (luff perpendicular} + 2 \text{ x half width)})$
MoMu0,1,2	4.26.2	A storm trysail with:
MoMuO 1 2	d) 4.26.2	area not greater than 17 E0/2 mainsail hoist (D) y mainsail foot longth (E)
MoMu0,1,2	d) i	area not greater than 17.5% mainsail hoist (P) x mainsail foot length (E)
MoMu0,1,2	4.26.2	For sails made after 2011:The storm trysail are calculated as (0.5 x leech
MoMu0,1,2	d) ii 4.26.2	length x shortest distance between tack point and leech) no headboard
1101100,1,2	d) iii	no nedabodia
MoMu0,1,2	4.26.2	no battens
MoMu0,1,2	d) iv 4.26.2	sail number and letters on both sides, as large as practicable
	d) v	
MoMu0,1,2	4.26.2 d) vi	in the case of a boat with an in-mast furling mainsail, the storm trysail shall be capable of being set while the mainsail is furled
I	4.26.3	Sail Inventory
MoMu1,2	4.26.3	either a storm trysail as defined in OSR 4.26.2 d), or mainsail reefing to reduce
	a) i	the luff by at least 50% (or rotating wing mast if suitable)
MoMu0	4.27 4.27	Drogue, Sea Anchor 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)
	4.28	Spare Number
Mo0	4.29 4.29.1	Deck Bags If permitted by the Notice of Race, Sailing Instructions or Class Rules, bags for
1100	112311	storing sails on deck shall be:
Mo0	4.29.1	so constructed to ensure rapid draining of water
Mo0	a) 4.29.1	securely fastened in such a way that the integrity of deck fittings e.g.
_	b)	stanchions and lifelines, is not compromised
MaO 1 2	4.30	Emergency Pumps
Mo0,1,2	4.30.1 4.30.1	either fixed or portable pump to remove ingress water from any compartment. This pump shall:
, - ,-	a)	
Mo0,1,2 Mo0,1,2 Mo0,1,2	4.30.1	have a minimum rated capacity of 200 I/min
Mo0,1,2	b) 4.30.1	be operated by battery, main engine powered or a separate engine
	c)	, , , , , ,

Mo0,1,2	4.30.1 d)	if portable electric-powered, power cables to be terminated with alligator clips
Mo0,1,2	4.30.1 e)	have sufficient hose to discharge directly overboard or into the cockpit.
MaO 1 2		A combination of normanontly installed and nortable number may be combined
Mo0,1,2	4.30.1	A combination of permanently installed and portable pumps may be combined
	f)	to meet the above requirement.
		SECTION 5 - PERSONAL EQUIPMENT
**		Each crew member shall have:
	5.01	Lifejacket
**	5.01.1	A lifejacket which shall:
**	5.01.1	if manufactured before 2012 comply with ISO 12402 - 3 (Level 150) or
	a)i)	equivalent, including EN 396 or UL 1180 and:
**	5.01.1	
10.10		if inflatable have a gas inflation system
	a)i)	
**	5.01.1	have crotch/thigh straps (ride up prevention system (RUPS))
	a)i)	
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
	a) II	
* *	E 01 1	system
**	5.01.1	crotch/thigh straps (ride up prevention system (RUPS))
	a) ii	
MoMu0,1,2	5.01.1	an integral safety harness in compliance with OSR 5.02
	a) ii	
MoMu0,1,2,3	5.01.1	have an emergency position indicating light in accordance with either ISO
, , , , -	b)	12402-8 or SOLAS LSA code 2.2.3
**	5.01.1	be clearly marked with the boat's or wearer's name
		be deally marked with the boat's of wearer's name
MaM0 1 2 2	C)	have a constitue of in accordance with ICO 12402.0
MoMu0,1,2,3	5.01.1	have a sprayhood in accordance with ISO 12402-8
	d)	
MoMu0	5.01.1	have a PLB unit (as with other types of EPIRB, should be properly registered
	e)	with the appropriate authority)
**	5.01.1	if inflatable, regulalrly checked for air retention
	f)	, ,
MoMu0,1,2,3	5.01.2	A boat shall carry at least one gas inflatable lifejacket spare cylinder and, if
1 101 100/1/2/3	310112	appropriate, spare activation head for each type of lifejacket on board.
MaMun 1 2	5.01.3	A boat shall carry at least one spare lifejacket as required in OSR 5.01.1, (a
MoMu0,1,2	5.01.5	
1.1.		spare PLB described in 5.01.1(e) is not required)
**	5.01.4	The person in charge shall personally check each lifejacket at least once
		annually.
	5.02	Safety Harness and Tethers
MoMu0,1,2,3	5.02.1	A harness that complies with ISO 12401 or equivalent
MoMu0,1,2,3	5.02.2	A tether that shall:
MoMu0,1,2,3	5.02.2	comply with ISO 12401 or equivalent
1 101 100,1,2,3	a)	comply with 150 12 for or equivalent
MaMun 1 2 2	5.02.2	not exceed 2 m (6' 6") including the length of the heals
MoMu0,1,2,3		not exceed 2 m (6'-6") including the length of the hooks
	b)	
MoMu0,1,2,3	5.02.2	have self-closing hooks
	c)	
MoMu0,1,2,3	5.02.2	have overload indicator flag embedded in the stitching
	d)	
MoMu0,1,2,3	5.02.2	be manufactured after 2000
1 101 100/1/2/2	e)	De manaractarea area 2000
MoMun 1 2 2	5.02.3	All of the crew shall have either:
MoMu0,1,2,3		
MoMu0,1,2,3	a)	a tether not exceeding 1m(3'3") including the length of the hooks, or
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
MoMu0	5.04 5.04	Foul Weather Suits A foul weather suit with hood
MoMu0	5.05 5.05 5.06	Knife 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);
	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
MoMu0,1,2	6.01.2	Topics At least 30% but not fewer than two members of a crew, including the Person in Charge shall have undertaken training within the five years before the start
MoMu0,1,2	6.01.4	of the race in OSR 6.02 Training Topics Except as otherwise provided in the Notice of Race, an in-date certificate gained at a World Sailing / ISAF Approved Offshore Personal Survival Training course shall be accepted by a race organizing authority as evidence of compliance with Special Regulation 6.01. See Appendix G - Model Training Course, for further details.
	6.02	Training Topics
	6.02.1	Giving Assistance to Other Craft
	6.02.2	Personal Safety Gear, theory and practice
	6.02.3	Care and Maintenance of Safety Gear
	6.02.4	Fire Precautions and Firefighting, theory and practical
	6.02.5	Crew Overboard Identification and Recovery
	6.02.6	Hypothermia, Cold Shock and Drowning
	6.02.7	Crew Health
	6.02.8	Marine Weather
	6.02.9	Heavy Weather
	6.02.10	Storm Sails
	6.02.11 6.02.12	Damage Control Search and Rescue Organization
	6.02.13	Pyrotechnics and Signalling Gear, theory and practical
	6.02.14	Emergency Communications, theory and practical
	6.02.15	Liferafts and Abandon Ship, theory and practical
	6.03	Spare Number
	6.04	Routine Training On-Board
**	6.04	At least annually the crews shall practice the drills for:
**	6.04 a)	Crew-Overboard Recovery
**	6.04 b)	Abandonment of vessel
	6.05	Medical Training
MoMu0	6.05.1	At least one crewmember shall have a valid STCW A-VI/4-2 (Proficiency In Medical Care) certificate or equivalent
MoMu0	6.05.2	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	6.05.2 a)	A certificate listed on the World Sailing website www.sailing.org/specialregs of MNA recognised courses
MoMu0,1,2	6.05.2 b)	STCW First Aid Training complying with A-VI/1-3 - Elementary First Aid or higher STCW level

6.06 Diving Training

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 Rudder and Keel Inspection Procedure

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