Requirements and checklist for World Sailing - Offshore Special Regulations Category 3

Based on the latest revision of January 2020

Here is an excerpt of the requirements that are currently set for participation in International regattas subject to **World Sailing OSR Category 3**. The list of requirements has been prepared for and is part of the compendium that has been prepared for the Norwegian Society for Sea Rescue (Redningsselskapet) World Sailing Safety Course,

The same definition should at least form the basis for safe sailing in waters off the coast in addition to bluewater sailing.

It is very important to not only have the equipment on board but also to have it available in the places that are relevant and known to everyone on board, in addition to being able to use it in a safe way.

Link to original document at World Sailing:
https://www.sailing.org/tools/documents/mo3life2021-[26833].pdf

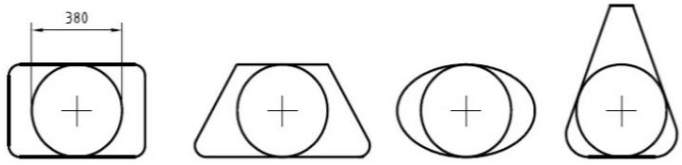
Facilitated for the Norwegian Society for Sea Rescue (Redningsselskapet) World Sailing Safety Course:
https://www.redningsselskapet.no/fritidsbatkurs/wso/

Revised 26.03.21

World Sailing OSR - Category 3 - Excerpt

Check	Punkt	Omhandler	Original beskrivelse OSR 2020 (nytt i 2020 merket rødt)
	2.01	*Category 3*	*Races across open water, most of which is relatively protected or close to shorelines*
	2.04.1	Equipment cleaned and kept in order, placement system	All equipment required by OSR shall: • Function properly • Be regularly checked, cleaned and serviced • When not in use be stowed in conditions in which deterioration is minimized • Be readily accessible • Be of a type, size and capacity suitable and adequate for the intended use and size of the boat. • If it has an expiry date, it will not have exceeded its expiry date whilst racing
	2.04.2	Attachment of heavy equipment	Heavy items shall be permanently installed or securely fastened
	3.02.1	Watertight and Structural Integrity of a Boat	Essentially watertight and all openings shall be capable of being immediately secured. Centreboard, daggerboard trunks and the like shall not open into the interior of a hull except via a watertight maintenance hatch with the opening entirely above the Waterline

Check	Punkt	Omhandler	Original beskrivelse OSR 2020 (nytt i 2020 merket rødt)
	3.02.2	Structural Inspection	Effective 1 January 2022: Structural Inspection - Consult the owner's manual for any instructions for keel bolt checking and re-tightening. The following inspection to be conducted by a qualified person externally with the boat out of the water. Check that there are no visible stress cracks particularly around the keel, hull/keel attachment, hull appendages and other stress points, inside the hull, backing plates, bolting arrangements and keel floors. (See Appendix L – Model Keel and Rudder Inspection Procedure)
	3.02.3	Evidence of a structural inspection	Effective 1 January 2022: Evidence of a structural inspection in accordance with 3.02.2 within 24 months before the start of the race or after a grounding whichever is the later
	3.03.4	Inspection after Grounding	Effective 1 January 2022: Inspection after Grounding – an appropriately qualified person shall conduct an internal and external inspection after each unintentional grounding
	3.04.1	Stability	Able to demonstrate compliance with ISO 12217-2* design category B or higher, either by EC Recreational Craft Directive certification having obtained the CE mark or the designer's declaration * The latest effective version of ISO 12217-2 should be used unless the boat was already designed to a previous version
	3.04.2	Requirements for stability	Where compliance in accordance with 3.04.1 cannot be demonstrated, able to demonstrate either: i a STIX value not less than 23; and ii AVS not less than 130 - 0.005*m, but always >= 95°, (where "m" is the mass of the boat in the minimum operating condition as defined by ISO 12217-2); and iii a minimum righting energy not less than m*AGZ>57000 (where AGZ is the positive area under the righting lever curve in the minimum operating condition, expressed in kg metre degrees from upright to AVS); or Extract Mo3 b) Stability Index in ORC Rating System of not less than 103; or Extract Mo3 c) IRC SSS Base value of not less than 15
	3.06.1	Exits	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 m² (1.9 ft²) (see figure 1)
	3.06.2	Exits - opening	The following minimum clear hatch openings if First Launch after 2013: a) a circular hatch with diameter 450 mm (18"); or b) any other shape with minimum dimension of 380 mm (15") and minimum area of 0.18 m² (1.9 ft²) (see figure 1 below)

Check	Punkt	Omhandler	Original beskrivelse OSR 2020 (nytt i 2020 merket rødt)
			
	3.08.1	Hatches & Companionways	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 m² (110 in²)
	3.08.2	Hatches - placements	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 b) above the water when the boat is heeled 90° 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 0.071² m (110 in²)
	3.08.3	Hatches - Labeling	Hatches not conforming with 3.08.1 and 3.08.2 shall be clearly labelled andused in accordance with the following instruction “NOT TO BE OPENED AT SEA”
	3.08.4	Companionway hatches	Companionway hatches: a) fitted with a strong securing arrangement which shall be operable from the exterior and interior even when the boat is inverted b) blocking devices: 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 permit exit in the event of inversion
	3.08.5	Companionway – open cocpit	If a monohull with Open Cockpit(s): a) a companionway sill that does not extend below the local sheerline; or b) a companionway in full compliance with ISO 11812 category A
	3.08.6	Companionway – contained cocpits	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.
	3.09.5	Cockpit drain	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	Permanently installed sea cocks or valves on all through-hull openings below the waterline except for integral deck scuppers and instrument through-hulls
	3.14	Pulpits, Stanchions, Lifelines	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”)

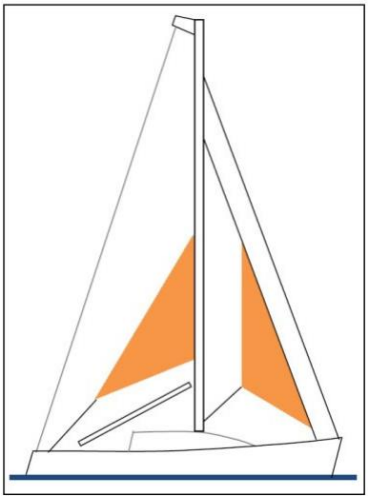
<table>
<tr><th>Check</th><th>Punkt</th><th>Omhandler</th><th>Original beskrivelse OSR 2020 (nytt i 2020 merket rødt)</th></tr>
<tr><td></td><td></td><td></td><td>ii intermediate: 230 mm (9”)
iii vertical opening: no greater than 380 mm (15”) except that on a boat with a Primary Launch before 1993 where it shall be no greater than 560 mm (22”)
iv a boat less than 8.5 m (28’) LH may use a single lifeline system with a height between 450 mm (18”) and 560 mm (22”)
c) Lifelines permanently supported at intervals of not more than 2.2 m (7'-2 1/2”) and shall not pass outboard of supporting stanchions
d) Pulpit and stanchion bases permanently installed with pulpits and stanchions 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:
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”)
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”)
h) Lifelines may terminate at or pass through adequately braced stanchions set inside and overlapping the bow pulpit
i) When a deflecting force of 4 kg (8.8 #) is applied to a lifeline at the mid-point of the longest span between supports that are aft of the mast, the deflection shall not exceed:
50 mm (2”) for an upper or single lifeline
120 mm (4 ¾”) for an intermediate lifeline</td></tr>
<tr><td></td><td>3.14.6</td><td>Lifeline Specifications</td><td>Lifelines of stranded stainless steel wire
b) The minimum diameter is specified in table 8 below
c) Stainless steel lifelines shall be uncoated and used without close-fitting sleeving, however, temporary sleeving may be fitted provided it is regularly removed for inspection
d) A lanyard of synthetic rope may be used to secure lifelines provided the gap it closes does not exceed 100 mm (4”). This lanyard shall be replaced annually
e) All components of the lifeline enclosure system shall have a breaking strength no less than the lifeline
<table>
<tr><th>LH</th><th>Wire Min. lifeline diameter</th><th>HMPE rope (Single braid) min. lifeline diameter</th><th>HMPE Core (Braid on braid) min. lifeline diameter</th></tr>
<tr><td>Under 8.5m (28')</td><td>3mm (1/8")</td><td>4mm (5/32")</td><td>4mm (5/32")</td></tr>
<tr><td>8.5m - 13m</td><td>4mm (5/32")</td><td>5mm (3/16")</td><td>5mm (3/16")</td></tr>
<tr><td>Over 13m (42' 8")</td><td>5mm (3/16")</td><td>5mm (3/16")</td><td>5mm (3/16")</td></tr>
</table></td></tr>
<tr><td></td><td>3.17</td><td>Toe Rail or Foot - Stop</td><td>Permanently installed toe rail of minimum height 25 mm (1”), located as close as practicable to the stanchion bases, around the foredeck from abreast the mast. An additional</td></tr>
</table>

Check	Punkt	Omhandler	Original beskrivelse OSR 2020 (nytt i 2020 merket rødt)
			lifeline of between 25-50 mm (1-2") high is permitted in lieu of a toe rail on a boat with Primary Launch before 1984.
	3.18	Toilet	Permanently installed toilet or fitted bucket
	3.19	Bunks	Permanently installed bunks
	3.2	Cooking Facilities	Permanently installed cooking stove, capable of being erated safely at sea, with fuel shutoff control
	3.21.1	Drinking Water Tanks	Permanently installed delivery pump and water tank(s)
	3.21.3	Emergency Drinking Water	At least 9 l (2.4 US Gal) of drinking water for emergency use in a dedicated and sealed container or container(s)
	3.22	Hand Holds	Adequate hand holds fitted below deck
	3.23.1 a	2 buckets	Two strong buckets, each with a lanyard and of at least 9 l capacity
	3.23.1 b	Pumps	Cat 3: **One**, permanently installed manual bilge pumps, one operable from above,the other from below deck. Cat 3: one permanently installed manual bilge pump Cat 0-2: **Two** (our recommendation)
	3.23.5	Pump handles	All removable bilge pump handles retained by a lanyard
	3.24	Compass	a) Marine magnetic compass capable of being used as a steering compass: b) Permanently installed marine magnetic steering compass, independent of any power supply, correctly adjusted with deviation card c) a second compass which may be hand-held and/or electronic
	3.25	Halyards	A minimum of two halyards, each capable of hoisting a sail, on each mast 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.
	3.27.1/2	Navigation Lights	That conform to the International Regulations for Preventing Collisions at Sea (Part C and Technical Annex I) and shall be exhibited as required by those regulations. Mounted above sheerline and so that they will not be masked by sails or the heeling of the boat
	3.27.3	Reserve lights	Reserve lights having the same specifications as above, and that can be powered independently
	3.27.4	Spare bulbs	Spare bulbs (not required for LED)
	3.28.1	Propulsion Engines	a) Engines and associated systems installed in accordance with their manufacturers' guidelines and suitable for the size and intended use of the boat An engine which provides a minimum speed in knots of (1.8 x √LWL in metres) or (√ LWL in feet) c) either an inboard or outboard engine, with associated power supply systems, all securely fastened d) an inboard combustion engine shall have a permanently installed exhaust, cooling system, fuel supply, fuel tank(s) and shall have adequate heavy weather protection e) an inboard electrical engine, when fitted, shall be provided with a permanently installed power supply, adequate heavy weather protection and have an engine control system.
	3.28.3	Liquid Fuel Systems	a) All fuel tanks for storage of liquid fuels shall be rigid (but may have permanently installed flexible linings) and shall have a shutoff valve

Check	Punkt	Omhandler	Original beskrivelse OSR 2020 (nytt i 2020 merket rødt)
			b) At the start a boat with a combustion engine shall carry sufficient fuel to meet charging requirements for the duration of the race and to motor at the above minimum speed for at least 5 hours
	3.28.4	Battery Systems	a) A dedicated engine/generator starting battery when an electric starter is the only method for starting the engine and/or separate generator b) Batteries installed after 2011 shall be of the sealed type from which liquid electrolyte cannot escape c) At the start a boat with an electric engine shall carry sufficient capacity to meet electrical requirements for the duration of the race and to motor at the above minimum speed for at least 5 hours
	3.29.1	Radio transceiver (VHF)	A marine radio transceiver with an emergency antenna when the regular antenna depends upon the mast. If the marine radio transceiver is a VHF: a) a minimum rated output power of 25 W, b) a masthead antenna not less than 38 cm (15”) in length and co-axial feeder cable with not more than 40% power loss, c) be DSC capable if installed after 2015, d) DSC capable VHF transceivers shall be programmed with an assigned MMSI (unique to the boat), be connected to a GPS receiver and be capable of making distress alert calls as well as sending and receiving a DSC position report with another DSC equipped station
	3.29.5	Hand held VHF	A hand-held marine VHF transceiver, watertight or with a waterproof cover. When not in use to be stowed in a grab bag or emergency container (see OSR 4.21)
	3.29.6	Radio receiver	a second radio receiver, capable of receiving weather bulletins
	3.29.8	GPS	a GPS
	3.29.13	AIS Transponder	An AIS Transponder which either: a) shares the masthead VHF antenna via a low loss AIS antenna splitter; or b) has a dedicated AIS antenna not less than 38 cm (15”) in length mounted with its base not less than 3 m (10’) above the Waterline and co-axial feeder cable with not more than 40% power loss
	4.03	Soft Wood Plugs	A tapered soft wood plug stowed adjacent to every through-hull opening
	4.04	Jackstays and Clipping Points	Permanently Installed fittings for jackstay ends and clipping points. Jackstays which shall: a) be independent on each side of the deck 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 c) have a breaking strength of 2040 kg (4500#) and be uncoated and nonsleeved stainless steel 1 x 19 wire of minimum diameter 5 mm (3/16”), webbing or HMPE rope. Clipping points which shall: a) be adjacent to stations such as the helm, sheet winches and masts, where crewmembers work b) enable a crewmember to clip on before coming on deck and unclip after going below

Check	Punkt	Omhandler	Original beskrivelse OSR 2020 (nytt i 2020 merket rødt)
			c) enable two-thirds of the crew to be simultaneously clipped on without depending on jackstays
	4.05	Fire Fighting Equipment	A fire blanket adjacent to every cooking device with an open flame. 2 fire extinguishers, each with 2 kg each of dry powder or quivalent, in different parts of the boat
	4.06	Anchors	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
	4.07	Flashlights and Searchlights	Watertight lights with spare batteries and bulbs as follows: a) a searchlight, suitable for searching for a person overboard at night and for collision avoidance and b) a flashlight in addition to 4.07 a)
	4.08	First Aid Manual and First Aid Kit	A First Aid Manual and First Aid Kit. The contents and storage of the First Aid Kit shall reflect the likely conditions and duration of the passage, and the number of crew
	4.09	Foghorn	A foghorn
	4.10	Radar Reflector	A passive radar reflector with: a) octahedral circular plates of minimum diameter 30 cm (12"), or b) octahedral rectangular plates of minimum diagonal dimension 40 cm (16"), or c) a non-octahedral reflector with a documented Root Mean Square minimum Radar Cross Section (RCS) area of 2 m^2 (22 ft^2) from 0-360° of azimuth and ±20° of heel
	4.11	Navigation Equipment	Navigational charts (not solely electronic), light list and chart plotting equipment
	4.12	Safety Equipment Location Chart	A safety equipment location diagram in durable waterproof material, clearly displayed in the main accommodation, marked with the location of principal items of safety equipment
	4.13.1	Log	A knotmeter or distance measuring instrument (log)
	4.13.2	Depth sounder	A depth sounder
	4.15	Emergency Steering	An emergency tiller capable of being fitted to the rudder stock except when: a) the principal method of steering is by means of an unbreakable metal tiller 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.
	4.16	Tools and Spare Parts	Tools and spare parts, suitable for the duration and nature of the passage. An effective means to quickly disconnect or sever the standing rigging from the boat
	4.17	The boat's name on miscellaneous buoyant equipments	The boat's name on miscellaneous buoyant equipment, such as lifejackets, cushions, lifebuoys, recovery slings, grab bags etc.

Check	Punkt	Omhandler	Original beskrivelse OSR 2020 (nytt i 2020 merket rødt)
	4.18	Retro-reflective material on miscellaneous buoyant equipments	Marine grade retro-reflective material on lifebuoys, recovery slings, liferafts and lifejackets
	4.19	**EPIBs**	**EPIRB (Emergency Position-Indicating Radio Beacon) to easy be released**
	4.20	Liferafts	One or more inflatable liferafts with a total capacity to accommodate at least the total number of people on board which complies with: a) i SOLAS LSA Code 1997 Chapter IV or later version; or a) ii ISO 9650-1:2005, Type 1, Group A - Small Craft - Inflatable; or a) iii ISAF liferafts manufactured before 2016 until replacement is due at end of service life; or a) iv ORC liferafts manufactured before 2003 until replacement is due at end of service life
	4.20.2	Minimum Liferaft Equipment	a) A SOLAS liferaft shall contain as a minimum a SOLAS A pack; c) An ISO 9650 liferaft shall contain as a minimum Pack 2 (less than 24 hour pack);
	4.21	Grab bag	If a grab bag is provided it shall have inherent flotation, at least 0.1 m² (1 ft²) area of fluorescent orange colour on the outside, shall be marked with the name of the boat, and shall have a lanyard and clip
	4.22	**MOB – Man over board Crew Overboard Identification and Recovery**	**Crew Overboard Identification and Recovery Locator Beacons (AIS MOB and PLB)** **GPS Crew Overboard Position** A lifebuoy with a self-igniting light, a whistle and a drogue within reach of the helmsman and ready for immediate use Each inflatable lifebuoy and any automatic device shall be tested and serviced at intervals in accordance with its manufacturer's instructions A heaving line, no less than 6 mm (1/4")diameter, 15 - 25 m (50 - 75') long, readily accessible to cockpit A recovery sling which includes a: a) buoyant line of length no less than the shorter of 4 times LH or 36m (120') b) buoyancy section (horseshoe) with no less than 90 N (20#) buoyancy c) minimum strength capable to hoist a crewmember aboard
		(Cat 0,1 og 2: mandatory) (our recommendations for Cat 3:)	**An AIS personal crew overboard beacon PLB (Personal Locator Beacon) and AIS MOB for each crew member (our recommendations)**
	4.22.8	Recovery sling	A recovery sling which includes a: a) buoyant line of length no less than the shorter of 4 times LH or 36m (120') b) buoyancy section (horseshoe) with no less than 90 N (20#) buoyancy c) minimum strength capable to hoist a crewmember aboard
	4.23	Pyrotechnic and Light Signals	Pyrotechnic signals shall be provided conforming to SOLAS LSA Code Chapter III Visual Signals and not older than the stamped expiry date (if any) or if no expiry date stamped , **not older than 4 years**. MoMu0,1,2,3: 4 pcs Red Hand Flares LSA III 3.2 2 pcs Orange Smoke Flares LSA III 3.3

Check	Punkt	Omhandler	Original beskrivelse OSR 2020 (nytt i 2020 merket rødt)
	4.25	Cocpit knife	A strong, sharp knife, sheathed and securely restrained shall be provided readily accessible from the deck or a cockpit.
	4.26	Storm & Heavy Weather Sails	**Cat 0,1 and 2:** A storm trysail with area of 17.5% mainsail hoist (P) x mainsail foot length (E). For sails made after 2011: The storm trysail are calculated as (0.5 x leech length x shortest distance between tack point and leech) No headboard, no battens, number and letters on both sides as large as practicable. 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 **Cat 3:** Either a storm trysail as defined in cat 0,1 and 2, or mainsail reefing to reduce the luff by at least 40%
	4.26.1	Design	 a) The material of the body of a storm sail purchased after 2013 shall have a highly-visible colour (e.g. dayglo pink, orange or yellow) b) Aromatic polyamides, carbon and similar fibres shall not be used in a trysail or storm jib but HMPE and similar materials are permitted c) Sheeting positions on deck for each storm and heavy-weather sail d) Sheeting positions for the trysail independent of the boom
	4.26.2	Sail Areas	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
	4.26.2 a	A heavy-weather jib (or heavy-weather sail in a boat with no forestay)	a) i area of 13.5% height of the foretriangle squared a) ii readily available means, independent of a luff groove, to attach to the stay c) For sails made after 2011: Storm and heavy weather jib areas calculated as: (0.255 x luff length x (luff perpendicular + 2 x half width))
	4.26.3	Sail Inventory	Either a storm trysail as defined in OSR 4.26.2 d), or mainsail reefing to reduce the luff by at least 40% (or rotating wing mast if suitable)

Check	Punkt	Omhandler	Original beskrivelse OSR 2020 (nytt i 2020 merket rødt)
	5.01	Each crew member shall have: Lifejacket	A lifejacket which shall: a) i if manufactured before 2012 comply with ISO 12402 - 3 (Level 150) or equivalent, including EN 396 or UL 1180 and: a) i if inflatable have a gas inflation system a) i have crotch/thigh straps (ride up prevention system (RUPS)) a) ii if manufactured after 2011 comply with ISO 12402-3 (Level 150) and be fitted with a whistle, lifting loop, reflective material automatic/manual gas inflation system a) ii crotch/thigh straps (ride up prevention system (RUPS)) 1 b) have an emergency position indicating light in accordance with either ISO 12402-8 or SOLAS LSA code 2.2.3 c) be clearly marked with the boat's or wearer's name d) have a sprayhood in accordance with ISO 12402-8 f) if inflatable, regulalrly checked for air retention 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. The person in charge shall personally check each lifejacket at least once annually.
	5.02	Safety Harness and Tethers	A harness that complies with ISO 12401 or equivalent A tether that shall: a) comply with ISO 12401 or equivalent b) not exceed 2 m (6'-6") including the length of the hooks c) have self-closing hooks d) have overload indicator flag embedded in the stitching e) be manufactured after 2000 All of the crew shall have either: a) a tether not exceeding 1m(3'3") including the length of the hooks b) an intermediate self-closing hook on a 2 m (6'-6") tether A tether which has been overloaded shall be replaced
	6.0	Training	When there are only two crewmembers, at least one shall have undertaken training within the five years before the start of the race in OSR 6.02 Training Topics **At least annually** the crews shall practice the drills for: a) Crew-Overboard Recovery b) Abandonment of vessel **Medical Training** At least one member of the crew shall be familiar with First Aid procedures, hypothermia, drowning, cardio-pulmonary resuscitation and relevant communications systems