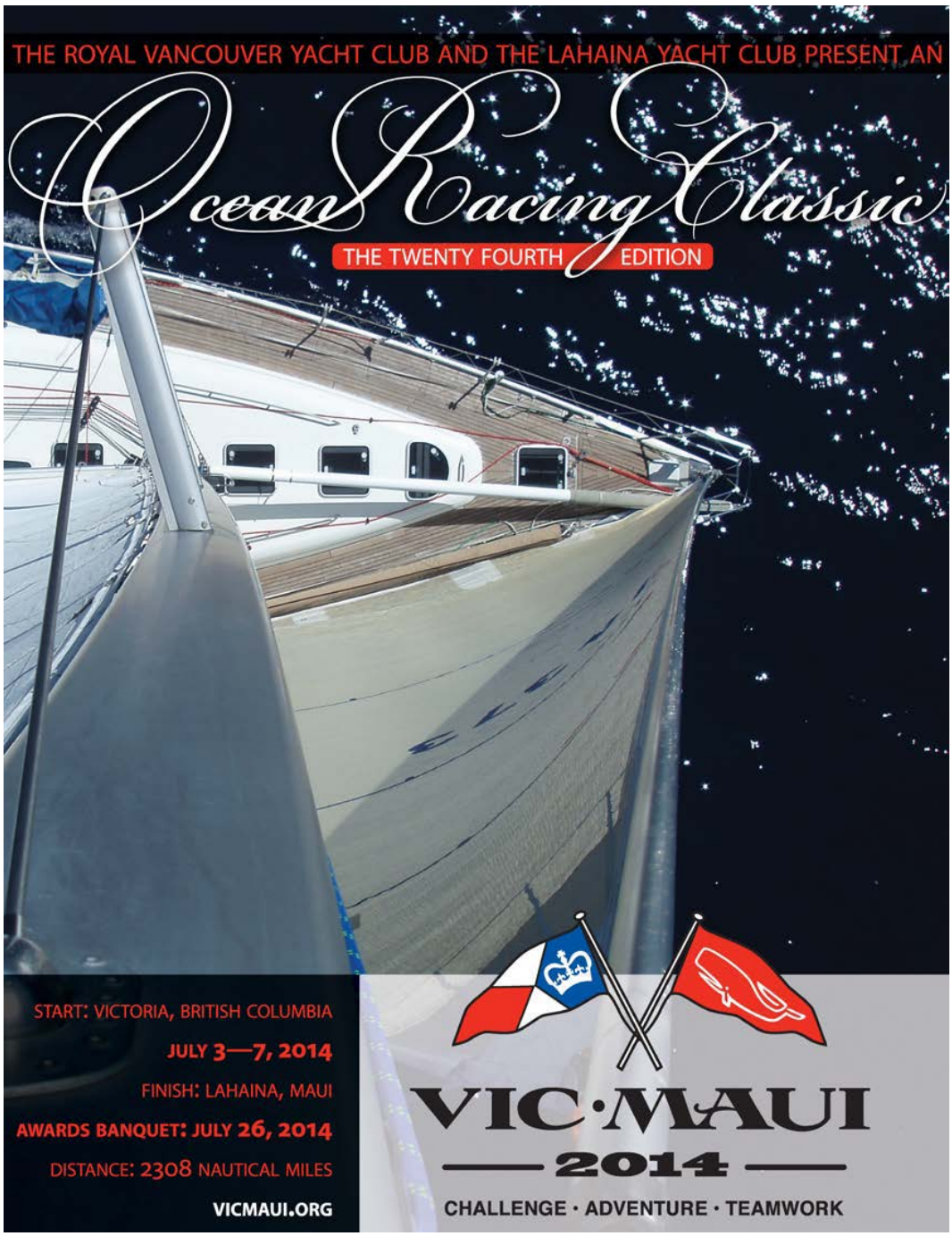
NOTICE OF RACE: Appendix B Checklist

Victoria to Maui International Yacht Race



www.vicmaui.org

NOTICE OF RACE: Appendix B Checklist

September 3, 2013

Boat Information:

Boat Name			
Type		Series date	
Number of crew this race		LOA	
LWL		Max beam	

Boats must conform to the ISAF Offshore Special Regulations for 2012-2013 (OSR) for a Category 1 Monohull event and its appendices, amendments and interpretations; and the amendments listed in the Notice of Race (NOR) and its appendices and amendments. No national authority prescriptions will apply. Attention is drawn to OSR 1.02, Responsibility of the Person in Charge, and OSR 2.03, General Requirements. This document is not a complete list of the OSR and NOR requirements, it is framed as a convenience for the skippers.

Instructions to Skipper (Person in Charge):

1) Start early with your preparations and review all race documents.
2) Determine how your boat will comply with all race requirements.
3) Prior to April 25, 2014, contact Greg Westerlund at gregwesterlund@shaw.ca to schedule a consultation with a Vic-Maui inspector.
4) Prior to the consultation, ensure your boat is in a suitable state of readiness.
5) The consultation with the Vic-Maui inspector is to review how your boat complies with race requirements. The inspector **will not complete** Appendix B for you during the consultation, nor approve items – that remains the responsibility of the Skipper. The inspector may provide feedback as to the suitability of your method of compliance with the requirements.
6) Complete Appendix B by filling out the compliance column (Yes or No or Not Applicable); and complete any required input in the comments column for each specified regulation number. Areas that are required, but not yet complete will be subject to further review prior to being allowed to Start.
7) Submit Appendix B and supporting documentation to the Race Committee completed and signed by to June 19, 2014. (Note: proof of compliance with 6.01.5, man overboard procedure practice certificate, must be provided not later than 24 hours prior to the scheduled start for the boat.)

Skipper's statement:

I declare that this boat, its equipment and crew conform to the requirements of the Vic-Maui 2014 International Yacht Race.

Skipper's signature: _____ Date: _____

***** = denotes changes specified or modified by Vic-Maui Notice of Race including Appendix A & B.

Section 2 – Application & General Requirements

REG #	REGULATION	COMPLIANCE (Y/N or NA)	COMMENTS
2.03.2 (a)	Ballast, ballast tanks and associated equipment shall be permanently installed.		
2.03.2 (b)	Heavy movable items shall be securely fastened.		
	batteries		
	stoves		
	gas bottles		
	tanks (water & fuel)		
	toolboxes		
	anchor and chain		
2.03.2 (c) *	Other heavy items: engine floorboards & heavy locker covers		

Section 3 – Structural Features, Stability, Fixed Equipment

REG #	REGULATION	COMPLIANCE (Y/N or NA)	COMMENTS
3.01	Yachts shall be strongly built, watertight and, particularly with regard to hulls, decks and cabin trunks capable of withstanding solid water and knockdowns. They must be properly rigged and ballasted, be fully seaworthy and must meet the standards set forth herein. Shrouds shall never be disconnected.		
3.02.1	A hull, including, deck, coach roof, windows, hatches and all other parts, shall form an integral, essentially watertight unit and any openings in it shall be capable of being immediately secured to maintain this integrity.		
3.02.2	Centreboard and daggerboard trunks and the like shall not open into the interior of a hull except via a watertight inspection/maintenance hatch of which the opening shall be entirely above the waterline of the yacht floating level in normal trim.		
3.02.3	A canting keel pivot shall be completely contained within a watertight enclosure which shall comply with OSR 3.02.2. Access points in the watertight enclosure for control and actuation systems or any other purpose shall comply with OSR 3.02.1.		

REG #	REGULATION	COMPLIANCE (Y/N or NA)	COMMENTS
3.02.4	Moveable ballast systems shall be fitted with a manual control and actuation secondary system which shall be capable of controlling the full sailing load of the keel in the event of failure of the primary system. Such failures would include electrical and hydraulic failure and mechanical failure of the components and the structure to which it mounts. The system must be capable of being operational quickly and shall be operable at any angle of heel. It would be desirable if this system was capable of securing the keel on the centreline.		
3.03 *	Hull Construction Standards (Scantlings) Compliance with section 3.03 is strongly recommended.		
3.04.6	For boats with moveable or variable ballast the method in OSR 3.04.4 shall apply plus the relevant additional requirement of OSR Appendix K.		
3.04.7	Tanks for variable ballast shall be permanently installed and shall be provided with a system of isolating valves and pump(s) capable of manual operation at any angle of heel. A plan of the plumbing system shall be displayed aboard the boat.		
3.04.8 *	Boats shall provide proof of compliance of a minimum stability index of 115, as determined by section 2.02 of the Offshore Racing Rule (www.offshoreracingrule.org), or boats in Cruising Division shall provide proof of compliance with ISO 12217-2, Small Craft Stability and Buoyancy Assessment and Categorization, Part 2 for category "A" waters, or custom boats or one-off designs in Cruising Division without an ORR certificate or proof of compliance with ISO 12217-2 shall submit a signed statement from a naval architect stating that the boat complies with either of the standards noted above.		**Attach proof of compliance to this document**
3.06.1	**Yachts 8.5m (28 ft) and over, constructed 1/95 and after**; shall have two exits. One exit shall be located forward of the foremost mast except where structural features prevent its installation.		

3.06.2	Yachts first launched on or after January 2014 have a hatch with minimum clear openings in compliance with ISO 9094		
3.08.1	No hatch forward of the maximum beam station shall open in such a way that the lid or cover moves into the open position towards the interior of the hull (excepting ports having an area of less than 0.071m2 (110 sq in)).		
3.08.2	A hatch fitted forward of the maximum beam station located on the side of the coach-roof, opening into the interior of the boat and of area greater than 0.071 m2 shall comply with ISO 12216 design category A and be clearly labeled and used in accordance with the following instruction: NOT TO BE OPENED AT SEA.		
3.08.3	**A hatch shall be:**		
3.08.3 (a)	So arranged as to be above the water when the hull is heeled 90 degrees. Hatches over lockers that open to the interior of the vessel shall be included in this requirement. A yacht may have a maximum of four (two on each side of centerline) hatches that do not conform to this requirement, provided that the opening of each is less than 0.071 sq m (110 sq in). Effective for boats of a series begun after January 1, 2009, a written statement signed by the designer or other person who performed the downflooding analysis shall be carried on board. For purposes of this rule the vessel's displacement condition for the analysis shall be the Light Craft Condition LCC (in conformity with 6.3 of the EN ISO 8666 standard and 3.5.1 of the EN ISO12217-2 standard).		
3.08.3 (b)	Permanently attached		
3.08.3 (c)	Capable of being firmly shut immediately and remaining firmly shut in a 180 degree capsize (inversion)		
3.08.4	**A companionway hatch shall:**		
3.08.4 (a)	Be fitted with a strong securing arrangement which shall be operable from exterior and interior including when the yacht is inverted		

3.08.4 (b)	Have any blocking devices (i) be capable of being retained in position with the hatch open or shut (ii) whether or not in position in the hatchway, be secured to the yacht (e.g. by lanyard) for the duration of the race, to prevent their being lost overboard (iii) permit exit in the event of inversion		
3.08.5	If the companionway extends below the local sheerline and the boat has a cockpit opening aft to the sea the boat shall comply with one of the following a) the companionway sill shall not extend below the local sheerline, or b) be in full compliance with all aspects of ISO 11812 to design category A		
3.08.6	For boats with a cockpit closed aft to the sea where the companionway hatch extends below the local sheerline, the companionway shall be capable of being blocked off up to the level of the local sheerline, provided that the companionway hatch shall continue to give access to the interior with the blocking devices (e.g. washboards) in place.		
3.09.1	Cockpits shall be structurally strong, self-draining quickly by gravity at all angles of heel and permanently incorporated as an integral part of the hull		
3.09.2	Cockpits must be essentially watertight, that is, all openings to the hull must be capable of being strongly and rigidly secured		
3.09.3	A bilge pump outlet pipe shall not be connected to a cockpit drain. See OSR 3.09.8 for cockpit drain minimum sizes		
3.09.4	A cockpit sole shall be at least 2%LWL above LWL		**2% of LWL =** **Cockpit sole height above LWL =**
3.09.5	A blow, lateral, central or stern well shall be considered a cockpit for the purposes of SOR 3.09		
3.09.6	In cockpits opening aft to the sea structural openings aft shall be not less in area than 50% of maximum cockpit depth x maximum cockpit width.		**Area of structural openings aft =** **50% of (cockpit max depth x max width) =**

3.09.7	**Series date yachts before 4/92:** The total volume of all cockpits below lowest coamings shall not exceed 6% (LWL x maximum beam x freeboard abreast the cockpit). **Series date yachts 4/92 and after:** as above except that the "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 the calculation of cockpit volume		**Total volume of cockpits = 6% of (LWL x maximum beam x freeboard abreast the cockpit) =**
3.09.8	Cockpit drain cross section area (after allowance for screens if fitted) shall be: **Series date yachts before 1/72 or yachts under 8.5m (28ft):** at least that of 2 x 25mm diameter (one inch) unobstructed openings or equivalent **Series date yachts 1/72 and after:** at least that of 4 x 20mm diameter (3/4 inch) unobstructed openings or equivalent		**Total area required** before 1/72=1.57in^2 after 1/72=1.77in^2 **Total Area of cockpit drains =**
3.10	Sea cocks or valves shall be permanently installed on all through-hull openings below the waterline except integral deck scuppers, speed indicators, depth finders and the like, however a means of closing such openings shall be provided.		
3.11	Sheet winches shall be mounted in such a way that an operator is not required to be substantially below deck.		
3.12	The heel of a keel-stepped mast shall be securely fastened to the mast step or adjoining structure.		
3.14.2	**Lifelines required in Special Regulations shall be "taut".** As a guide, when a deflecting force of 50 N (11.2 lbf) is applied to a lifeline midway between supports, the lifeline should not deflect more than 50 mm.		
3.14.3 (a)	A bow pulpit with vertical height and openings essentially conforming to Table 7. Bow pulpits may be open but the opening between the pulpit and any part of the boat shall never be greater than 360mm (14.2") (this requirement shall be checked by presenting a 360mm (14.2") circle inside the opening)		Table 7 reproduced below Circle applicable category
3.14.3 (b)	A stern pulpit, or lifelines arranged as an adequate substitute, with vertical openings conforming to Table 7		

3.14.3 (c)	Lifelines supported on stanchions, which, with pulpits, shall form an effectively continuous barrier around a working deck for man-overboard prevention. Lifelines shall be permanently supported at intervals of not more than 2.20m (86.6") and shall not pass outboard of supporting stanchions		**maximum support interval of lifelines =**
3.14.3 (d)	upper rails of pulpits at no less height above the working deck than the upper lifelines as in Table 7.		**minimum height of upper pulpit rail above working deck =**
3.14.3 (e)	Open-able upper rails in bow pulpits shall be securely shut whilst racing		
3.14.3 (f)	Pulpits and stanchions shall be permanently installed. When there are sockets or studs, these shall be through-bolted, bonded or welded. The pulpit(s) and/or stanchions fitted to these shall be mechanically retained without the help of the life-lines. Without sockets or studs, pulpits and/or stanchions shall be through-bolted, bonded or welded.		
3.14.3 (g)	The bases of pulpits and stanchions shall not be further inboard from the edge of the appropriate working deck than 5% of maximum beam or 150 mm (6 in), whichever is greater.		
3.14.3 (h)	Stanchion bases shall not be situated outboard of a working deck. For the purpose of this rule a stanchion or pulpit base shall be taken to include a sleeve or socket into which a stanchion or pulpit tube is fitted but shall exclude a baseplate which carries fixings into the deck or hull.		
3.14.3 (i)	Provided the complete lifeline enclosure is supported by stanchions and pulpit bases effectively within the working deck, lifeline terminals and support struts may be fixed to a hull aft of the working deck		
3.14.3 (j)	Lifelines need not be fixed to a bow pulpit if they terminate at, or pass through, adequately braced stanchions set inside and overlapping the bow pulpit, provided that the gap between the upper lifeline and the bow pulpit does not exceed 150 mm (6 in).		
3.14.3 (k)	Stanchions shall be straight and vertical except that: (i) Within the first 50 mm (2 in) 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 in), and (ii) Stanchions may be angled to not more than 10 degrees from vertical from any single point above 50 mm (2 in) from the deck.		

Table 7		
LOA	**earliest of age/series date**	**minimum requirements**
Under 8.5 m (28 ft)	Before January 1992	taut single lifeline at a height of no less than 450 mm (18 in) above the working deck. No vertical opening shall exceed 560 mm (22 in).
Under 8.5 m (28 ft)	January 1992 and after	as for under 8.5 m (28 ft) in table 7 above, except that when an intermediate lifeline is fitted no vertical opening shall exceed 380 mm (15 in).
8.5 m (28 ft) and over	Before January 1993	taut double lifeline with upper lifeline at a height of no less than 600 mm (24 in) above the working deck. No vertical opening shall exceed 560 mm (22 in)
8.5 m (28 ft) and over	January 1993 and after	as 8.5 m (28 ft) and over in Table 7 above, except that no vertical opening shall exceed 380 mm (15 in).

3.14.6 (a)	Lifelines shall be stranded stainless steel wire or single braided High Modulus Polyethylene (HMPE) (Dyneema/Spectra or equivalent) rope.		**SS wire or Dyneema?**
3.14.6 (b)	The minimum diameter is specified below **Yachts under 8.5 m (28ft):** 3 mm (1/8 in) **Yachts 8.5 m to 13 m:** 4 mm (5/32 in) **Yachts over 13 m (43ft):** 5 mm (3/16 in) Notwithstanding 3.14.6 (a) above,		**Lifeline diameter =**
3.14.6 (c)	Stainless steel lifeline shall be uncoated and used without close-fitting sleeving, however, temporary sleeving may be fitted provided it is regularly removed for inspection		
3.14.6 (e)	When HMPE (Dyneema/Spectra) is used, it shall be spliced in accordance with manufacturer's recommended practice.		
3.14.6 (f)	A taut lanyard of synthetic rope may be used to secure lifelines provided the gap it closes does not exceed 100 mm (4 in). This lanyard shall be replaced annually at a minimum.		**Date lanyard replaced?**
3.14.6 (g)	All wire, fittings, anchorage points, fixtures and lanyards shall comprise a lifeline enclosure system which has at all points at least the breaking strength of the required lifeline wire.		
3.14.7	**Yachts of series date before 1/87:** Carbon fibre is not recommended in stanchions pulpits and lifelines. **Yachts of series date 1/87 and after:** Stanchions, pulpits and lifelines shall not be made of carbon fibre.		

3.17.1	A toe rail of minimum height 25 mm (1 in) shall be permanently installed around the foredeck from abreast the mast, except in way of fittings and not further inboard from the edge of the working deck than one third of the local half-beam. (See OSR 3.17.2 for variations)		
3.18.1	A toilet, permanently installed		
3.19.2	Bunks, permanently installed		**# of bunks =**
3.20.1	A cooking stove; permanently installed or securely fastened with safe accessible fuel shutoff control capable of being safely operated in a seaway.		
3.21.1	A yacht shall have a permanently installed delivery pump and water tanks dividing the water supply into at least two compartments		
3.21.2 (a) *	Each yacht shall have the necessary equipment (which may include watermakers and tanks containing water) permanently installed to provide at least 3 litres of drinking water per person per day for at least the likely duration of they voyage		**Watermaker?** **Total water carried =**
3.21.3	At least 9 litres (2.4 US gallons) of drinking water for emergency use shall be provided in a dedicated and sealed container or container(s)		
3.22	Adequate hand holds shall be fitted below deck so that crew members may move about safely at sea A hand hold should be capable of withstanding without rupture a side force of 1500N - Attention is drawn to ISO 15085		
3.23.1	No bilge pump may discharge into a cockpit unless that cockpit opens aft to the sea		
3.23.2	Bilge pumps shall not be connected to cockpit drains		
3.23.3	Bilge pumps and strum boxes shall be readily accessible for maintenance and for clearing out debris *"readily accessible" means without the use of tools*		
3.23.4	Unless permanently installed, each bilge pump handle shall be provided with a lanyard or catch or similar device to prevent accidental loss		
3.23.5 (a)	Two permanently installed manual bilge pumps, one operable above, the other below deck. Each pump shall be operable with all cockpit seats, hatches and companionways shut and shall have permanently installed discharge pipe(s) of sufficient capacity to accommodate simultaneously both pumps		

3.23.5 (f)	Two buckets of stout construction each with at least 9 litres (2 UK gallons, 2.4 US gallons) capacity. Each bucket to have a lanyard.		
3.24.1 (a)	a marine magnetic compass, independent of any power supply, permanently installed and correctly adjusted with deviation card		
3.24.1 (b)	a magnetic compass independent of any power supply, capable of being used as a steering compass, which may be hand-held		
3.25	No mast shall have less than two halyards, each capable of hoisting a sail.		
3.27.1	Navigation lights shall be mounted so that they will not be masked by sails or the heeling of the yacht		
3.27.2	Navigation lights shall not be mounted below deck level and should be at no less height than immediately under the upper lifeline		
3.27.3	Navigation light intensity: **Yachts under 12 m (39.4ft):** 10 Watts **Yachts 12 m and above:** 25 Watts		
3.27.4	Reserve navigation lights shall be carried having the same minimum specifications as the navigation lights above, with a separable power source, and wiring or supply system essentially separate from that used for the normal navigation lights		
3.27.5	Spare bulbs for navigation lights shall be carried, or for lights not dependent on bulbs, appropriate spares.		
3.28.1 (a)	Engines and associated systems shall be installed in accordance with their manufacturers' guidelines and shall be of a type, strength, capacity, and installation suitable for the size and intended use of the yacht.		
3.28.1 (b)	A propulsion engine shall be provided with a permanently installed exhaust and fuel supply systems and fuel tank(s); be securely covered; and have adequate protection from the effects of heavy weather.		
3.28.1 (c)	A propulsion engine shall provide a minimum speed in knots of (1.8 x square root of LWL in metres, or square root of LWL in feet).		**√LWL (in feet) = max speed under power (in knots)**
3.28.1 (e)	An inboard propulsion engine shall be provided.		
3.28.2	A separate generator for electricity is optional. However, when a separate generator is carried it shall be permanently installed, securely covered, and shall have permanently installed exhaust and fuel supply systems and fuel tank(s) and have adequate protection from the effects of heavy weather.		**Separate generator (Y/N)?**

3.28.3 (a)	Each fuel tank provided with a shut-off valve. Except for permanently installed linings or liners, a flexible tank is not permitted as a fuel tank.		
3.28.3 (b)	The propulsion engine shall have a minimum amount of fuel sufficient to be able to meet charging requirements for the duration of the race and to motor at the above minimum speed for at least 8 hours		**fuel amount required for 3.28.3(b) =** **Volume carried =**
3.28.4 (a)	When an electric starter is the only method for starting the engine, have a separate battery, the primary purpose of which is to start the engine.		
3.28.4 (b)	All rechargeable batteries on board shall be of the sealed type from which liquid electrolyte cannot escape. Other types of batteries installed on board at 1/12 may continue in use for the remainder of their service lives.		
3.29.1 (a) *	A VHF marine radio transceiver		
	(i) an emergency antenna when the regular antenna depends on the mast		
3.29.1 (b) *	(i) VHF shall have a rated output power of not less than 25W, with DSC capability and with the MMSI and GPS functions enabled		
	(ii) it shall have a masthead antenna, and co-axial feeder cable with not more than 40% power loss		
	(iii) The following types and lengths of co-axial feeder cable will meet the requirements of 3.29.1 (a)(ii) **cable lengths up to 15m** - type RG8X ("mini 8") **cable lengths of 15-28m** - type RG8U **cable lengths of 28-43m** - type 9913F **cable lengths of 43-70m** - type LMR600 with special connectors		
	(iv) it should include channel 72		
3.29.1 (e)	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 (f))		
3.29.1 (f)	Independent of a main radio transceiver, a radio receiver capable of receiving weather bulletins		
3.29.1 (i)	an EPFS (Electronic Position-Fixing System) (e.g. GPS)		
3.29.1 (n)	An AIS Transponder		

3.29.1 (p) *	It is strongly recommended that boats carry a marine single side band (SSB) transceiver compliant with 3.29.1 (k), with DSC capability and the MMSI and GPS functions enabled. Boats that do not carry a marine SSB transceiver compliant with 3.29.1 (k) shall carry two approved satellite telephones. Satellite telephones approved by the Organizing Authority will be those that provide contiguous network coverage over the entire racing area (i.e. Inmarsat or Iridium; Globalstar is not currently approved).		**SSB or 2 Satphones?** **Satphone service provider?** **Minutes of contracted Satphone airtime =**
	If two approved satellite telephones are carried, one shall be configured at all times to receive telephone calls. The other shall be stored in the liferaft grab bag.		

Section 4 – Portable Equipment and Supplies

REG #	REGULATION	COMPLIANCE (Y/N or NA)	COMMENTS
4.03	Soft wood plugs, tapered and of the appropriate size, shall be attached or stowed adjacent to the appropriate fitting for every through-hull opening.		
4.04.1 (a)	Jackstays: shall be provided (i) attached to through-bolted or welded deck plates or other suitable and strong anchorage fitted on deck, port and starboard of the yacht's centre line to provide secure attachments for safety harness.		
	(ii) comprising stainless steel 1 x 19 wire of minimum diameter 5 mm (3/16 in), high modulus polyethylene (such as Dyneema/Spectra) rope, or webbing of equivalent strength		
	(iii) which, when made from stainless steel wire shall be uncoated and used without any sleeving.		
	(iv) 20kN (2,040 kgf or 4,500 lbf) min breaking strain webbing is recommended		
4.04.2	Clipping points: shall be provided (a) attached to through-bolted or welded deck plates or other suitable and strong anchorage points adjacent to stations such as the helm, sheet winches and masts, where crew members work for long periods (b) which, together with jackstays and static safety lines shall enable a crew member: (i) to clip on before coming on deck and unclip after going below (ii) whilst continuously clipped on, move readily between the working areas on deck and the cockpit(s) with the minimum of clipping and unclipping operations		

REG #	REGULATION	COMPLIANCE (Y/N or NA)	COMMENTS
4.04.2 (c)	The provision of clipping points shall enable two-thirds of the crew to be simultaneously clipped on without depending on jackstays		
4.05.1	Fire extinguishers, at least two, readily accessible in suitable and different parts of the yacht Of minimum 2 kgs each of dry powder or equivalent		
4.06.1	**Anchors:** **8.5 m (28 ft) and over:** 2 anchors together with a suitable combination of chain and rope, all ready for immediate use **under 8.5 m (28 ft):** 1 anchor together with a suitable combination of chain and rope, all ready for immediate use		
4.06.2 *	At least one of the required anchor and rode combinations shall be suitable for anchoring in tropical conditions in a deep area containing coral.		
4.07.1 (a)	A watertight high-powered searchlight, suitable for searching for a person overboard at night and for collision avoidance with spare batteries and bulbs		
4.07.1 (b)	A watertight flashlight, with spare batteries and bulb		
4.08.1	A suitable First Aid Manual Recommendations: International Medical Guide for Ships, World Health Organisation, Geneva Le Guide de la medecine a distance, by Docteur J Y Chauve, published by Distance Assistance BP33 F-La Baule, cedex, France Advanced First Aid Afloat by Peter Eastman, MD, Cornell Maritime Press A Comprehensive Guide to Marine Medicine by Eric A. Weiss, MD and Michael E. Jacobs, MD, Adventure Medical Kits		**Manual Carried =**
4.08.2	A First Aid Kit shall be provided.		
4.08.3	The contents and storage of the First Aid Kit should reflect the guidelines of the manual carried the likely conditions and duration of the passage, and the number of people aboard the yacht.		
4.09	A foghorn shall be provided.		

REG #	REGULATION	COMPLIANCE (Y/N or NA)	COMMENTS
4.10.1 (a)	If a radar reflector is: (i) octahedral with triangular plates making up each pocket it must have a minimum diagonal measurement of 456 mm (18in), (ii) octahedral with circular sector plates making up each pocket it must have a minimum diameter of 304 mm (12in), (iii) not octahedral it must have a documented RCS (radar cross-section) of not less than 10 m2 at 0^{o} elevation and be capable of performance around 360^{o} in azimuth. The minimum effective height above water is 4.0 m (13ft). **See also NOR - Appendix A 4.10.5**		**(octahedral) diagonal measurement =** **Reflector installed height above WL =**
4.10.1 (b)	The passive and active devices referred to in this section are primarily intended for use in the X (9GHz) band.		
4.10.1 (c) *	A passive Radar Reflector shall be displayed at all times.		
4.10.2	The most effective radar response from a yacht may be provided by an RTE (Radar Target Enhancer) which may be on board in addition to the required passive reflector. An RTE should conform to ISO 8729-2:2009 and is strongly recommended.		**Is an RTE aboard boat? (Y/N)**
4.10.2 (b) *	The display of an RTE is for the person in charge to decide according to prevailing conditions.		
4.10.3	When available, a passive radar reflector in compliance with ISO 8729-1:2010 will offer improved performance over earlier models and has a size typified by a cylinder of not more than weight 5 kg, height 750 mm and diameter 300 mm.		
4.10.4	S (3GHz) band radar is often used by ships in bad weather to complement X (9GHz) band radar. On S (3GHz) band a passive reflector offers about $1/10^{th}$ the response obtained on the X (9GHz) band. Unless specifically designed to operate in the S (3GHz) band an RTE will provide no response at all.		
4.11.1	Navigational charts (not solely electronic), light list and chart plotting equipment		

REG #	REGULATION	COMPLIANCE (Y/N or NA)	COMMENTS
4.11.2	Navigators are recommended to carry a sextant with suitable tables and a timepiece or an adequate reserve navigation system so that total reliance is not placed on dead-reckoning and a single form of EPFS (Electronic Position-Fixing System)		
4.12	A safety equipment location chart in durable waterproof material shall be displayed in the main accommodation where it can best be seen, clearly marked with the location of principal items of safety equipment.		
4.13.1	An echo sounder or lead line		
4.14	A speedometer or distance measuring instrument (log)		
4.15.1 (a)	**Emergency steering shall be provided as follows:** except when the principal method of steering is by means of an unbreakable metal tiller, an emergency tiller capable of being fitted to the rudder stock		
4.15.1 (b)	crews must be aware of alternative methods of steering the yacht in any sea condition in the event of rudder loss. At least one method must have been proven to work on board the yacht. An inspector may require that this method be demonstrated.		**Date of alternate method trial?**
4.16	Tools and spare parts, including effective means to quickly disconnect or sever the standing rigging from the hull shall be provided		
4.16.1 *	A climbing harness, bosun's chair or similar mast climbing equipment is required.		
4.17	Yacht's name shall be on miscellaneous buoyant equipment, such as lifejackets, cushions, lifebuoys, lifeslings, grab bags etc.		
4.18	Marine grade retro-reflective material shall be fitted to lifebuoys, lifeslings, liferafts and lifejackets.		
4.19.1	A 406 MHz EPIRB or an INMARSAT type "E" EPIRB		
4.19.1 (b)	**It is recommended that a 406 MHz EPIRB should include an internal GPS, and also a 121.5MHz transmitter for local homing.**		

4.19.1 (c) *	Every 406 MHz EPIRB shall be properly registered with the appropriate authority and documentation of EPIRB registration shall be supplied to the Organizing Authority prior to June 2, 2014		**Attach copy of registration**
4.19.1 (d)	Every ship's 406 MHz EPIRB shall be water and manually activated		
4.19.1 (e)	EPIRBs should be tested in accordance with manufacturer's instructions when first commissioned and then at least annually.		
4.19.1 (f)	A list of registration numbers of 406 EPIRBs should be notified to event organizers and kept available for immediate use.		
4.19.1 (j) *	EPIRBs shall have a battery expiry date of not before August 2014.		**battery expiry date**
4.20.1 (b) *	See 4.20.2 (a)		
4.20.2	Liferaft(s) capable of carrying the whole crew		**# of crew =** **# of liferafts =** **capacity of raft(s) =**
	Each liferaft shall comply with either:		**Tick box to denote raft type carried**
4.20.2 (a) *	SOLAS LSA code 1997 Chapter IV or later version except that they are acceptable with a capacity of 4 persons and may be packed in a valise; a SOLAS liferaft shall contain at least a SOLAS "B" pack, or		
4.20.2 (b) *	for liferafts manufactured prior to January 2006, OSR Appendix A part I (ORC), or		
4.20.2 (c)	OSR Appendix A part II (ISAF) when the floor shall include thermal insulation, or		

4.20.2 (d)	ISO 9650 Part I Type I Group A (ISO) when each liferaft shall contain at least a Pack 2 (<24h) and- i) shall have a semi-rigid boarding ramp, and ii) shall be so arranged that any high-pressure hose shall not impede the boarding process, and iii) shall have a topping-up means provided for any inflatable boarding ramp, and iv) when the liferaft is designed with a single ballast pocket this shall be accepted provided the liferaft otherwise complies with ISO 9650 and meets a suitable test of ballast pocket strength devised by the manufacturer and v) compliance with OSR 4.20.2 (d) i-iv shall be indicated on the liferaft certificate.		
4.20.2 (e) *	Liferafts are strongly recommended to be equipped with an insulated floor.		
4.20.3	A liferaft shall be either: a) packed in a transportable rigid container or canister and stowed on the working deck or in the cockpit, or		
4.20.3 (b)	Packed in a transportable rigid container or canister or in a valise and stowed in a purpose-built rigid compartment containing liferaft(s) only and opening into or adjacent to the cockpit or working deck, or through a transom, provided that:- i) each compartment is watertight or self-draining (self-draining compartments will be counted as part of the cockpit volume except when entirely above working deck level or when draining independently overboard from a transom stowage – see OSR 3.09) and ii) the cover of each compartment is capable of being easily opened under water pressure, and iii) the compartment is designed and built to allow a liferaft to be removed and launched quickly and easily, or iv) in a yacht with age or series date before 6/01, a liferaft may be packed in a valise not exceeding 40kg securely stowed below deck adjacent to a companionway		**Valise weight =** **(attach photo and /or description)**
4.20.3 (c)	The end of each liferaft painter should be permanently made fast to a strong point on board the yacht.		

4.20.4 (a)	Each liferaft shall be capable of being got to the lifelines or launched within 15 seconds.		
4.20.4 (b)	liferafts of more than 40kg weight should be stowed in such a way that they can be dragged or slid into the sea without significant lifting		
4.20.5 (a)	Certificates or copies, of servicing and/or inspection shall be kept on board the yacht. Every SOLAS liferaft and every valise-packed liferaft shall have a valid annual certificate of new or serviced status from the manufacturer or his approved service station.		**Tick box to denote inspection type and attach servicing and/or inspection certificates**
4.20.5 (b)	A liferaft built to OSR Appendix A part I ("ORC") packed in a rigid container or canister shall either be serviced annually or may, when the manufacturer so specifies, be inspected annually (not necessarily unpacked) provided the yacht has on board written confirmation from the manufacturer's approved service station stating that the inspection was satisfactory.		
4.20.5 (c)	A liferaft built to OSR Appendix A part II ("ISAF") packed in a rigid container or canister shall either be serviced annually or may, when the manufacturer so specifies, have its first service no longer than 3 years after commissioning and its second service no longer than 2 years after the first. Subsequent services shall be at intervals of not more than 12 months.		
4.20.5 (d)	A liferaft built to ISO 9650 Part 1 Type Group A packed in a rigid container or canister shall be serviced in accordance with the manufacturer's instructions but NOT less frequently than every three years		
4.20.5 (e)	A liferaft built to ISO 9650 Part 1 Type Group A packed in a valise shall be inspected annually by an approved manufacturer's agent and serviced in accordance with the manufacturer's instructions but NOT less frequently than every three years.		
4.20.5 (f)	Liferaft servicing certificates shall state the specification that the liferaft was built to. See OSR 4.20.2		

4.21.2 (a) *	A boat is required to have for each liferaft, a grab bag. A grab bag should have inherent flotation, at least 0.1 m2 area of fluorescent orange colour on the outside, should be marked with the name of the yacht, and should have a lanyard and clip.		
4.21.2 (b) *	**Note: it is not intended to duplicate in a grab bag items required by other OSRs to be on board the boat or packed inside the liferaft - these recommendations cover only the stowage of those items**		
4.21.3 (a)	**Grab Bag Recommended Contents** 2 red parachute and 2 red hand flares and cyalume-type chemical light sticks (red flares compliant with SOLAS)		
4.21.3 (b)	watertight hand-held EPFS (Electronic Position-Fixing System) (e.g. GPS) in at least one of the grab bags carried by a yacht		
4.21.3 (c)	SART (Search and Rescue Transponder) in at least one of the grab bags carried by a yacht		
4.21.3 (d)	a combined 406MHz/121.5MHz or type "E" EPIRB (see OSR 4.19.1) in at least one of the grab bags carried by a yacht		
4.21.3 (e)	water in re-sealable containers or a hand-operated desalinator plus containers for water		
4.21.3 (f)	a watertight hand-held marine VHF transceiver plus a spare set of batteries		
4.21.3 (g)	a watertight flashlight with spare batteries and bulb		
4.21.3 (h)	drysuits or thermal protective aids or survival bags		**# of suits/bags**
4.21.3 (i)	second sea anchor for the liferaft (not required if the liferaft has already a spare sea anchor in its pack) (recommended standard ISO 17339) with swivel and >30m line diameter >9.5 mm		
4.21.3 (j)	two safety tin openers (if appropriate)		
4.21.3 (k)	first-aid kit including at least 2 tubes of sunscreen. All dressings should be capable of being effectively used in wet conditions. The first-aid kit should be clearly marked and re-sealable.		
4.21.3 (l)	signaling mirror		
4.21.3 (m)	high-energy food		

4.21.3 (n)	nylon string, polythene bags, seasickness tablets		
4.21.2 (o)	watertight hand-held aviation VHF transceiver		
4.22.1 (a)	**The following shall be provided within reach of the helmsman and ready for instant use:** a lifebuoy with a self-igniting light and a drogue **or** a LifeSling with a self-igniting light and without a drogue.		
4.22.1 (b)	In addition, one lifebuoy within reach of the helmsman and ready for instant use, equipped with:- (i) a whistle, a drogue, a self-igniting light and (ii) a pole and flag. The pole shall be either permanently extended or be capable of being fully automatically extended (not extendable by hand) in less than 20 seconds. It shall be attached to the lifebuoy with 3 m (10 ft) of floating line and is to be of a length and so ballasted that the flag will fly at least 1.8 m (6 ft) off the water.		
4.22.2	When at least two lifebuoys (and/or Lifeslings) are carried, at least one of them shall depend entirely on permanent (e.g. foam) buoyancy.		
4.22.3	Each inflatable lifebuoy and any automatic device (e.g. pole and flag extended by compressed gas) shall be tested and serviced at intervals in accordance with its manufacturer's instructions.		**Attach servicing and/or inspection certificates**
4.22.4	Each lifebuoy or LifeSling shall be fitted with marine grade retro reflective material		
4.23.1	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. 6 of red parachute flares to LSA III, 3.1 4 of red hand flares to LSA III, 3.2 2 of orange smoke flares to LSA III, 3.3		
4.24 (a)	A heaving line 15 m - 25 m (50 ft - 75 ft) length readily accessible to cockpit.		
4.25	A strong, sharp knife, sheathed and securely restrained readily accessible from the deck or a cockpit.		

4.26.1	It is strongly recommended that persons in charge consult their designer and sailmaker to decide the most effective size for storm and heavy weather sails. The purpose of these sails is to provide safe propulsion for the yacht in severe weather – they are not intended as a part of the racing inventory. The areas below are maxima. Smaller areas are likely to suit some yachts according to their stability and other characteristics.		
4.26.2	Every storm jib shall either be of highly visible coloured material (e.g. dayglo pink, orange or yellow) or have a highly-visibile coloured patch at least 50% of the area of the sail (up to a maximum diameter of 3 m. added on each side. A storm sail purchased after January 2014 shall have the material of the body of the sail a highly-visible colour		
4.26.3	a) aromatic polyamides, carbon and similar fibres shall not be used in a trysail of storm jib but Spectra/Dyneema and similar materials are permitted.		
4.26.4	**The following shall be provided:** a) sheeting positions on deck for each storm and heavy-weather sail;		
4.26.4 (b)	For each storm or heavy-weather jib, a means to attach the luff to the stay, independent of any luff-groove device. A heavy weather jib shall have the means of attachment readily available. A storm jib shall have the means of attachment permanently attached; Storm and heavy weather jib areas shall be calculated as: (0.255 x luff length x (luff perpendicular + 2 x half width)) to apply to sails made in 1/2012 and after		**Method of attachment**
4.26.4 (c)	a storm trysail capable of being sheeted independently of the boom with area not greater than 17.5% mainsail hoist (P) x mainsail foot length (E). The storm trysail area shall be measured as (0.5 x leech length x shortest distance between tack point and leach). The storm trysail shall have neither headboard nor battens		**17.5% x P x E =** **trysail area =**
4.26.4 (d)	the yacht's sail number and letter(s) shall be placed on both sides of the trysail in as large a size as practicable		

4.26.4 (e)	a storm jib of area not greater than 5% height of the foretriangle squared, with luff maximum length 65% height of the foretriangle		**(5% height of the foretriangle)^2 =** **65% height of the foretriangle =** **storm jib area =** **storm jib luff length=**
4.26.4 (f)	a heavy-weather jib (or heavy-weather sail in a yacht with no forestay) of area not greater than 13.5% height of the foretriangle squared		**(13.5% height of the foretriangle)^2 =** **heavy-weather jib area =**
4.26.4 (h)	in a yacht with an in-mast furling mainsail, the storm trysail must be capable of being set while the mainsail is furled.		
4.26.4 (i)	A trysail track should allow for the trysail to be hoisted quickly when the mainsail is lowered whether or not the mainsail is stowed on the main boom. It is strongly recommended that a boat has either a dedicated trysail track permanently installed with the entry point accessible to a person standing on the main deck or coach roof, or a permanently installed stay on which to hank the trysail.		
4.27.1	A drogue for deployment over the stern, or alternatively a sea anchor or parachute anchor for deployment over the bow, complete with all gear needed to rig and deploy the sea anchor or drogue, is strongly recommended to withstand long periods in rough conditions (see Appendix F).		
4.28.3	A yacht shall be equipped with an EPFS (e.g. GPS) capable of immediately recording a man overboard position from each helm station.		

Section 5 – Personal Equipment

REG #	REGULATION	COMPLIANCE (Y/N or NA)	COMMENTS
5.01.1	**Each crew member shall have a lifejacket as follows:**		**# of lifejackets =**
5.01.1 (a) *	In accordance with ISO 12402 – 3 (Level 150) or equivalent, including EN 396 or UL 1180		
	fitted with a mandatory whistle and retro-reflective material		
	NOTES: Persons of larger than average build are generally more buoyant than those of average build and so do not require a lifejacket with greater levels of flotation. Wearing a Level 275 lifejacket may hamper entry into liferafts.		
5.01.1 (a) (ii) *	Compliance is not required.		
5.01.1 (b)	Fitted with a crotch strap(s) / thigh straps or a full safety harness in accordance with ISO 12401; NOTE: The function of lifejacket crotch/thigh straps is to hold the buoyant element down. A crew member before a race should adjust a lifejacket to fit then retain that lifejacket for the duration of the race. Correct adjustment is fundamental to the lifejacket functioning correctly.		
5.01.1 (c)	a lifejacket light in accordance with SOLAS LSA code 2.2.3 (white, >0.75 candelas, >8 hours);		
5.01.1 (d)	if inflatable have a compressed gas inflation system.		
5.01.1 (e)	if inflatable, regularly checked for gas retention		
5.01.1 (f)	compatible with the wearer's safety harness		
5.01.1 (g)	clearly marked with the yacht's or wearer's name		
5.01.1 (j)	It is strongly recommended that a lifejacket has: a splashguard/sprayhood See ISO 12402 – 8;		
5.01.1 (k)	It is strongly recommended that a lifejacket has a PLB unit (as with other types of EPIRB, should be properly registered with the appropriate authority)		
5.01.2 *	Compliance with 5.01.2 is required. For every gas inflatable lifejacket a spare cylinder and if appropriate a spare activation head. For multiple lifejackets that accept identical spares, one spare per two lifejackets is acceptable.		
5.01.4	The person in charge shall personally check each lifejacket at least once annually		**Date checked**

5.02.1	Each crew member shall have a safety harness and safety line that complies with ISO12401 or equivalent with a safety line not more than 2m in length Note: Harnesses and safety lines manufactured prior to Jan 2010 shall comply with either ISO 12401 or EN 1095. Note: Harnesses and safety lines manufactured prior to Jan 2001 are not permitted.		**# of harnesses =** **Date of harness manufacture =**
5.02.2	At least 30% of the crew shall each, in addition to the above be provided with either:- (a) a safety line not more than 1m long, or (b) a mid-point snaphook on a 2m safety line		**30% of crew # =** **# of additional safety lines or 2m safety lines with mid-point snaphook**
5.02.3	A safety line purchased in January 2001 or later shall have a coloured flag embedded in the stitching, to indicate an overload. A line which has been overloaded shall be replaced as a matter of urgency.		
5.02.4	A crew member's lifejacket and harness shall be compatible		
5.02.5	Refer to this OSR section for detailed recommendations regarding safety lines & harnesses; static lines, crotch/thigh straps, construction, snaphooks, ease of release, personal knife, adjustment for fit, safety line length, MOB prevention		
5.02.7 *	Safety Harness and Safety Lines (Tethers) Safety harnesses and PFDs shall be worn from sunset to sunrise while on deck, in addition to those times prescribed by the skipper.		

Section 6 – Training

REG #	REGULATION	COMPLIANCE (Y/N or NA)	COMMENTS
6.01 *	At least 50% but not fewer than two members of a crew, including the skipper, shall have undertaken ISAF approved offshore personal survival training within the five years before the start of the race in both 6.02 topics for theoretical sessions, and 6.03 topics which include practical, hands-on sessions.		**50% of crew # =** **# of crew with training certificates =**
6.01.5 *	A man overboard procedure (see OSR 2012 - 2013, Appendix D "Quickstop") shall be practiced aboard the boat with all Vic-Maui 2014 crew participating, not more than six months prior to the race start. A certificate of such practice shall be signed by all participating crewmembers and be kept aboard the boat.		**Attach copy of certificate**
6.05	At least 2 members of the crew shall have a first aid certificate completed within the past 5 years meeting any of the following requirements: (i) a certificate listed on the ISAF website of MNA recognized courses; see http://www.sailing.org/classesandequipment/offshore/osr_recognized_first_aid_qualifications.php (ii) STCW 95 First Aid Training complying with A-VI/1-3 – Elementary First Aid or higher STCW level		**# of crew members with first aid certificates =**
6.07 *	All entries in the Double-handed Class shall have completed within one year prior to the race start a Vic-Maui Qualifying Race or two overnight passages with both Vic-Maui 2014 crew aboard and with all required safety equipment in place, and shall submit a log of the race or passages.		**Attach Log**