Off Soundings Club
2005-2008 Minimum Equipment and Accommodations Standards For Monohull Vessels

Based on Offshore Racing Council Categories 4 and 5

April, 2005

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SECTION 1.0 - PURPOSE, APPLICABILITY, AND IMPLEMENTATION

1.1 The purpose of this document is to establish uniform Minimum Equipment and Accommodations Standards for monohull yachts racing in Off Soundings Club events.

1.2 The intent of these standards is that a yacht shall be equipped to be capable in heavy weather of continuing to race or seek shelter under reduced sail, abandon racing and proceed to shelter under power, or stabilize her situation, summon assistance, and safely await its arrival as her Master may decide.

1.3 These requirements and recommendations do not replace, but rather supplement, the requirements of the United States Coast Guard, the Racing Rules, Class Associations and rating systems, except as may be specified herein or in the Sailing Instructions.

1.4 A yacht may be inspected at any time. If she does not comply with these Equipment Standards her entry may be rejected, or she may be liable to disqualification or other such penalty as may be prescribed by the protest committee. OSC officials or other competitors may protest a yacht not in conformance.

SECTION 2.0 - RESPONSIBILITY

2.1 The safety of a yacht and her crew is the sole and inescapable responsibility of the Master who has entered her in a Race Series.

2.2 The Master must do his/her best to ensure that the yacht is fully found, thoroughly seaworthy, and manned by an experienced crew who have undergone appropriate familiarization with the capabilities, workings, and peculiarities of the vessel and its equipment, and are physically fit to face bad weather. The ability to successfully deal with difficult conditions is dependent not only on being properly equipped, but also on the overall soundness of the vessel, prior planning and preparation, and the judgment and skill of the Master and crew. The Master must be satisfied as to the soundness of the hull, spars, rigging and all gear, and must ensure that all safety equipment is properly maintained and stowed and that the crew know where it is kept and how it is used.

2.3 Neither the establishment of these Regulations and Recommendations, their use by race organizers, nor the inspection or non-inspection of a yacht under these Requirements in any way limits or reduces the complete and unlimited responsibility of the Master.

2.4 The responsibility for a yacht's decision to participate in a race or to continue racing is the Master's alone.

2.5 By completing, signing, and submitting an Entry Blank for an Off Soundings Race Series the Master commits to read and understand, and to honor and fulfill the spirit and substance of the Regulations and Recommendations in this document.

SECTION 3.0 - SUITABILITY OF EQUIPMENT

All equipment specified by these Regulations shall:

(a) function properly,

(b) be regularly checked, cleaned and serviced,

(c) when not in use be stowed in conditions in which deterioration is minimized,

(d) be aboard and readily accessible when racing,

(e) be of a type, size and capacity suitable and adequate for the intended use and the size of the yacht.

SECTION 4.0 – PART A: REGULATIONS - Structural Features, Accommodations, and Fixed Equipment

4.1 General. Yachts shall be strongly built, watertight, be fully seaworthy and meet the standards set herein.

4.2 Watertight Integrity of a Hull. 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. Centerboard and daggerboard trunks shall not open into the interior of a hull.

4.3 Hatches and Companionways.

(a) Hatches. No hatch forward of the maximum beam station shall open inwards excepting ports having an area less than 0.071 m^2 (110 sq. in.). Hatches shall be so arranged as to be above the water when the hull is heeled 90 degrees. All hatches shall be permanently fitted so that they can be closed immediately and will remain shut in a 180 degree capsize.

(b) Companionways. If extended below the sheerline, companionways shall be capable of being blocked off up to the level of the local sheerline while still affording access to the interior of the hull. All blocking arrangements (e.g. washboards) shall be capable of being secured in position with the hatch open or shut and shall be secured to the yacht (e.g. by a lanyard) to prevent their being lost overboard.

4.4 Cockpits

(a) Cockpits General. Cockpits shall be structurally strong, self-drain quickly by gravity at all angles of heel and permanently incorporated as an integral part of the hull. They must be essentially watertight, that is, all openings to the hull must be capable of being strongly and rigidly secured. Every cockpit sole must be at least 2% LOA above the LWL. Every bow, lateral, central or stern well will be considered as a cockpit for the purposes of this requirement.

(b) Cockpits Opening Aft to the Sea. The lower edge of the companionway shall not be below main deck level at the local sheer line. Openings aft shall have an area that is equal to or greater than 50% maximum cockpit depth times maximum cockpit width.

(c) Cockpit Volume. The total volume of all cockpits below the lowest coaming shall not exceed 9% of LWL times maximum beam times Freeboard abreast the cockpit. In a cockpit opening aft to the sea, the above limitations on volume do not apply except to any volume of the cockpit that may be below the lowest coaming.

(d) Cockpit Drains. Cockpit drains shall not be connected to bilge pump outlet pipes. Cockpit drains shall be readily accessible for cleaning. They shall be not less in combined area (after allowance for screens) than the equivalent of four x 20 mm (0.75-inch) diameter drains if LOA is 28.0 ft. or greater. For yachts less than 28.0 ft. the equivalent area of two x 25mm (1.0-inch) diameter drains is required.

4.5 Seacocks and Valves. Seacocks, preferred, or valves shall be fitted on all through-hull openings below the LWL except for integral deck scuppers, shaft log, speed indicators, depth finders and the like. However, a means of closing such openings shall be provided. Softwood plugs, tapered and of various sizes, or other emergency closure devices, shall be attached to or stowed adjacent to through-hull fittings, and any tools required for their use shall be readily available.

4.6 Sheet Winches. Sheet winches shall be mounted in such a way that an operator is not required to be substantially below deck.

4.7 Mast Step. It is recommended that the heel of a keel-stepped mast be securely fastened to the mast step or adjoining structure.

4.8 Halyards. No mast shall have less than two halyards each capable of hoisting a sail.

4.9 Lifelines, Stanchions, and Pulpits.

(a) A fixed bow pulpit (forward of headstay) and stern pulpit shall be fitted except that adequate lifelines may be arranged to substitute for a stern pulpit.

(b) Upper rails of pulpits shall be at no less height above the working deck than the upper lifelines. Upper rails in bow pulpits shall be securely shut while racing.

(c) Lifelines shall be effectively continuous around the working deck but may be substituted for by appropriate horizontal rails in pulpits. Lifelines need not be fixed to the 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.).

(d) Lifelines shall be permanently supported at intervals of not more than 2.13 m (7 ft.) and shall not pass outboard of supporting stanchions.

(e) Support struts and terminals aft are allowed provided that the complete lifeline enclosure is supported by stanchions and pulpit bases within the working deck. Lifeline terminals and support struts may be fixed to the hull aft of the working deck.

(f) Lifelines shall be taut. Lifelines should not deflect more than 50 mm (2 in) when a force of 50 N (5.1 kgf, 11.2 lbf) is applied to the lifeline midway between supports.

(g) Lifelines and Vertical Openings. Yachts of 8.5 m (28.0 ft.) LOA and above shall have a taut double lifeline at a height of no less than 600 mm (24 in) above the working deck. No vertical opening shall exceed 380 mm (15 in). A yacht less than 8.5m (28.0 ft) LOA shall have at least a 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 (22in). When an intermediate lifeline is fitted, no vertical opening shall exceed 380 mm (15 in). On all yachts with intermediate lifelines, the intermediate line shall be not less than 230 mm (9 in) above the working deck and shall be of the same construction and general arrangements as required for the upper.

(h) Lifeline Materials. Lifelines shall be stranded stainless steel wire, minimum diameter of 3 mm (1/8") for yachts under 8.5m (28.0 ft) LOA, 4 mm (5/32") for yachts 8.5m (28.0 ft) to 13.1m (43.0 ft) LOA, or 5 mm (3/16") for yachts over 13.1m (43.0 ft) LOA. Plain uncoated wire is recommended.

(i) Synthetic Rope. A taut lanyard of synthetic rope may be used to secure lifelines provided the gap it closes does not exceed 100 mm (4 in). All wire, fittings, anchor point fixtures and lanyards shall comprise a lifelines enclosure system which has at all points at least the breaking strength of the required lifeline wire. It is recommended that synthetic rope used in such a fashion be replaced annually.

(j) Attachment. Stanchions and Pulpits shall be securely attached to the vessel.

4.10 Accommodations.

(a) Marine toilet (MSD), securely installed, or fitted bucket.

(b) Bunks securely installed.

(c) Galley facilities securely installed.

(d) Adequate handholds shall be fitted below deck so that crewmembers may move about safely at sea.

4.11 Bilge Pumps and Buckets

(a) At least one manual bilge pump shall be fitted.

(b) No bilge pump may discharge into a cockpit unless that cockpit opens aft to the sea.

(c) Bilge pumps shall not be connected to cockpit drains.

(d) Unless permanently fitted, each manual bilge pump handle shall be provided with a lanyard, catch, or similar device to prevent accidental loss.

(c) At least one bucket of stout construction and of at least 9 liters (2.4 US gallons) capacity shall be carried. Each bucket shall have a lanyard to prevent loss overboard.

4.12 Compass. A properly adjusted marine magnetic compass shall be permanently installed and visible from the helm.

4.13 Marine Radio.

(a) A multi-channel two-way marine radio, preferably waterproof, meeting the U.S. Federal Communications Commission regulations for the VHF-FM Marine Band, 156-163 MHz, and using the U.S channel assignments including the receive-only weather channels must be aboard.

(b) At least one radio must be a permanently installed fixed mount unit rated to have at least 25 watts of power on the 'high' setting and operating on ship's power.

(c) At least one marine radio aboard must have available an antenna that is independent of the vessel's rig.

4.14 Navigation lights. Navigation lights are to be installed as required by the COLREGS, mounted so that sails or the heeling of the yacht will not mask them.

4.15 Engine and Fuel.

(a) Inboard engine installations shall be such that the engine, when running, can be securely covered and that the exhaust and fuel supply systems are securely installed and adequately protected from the effects of heavy weather.

(b) When an electric starter is the only provision for starting the engine a spare battery, the primary purpose of which is to start the engine, shall be carried.

(c) Engine Fuel and Tankage. A yacht fitted with a permanently installed propulsion engine shall carry its fuel in a permanently installed fuel tank.

(d) Fuel tanks shall be provided with shutoff valves.

(e) Gasoline powered vessels shall be fitted with the appropriate USCG approved bilge ventilation.

4.16 Waivers. Waivers to certain parts of Section 4 may be granted to vessels of traditional design and construction or to vessels recently faithfully constructed to a traditional design. Waivers may carry special requirements and an expiration date. Requests for waivers should be specific as to the Regulation requested to be waived and the reason and should submitted in writing to the Race Secretary at least thirty days prior to the entry deadline of the Race Series for which they are requested. Waivers of this section will not be granted to vessels of recent design.

SECTION 5.0 -- PART B : REGULATIONS - Additional Equipment & Supplies

5.1 USCG Requirements. Each vessel shall meet the United States Coast Guard Safety Equipment Requirements for its 'class.'

5.2 Pyrotechnic Signals. Each vessel shall have aboard in waterproof containers at least the following unexpired marine signals; SOLAS flares are strongly recommended for their increased brightness and longer burn times:

(a) 3 orange smoke signals

(b) 3 handheld red signals

(c) 6 aerial meteor flares or 3 parachute flares, or a combination thereof wherein 1 parachute flare is counted as the equivalent of 2 meteor flares, and appropriate launching equipment.

5.3 Ground Tackle. One anchor, chain and rode suitable for the size of the yacht, with the anchor assembled and stowed to be accessible for immediate use.

5.4 Charts. Appropriate paper charts for the racing venue and navigation tools shall be aboard.

5.5 Fire Extinguishers. At least two fire extinguishers, readily accessible, shall be carried in suitable different parts of the yacht.

5.6 Flashlight. Watertight, with spare batteries and bulb.

5.7 Medical. A first aid kit and manual appropriate to the likely conditions during the race and the size of the crew shall be aboard.

5.8 Foghorn. A powered or manual foghorn shall be carried.

5.9 Radar Reflector. The radar reflector shall have a minimum documented "equivalent echoing area" of 6 m^2 (64 ft^2). Octahedral reflectors shall have a minimum diameter of 300mm (12 in). The radar reflector shall be deployed per the manufacturer's instructions in poor visibility.

5.10 Echo Sounder or Lead line. A depth sounding device shall be carried.

5.11 Identification. The yacht's name shall be affixed to miscellaneous buoyant equipment, such as lifejackets, oars, cushions, lifebuoys and Lifeslings etc.

5.12 Marine Grade Retro-Reflective Material shall be fitted to all lifebuoys, Lifeslings and lifejackets.

5.13 Lifejackets.

(a) One U.S. Coast Guard approved Type I, II, or III Personal Flotation Device shall be aboard for each crewmember.

(b) Each lifejacket shall have a whistle, shall be fitted with marine grade retro-reflective material, and be clearly marked with the name of the yacht or the wearer; a light is recommended.

(c) Inflatable PFDs shall be USCG approved, have an automatic compressed gas inflation system, and be checked regularly for leakage. (Note that inflatable PFDs are Type V devices and do not satisfy the USCG requirements of one PFD for each crewmember unless worn.)

5.14 Lifebuoys. At least one lifebuoy with a drogue OR Lifesling (without a drogue) equipped with a self-activating light shall be within easy reach of the helmsman and ready for instant use. Lifebuoys must be inherently buoyant. Every inflatable lifebuoy e.g., MOM systems, shall be tested regularly and otherwise maintained in accordance with its manufacturer's instructions.

5.15 Heaving Line. Minimum 15 m – 25 m (50 ft - 75 ft), minimum 6mm (1/4") diameter, floating, of UV-inhibited material and readily accessible to the cockpit.

5.16 Waivers. There will be no waivers of Section 5 Regulations.

SECTION 6.0 – Part C: RECOMMENDATIONS

6.1 Purpose. These recommendations recognize that given differences in hull and rig design and construction, space availability and configuration of vessels, differences in equipment, and the experience and preferences of individual Masters it may not be possible to develop universally workable specifications for all desirable safety requirements.

It is expected that each Master will recognize the importance of ensuring the safety of his crew and vessel and the safety of others, and develop and implement methods of dealing with the issues raised in this section. Any consequence of a failure to do is the responsibility of the Master and is at his own risk.

6.2 Portable VHF Radio. It is recommended that in addition to a fixed mount radio a self-powered waterproof portable VHF marine transceiver with a minimum rated output of 5 watts high power be carried aboard. The following is recommended:

(a) If the portable unit has a rechargeable battery system the unit be fully charged at the start of each race.

(b) If there is an accessory to recharge the internal battery from ship's power, and/or to operate the unit from ship's power such device(s) be aboard.

(c) If a rechargeable device can be backed up by a supplemental dry cell battery pack that backup should be available.

(d) If the unit operates from conventional dry cell batteries only, a full set of fresh backup batteries should be aboard in an easily accessible waterproof container.

(e) A portable unit is considered to meet the section 4.13 requirement for a radio with an antenna independent of the rig.

6.3 GPS. A Global Positioning System position-fixing device is recommended.

6.4 Safety Harnesses. It is strongly recommended that an adequate safety harness and tether be available for each crewmember.

6.5 Ground Tackle. At least one complete set of ground tackle aboard the vessel, i.e., anchor, chain and nylon rode, or all chain rode, should meet at least the 'working anchor' specifications of the anchor's manufacturer or the recommendations in the current *Chapman Piloting, Seamanship, and Small Boat Handling*, for anchor weight, chain size and length, and/or rode diameter and length for the vessel's size and the waters to be sailed.

6.6 Tools and Spare Parts.

(a) Parts and tools to repair essential equipment and systems should be carried aboard the vessel.

(b) Adequate means to disconnect or sever the standing rigging from the hull should be available. Using brass cotter pins in deck-level fittings may facilitate disconnecting the rig with normal hand tools.

(c) A well-sharpened non-folding knife capable of quickly severing any of the vessel's non-metallic rigging should be permanently mounted in a location easily accessible from the cockpit. A second knife mounted in the vicinity of the mast should be considered.

6.7 Emergency Steering. There should be an alternate method of steering the yacht in any sea condition in the event of failure or loss of the installed steering mechanism or rudder. It is recommended that at least one method be devised, tested, and proven to work on board the yacht, that any necessary material, parts and tools be aboard, and that the crew be familiarized with its installation and use. Otherwise, the vessel should be well equipped to request assistance and have a plan for stabilizing and maintaining the integrity and safety of the vessel until help arrives.

6.8 Storm and Heavy Weather Sails. The purpose of heavy weather headsails and a mainsail that can be reduced in area is not only to protect the integrity of the rig and assist in preventing a vessel from being overpowered in heavy weather, but also to provide a balanced efficient sailing rig that will allow the yacht to continue racing or to seek shelter under sail alone in the event of problems with the mechanical propulsion system, or to lie to until weather conditions improve.

(a) Ideally, each yacht will fulfill the following Recommendations:

1) The mainsail will be capable of being reefed to reduce the luff by at least 40% and will have the necessary running rigging to reef it, or there will be a storm trysail and any required attachment points and rigging.

2) Vessels using roller reefing for the mainsail will have the necessary material to pack any excess draft to an efficient shape.

3) Vessels having a forestay will have at least one heavy-weather jib of LP not greater than 100% without reef points and preferably of less than full hoist.

4) Vessels using a luff-groove device will have an alternative method of attaching the heavy-weather jib.

5) There will be a method of attaching the heavy-weather jib in place of a furling headsail.

6) A storm jib with a wire or other low stretch luff may be set flying from a properly installed reinforced attachment point on the foredeck to meet these recommendations. There also are commercially available devices that will adapt a jib to be set over a luff groove or furled jib.

(b) Masters who elect not to follow the above recommendations on heavy weather sails should consider their actions carefully not only in deciding whether to start or to continue racing in heavy weather, but in planning and determining what action they will take should conditions worsen and the vessel become overpowered while racing. The decision to start or continue racing and the responsibility for any consequences rest solely and inescapably with the Master of the yacht.