



Equipment Inspection Checklist

YACHT _____

SKIPPER _____

INSPECTOR #1 _____

INSPECTOR #2 _____

Second Inspection (if required)

SIGNATURE _____

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DATE _____

DATE _____

1.0 Overall

- | | Skipper | Inspector #1 | Inspector #2 |
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| 1.4 <u>Equipment and Knowledge:</u> All equipment required shall function properly, be regularly checked, cleaned and serviced, and be of a type, size and capacity suitable for the intended use and size of the boat and the size of the crew, who will have practiced with the use of equipment. This equipment shall be readily accessible while underway and, when not in use, stored in such a way that deterioration is minimized. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.5 <u>Secure Storage:</u> A boat's heavy items such as batteries, stoves, toolboxes, anchors, chain and internal ballast shall be secured. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.6 <u>Strength of Build:</u> A boat shall be strongly built, watertight and, particularly with regard to hulls, decks and cabin trunks, capable of withstanding solid water and knockdowns. A boat shall be properly rigged and ballasted, be fully seaworthy and shall meet the standards set forth herein. A boat's shrouds and at least one forestay shall remain attached at all times. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.7 <u>Watertight Integrity:</u> A boat's hull, including, deck, coach roof, windows, hatches and all other parts, shall form an integral watertight unit and any openings in it shall be capable of being immediately secured to maintain this integrity. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

2.0 Hull and Structure

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| 2.1.1 <u>Hull Openings:</u> A boat's companionway(s) shall be capable of being blocked off to main deck level. The method of blocking should be solid watertight and rigidly secured, if not permanent. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.1.2 <u>Hull Openings:</u> A boat's hatch boards, whether or not in position in the hatchway, shall be secured to the boat (e.g. by a lanyard) for the duration of the race to prevent their being lost overboard. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.1.3 <u>Cockpit:</u> A boat's entire cockpit shall be solid, watertight, strongly fastened and/or sealed. Weather-tight seat hatches are acceptable only if capable of being secured when closed. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.1.4 <u>Cockpit:</u> <i>It is strongly recommended that a boat's cockpit drains be capable of draining six inches of water in 5 minutes. One square inch (645mm²) of effective drain per eight square feet (0.743m²) of cockpit sole will meet this requirement.</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.1.6 <u>Through Hulls:</u> A boat's through-hull openings below the waterline shall be equipped with sea cocks or valves, except for integral deck scuppers, speed transducers, depth finder transducers and the like; however a means of closing such openings shall be provided. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.2.1 <u>Stability:</u> The boat must have a stability index greater than or equal to 115, or meet the requirements of ISO 12217-2A | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

- 2.3.1 Toilet: **A boat shall be equipped with an enclosed head.**
- 2.3.2 Bunks: A boat shall have bunks sufficient to accommodate the off-watch crew.
- 2.3.3 Cooking: A boat shall have a stove with a fuel shutoff.
- 2.3.4 Water: **A boat shall have an installed water tank and delivery system.**
- 2.3.5 Hand-Holds: A boat shall have adequate hand holds below decks.
- 2.4.1 Lifelines: A boat's deck including the headstay shall be surrounded by a suitably strong enclosure, typically consisting of lifelines and pulpits, meeting the requirements in 2.4.2 to 2.4.8.
- 2.4.2 Lifelines: A boat's stanchion and pulpit bases shall be within the working deck.
- 2.4.3 Lifelines: Bow pulpits may be open, but the opening between the vertical portion of stanchion pulpit and any part of the boat shall not exceed 14.2" (360mm).
- 2.4.4 Lifelines: Lifelines shall be stainless steel wire.
- 2.4.5 Lifelines: The maximum spacing between the bases of lifeline supports (e.g. stanchions and pulpits) shall be 87" (2.2m).
- 2.4.7 Lifelines: Boats 30 feet and over (9.14m) shall have at least two lifelines with 24" (762mm) minimum height above deck, and a maximum vertical gap of 15" (381mm). The minimum diameter will be 5/32" (4mm) for boats to 43' (13.1m) and 3/16" (5mm) for boats over 43' (13.1m).
- 2.4.8 Lifelines: Toe rails shall be fitted around the foredeck from the base of the mast with a minimum height of 3/4" (18mm) for boats under 30' (9.14m) and 1" (25mm) for boats over 30'. An additional installed lifeline that is 1-2" (25-51mm) above the deck will satisfy this requirement for boats without toe rails.
- 2.5.1 Dewatering pumps: A boat shall have a permanently installed manual bilge pump of at least a 10 gallons per minute (GPM) capacity and which is operable from on deck with the cabin closed with the discharge not dependent on an open hatch. Unless permanently attached to the pump, the bilge pump handle shall be securely attached to the boat in its vicinity via a lanyard or catch. A bilge pump discharge shall not be connected to a cockpit drain. The bilge pump shall not discharge into a cockpit unless that cockpit opens aft to the sea.
- 2.5.2 Dewatering pumps: **A boat shall have a second manual bilge pump of at least 10 GPM capacity, operable from below deck, meeting the same criteria as above. The pump may be mounted on a board.**
- 2.6 Mast and Rigging: **It is strongly recommended that a boat have the heel of a keel-stepped mast securely fastened to the mast step or adjoining structure.**
- 2.7.1 Mechanical Propulsion: **A boat shall have a mechanical propulsion system that is quickly available and capable of driving the boat at a minimum speed in knots equivalent to the square root of LWL in feet (1.81 times the square root of the waterline in meters) and a boat must carry enough fuel to motor for the distance specified in the NOR.**
- 2.7.3 Mechanical Propulsion: **It is recommended that the boat's engine and generator installation (if so equipped) must conform to ABYC, ISO and/or U.S. Coast Guard standards.**
- 2.7.4 Batteries: **A boat's onboard rechargeable batteries shall be of the sealed type or be installed in such a way that electrolyte cannot escape in the event of inversion.**

3.0 Safety Equipment

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| 3.1.1 <u>Personal</u> : Each crewmember shall have a life jacket that provides at least 33.7lbs (150N) of buoyancy, intended to be worn over the shoulders (no belt pack), meeting either U.S. Coast Guard or ISO specifications. Alternatively, each crewmember shall have an inherently buoyant off-shore life jacket that provides at least 22lbs (100N) of buoyancy meeting either U.S. Coast Guard or ISO specifications. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.1.4 <u>Personal</u> : Each crewmember shall have a safety harness and compatible safety tether not more than 6'7" (2m) long with a minimum tensile strength of 4500 lb. (20kN). The tether shall have a snap hook at its far end and a means to quickly disconnect the tether at the chest end. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.2.1 <u>Deck Safety</u> : A boat shall carry jacklines with a breaking strength of at least 4500 lb. (20kN) which allow the crew to reach all points on deck, connected to similarly strong attachment points, in place while racing. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.2.2 <u>Deck Safety</u> : A boat shall have adequate clipping points or jacklines that allow the crew to clip on before coming on deck and unclip after going below. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.2.3 <u>Lifejacket and Harness Use</u> : <i>It is strongly recommended that crew members wear a life jacket and harness while on deck from sunset to sunrise, during rough weather and when sails are being changed or reefed.</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.3.1 <u>Navigation Lights</u> : A boat racing between sunset and sunrise shall carry navigation lights that meet U. S. Coast Guard requirements mounted so that they will not be obscured by the sails nor be located below deck level. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.3.2 <u>Navigation Lights</u> : A boat shall have a second set of navigation lights that comply with US Coast Guard requirements and which can be connected to a different power source than the primary lights. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.4 <u>Fire Extinguishers</u> : A boat shall carry fire extinguisher(s) that meets U.S. Coast Guard requirements. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.5 <u>Sound Producing Equipment</u> : A boat shall carry a sound-making device that meets U.S. Coast Guard requirements. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.6.1 <u>Visual Distress Signals</u> : A boat shall carry two (2) SOLAS orange smoke flares not older than the expiration date. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.6.3 <u>Visual Distress Signals</u> : A boat shall carry four (4) SOLAS red hand flares not older than the expiration date. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.6.5 <u>Visual Distress Signals</u> : Boat flares stored inside of life rafts may not be used to satisfy the flare requirement. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.7.1 <u>Man Overboard</u> : A boat shall carry a Lifesling or equivalent man overboard rescue device equipped with a self igniting light stored on deck and ready for immediate use. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.7.2 <u>Man Overboard</u> : A boat shall have a man overboard pole and flag, with a lifebuoy, a self-igniting light, a whistle, and a drogue attached. A self-inflating MOB module, Dan Buoy or similar device will satisfy this requirement. Self-inflating apparatus shall be tested and serviced in accordance with the manufacturer's specifications. These items shall be stored on deck, ready for immediate use, and affixed in a manner that allows for a "quick release". | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.7.3 <u>Man Overboard</u> : A boat shall have a throwing sock-type heaving line of 50' (15m) or greater of floating polypropylene line readily accessible to the cockpit. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

- 3.8.1 Emergency Communications: A boat shall have a permanently installed 25-watt VHF radio connected to a masthead antenna by a co-axial feeder cable with no more than a 40% power loss. ***It is recommended that all radios shall have DSC capability, have an antenna of at least 15" (381mm) in length, be connected to or have an internal GPS, and have the assigned MMSI number (unique to the boat) programed into the VHF.***
- 3.8.2 Emergency Communications: A boat shall have a watertight handheld VHF radio or a handheld VHF radio with waterproof cover. ***It is highly recommended that this radio have DSC/GPS capability with an MMSI number properly registered to the vessel.***
- 3.8.3 Emergency Communications: ***It is recommended that a boat have an emergency VHF antenna. The emergency antenna shall be equipped with sufficient coax to reach the deck, and have a minimum antenna length of 15" (381mm).***
- 3.8.4 VHF Operational Modes: ***A boat shall be equipped with VHF transceivers that are operational in International and USA channel mode.***
- 3.9 Emergency Communications: ***It is recommended that a boat have an AIS transponder with a masthead mounted antenna of at least 15" (381mm) in length. The AIS can use the boat's VHF antenna if a low loss AIS antenna splitter is used.***
- 3.10 Emergency Communications: A boat shall carry a cellular phone in a waterproof container. ***Its number should be recorded as part of the boat's registration.***
- 3.11 Emergency Communications: ***A boat shall carry a satellite voice and text communication system, with critical components in a waterproof container(s). The satellite voice and text communication system shall be operable from below decks (if needed via external antenna). The system shall be on, capable of receiving incoming communication for the duration of the race. Its number shall be recorded as part of the boat's registration.***
- 3.13 Emergency Communications: A boat shall have a method of receiving weather information in addition to the fixed mount and hand held VHF radio.
- 3.14 Emergency Communications: A boat shall carry a GPS receiver.
- 3.15 Emergency Communications: A boat shall carry an electronic means to record the position of a man overboard within ten seconds. This may be the same instrument listed in 3.14.
- 3.16.1 Emergency Communications: A boat shall carry a 406MHz EPIRB that is properly registered to the boat. ***It is recommended that this device have either an internal GPS (self-locating) or be connected to a continuously functioning external GPS.***
- 3.17 Navigation: A boat shall have a knotmeter and/or distance-measuring instrument.
- 3.18 Navigation: A boat shall have a permanently installed depth sounder that can measure to depths of at least 200 ft. (61m).
- 3.19.1 Navigation: A boat shall have a permanently mounted magnetic compass independent of the boat's electrical system suitable for steering at sea.
- 3.19.2 Navigation: A boat shall have a second magnetic compass suitable for steering at sea which may be handheld.
- 3.20 Navigation: A boat shall have non-electronic charts that are appropriate for the race area.
- 3.21 Damage Control: A boat shall have the ability to display sail numbers and letters of the size carried on the mainsail by an alternative means when none of the numbered sails is set.

- 3.22 Damage Control: A boat shall carry soft plugs of an appropriate material, tapered and of the appropriate size, attached or stowed adjacent to every through-hull opening.
- 3.23 Anchoring: A boat shall carry one anchor, meeting the anchor manufacturer's recommendations based on the yacht's size, with a suitable combination of chain and line.
- 3.24.1 Lights: A boat shall carry a watertight, high-powered searchlight, suitable for searching for a person overboard at night or for collision avoidance.
- 3.24.2 Lights: A boat shall carry a watertight flashlight for each crewmember with spare batteries in addition to the above.
- 3.25 Medical Kits: A boat shall carry a first aid kit and first aid manual suitable for the likely conditions of the passage and the number of crew aboard.
- 3.26 Radar Reflectors: A boat shall carry an 11.5" (292mm) diameter or greater octahedral radar reflector or one of equivalent performance.
- 3.27 Dewatering: A boat shall carry two (2) sturdy bucket(s) of at least two gallons (8 liters) capacity with lanyards attached.
- 3.28 Safety Diagram: A boat shall post a durable, waterproof diagram or chart locating the principal items of safety equipment and through hulls in the main accommodation area where it can be easily seen.
- 3.29.1 Emergency Steering: A boat shall have an emergency tiller, capable of being fitted to the rudder stock.
- 3.30 Spare Parts: A boat shall carry tools and spare parts, including an effective means to quickly disconnect or sever the standing rigging from the hull.
- 3.31 Identification: All lifesaving equipment shall bear retro-reflective material and be marked with the yacht's or wearer's name. The exception would be for new equipment or rented equipment (e.g. life rafts) that would require the unpacking of sealed equipment in order to meet this requirement. The boat name shall be stenciled on during the first servicing of any new equipment.
- 3.32 Cockpit Knife: A boat shall carry a strong, sharp knife, sheathed and securely restrained which is readily accessible from the deck and/or cockpit.
- 3.33.1 Mainsail Reefing: **A boat shall have a mainsail with reefing capable of reducing the area of the sail by an amount appropriate for the weather conditions possible on the race course.**
- 3.33.2 Trysail: **It is strongly recommended that a boat carry a trysail, with the boat's sail number displayed on both sides, which can be set independently of the main boom, has an area less than 17.5% of E x P, and which is capable of being attached to the mast. Storm sails manufactured after 01/01/2014 shall be constructed from a highly visible material.**
- 3.33.3 Headsails: A boat shall carry 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.
- 3.33.4 Headsails: A boat shall carry a storm jib not exceeding 5% of the yacht's I dimension squared that is equipped with an alternative means of attachment to the headstay in the event of a failure of the head foil. Storm sails manufactured after 01/01/2014 shall be constructed from a highly visible material.

- 3.35 Halyards: A boat shall not be rigged with any halyard that requires a person to go aloft in order to lower a sail.
- 3.36.1 Boom Support: A boat shall have a means to prevent the boom from dropping if support from the mainsail or halyard fails.
- 3.36.2 Boom Preventer: **A yacht shall have a preventer or boom restraining device, shall practice rigging it and shall be prepared to demonstrate its use to the satisfaction of the MBR OA.**
- 3.37 Water: A boat shall carry 1 gallon (3.785 liters) per crewmember of emergency drinking water in sealed containers in addition to any other water carried aboard the boat and it shall be aboard after finishing.
- 3.38 Rations: **A boat shall carry adequate food, energy bars, and snacks to maintain crew stamina as specified in the Notice of Race.**
- 3.39 Life Rafts: A boat shall carry adequate inflatable life raft(s) designed for saving life at sea with designed capacity for containing entire crew. The raft shall be SOLAS, ISAF, ISO 9650-1, or ORC approved. The raft shall be stored in such a way that it is capable of being launched within 15 seconds. The life raft shall hold a current certificate of inspection. Boats built after 01/06/ 2001 shall have the life raft stowed in a deck mounted rigid container or stowed in watertight or self draining purpose built rigid compartment(s) opening adjacent to the cockpit of the working deck.
- 3.40 Life Rafts: A boat shall have a grab bag with a lanyard and clip for each life raft. The grab bag shall have inherent flotation and be of a bright fluorescent color containing at least an EPIRB, and a watertight handheld VHF radio. The VHF radio and EPIRB need not be in addition to the prior requirements.

4.0 Skills

- 4.1 Emergency Steering: A boat's crew shall be aware of multiple methods of steering the boat with the rudder disabled, and shall have chosen and practiced one method of steering the boat with the rudder disabled and be prepared to demonstrate said method of steering both upwind and downwind.
- 4.2 Man Overboard: Annually, two-thirds of the boat's racing crew shall practice man-overboard procedures appropriate for the boat's size and speed. The practice shall consist of marking and returning to a position on the water, and demonstrating a method of hoisting a crewmember back on deck, or other consistent means of reboarding the crewmember.
- 4.3.1 Safety at Sea Training: At least 30% of those aboard the boat, but not fewer than two members of the crew, including the person in charge, shall have attended a one-day or two-day US Sailing Safety at Sea Seminar within the last 5 years, or other courses as accepted by US Sailing.
- 4.4 CPR and First Aid: **It is recommended that at least two crew members have current CPR and First Aid certifications.**

Skipper
 Inspector #1
 Inspector #2