

# CABRILLO BEACH YACHT CLUB DANA POINT YACHT CLUB

MAY 29-30, 2021 NOTICE OF RACE

# "Around Catalina"

# 40<sup>TH</sup> ANNUAL CABRILLO BEACH TO DANA POINT RACE

The Organizing Authority (OA) for this Regatta is Dana Point Yacht Club (DPYC) and Cabrillo Beach Yacht Club (CBYC). The Race Committees (RC) of both clubs will manage this race jointly.

#### 1. RULES – GENERAL

- 1.1 This race shall be governed by the 'Rules' as defined in the 2021-2024 Racing Rules of Sailing (RRS). US Sailing prescriptions will apply.
- 1.2 All boats, except Cruising Fleet boats, shall comply with the current equipment and safety regulations set forth by the US Safety Equipment Regulations, (USSER), US Coastal Race Level, except as modified by this notice of race and sailing instructions. See NOR Sec 19.2.
- 1.3 Cruising Fleet boats shall comply with the current equipment and safety regulations set forth by US Safety Equipment Regulations, (USSER), US Nearshore Race Level, except as modified by this notice of race and sailing instructions. See NOR Sec 19.3.
- 1.4 For boats competing in the PHRF Fleet, including Cruising Fleet, the rules of Performance Handicap Racing Fleet of Southern California (PHRF) will apply and PHRF is the Rating Authority (RA).
- 1.5 For boats forming a One-Design class (five or more), the rules of the relevant One-Design class will also apply and they shall compete in the PHRF Fleet.
- 1.6 All Multi-Hulls shall comply with their class equipment list and the Ocean Racing Catamaran Association (ORCA) Equipment List for an ORCA Coastal Class Race, including those for Extreme rated boats as applicable. See NOR Sec 19.4

#### 2. RULES - AMENDED

- 2.1 RRS 54 Forestays and Headsail Tacks, is modified to allow the temporary removal of the forestay to facilitate a gybe. The forestay shall be reattached at the first opportunity after the gybe is complete.
- 2.2 RRS 51 (Movable Ballast) and RRS 52 (Manual Power) are modified as follows:
- 2.2.1 The movement of sails not in use while racing is allowed, however all gear and sails not being flown must remain within a boat's lifelines.
- 2.2.2 RRS 51 Movable Ballast and RRS 52 Manual Power are modified to permit the positioning of hull appendages, specifically adjustable keels, or water ballast by hydraulic or electric power on boats so designed and so rated by the RA. All movable ballast systems shall be capable of manual operation if powered systems are inoperable. All other boats shall comply with RRS 51 and RRS 52.

- 2.2.3 Movable ballast systems designed and rated for the boat (excluding canting ballast strut and bulb) including reservoirs, pipes, tubes, tackle, etc. shall be positioned inside the hull and shall be firmly and indefectibly integrated with the structure of the boat. Movable ballast shall only be used within such systems and shall be seawater only, to the exclusion of all other liquids.
- 2.3 RRS 55 is modified to allow the disposal of biodegradable material used to band spinnakers in the water
- 2.4 RRS 62.1 is modified by adding the following: (e) being directed by a Government Authority to deviate from her proper course.
- 2.5 OSR 4.26 will be modified to allow boats to reef the mainsail to 30% in lieu of carrying a storm trysail, and to carry either a storm jib or a heavy-weather jib.
- 2.6 US Sailing prescriptions to RRS 60 and 63.2 do not apply.
- 2.7 RRS 64.2, Penalties, is modified by adding: "(d) When the protest committee decides a boat that is a party to a protest hearing has broken a rule, it may assign a time penalty to be added to the boat's corrected time."

#### 3. ADVERTISING

- 3.1 This regatta is classified as a Category C event in accordance with ISAF Regulation 20. If a Class Association has elected another category or advertising rule, then advertising will be restricted to that Class Rule for that Class only.
- 3.2 Boats may be required to display advertising supplied by the Organizing Authority in accordance with ISAF Regulation 20.4.

#### 4. OFFICIAL NOTICE BOARD

- 4.1 The Official Notice Board is a web page bearing the name "Race Documents" on the race website at: <a href="https://www.regattanetwork.com/event/22343#">https://www.regattanetwork.com/event/22343#</a> docs.
- 4.2 Supplementary notice boards are located in the upstairs area at DPYC and outside the main entrance in an enclosed case at CBYC.

#### 5. ELIGIBILITY

- 5.1 The race is open to ocean racing / cruising sailing vessels whose owners or charterers are members of a yacht club recognized by US Sailing or SCYA. All boats must conform to USCG and US Sailing requirements.
- 5.2 All boats, except Cruising classes, must have a valid current PHRF rating certificate.
- 5.2.1 Cruising Class Boats with a PHRF base OWC rating of 60 or higher.
- 5.3 All boats are subject to ISAF Offshore Regulation 2.02–Inspection. If an inspection is required, it will be carried out according to OSR, Appendix C, Standard Inspection Card as modified by the SI's. Decisions made by the OA, RC and the RA regarding any measurement or equipment dispute that arises from an inspection shall be final.
- 5.4 The term "Skipper" as used herein is defined as the person in charge (RRS 46), whether or not they are the owner/charterer of the boat designated on the entry, and is the person in charge of the boat during the race. The Skipper is responsible for the boat, its handling and safety, the conduct of its crew before, during, and after the race, and compliance with the rules.

5.5 A decision of the OA or the Race Committee as to whether a boat and her crew meet the eligibility criteria for entry in the race is final and binding and shall not be grounds for a request for redress.

#### 6. ENTRY AND FEES

- 6.1 The DPYC Race Committee must receive a completed online entry and fee of \$75 by **May 28, 2021**. Online Entry is available on Regatta Network, at <a href="https://www.regattanetwork.com/clubmgmt/applet registration form.php?regatta\_id=22343">https://www.regattanetwork.com/clubmgmt/applet registration form.php?regatta\_id=22343</a>, and the date stamp of the online entry will be your entry date once payment is completed.
- 6.2 The final entry deadline is 1800 hours, May 28, 2021. Online entries submitted after this deadline will be deemed not received.
- 6.3 All boats, except Cruising Classes, must submit a copy of your current PHRF Rating Certificate along with their entry unless on file with DPYC or online validation is available.
- 6.4 Cruising Class entries **should** submit a Valid PHRF Rating Certificate. Those without a PHRF Rating Certificate will be assigned a rating by the OA. This rating assignment is final and binding and shall not be grounds for a request for redress.
- 6.5 Current PHRF certificates for any online entry where DPYC does not currently have the boat's certificate on file or is not able to validate it from the PHRF website may submit their certificate by fax to DPYC, Attn: Jason Adamson at 949.496.1603 or by email to saboteer@yahoo.com no later than May 28, 2021.
- 6.6 If mailing any documentation, mail to DPYC, Attn: Jason Adamson, 24399 Dana Drive, Dana Point, CA 92629.
- 6.7 If an entry is cancelled or withdrawn prior to Tuesday, May 25, 2021, the entry fee will be refunded. After that date no refunds will be made.

#### 7. FLEETS & CLASSES

- 7.1 PHRF and Cruising boats will each have their own fleet. The PHRF and Cruising fleets will be divided into classes based upon the type and number of entries. Double-Handed boats may be established as a separate fleet or may be placed as a Division within a Class depending on the type and number of entries.
- 7.2 One-Design classes will compete in the PHRF fleet.
- 7.3 The following handicap classes within the PHRF fleet will be:
- 7.3.1 PHRF boats according to their PHRF Regional OWC rating.
- 7.3.2 One-Design classes may be formed by five (5) or more entries.
- 7.3.3 Divisions within a class may be made to better group boats with similar performance characteristics.
- 7.4 Where the OA receives fewer than 5 entries for a Class, the RC reserves the right to reassign those boats to another Class.
- 7.5 Entries that wish to initiate a One-Design class or an additional class should contact the OA by May 21, 2021.
- 7.6 Cruising fleet entries may be split into spinnaker and non-spinnaker classes depending upon the type and number of entries.
- 7.7 Non-Spinnaker offsets will be used for the Cruising class(es) entries who enter as Non-Spin.

- 7.8 Skippers will be notified in the Sailing Instructions as to which class they will compete.
- 7.9 Multi-Hull boats are invited to participate in this race. Multi-Hulls will have their own fleet.

#### 8. SAILING INSTRUCTIONS

8.1 The Race Committee will publish Sailing Instructions on the Official Notice Board on the race website: https://www.regattanetwork.com/event/22343# docs.

#### 9. COURSE AND START AREA

- 9.1 This is an "Offwind Course Rating" (OWC) race.
- 9.2 The start line will be defined in the Sailing Instructions and will be located inside the Los Angeles Harbor approximately 1 nm northeast of the Los Angeles Lighthouse.
- 9.3 All PHRF, One-Design, Multi-Hull and Double-Handed classes shall leave Santa Catalina Island to port and finish at Dana Point Harbor. The finish line will be defined in the Sailing Instructions and will be located in the vicinity of the Dana Point Green Buoy "G1". This is a new finish line location this year. HANDICAP COURSE LENGTH 75 NM.
- 9.4 Cruising classes shall exit LA Harbor at Angel's Gate and sail their best course to finish. The finish line will be defined in the Sailing Instructions and will be located in the vicinity of the Dana Point Green Buoy "G1". This is a new finish line location this year. HANDICAP COURSE LENGTH IS -34 NM.
- 9.5 Chart 18751 covers Los Angeles and Long Beach Harbors. Chart 18746 covers the entire racecourse.

#### 10. SCORING PENALTY

10.1 The Scoring Penalty, RRS 44.3, will apply. The number of places penalty shall be the whole number (rounding all decimals upward) nearest to 20% of the number of boats entered in the class.

#### 11. SCORING

- 11.1 Overall results will be calculated using the boat's PHRF OWC rating and the overall winner will be the PHRF Fleet or Double-Handed Division boat with the lowest PHRF corrected time.
- 11.2 Results for all other Classes will be calculated using the PHRF OWC rating or RC assigned rating.

#### 12. PRIZES

- 12.1 Trophies awarded will be made available to the winning skipper, within a reasonable time frame, at DPYC.
- 12.2 Perpetual trophies may be awarded as follows:
- 12.2.1 The "Around Catalina First to Finish" trophy to the first boat to finish in the PHRF Fleet or Double-Handed Division.
- 12.2.2 The "Around Catalina First Overall" trophy to the PHRF Fleet or Double-Handed Division boat with the lowest PHRF corrected time.
- 12.2.3 The "Around Catalina First Catalina" trophies to the Catalina designed boat with the lowest corrected time from the PHRF Fleet or Double-Handed Division and the Cruising Fleet.
- 12.2.4 The "Around Catalina First J-Boat" trophy to the J-Boat designed boat with the lowest corrected time from the PHRF Fleet or Double-Handed Division.

- 12.2.5 The "Cruising Class First to Finish" trophy to the first boat to finish in the Cruising Class.
- 12.2.6 The "Cruising Class First Overall" trophy to the Cruising Class boat with the lowest corrected time.
- 12.3 Take home trophies will be awarded in customary numbers to all classes, as well as to, the First to Finish and First Overall winners. Double-Handed boats will receive two class trophies per boat.

#### 13. DISCLAIMER

13.1 Sailing is an activity that has an inherent risk of damage and injury. Competitors in this race participate entirely at their own risk. See RRS 4, Decision to Race. The race organizers (OA, RA, Race Committee, Protest Committee, host clubs, sponsors, or any other organization or official) will not be responsible for damage to any boat or other property or the injury to any competitor, including death, sustained as a result of participation in this race. By participating in this race, each competitor agrees to release the race organizers from any and all liability associated with such competitor's participation in this event to the fullest extent permitted by law.

#### 14. INSURANCE

14.1 Each participating boat shall be insured with valid watercraft liability insurance policy in an amount not less than \$300,000 personal injury and personal property damage of \$100,000.

#### 15. RIGHT TO USE NAME AND LIKENESS

15.1 The skipper of the boat and all crew members acknowledge that they grant the OA, and its sponsors, the unconditional right and authority, in perpetuity, to publish and broadcast anywhere in the world, for any purpose and in any media, the names, images, and biographical information relating to the crew and photographs, video footage, and audio recordings taken of the boat and its crew prior to, during, and after the race without compensation.

#### 16. FACILITIES

- 16.1 Cabrillo Beach Yacht Club is located at Berth 35 in the Cabrillo Marina, 211 West 22nd Street, San Pedro. Dockage is available upon request. Please contact Dean Wyer at <a href="mailto:dean@cbyc.org">dean@cbyc.org</a> or 310.519.1694
- 16.2 Upon arrival, CBYC can be contacted on VHF channel 68 and port crew will be available to assist boats arriving on Friday, May 24.
- 16.3 Restrooms and showers are available and a facilities gate card will be available in the CBYC office for a \$50 refundable deposit.
- 16.4 Dana Point Yacht Club will obtain as many slips as possible for use by race participants over the weekend. Please contact John Taylor at <a href="mailto:port@dpyc.org">port@dpyc.org</a> or 949.496.2900 to reserve dockage.
- 16.5 If necessary, boats may anchor in the west basin of Dana Point harbor. Boats should be prepared to anchor bow and stern. DPYC will provide shore boat service to anchored boats.
- 16.6 Upon finishing, contact the Port Captain on VHF 68 and follow the instructions in the race packet for slip or anchoring assignment at Dana Point. A 2 Ton hoist will be available.
- 16.7 The DPYC facilities will be available for use by skippers, crew and guests throughout the weekend. A dock gate key will be available from the Port Captain for a \$50 refundable deposit.

#### 17. RACE SOCIAL EVENTS

17.1 Due to current COVID state dining restrictions all guests are advised that reservations are required, please contact Pamela Botis at <a href="mailto:pamela@cbyc.org">pamela@cbyc.org</a> or 310.519.1694 for CBYC. Please contact DPYC's front office at <a href="mailto:dpyc@dpyc.org">dpyc@dpyc.org</a> or 949-496-2900.

### **18 GENERAL INFORMATION**

18.1 Questions regarding the Notice of Race, Entry, Eligibility or Sailing Instructions, including interpretations of published rules and amendments, must be submitted in writing to the OA at race@dpyc.org.

#### 18.2 Race Contacts:

DPYC Regatta Chair / PRO CBYC Regatta Chair

Jason Adamson Dave Moore

<u>saboteer@yahoo.com</u> <u>drolfmoore@yahoo.com</u>

Dana Point Yacht Club Cabrillo Beach Yacht Club

949.496.2900 310.519.1694 <u>www.dpyc.org</u> <u>www.cbyc.org</u>

#### 19 Safety

- 19.1 No claim is made or implied that observance of the following safety requirements will prevent injury, death, or loss of property. Neither the establishment of these safety regulations, their use by race organizers, nor the inspection or absence of inspection of a boat for compliance with these safety regulations in any way limits or reduces the complete and unlimited responsibility of the person in charge, as per RRS 46, who shall ensure that the boat is seaworthy and manned by an experienced crew with sufficient ability and experience to face adverse conditions. S/he shall be satisfied as to the soundness of hull, spars, rigging, sails and all gear. S/he shall ensure that all safety equipment is at all times properly maintained and safely stowed and that the crew knows where it is kept and how it is to be used.
- 19.2 The US Sailing Safety Equipment Requirements (SERs), Coastal Level, modified in the following table, are in effect for all boats. Items shown with a single 'x' are standard requirements.

#### Safety Equipment Requirements

Note: Organizing Authorities may add or delete items based on the conditions of their specific races.

Effective Date: February 8, revision 2021.0

| Section Name | #     | Requirement  | Coastal |
|--------------|-------|--|---------|
| Definition   | 1.0.2 | Coastal: Races not far removed from shorelines, where rescue is likely to be quickly available   | X       |
|              |       | The Safety Equipment Requirements establish uniform minimum equipment and training standards for a variety of boats racing in differing conditions. These regulations do not replace, but rather supplement, the requirements of applicable local or national authority for boating, the Racing Rules of Sailing, the rules of Class Associations and any applicable |         |
| Overall      | 1.1   | rating rules.  | X       |

| Overall:<br>Responsibility           | 1.2   | The safety of a boat and her crew is the sole and inescapable responsibility of the "person in charge", as per RRS 46, who shall ensure that the boat is seaworthy and manned by an experienced crew with sufficient ability and experience to face bad weather. S/he shall be satisfied as to the soundness of hull, spars, rigging, sails and all gear. S/he shall ensure that all safety equipment is at all times properly maintained and safely stowed and that the crew knows where it is kept and how it is to be used. | x |
|--------------------------------------|-------|--|---|
|                                      |       |  |   |
| Overall:<br>Responsibility           | 1.2.1 | Should there be an incident during a race the Organizing Authority or US Sailing may conduct an investigation to determine the facts of the incident and provide recommendations. By participating in a race conducted under the SER, the person in charge, each competitor and boat owner agrees to reasonably cooperate with the organizing authority and US Sailing in the development of an independent incident report.   | x |
|                                      |       |  |   |
| Overall: Inspections                 | 1.3   | A boat may be inspected at any time by an equipment inspector or measurer appointed for the event. If she does not comply with these regulations, her entry may be rejected or she will be subject to a protest filed by the RC. A Violation of the Safety Equipment Requirements may result in a penalty other than disqualification.   | х |
|                                      |       | ,  |   |
| Overall: Equipment and Knowledge     | 1.4   | 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. This equipment shall be readily accessible while underway and, when not in use, stored in such a way that deterioration is minimized.   | x |
| Overall: Secure<br>Storage           | 1.5   | A boat's heavy items such as batteries, stoves, toolboxes, anchors, chain and internal ballast shall be secured.   | x |
| Overall: Strength of Build           | 1.6   | 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.   | x |
| Overall: Watertight Integrity        | 1.7   | 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.   | х |
| Hull and Structure:<br>Hull Openings | 2.1.1 | A boat's companionway(s) shall be capable of being blocked off to main deck level (sheerline). The method of blocking should be solid, watertight, and rigidly secured, if not permanent.  | Х |
| Hull and Structure:<br>Hull Openings | 2.1.2 | A boat's hatch boards, whether or not in position in the hatchway, shall be secured in a way that prevents their being lost overboard.   | x |
| Hull and Structure:<br>Cockpit       | 2.1.3 | 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.   | х |

|                                      |         |  | ı |
|--------------------------------------|---------|--|---|
| Hull and Structure:                  | 2.1.4   | A boat's cockpit drains shall 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.   | x |
| Cockpit                              | 2.1.7   | this requirement.  | ^ |
| Hull and Structure:<br>Cockpit       | 2.1.5.2 | A boat's maximum cockpit volume for cockpits not open to the sea, including any compartments capable of flooding, to lowest points of coaming over which water can adequately escape, shall not exceed 0.08 x LOA x Max. Beam x Freeboard aft. The cockpit sole shall be at least 0.02 x LOA above LWL.  | x |
| Hull and Structure:<br>Through Hulls | 2.1.6   | 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.  | x |
| Triiougii riulis                     | 2.1.0   | provided.  | ^ |
| Hull and Structure:<br>Stability     | 2.2.2   | The boat must have a stability index greater than or equal to 103 or meet the requirements of ISO 12217-2B.  | x |
| Hull and Structure:<br>Stability     | 2.2.3   | A boat with moveable or variable ballast (water or canting keel) shall comply with the requirements of Appendix K.   | х |
| Hull and Structure:<br>Lifelines     | 2.4.1   | 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.  | x |
|                                      |         |  |   |
| Hull and Structure:<br>Lifelines     | 2.4.2   | A boat's stanchion and pulpit bases shall be within the working deck.  | x |
| Hull and Structure:<br>Lifelines     | 2.4.3   | 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).   | х |
| Hull and Structure:                  |         | Lifelines shall be-uncoated stainless-steel wire OR line of comparable strength & durability OR as prescribed in a vessels OD configuration. A multipart-lashing segment not to exceed 4" per end termination for the purpose of attaching lifelines to  |   |
| Lifelines                            | 2.4.4   | pulpits is allowed. Lifelines shall be taut.   | X |
| Hull and Structure:<br>Lifelines     | 2.4.4.1 | Lifeline deflection shall not exceed the following: a) When a deflecting force of 9 lbs (40N) is applied to a lifeline midway between supports of an upper or single lifeline, the lifeline shall not deflect more than 2" (50mm). This measurement shall be taken at the widest span between supports that are aft of the mast. b) When a deflecting force of 9 lbs (40N) is applied midway between supports of an intermediate lifeline of all spans that are aft of the mast, deflection shall not exceed 5" (120mm) from a straight line between the stanchions. | х |
| Hull and Structure:                  |         | The maximum spacing between lifeline supports (e.g.,   |   |
| Lifelines                            | 2.4.5   | stanchions and pulpits) shall be 87" (2.2m).   | х |
| Hull and Structure:<br>Lifelines     | 2.4.6   | Boats under 30' (9.14m) shall have at least one lifeline with 18" (457mm) minimum height above deck, and a maximum vertical gap of 18" (457mm). Taller heights will require a second lifeline. The minimum diameter shall be 1/8" (3mm).   | х |

| Hull and Structure:<br>Lifelines                | 2.4.7 | Boats 30' 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).   | х |
|---|-------|---|---|
| Hull and Structure:<br>Lifelines                | 2.4.8 | 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 toerails.   | X |
| Hull and Structure:<br>Lifelines                | 2.4.9 | Trimarans are exempted from the lifeline requirement where there is a trampoline outboard of the main hull, except that a lifeline must run from the top of a bow pulpit to the forward crossbeam at the outboard edge of the bow net or foredeck. Catamarans with trampoline nets between the hulls are exempted from the lifeline requirement. All catamarans are exempted from the need for pulpits and lifelines across the bow.  | X |
| Hull and Structure:<br>Dewatering pumps         | 2.5.1 | A boat shall have a permanently installed manual bilge pump of at least a 10 GPM (37.8 liter per minute) 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. | x |
| Hull and Structure:<br>Mechanical<br>Propulsion | 2.7.2 | 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 (1.8 times the square root of the waterline in meters) for 4 hours.   | x |
| Hull and Structure:<br>Mechanical<br>Propulsion | 2.7.3 | The boat's engine and generator installation (if so equipped) must conform to ABYC, ISO, or U.S. Coast Guard standards.   | x |
| Safety Equipment:<br>Personal                   | 3.1.1 | 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.  | x |
| Safety Equipment:<br>Personal                   | 3.1.2 | Life jackets shall be equipped with crotch or leg straps, a whistle, a waterproof light, be fitted with marine-grade retroreflective material, and be clearly marked with the boats or wearer's name, and be compatible with the wearer's safety harness. If the life jacket is inflatable, it shall be regularly checked for air retention.  | x |
| Safety Equipment:<br>Personal                   | 3.1.4 | 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.   | х |

| Safety Equipment:<br>Deck Safety                  | 3.2.1 | 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.  | х |
|---|-------|--|---|
| Safety Equipment:<br>Deck Safety                  | 3.2.3 | Multihulls must have jacklines or attachment points that are accessible when the boat is inverted.   | X |
| Safety Equipment:<br>Navigation Lights            | 3.3.1 | A boat racing between sunset and sunrise shall carry navigation lights that meet U. S. Coast Guard or applicable government requirements mounted so that they will not be obscured by the sails nor be located below deck level.   | x |
| Safety Equipment:<br>Fire Extinguishers           | 3.4   | A boat shall carry fire extinguisher(s) that meets U.S. Coast Guard or applicable government requirements, when applicable.  | x |
| Safety Equipment:<br>Sound Producing<br>Equipment | 3.5   | A boat shall carry-sound-making devices that meets U.S. Coast Guard or applicable government requirements, when applicable.  | x |
| Safety Equipment:<br>Visual Distress<br>Signals   | 3.6.2 | A boat shall carry one SOLAS orange smoke flares not older than the expiration date.   | x |
| Safety Equipment:<br>Visual Distress<br>Signals   | 3.6.4 | A boat shall carry three SOLAS red hand flares not older than the expiration date.   | x |
| Safety Equipment:<br>Visual Distress<br>Signals   | 3.6.5 | Boat flares stored inside of life rafts may not be used to satisfy the flare requirement.  | x |
| Safety Equipment:<br>Man Overboard                | 3.7.1 | 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.   | х |
| Safety Equipment:<br>Man Overboard                | 3.7.2 | 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 Man Overboard 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". | x |
| Safety Equipment:<br>Man Overboard                | 3.7.3 | A boat shall have a throwing sock-type heaving line of 50' (15m) or greater of floating polypropylene line readily accessible to the cockpit.  | x |
| Safety Equipment:<br>Man Overboard                | 3.7.4 | A boat shall carry a Coast Guard or applicable government approved "throwable device". If the device carried under 3.7.1 or 3.7.2 satisfies this requirement, then no additional device is needed.   | x |

| Safety Equipment:<br>Emergency<br>Communications | 3.8.1  | 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. Such radio 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. | х |
|--|--------|---|---|
| Safety Equipment:<br>Emergency<br>Communications | 3.8.2  | A boat shall have a watertight handheld VHF radio or a handheld VHF radio with waterproof cover. This radio shall have DSC/GPS capability with an MMSI number properly registered to the vessel.  | х |
| Safety Equipment:<br>Emergency<br>Communications | 3.14   | A boat shall carry a GPS receiver.  | х |
| Safety Equipment:<br>Emergency<br>Communications | 3.15   | 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.  | х |
| Safety Equipment:<br>Emergency<br>Communications | 3.16.2 | A boat shall carry either a 406MHz EPIRB which is properly registered to the boat, or a floating 406MHz Personal Locator Beacon, registered to the owner with a notation in the registration that it is aboard the boat. This device shall be equipped with an internal GPS.  | x |
| Safety Equipment:<br>Navigation                  | 3.18   | A boat shall have a permanently installed depth sounder that can measure to depths of at least 200 ft. (61m).   | Х |
| Safety Equipment:<br>Navigation                  | 3.19.1 | A boat shall have a magnetic compass independent of the boat's electrical system suitable for steering at sea.  | х |
| Safety Equipment:<br>Navigation                  | 3.20   | A boat shall have non-electronic charts that are appropriate for the race area.   | x |
| Safety Equipment:<br>Damage Control              | 3.22   | 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.   | x |
| Gear: Anchoring                                  | 3.23   | 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.  | x |
| Gear: Lights                                     | 3.24.1 | A boat shall carry a watertight, high-powered searchlight, suitable for searching for a person overboard at night or for collision avoidance.   | х |
| Gear: Lights                                     | 3.24.3 | A boat shall carry at least two watertight flashlights with spare batteries in addition to the requirement of 3.24.1.   | х |
| Gear: Medical Kits                               | 3.25   | 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.  | х |
| Gear: Radar<br>Reflectors                        | 3.26   | A boat shall carry an 11.5" (292mm) diameter or greater octahedral radar reflector or one of equivalent performance.  | х |
|  | 3.27.1 | A boat shall carry one sturdy bucket of at least two gallons (8 liters) capacity with lanyard attached.   | х |

| Gear: Safety<br>Diagram       | 3.28   | 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.  | x |
|-------------------------------|--------|--|---|
| Gear: Emergency<br>Steering   | 3.29.2 | Wheel steered boats shall have an emergency tiller, capable of being fitted to the rudder stock.   | X |
| Gear: Identification          | 3.31   | 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 added during the first servicing of any new equipment.       | x |
| Sails: Mainsail<br>Reefing    | 3.33.1 | A boat shall have a mainsail reefing capable of reducing the luff length by at least 10%.  | X |
| Rigging: Halyards             | 3.35   | A boat shall not be rigged with any halyard that requires a person to go aloft in order to lower a sail.   | x |
| Rigging: Boom<br>Support      | 3.36   | A boat over 30' LOA (9.14m) shall have a means to prevent the boom from dropping if support from the mainsail or halyard fails.  | x |
| Skills: Emergency<br>Steering | 4.1.2  | Crews must be aware of methods of steering the yacht with the rudder disabled.   | x |
| Skills: Man<br>Overboard      | 4.2    | 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.                                | x |
| Skills: Crew<br>Training      | 4.4    | As required in 1.2 above the person in charge shall ensure that all crew members know where all emergency equipment is located and how to operate the equipment. In addition, the person in charge and crew should discuss how to handle various emergency situations including Crew Overboard, Grounding, Loss of steering, Flooding, Fire, Dismasting, and Abandon Ship. | x |
| Skills: Crew<br>Training      | 4.6    | Lifejackets as described in 3.1.1 – 3.1.3 should be worn by all crew on deck in any conditions where recovery may be difficult. It is recommended that lifejackets be worn by all crew on deck unless the person in charge has indicated that they may be set aside.   | X |

19.3 The US Sailing Safety Equipment Requirements (SERs), Nearshore Level, modified in the following table, are in effect for all boats. Items shown with a single 'x' are standard requirements.

#### **Safety Equipment Requirements**

Note: Organizing Authorities may add or delete items based on the conditions of their specific races.

Effective Date: February 8, revision 2021.0

| Section Name | #     | Requirement  | Nearshore |
|--------------|-------|--|-----------|
|              |       | Nearshore: Races primarily sailed during the day, close to |           |
| Definition   | 1.0.3 | shore, in relatively protected waters.                     | X         |

|                                      | 1     |  | ĺ |
|--------------------------------------|-------|--|---|
| Overall                              | 1.1   | The Safety Equipment Requirements establish uniform minimum equipment and training standards for a variety of boats racing in differing conditions. These regulations do not replace, but rather supplement, the requirements of applicable local or national authority for boating, the Racing Rules of Sailing, the rules of Class Associations and any applicable rating rules.   | x |
|                                      |       |  |   |
| Overall:<br>Responsibility           | 1.2   | The safety of a boat and her crew is the sole and inescapable responsibility of the "person in charge", as per RRS 46, who shall ensure that the boat is seaworthy and manned by an experienced crew with sufficient ability and experience to face bad weather. S/he shall be satisfied as to the soundness of hull, spars, rigging, sails and all gear. S/he shall ensure that all safety equipment is at all times properly maintained and safely stowed and that the crew knows where it is kept and how it is to be used. | X |
|                                      |       |  |   |
| Overall:<br>Responsibility           | 1.2.1 | Should there be an incident during a race the Organizing Authority or US Sailing may conduct an investigation to determine the facts of the incident and provide recommendations. By participating in a race conducted under the SER, the person in charge, each competitor and boat owner agrees to reasonably cooperate with the organizing authority and US Sailing in the development of an independent incident report.   | * |
| Responsibility                       | 1.2.1 | 03 Sailing in the development of an independent incident report.   | Х |
| Overall: Inspections                 | 1.3   | A boat may be inspected at any time by an equipment inspector or measurer appointed for the event. If she does not comply with these regulations, her entry may be rejected or she will be subject to a protest filed by the RC. A Violation of the Safety Equipment Requirements may result in a penalty other than disqualification.   | X |
| Overall: Equipment and Knowledge     | 1.4   | 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. This equipment shall be readily accessible while underway and, when not in use, stored in such a way that deterioration is minimized.   | X |
| Overall: Secure<br>Storage           | 1.5   | A boat's heavy items such as batteries, stoves, toolboxes, anchors, chain and internal ballast shall be secured.   | x |
| Overall: Watertight Integrity        | 1.7   | 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.   | × |
| Hull and Structure:<br>Stability     | 2.2.3 | A boat with moveable or variable ballast (water or canting keel) shall comply with the requirements of Appendix K.   | х |
| Hull and Structure: Dewatering pumps | 2.5.3 | A boat shall have a manual bilge pump of at least a 10 GPM (37.8 liter per minute) capacity.   | x |
| Safety Equipment:                    |       | Each crewmember shall have a life jacket intended for small boat sailing or other active boating. Each such life jacket shall be USCG, ISO, or applicable government approved or shall meet  |   |
| Personal                             | 3.1.3 | the ocean requirement of 3.1.1.  | Х |

|   | 1      | I  | 1 |
|---|--------|--|---|
| Safety Equipment:<br>Navigation Lights            | 3.3.1  | A boat racing between sunset and sunrise shall carry navigation lights that meet U. S. Coast Guard or applicable government requirements mounted so that they will not be obscured by the sails nor be located below deck level.   | x |
| Safety Equipment:<br>Fire Extinguishers           | 3.4    | A boat shall carry fire extinguisher(s) that meets U.S. Coast Guard or applicable government requirements, when applicable.  | X |
| Fire Extinguishers                                | 3.4    | Guard of applicable government requirements, when applicable.  |   |
| Safety Equipment:<br>Sound Producing<br>Equipment | 3.5    | A boat shall carry-sound-making devices that meets U.S. Coast Guard or applicable government requirements, when applicable.  | x |
|   |        |  |   |
| Safety Equipment:<br>Visual Distress<br>Signals   | 3.6.6  | A boat shall carry U.S. Coast Guard (or applicable government entity) flares meeting day-night requirements not older than the expiration date.  | х |
| Safety Equipment:<br>Man Overboard                | 3.7.3  | A boat shall have a throwing sock-type heaving line of 50' (15m) or greater of floating polypropylene line readily accessible to the cockpit.  | x |
| Safety Equipment:<br>Man Overboard                | 3.7.4  | A boat shall carry a Coast Guard or applicable government approved "throwable device". If the device carried under 3.7.1 or 3.7.2 satisfies this requirement, then no additional device is needed.   | X |
| Safety Equipment:<br>Emergency<br>Communications  | 3.8.3  | A boat shall have a VHF radio which may be fixed or handheld.  | x |
| Communications                                    | 0.0.0  | A beat shall have a vill radio which may be indeed it hallandra.   |   |
| Safety Equipment:<br>Navigation                   | 3.19.1 | A boat shall have a magnetic compass independent of the boat's electrical system suitable for steering at sea.   | х |
| Gear: Anchoring                                   | 3.23   | 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.   | Х |
| Gear: Lights                                      | 3.24.3 | A boat shall carry at least two watertight flashlights with spare batteries in addition to the requirement of 3.24.1.  | х |
| Gear: Medical Kits                                | 3.25   | 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.   | X |
|   | 3.27.2 | A boat shall carry one sturdy bucket of at least two gallons (8 liters) capacity with lanyards attached.   | х |
| Skills: Man<br>Overboard                          | 4.2    | Annually, two-thirds of the boat's racing crew shall practice manoverboard 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. | X |

| Skills: Crew<br>Training | 4.4 | As required in 1.2 above the person in charge shall ensure that all crew members know where all emergency equipment is located and how to operate the equipment. In addition, the person in charge and crew should discuss how to handle various emergency situations including Crew Overboard, Grounding, Loss of steering, Flooding, Fire, Dismasting, and Abandon Ship. | x |
|--------------------------|-----|--|---|
| Skills: Crew<br>Training | 4.6 | Lifejackets as described in 3.1.1 – 3.1.3 should be worn by all crew on deck in any conditions where recovery may be difficult. It is recommended that lifejackets be worn by all crew on deck unless the person in charge has indicated that they may be set aside.   | х |

19.4 The US Sailing Safety Equipment Requirements (SERs) for Multihulls, Coastal & Nearshore Level, modified in the following table, are in effect for all multi-hull boats. Items shown with a single 'x' are standard requirements.

## **US Mulithull Safety Equipment Requirements**

Note: Organizing Authorities may add or delete items based on the conditions of their specific

Effective Date: February 8, 2021, revision 2021.0

| Section Name                           | #    | Requirement  | Coastal | Nearshore |
|--|------|--|---------|-----------|
| Definition                             | 1.02 | Coastal: Races not far removed from shorelines, where rescue is likely to be quickly available   | X       |           |
| Overall                                | 1.1  | The Safety Equipment Requirements establish uniform minimum equipment and training standards for a variety of boats racing in differing conditions. These regulations do not replace, but rather supplement, the requirements of applicable local or national authority for boating, the Racing Rules of Sailing, the rules of Class Associations and any applicable rating rules.   | X       | Х         |
| Overall:<br>Responsibility             | 1.2  | The safety of a boat and her crew is the sole and inescapable responsibility of the "person in charge", as per RRS 46, who shall ensure that the boat is seaworthy and manned by an experienced crew with sufficient ability and experience to face bad weather. S/he shall be satisfied as to the soundness of hull, spars, rigging, sails and all gear. S/he shall ensure that all safety equipment is at all times properly maintained and safely stowed and that the crew knows where it is kept and how it is to be used. | ×       | X         |
| Overall:<br>Inspections                | 1.3  | A boat may be inspected at any time by an equipment inspector or measurer appointed for the event. If a boat does not comply with these regulations, its entry may be rejected or it will be subject to a protest filed by the RC. A Violation of the Safety Equipment Requirements may result in a penalty other than disqualification.   | Х       | X         |
| Overall:<br>Equipment and<br>Knowledge | 1.4  | 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. This equipment shall be readily accessible while underway and, when not in use, stored in such a way that deterioration is minimized.   | X       | ×         |
| Overall: Secure<br>Storage             | 1.5  | A boat's heavy items such as batteries, stoves, toolboxes, anchors, chain and internal ballast shall be secured.   | X       | Х         |
| Overall: Strength of Build             | 1.6  | A boat shall be strongly built, watertight and, particularly with regard to hulls, decks and cabin trunks, capable of withstanding solid water. A boat shall be properly rigged, 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.  | Х       |           |
| Overall:<br>Watertight<br>Integrity    | 1.7  | A boat's hulls and amas, 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. Centerboard and daggerboard trunks and the like shall not open to the interior of the hull unless the opening is watertight and situated entirely above the waterline floating level in normal trim.  | X       | Х         |

| Overall: Sailing without power                     | 1.9         | The crew of a boat must demonstrate that normal sailing functions (including but not limited to: raising and lowering sails; trimming sails; steering; raising and lowering dagger boards; positioning canting centerboards and moveable ballast; operating bilge pumps; rotating masts (if applicable); and deploying safety gear) can be performed in the event of a complete loss of power.   | × | x |
|--|-------------|--|---|---|
| Hull and<br>Structure: Exits                       | 2.1.1.1     | Exits: A boat shall have at least 2 exits in each hull which contains accommodation.   | Х |   |
| Hull and<br>Structure:<br>Escape hatches           | 2.1.1.2     | Escape Hatches: A boat shall have either an escape hatch in each hull that contains accommodation for access to and from the hull in the event of an inversion or appropriate tools for cutting an escape opening stowed securely in a location accessible from both inside and outside the boat in the event of capsize.  | Х |   |
| Hull and<br>Structure:<br>Escape hatches           | 2.1.1.2.3   | Escape Hatches shall be on the side nearest the vessel's centerline if first launch after 2002.  | Х |   |
| Hull and<br>Structure:<br>Escape hatches           | 2.1.1.1.2.4 | Escape hatches shall be above the waterline when the boat is inverted.   | Х |   |
| Hull and<br>Structure:<br>Escape hatches           | 2.1.1.1.2.5 | Escape Hatches shall have sufficient minimum clearance of 450mm (approximately 18") in diameter or when an escape hatch is not circular, sufficient clearance to allow a crew member to pass through fully clothed.  | Х |   |
| Hull and<br>Structure:<br>Escape hatches           | 2.1.1.2.6   | Each Escape Hatch shall have been opened both from the inside and outside within six (6) months prior to the race.   | X |   |
| Hull and<br>Structure: Hull<br>Openings            | 2.1.2       | A boat's hatch boards or doors, whether or not in position in the hatchway, shall be secured in a way that prevents their being lost overboard.  |   |   |
| Hull and<br>Structure:<br>Cockpit                  | 2.1.3       | 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.   |   |   |
| Hull and<br>Structure:<br>Through Hulls            | 2.1.6       | 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.   |   |   |
| Hull and<br>Structure:<br>Floatation               | 2.1.7       | A boat shall be designed to ensure that the boat is effectively unsinkable.  | Х |   |
| Hull and<br>Structure:<br>Accommodations           | 2.3.5       | A boat shall have adequate hand holds below decks.   | Х |   |
| Hull and<br>Structure:<br>Dewatering<br>pumps      | 2.5.2       | A boat shall have a portable manual bilge pump of at least 10 GPM capacity capable of dewatering any part of the boat. When not in use, the pump shall be attached to the boat.  | х |   |
| Hull and<br>Structure:<br>Mechanical<br>Propulsion | 2.7.2       | 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 (1.8 times the square root of the waterline in meters) for 4 hours.  |   |   |
| Hull and<br>Structure:<br>Mechanical<br>Propulsion | 2.7.3       | A boat's engine and generator installation (if so equipped) must conform to ABYC, ISO, or U.S. Coast Guard standards.  |   | Х |
| Hull and<br>Structure: Nets<br>or Trampolines      | 2.8         | All trampolines shall be (a) essentially horizontal; (b) Made from durable woven webbing, water permeable fabric or mesh with openings not larger than 2" (5cm) in any dimension. Attachment points shall avoid chafe and the junction between net and boat shall present no risk of foot trapping; (c) Solidly fixed at regular intervals on transverse and longitudinal support lines and (d) Able to carry the full weight of the crew either in normal working conditions at sea or when the boat is inverted. |   | X |

| Hull and<br>Structure: Nets<br>or Trampolines      | 2.9   | Each multihull shall have one or a combination of netting, coamings, bulwarks, railings, lifelines or jacklines, extending from the aft most part of the cockpit or steering station to the aft most part of the central pulpit or forestay, to keep the crew aboard while sailing and sail handling in conditions expected for Offshore, Coastal or Inshore racing. If lifelines are used, they may be either stainless or HMPE with a minimum diameter of 3/16" (5mm), they must be taut, supported at distances of no greater than 87" (2.2 m), and be a minimum of 24" (762 mm) above the deck with a maximum vertical gap of 15" (381mm). | X | X |
|--|-------|--|---|---|
| Hull and<br>Structure: Nets<br>or Trampolines      | 2.1   | A trimaran with a single crossbeam shall have nets between the central hull and each outrigger on each side between two straight lines from the intersection of the crossbeam and the outrigger, respectively to the aft end of the pulpit on the central hull, and to the aftermost point of the cockpit or steering position on the central hull (whichever is furthest aft).  | Х | х |
| Hull and<br>Structure: Nets<br>or Trampolines      | 2.11  | A catamaran shall have nets covering at least the area bounded: (a) laterally between the hulls and (b) Longitudinally between transverse stations through the forestay base and the aftermost point of the boom lying fore and aft. However, a catamaran with a central nacelle (non-immersed) may satisfy the regulations for a trimaran   | Х |   |
| Safety<br>Equipment:<br>Personal                   | 3.1.1 | 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 offshore life jacket that provides at least 22lbs (100N) of buoyancy meeting either U.S. Coast Guard or ISO specifications.   | X |   |
| Safety<br>Equipment:<br>Personal                   | 3.1.2 | Life jackets shall be equipped with crotch or leg straps, a whistle, a waterproof light, be fitted with marine-grade retro-reflective material and be clearly marked with the boat's or wearer's name and be compatible with the wearer's safety harness. If the life jacket is inflatable, it shall be regularly checked for air retention. Life jackets shall be equipped with a knife suitable for cutting through the trampoline on the boat, with a tether attaching the knife to the life jacket.  | Х |   |
| Safety<br>Equipment:<br>Personal                   | 3.1.4 | 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. (20 kN). The tether shall have a snap hook at its far end and a means to quickly disconnect the tether at the chest end.   | Х |   |
| Safety<br>Equipment: Deck<br>Safety                | 3.2.1 | A boat shall carry jacklines with a breaking strength of at least 4500 lb. (20 kN) which allow the crew to reach all points on deck, connected to similarly strong attachment points, in place while racing.   |   |   |
| Safety<br>Equipment: Deck<br>Safety                | 3.2.3 | A boat shall have jack lines with a breaking strength of at least 4,500 lbs. (20 kN), running the length of the underwing deck adjacent to the escape hatches, which allow the crew to clip in before exiting the hull. On a trimaran, these shall be around the central hull. In addition, the underwing deck shall (if there is one) be outfitted with nonskid pathways suitable for crew to cross between hulls and to access safety equipment while remaining clipped in.  | Х |   |
| Safety<br>Equipment:<br>Navigation Lights          | 3.3.1 | A boat racing between sunset and sunrise shall carry navigation lights that meet U. S. Coast Guard or applicable government requirements mounted so that they will not be obscured by the sails nor be located below deck level.   | х | X |
| Safety<br>Equipment: Fire<br>Extinguishers         | 3.4   | A boat shall carry fire extinguisher(s) that meets U.S. Coast Guard or applicable government requirements, when applicable.  | Х | Х |
| Safety Equipment: Sound Producing Equipment        | 3.5   | A boat shall carry sound-making devices that meets U.S. Coast Guard or applicable government requirements, when applicable.  | Х | × |
| Safety<br>Equipment:<br>Visual Distress<br>Signals | 3.6.2 | A boat shall carry one SOLAS orange smoke flares not older than the expiration date.   | Х |   |
| Safety<br>Equipment:<br>Visual Distress<br>Signals | 3.6.6 | A boat shall carry three SOLAS red hand flares not older than the expiration date.   | Х |   |

|   |        |  |   | • |
|---|--------|--|---|---|
| Safety<br>Equipment:<br>Visual Distress<br>Signals  | 3.6.5  | Boat flares stored inside of life rafts may not be used to satisfy the flare requirement.  | Х | х |
| Safety<br>Equipment: Man<br>Overboard               | 3.7.1  | 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.   | Х |   |
| Safety<br>Equipment: Man<br>Overboard               | 3.7.2  | 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 Man Overboard 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". | х |   |
| Safety<br>Equipment: Man<br>Overboard               | 3.7.3  | A boat shall have a throwing sock-type heaving line of 50' (15m) or greater of floating polypropylene line readily accessible to the cockpit.  | х | Х |
| Safety<br>Equipment: Man<br>Overboard               | 3.7.4  | A boat shall carry a Coast Guard or applicable government approved "throwable device". If the device carried under 3.7.1 or 3.7.2 satisfies this requirement, then no additional device is needed.   | Х | Х |
| Safety<br>Equipment:<br>Emergency<br>Communications | 3.8.1  | 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. Such radio 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.  | х |   |
| Safety<br>Equipment:<br>Emergency<br>Communications | 3.8.2  | A boat shall have a watertight handheld VHF radio or a handheld VHF radio with waterproof cover. This radio shall have DSC/GPS capability with an MMSI number properly registered to the vessel.   | Х |   |
| Safety<br>Equipment:<br>Emergency<br>Communications | 3.9.1  | Effective January 1, 2021, a boat shall have either an AIS transponder or an AIS receiver, properly installed and permanently connected to a suitable antenna. If a transponder is installed, it shall meet the requirements of 3.9.   | Х |   |
| Safety<br>Equipment:<br>Emergency<br>Communications | 3.10.1 | Effective January 1, 2021, each crew member shall have a dedicated AIS personal crew overboard beacon. This shall be on the crew member's person at all times while on deck.   | х |   |
| Safety<br>Equipment:<br>Emergency<br>Communications | 3.14   | A boat shall carry a GPS receiver.   | Х |   |
| Safety<br>Equipment:<br>Emergency<br>Communications | 3.15   | 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.   | Х |   |
| Safety<br>Equipment:<br>Emergency<br>Communications | 3.16.2 | A boat shall carry either a 406MHz EPIRB which is properly registered to the boat, or a floating 406MHz Personal Locator Beacon, registered to the owner with a notation in the registration that it is aboard the boat. This device shall be equipped with an internal GPS.   | Х |   |
| Safety<br>Equipment:<br>Navigation                  | 3.17   | A boat shall have a knotmeter or alternatively a handheld GPS, in additional to the primary GPS referenced in 3.14   | Х |   |
| Safety<br>Equipment:<br>Navigation                  | 3.18   | A boat shall have a permanently installed depth sounder that can measure to depths of at least 200 ft. (61m).  | Х |   |
| Safety<br>Equipment:<br>Navigation                  | 3.19.1 | A boat shall have a magnetic compass independent of the boat's electrical system suitable for steering at sea.   | Х | Х |
| Safety<br>Equipment:<br>Navigation                  | 3.2    | A boat shall have non-electronic charts that are appropriate for the race area.  | х |   |
| Safety<br>Equipment:<br>Damage Control              | 3.22   | 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.  | Х |   |

| Gear: Anchoring                   | 3.23   | 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.  | х | Х |
|-----------------------------------|--------|---|---|---|
| Gear: Lights                      | 3.24.1 | A boat shall carry a watertight, high-powered searchlight, suitable for searching for a person overboard at night or for collision avoidance.   | Х |   |
| Gear: Lights                      | 3.24.3 | A boat shall carry at least two watertight flashlights with spare batteries in addition to the requirement of 3.24.1.   | Х | Х |
| Gear: Medical<br>Kits             | 3.25   | 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.  |   | Х |
| Gear: Radar<br>Reflectors         | 3.26   | A boat shall carry an 11.5" (292mm) diameter or greater octahedral radar reflector or one of equivalent performance.  |   |   |
| Gear: Buckets                     | 3.27.1 | A boat shall carry two sturdy buckets of at least two gallons (8 liters) capacity with lanyards attached.   |   |   |
| Gear: Safety<br>Diagram           | 3.28   | 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.   |   |   |
| Gear: Spare<br>Parts              | 3.3    | A boat shall carry tools and spare parts, including an effective means to quickly disconnect or sever the standing rigging from the hull.   |   | Х |
| Gear:<br>Identification           | 3.31   | 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 added during the first servicing of any new equipment.   |   |   |
| Gear: Cockpit<br>Knife            | 3.32   | A boat shall carry at least one strong, sharp knife, sheathed and securely restrained on deck which is readily accessible from each trampoline in the event of inversion In addition, A boat shall carry a second knife meeting the requirements above which is accessible from the underside of the boat.  |   | х |
| Sails: Mainsail<br>Reefing        | 3.33.1 | A boat shall have a mainsail with reefing capable of reducing the luff length by at least 50%.  |   |   |
| Sails: Mainsheet<br>Release       | 3.33.5 | The crew of a boat must be able to manually release sufficient mainsheet or traveler to cause the end of the boom to move at least 15 degrees in arc in under two (2) seconds from all steering or consistently manned trimming station while racing. Hydraulics manufacturer design specifications or video are acceptable compliance.                               |   |   |
| Sails: Search & Rescue Visibility | 3.34   | A boat must display a one square meter area of highly visible pink, orange or yellow showing if the boat is inverted.   |   |   |
| Rigging:<br>Halyards              | 3.35   | A single roller-furling headsail of no larger than 125% LP may be lashed to the swivel at the top of the forestay, thus requiring a person to go aloft to hoist or drop this sail. No other sail, either headsail or mainsail, may be rigged so that someone has to go aloft to hoist or drop it.   | х |   |
| Skills:<br>Emergency<br>Steering  | 4.1.2  | Crews must be aware of methods of steering the yacht with the rudder disabled.  |   | Х |
| Skills: Man<br>Overboard          | 4.2    | Annually, two-thirds of a 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.                              |   | х |
| Skills: Crew<br>Training          | 4.4    | As required in 1.2 above the person in charge shall ensure that all crew members know where all emergency equipment is located and how to operate the equipment. In addition, the person in charge and crew shall discuss how to handle various emergency situations including Crew Overboard, Grounding, Loss of steering, Flooding, Fire, Dismasting, Abandon Ship. |   | х |