



## 2022 HYC “QUANTUM CUP” OFFSHORE REGATTA

May 6-7, 2022

**Organizing Authority:  
The Houston Yacht Club**

3620 Miramar Drive  
Shoreacres, Texas 77571  
(281) 471-1255

### **Notice of Race (NOR)**

*Preamble* The notation ‘[NP]’ in a rule in this NOR means that a boat may not protest another boat for breaking that rule. This changes RRS 60.1(a).

#### **1 RULES**

**1.1** This event is governed by:

- a. the *rules* as defined in *The Racing Rules of Sailing*, except as modified by this NOR or the Sailing Instructions;
- b. [NP] the Safety Equipment Requirements for Coastal Races as published by US Sailing (“SER”) and as modified for this event (see Attachment A and NOR 1.4);
- c. [NP] the rules of the Offshore Racing Congress Club Rule (“ORC Club”) for Monohulls competing in the ORC Fleet (available at [www.orc.org](http://www.orc.org));
- d. [NP] the rules of the Performance Handicap Racing Fleet of Galveston Bay (“PHRF”) for Monohulls competing in the PHRF Spinnaker Fleet and PHRF Non-Spinnaker Fleet (available at [www.phrfgb.org](http://www.phrfgb.org));
- e. [NP] the rules of the Texas Offshore Multihull Association (“TOMA”) for the Multihull Fleet; and,
- f. [NP] the International Regulations for Preventing Collisions at Sea (“IRPCAS”) (available at [www.imo.org](http://www.imo.org)).

- 1.2 The rules of Part 2 of *The Racing Rules of Sailing* are replaced by the IRPCAS between sunset and sunrise.
- 1.3 The Race Committee may file a protest if it has reason to believe a yacht has failed to abide by the SER as modified for this event (see Attachment A and NOR 1.4).
- 1.4 Modifications to SER:
- a. **Lifelines:** The requirements for lifelines are modified to allow vinyl or other coating on the lifelines provided any stained coating is removed to establish that the lifelines have not corroded. Competitors are advised to exercise special care to ensure that any coated lifelines have been tested prior to racing, as evidence of corrosion is not always visible.
  - b. **Flares:** The requirements for flares are modified to allow the use of Coast Guard approved flares in lieu of SOLAS flares as long as the type and quantity comply with the requirements of the relevant SER paragraph and they are not older than the expiration date.
  - c. **Special Requirements for Pulpits, Stanchions, Lifelines and Bilge Pumps on Multihulls:** Jackstays and clipping points may be substituted for lifelines or pulpits, according to the following conditions:
    - a. Jackstays shall be a dedicated piece of safety equipment installed before the start of the race and remain in place until the boat is securely berthed after finishing the race.
    - b. Jackstays must be installed to allow a crewmember – while clipped on – to move readily between the working areas on deck and the cockpit, with minimum of clipping and unclipping operations.
    - c. Each crew member shall have a safety harness (or combined with inflatable vest) and tether
    - d. All crewmembers in the cockpit, on deck or nets between sunset and sunrise must be clipped on.
    - e. In accordance with Multihull SER 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.
- 1.5 [NP] Competitors and support persons shall comply with any reasonable request from an event official.
- 2 **ADVERTISING**
- 2.1 [NP] Boats may be required to display advertising chosen and supplied by the Organizing Authority. As a courtesy to our valued race sponsors, no other advertising may be displayed at this event without prior written permission of the Organizing Authority. This rule applies from 7:00 p.m. on May 6, 2022 until the time a boat finishes racing in this event.

### **3 OFFICIAL NOTICE BOARD**

**3.1** The Official Notice Board will be online at: [www.regattanetwork.com/event/24372](http://www.regattanetwork.com/event/24372).

### **4 SAILING INSTRUCTIONS**

**4.1** The sailing instructions will be available online on the Official Notice Board on or before 7:00 p.m. on May 6, 2022. A limited number of printed copies may be available on request at the Skipper's Meeting. As a courtesy, sailing instructions may also be posted on the "HYC Race Information" board located in the breezeway adjacent to the HYC Office.

### **5 ELIGIBILITY, EQUIPMENT, AND ENTRY**

**5.1** This regatta is open to all boats of the ORC Spinnaker, PHRF Spinnaker, PHRF Non-Spinnaker, One Design, and Multihull classes that are at least 27 feet length on deck.

**5.2** A minimum of three boats constitutes a class.

**5.3** Eligible boats may enter by completing the online entry form at the event website at [www.regattanetwork.com](http://www.regattanetwork.com) and timely paying the required Entry Fee by Wednesday, May 4, 2022 at 5:00 p.m. Entries received on or after 5:00 p.m. on May 4, 2022 are considered late. All registrations must be made online. There will be no onsite registration.

**5.4** The Race Committee shall have full authority to determine the suitability of any boat for entry, or for entry in any class or fleet, and may divide any fleet into divisions or classes at its sole discretion.

**5.5** The Multihull Fleet is open to any TOMA-rated Multihull of at least 27 feet length on deck. The multihull fleet may include a cruising class provided at least three boats register for the cruising class on or before 5:00 p.m. on May 4, 2022.

**5.6** Each boat must be properly documented with the U.S. Coast Guard or properly registered with a jurisdiction within the United States. Vessels registered with a jurisdiction outside the United States may enter with prior written approval of the Principal Race Officer.

**5.7** Each boat shall conform to U.S. Sailing's Safety Equipment Requirements for Coastal Races (SER), with exceptions and changes as listed on Attachment A and NOR 1.4.

**5.8** Monohulls shall have a minimum crew of four capable sailors.

**5.9** Multihulls shall have a minimum crew of three experienced and capable sailors.

**5.10** Entry is not complete until the Organizing Authority receives a Waiver and Release of Liability from each skipper and crew member. Skippers' waivers are submitted with the online entry process. All crew waivers shall be submitted online no later than the Skippers' Meeting or may be scanned and sent to the attention of HYC Race & Regatta Chair, Yolanda Cortes Mares, by email at [ymares@earthlink.net](mailto:ymares@earthlink.net). The Skipper must ensure that before the Skippers' Meeting (a) all crew members are listed in the boat's registration and (b) every crew member has executed a Waiver and Release of Liability. No crew member substitutions or additions will be permitted after the Skippers' Meeting. It is the skipper's obligation to insure that each crew member is listed on the on-line listing of waivers received prior to the start of the race to verify that the boat has met the entry requirement. At the discretion of the Race Committee Chair, crew member waivers may be accepted after the

Skipper's Meeting but prior to the race start. Failure to submit a waiver for each crew member will result in the entry being incomplete, and the boat will not be considered to be participating in this event.

**5.11** In accordance with RRS 78, each boat shall provide the following required rating certificate or verify its existence before a boat races:

- a. Each boat racing in an ORC fleet shall have and provide a copy of her current 2022 ORC certificate.
- b. Each boat racing in a PHRF fleet shall be on the current PHRF-GB valid list or provide a copy of her current 2022 PHRF-GB certificate.
- c. Each boat racing in a Multihull fleet shall submit a current rating certificate from the Texas Offshore Multihull Association.

**5.12** Rating certificates may be scanned and uploaded with your registration, or may be sent to the attention of HYC Race & Regatta Chair, Yolanda Cortes Mares, by email at ymares@earthlink.net.

**5.13** By entering this event, each skipper, boat owner, and boat owner's representative agree to be bound by *The Racing Rules of Sailing* and by all other *rules* that govern this event.

## **6 FEES**

**6.1** The required Entry Fee is \$200 per boat. It does not include any meal tickets or refreshments and it does not include slip rental fees. US Sailing members receive a \$10.00 discount. The Entry Fee is payable by credit card. Houston Yacht Club members may pay by club charge.

**6.2** Late entries may be accepted at the discretion of the Regatta Chair, but will require an additional late fee of \$50 per boat.

## **7 SCHEDULE**

### **7.1 Wednesday, May 4, 2022:**

- **5:00 p.m.:** Registration deadline. Late fees assessed after this time.

### **7.2 Friday, May 6, 2022:**

- **7:00 p.m.:** Skipper's Meeting and party (cash bar, food will be available for purchase) at Marina Bar & Grill, Galveston Yacht Basin, 715 N. Holiday Drive, Galveston, Texas 77550 (409) 765-3033.

### **7.3**

#### **Saturday, May 7, 2022:**

- **9:00 a.m.:** First Warning Signal for all boats.

### **7.4**

#### **Saturday, May 21, 2022:**

- **5:00 p.m.:** Awards presentation at the HYC Clubhouse.

## **8 VENUE**

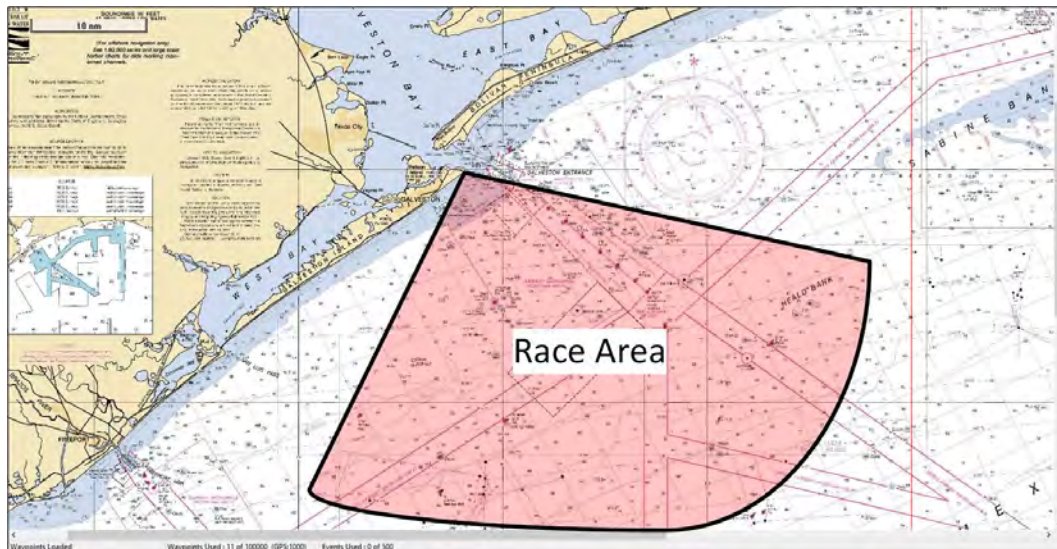
8.1 Primary berthing and event facilities will be located at Galveston Yacht Basin before the race and at Houston Yacht Club after the race.

9

## THE COURSE

9.1

The racing area will be in the Gulf of Mexico, offshore of Galveston Island, to seaward of the Houston Ship Channel marker #11 (see the diagram below). The course will be a distance course with fixed marks. The approximate course length is 30 to 40 nautical miles. Sailing Instructions may provide a shorter course for the PHRF Non-Spinnaker Fleet than all other fleets.



10

## SCORING

10.1

All PHRF, One Design, and Multihull classes will be scored based on **PHRF Time-on-Distance (TOD)** scoring. The ORC fleet will use the single number **All-Purpose Time-On-Time (TOT)** scoring.

11

## PENALTIES AT THE TIME OF AN INCIDENT

11.1

For all boats racing PHRF Non-Spinnaker, RRS 44.1 is changed so that the Two-Turns Penalty is replaced by the One-Turn Penalty.

11.2

For all boats racing PHRF Spinnaker, ORC Spin, One Design, and Multihull, a boat may either take a One-Turn Penalty when she may have broken one or more rules of Part 2 in an incident while racing or may take a 5 minute Scoring Penalty. This changes the first sentence of RRS 44.1 and 44.3(c). A boat that takes a Scoring Penalty shall display a yellow flag at the first reasonable opportunity after the incident, keep the yellow flag displayed until finishing, and inform the Race Committee of the identity of the other boat involved in the incident at the first reasonable opportunity and within the protest time limit.

12

## DOCKING / BERTHING

12.1

The Topside Marina located at the Galveston Yacht Basin will be the primary regatta facility. Skippers and boat owners are required to make their own arrangements with Topside Marina for slip availability on May 6, 2022 and May 7, 2022 and pay all slip fees directly to Topside Marina. A limited number of slips without electricity are available on a first come first serve basis. Slip availability with electricity will be released by Topside

Marina approximately one week before the event. Reservations are required. Dockage is assigned by Topside Marina upon arrival only with a prior reservation. Any boat docking at the Topside Marina shall comply with all instructions from the Topside Marina. For more information and to reserve a slip (with or without electricity), please call Topside Marina at (409) 765-3000, dial 2 for leasing, ask for Jessica and ask for a slip for "The Quantum Cup". It is anticipated that availability of slips with electricity from Topside Marina may increase for future HYC offshore events.

### 13 RADIO COMMUNICATIONS

13.1 VHF radios are required. In addition, each boat is required to carry a cell or satellite phone and shall provide necessary information and authority so the Race Committee can send text messages to the boat during the event. During registration, each boat shall provide the MMSI Number registered to the boat.

13.2 [DP] Except in an emergency, a boat shall neither make radio transmissions while racing nor receive radio communications not available to all boats. This restriction also applies to mobile telephones.

### 14 RISK STATEMENT

14.1 Competitors in this event participate entirely at their own risk. RRS 3 states: 'The responsibility for a boat's decision to participate in a race or to continue to race is hers alone.' By participating in this event each competitor and boat owner agrees and acknowledges that sailing is a potentially dangerous activity with inherent risks of damage and injury. These risks include strong winds and rough seas, sudden changes in weather, failure of equipment, boat handling errors, poor seamanship by other boats, loss of balance on an unstable platform and fatigue resulting in increased risk of injury. **Inherent in the sport of sailing is the risk of permanent, catastrophic injury or death by drowning, trauma, hypothermia or other causes.** All competitors in the crew, the skipper, and boat's owner participate in this regatta entirely at their own risk; by registering in this event, the person in charge of each boat acknowledges that the skipper, boat's owner, and all competitors in the crew are aware of this Risk Statement, accept RRS 3, and waive liability. Houston Yacht Club will not accept any liability for any property damage or personal injury, COVID-19, or death sustained in conjunction with or prior to, during, or after the regatta.

### 15 DISCLAIMER OF LIABILITY

15.1 **The Race Organizers (including Houston Yacht Club, the Race Committee, the sponsors of the HYC "Quantum Cup" Offshore Regatta, the Protest Committee, and/or their respective members, officers, board of directors, board of trustees, and event volunteers) will not be responsible for damage to any boat or other property or the injury to any competitor, including COVID-19 or death, sustained as a result of participation in this event prior to, during, or after the regatta. By participating in this event, 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.** Neither the adoption of the Special Equipment Requirements, their use and modification by the Organizing Authority, nor the inspection of a boat in any way reduces the complete and unlimited responsibility of the skipper. It is the sole and exclusive responsibility of the skipper and crew of a boat to decide whether or not to start or continue racing in this event.

**16 INSURANCE**

**16.1** [NP] Each participating boat shall be insured with valid third-party liability insurance with a minimum coverage of \$300,000 per event or the equivalent.

**17 PHOTOGRAPHY**

**17.1** For and in consideration for participation in this regatta, each boat's skipper, owner, charterer, and crew extend to Houston Yacht Club, Quantum Sails, and their personnel the absolute right and permission for any photography and video coverage taken of persons and/or their boat during this event to be published in any media worldwide for any editorial, promotional, and/or advertising purpose or to be used in press information.

**18 PRIZES**

**18.1** **GRAND PRIZE:** Quantum Sails will be giving \$2,000 off any sail (Note: if the sail is under \$2,000, you will receive only the sail and not the remainder in cash or services) to the chosen winner at the Awards Ceremony at 5:00 p.m. on Saturday, May 21, 2022 at Houston Yacht Club. It will be a random drawing for ALL boats that entered and raced this event. You must be present at the Awards Ceremony to win. We would like all skippers to attend the Awards Ceremony in person, but if the skipper cannot attend, someone from the winning boat must be present to win. We will check the crew entries and Waivers submitted to ensure the crew member present was a crew of the winning boat.

**18.2** There will be 1<sup>st</sup> place trophies awarded for all classes and additional trophies will be awarded depending on the size of the class. One trophy will be awarded in each class with at least 3 boats. Two trophies will be awarded in classes with four or five boats. Three trophies will be awarded in classes with six or more boats.

**18.3** The Carroll Blanchard Cup will be awarded to the winner of the PHRF Spinnaker Class.

**18.4** The HYC "Quantum Cup" Offshore Regatta is one of three events of the Texas Offshore Circuit (TORC).

**18.5**       **a. Texas Navy Trophy:** Boats sailing in the ORC Spinnaker class will be eligible to compete for the TORC championship trophy, the Texas Navy Trophy, if the winning skipper entered in all three regattas in the same class, and if all three regattas are held during the 2022 calendar year. For purposes of Texas Navy Trophy scoring, two races of the Texas Race Week Regatta will be scored, along with one of either the LYC Heald Bank or the HYC "Quantum Cup" Offshore Regatta. Eligible boats will be scored against each other, and not against ineligible boats.

**b. S. Rhoads Fisher Trophy:** Yachts sailing in the PHRF Non-Spinnaker Class will be eligible for the S. Rhoads Fisher Trophy, if they have entered all three regattas of the TORC in the same class, and if all three regattas are held during the 2022 calendar year. The Trophy will be awarded at Houston Yacht Club on November 19, 2022 during the Award Ceremony for the HYC James T. Liston Turkey Day Regatta.

**18.6** To encourage women in yacht racing, a special trophy will be awarded based on lowest corrected time to a boat whose skipper and primary crew are women. One male owner's representative may be part of the crew but may not act as the person in charge.

**19 FURTHER INFORMATION**

**19.1** For further information please contact Farley Fontenot, HYC Commodore, at [commodorehyc2022@gmail.com](mailto:commodorehyc2022@gmail.com) or Yolanda Cortes Mares, HYC Race & Regatta Chair at [ymares@earthlink.net](mailto:ymares@earthlink.net).



## ATTACHMENT A

### Safety Equipment Requirements – 2022 HYC QUANTUM CUP

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

Current as of May 12, 2021

Section Name	#	Requirement	HYC QUANTUM CUP Exception	Meets Req.	Issue
Definition	1.0.2	Coastal: Races not far removed from shorelines, where rescue is likely to be quickly available			
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.			
Overall: 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.			
Overall: 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.			
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.			
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.			
Overall: Secure Storage	1.5	A boat's heavy items such as batteries, stoves, toolboxes, anchors, chain and internal ballast shall be secured.			
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.			

## Safety Equipment Requirements – 2022 HYC QUANTUM CUP

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

Current as of May 12, 2021

Section Name	#	Requirement	HYC QUANTUM CUP Exception	Meets Req.	Issue
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: 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.			
Hull and Structure: 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.			
Hull and Structure: 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 Structure: Cockpit	2.1.4	A boat's cockpit drains shall be capable of draining six inches of water in 5 minutes. One square inch (645mm <sup>2</sup> ) of effective drain per eight square feet (0.743m <sup>2</sup> ) of cockpit sole will meet this requirement.			
	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.			
Hull and Structure: 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 Structure: 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.			
Hull and Structure: Stability	2.2.3	A boat with moveable or variable ballast (water or canting keel) shall comply with the requirements of Appendix K.			
Hull and Structure: 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.			
Hull and Structure: Lifelines	2.4.2	A boat's stanchion and pulpit bases shall be within the working deck.			
Hull and Structure: 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).			

## Safety Equipment Requirements – 2022 HYC QUANTUM CUP

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

Current as of May 12, 2021

Section Name	#	Requirement	HYC QUANTUM CUP Exception	Meets Req.	Issue
Hull and Structure: Lifelines	2.4.4	Lifelines shall be uncoated stainless steel wire. A multipart-lashing segment not to exceed 4" per end termination for the purpose of attaching lifelines to pulpits is allowed. Lifelines shall be taut.	Vinyl coated lifelines may be used provided any stained coating is removed to establish that the lifelines have not corroded.		
Hull and Structure: 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.			
Hull and Structure: Lifelines	2.4.5	The maximum spacing between lifeline supports (e.g. stanchions and pulpits) shall be 87" (2.2m).			
Hull and Structure: 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).			
Hull and Structure: 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).			
Hull and Structure: 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.			
Hull and Structure: 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.			
Hull and Structure: 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.			

## Safety Equipment Requirements – 2022 HYC QUANTUM CUP

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

Current as of May 12, 2021

Section Name	#	Requirement	HYC QUANTUM CUP Exception	Meets Req.	Issue
Hull and Structure: Mechanical 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 Structure: Mechanical 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.			
Safety Equipment: 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.			
Safety Equipment: 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.			
Safety Equipment: 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.			
Safety Equipment: 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.			
Safety Equipment: Deck Safety	3.2.3	Multihulls must have jacklines or attachment points that are accessible when the boat is inverted.			
Safety Equipment: 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.			
Safety Equipment: Fire Extinguishers	3.4	A boat shall carry fire extinguisher(s) that meets U.S. Coast Guard or applicable government requirements, when applicable.			
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.			

## Safety Equipment Requirements – 2022 HYC QUANTUM CUP

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

Current as of May 12, 2021

Section Name	#	Requirement	HYC QUANTUM CUP Exception	Meets Req.	Issue
Safety Equipment: Visual Distress Signals	3.6.2	A boat shall carry one SOLAS orange smoke flares not older than the expiration date.	SOLAS Flares are strongly recommended but current US Coast Guard approved flares may be used in lieu of SOLAS flares.		
Safety Equipment: Visual Distress Signals	3.6.4	A boat shall carry three SOLAS red hand flares not older than the expiration date.	SOLAS Flares are strongly recommended but current US Coast Guard approved flares may be used in lieu of SOLAS flares.		
Safety Equipment: Visual Distress Signals	3.6.5	Boat flares stored inside of life rafts may not be used to satisfy the flare requirement.			
Safety Equipment: 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.			
Safety Equipment: 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".			
Safety Equipment: 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.			
Safety Equipment: 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.			
Safety Equipment: Emergency 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.			
Safety Equipment: Emergency 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.			

## Safety Equipment Requirements – 2022 HYC QUANTUM CUP

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

Current as of May 12, 2021

Section Name	#	Requirement	HYC QUANTUM CUP Exception	Meets Req.	Issue
Safety Equipment: Emergency Communications	3.14	A boat shall carry a GPS receiver.			
Safety Equipment: Emergency 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.			
Safety Equipment: Emergency 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.			
Safety Equipment: Navigation	3.18	A boat shall have a permanently installed depth sounder that can measure to depths of at least 200 ft. (61m).			
Safety Equipment: Navigation	3.19.1	A boat shall have a permanently mounted magnetic compass independent of the boat's electrical system suitable for steering at sea.			
Safety Equipment: Navigation	3.20	A boat shall have non-electronic charts that are appropriate for the race area.			
Safety Equipment: 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.			
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.			
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.			
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.			
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.			
Gear: Radar Reflectors	3.26	A boat shall carry an 11.5" (292mm) diameter or greater octahedral radar reflector or one of equivalent performance.			
	3.27.1	A boat shall carry two sturdy buckets of at least two gallons (8 liters) capacity with lanyards attached.			

## Safety Equipment Requirements – 2022 HYC QUANTUM CUP

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

Current as of May 12, 2021

Section Name	#	Requirement	HYC QUANTUM CUP Exception	Meets Req.	Issue
Gear: Safety 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: Emergency Steering	3.29.2	Wheel steered boats shall have an emergency tiller, capable of being fitted to the rudder stock.			
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.			
Sails: Mainsail Reefing	3.33.1	A boat shall have a mainsail reefing capable of reducing the luff length by at least 10%.			
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.			
Rigging: Boom 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.			
Skills: Emergency Steering	4.1.2	Crews must be aware of methods of steering the yacht with the rudder disabled.			
Skills: Man 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.			
Skills: Safety at Sea Training	4.3.2	At least 30% of those aboard the boat, but not fewer than two members of the crew, unless racing single-handed, including the person in charge, shall have a valid Coastal, Offshore, or International Offshore Certificate from US Sailing, or the equivalent from another national authority.			
Skills: Crew 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.			
Skills: Crew 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.			