PACIFIC INTERNATIONAL YACHTING ASSOCIATION

Effective JANUARY 1, 2010

SPECIAL REGULATIONS GOVERNING MINIMUM EQUIPMENT AND ACCOMMODATIONS STANDARDS

TO ALL SAILING SKIPPERS:

Member clubs of this regional authority have subscribed to the following category system. Circle the symbol for each item applying to your yacht. **Sign the certificate and keep on your yacht at all times.**

All equipment required in this certificate shall be operable throughout the race. Where spare equipment is required, the operation of it and the main item is required at the start.

The words "Coast Guard" mean the U.S. or Canadian Coast Guard current minimum requirements or approval.

The safety of the yacht and her crew is the responsibility of the Owner and Skipper. It is the responsibility of each skipper to decide whether or not to start or to continue in a race.

Changes for 2010: 3.3 addresses use of lighter anchor than stated in formula by adding chain. 3.16 Lifeline material and size specified and to add UHMWPE type rope and temporary sleeving. These changes are intended to make PIYA more consistent with ISAF/IYRU requirements and European-built boats. Also, 3.17 jack line requirement was clarified, and 3.23, 3.25 category requirements were upgraded. Multihull section of 3.16b changed to 3.16c for requirements traceability. 1.1 and 1.6 stability standards are being reviewed.

Purpose:

To establish minimum specifications for construction, equipment and accommodations to provide **safe** and **equitable** racing in our region.

Sail Yacht Category Descriptions:

These regulations shall be mandatory for PIYA sponsored events and are recommended for all events in the area. Each race sponsor is responsible for specifying the category of vessels for its races. These are minimum requirements and the final onus for safety rests upon the skipper of each vessel. Following are categories of vessels recommended and/or required for events in the area.

Category 0: Yachts capable of extended offshore races, such as Victoria-Maui. It is recommended that ISAF/ORC Category 0 and I special regulations be utilized (available through CYA and USSA) for such races which do not already have equivalent specific construction, equipment, and accommodation requirements. Yachts meeting all ISAF/ORC Category 0 and I requirements shall be considered eligible for PIYA Category I, II, and III races, provided they meet the minimum requirement of sections 4.0, 6.0 and 7.0 below.

Category I: Yachts capable of racing exposed waters where the vessel must be self-sufficient and capable of enduring heavy storms. Yachts meeting Category I requirements shall also be considered eligible for Category II and III races.

Category II: Yachts capable of racing in semi-protected waters, day or night, where heavy weather may be encountered. Yachts meeting Category II requirements shall also be considered eligible for Category III races.

Category III: Yachts capable of racing protected waters primarily in daylight.

Category IV: Open centerboard, dinghy, and open or partially decked keel boats racing in protected waters during daylight with rescue boat(s) in attendance.

Category Specifications:

Symbols:
R - Required
A - Advisable
N - Not Required / Not Applicable
* - Candidate for upgrading at future date

I	II	III	IV		
					1.0 Hull
R	R	R	N	1.1	Mono-Hull, self-righting and strongly built. Recommend that boats should have a minimum limit of positive stability of 105°.
					Multi-hull, light and strongly built, with positive buoyancy situated so that the boat will float reasonably level with the hulls flooded.
A	N	N	N	1.1a	Recommended Limit of Positive Stability not less than 120 degrees.
N	A	N	N	1.1b	Recommended Limit of Positive Stability not less than 110 degrees.
N	N	A	N	1.1c	Recommended Limit of Positive Stability not less than 105 degrees.
A	A	A	N	1.1d	Yachts with movable water ballast should meet the above recommendations in all conditions of ballasting, and should not heel more than 10 degrees with one side ballast tank filled (yacht in sailing condition, no crew aboard).
R	R	A	A	1.2	Readily accessible, positive mechanical closure provided for all through-hull openings below the load waterline (LWL) except shafts and measuring devices.
R	R	R	R	1.3	Tapered soft wood (or equivalent) plugs for all through hull openings or shafts immediately available.
R	R	N	N	1.4	Minimum average freeboard at ends of LWL equals 5% of LOA, but not less than 2.2 feet (to deck at side).
N	N	N	R	1.5	Centerboard yachts shall obey their class buoyancy regulations and if not sailing under Class rules, shall have sufficient positive buoyancy to support crew.
A*	N	N	N	1.6	The maximum beam (in feet) should not exceed twice the cube root of the displacement (in cubic feet) when the boat is in racing trim (To convert the displacement to cubic feet divide the displacement in pounds by 64.) (Applies to monohulls only.)
					2.0 Decks and Cabins
R	R	R	N	2.1	Strong, capable of withstanding pooping or knockdown.
R	R	A	N	2.2	Hatches or ports permanently fastened to yacht and capable of being solidly secured, essentially leak-proof.
R	R	A	N	2.3	Companionway(s) capable of being blocked off to main deck level, solid, essentially leak-proof and rigidly secured, if not permanent. (Note: normal door boards when not secured or plugged, are not acceptable.)
R	R	A	N	2.4	Companionway(s) above deck level well fastened and essentially leak-proof when closed.
R	R	N	N	2.5	Where windows exceed two sq. ft. in area or where the least dimension exceeds 9 inches, covers of strength equal to 3/8″ minimum thickness plywood shall be carried aboard for all such windows. One set will serve either side of yacht.
R	R	N	N	2.6	Cockpit drains having a combined effective cross sectional area of one square inch per eight square feet of cockpit sole area. Any raised area in the cockpit less than one foot in height shall be considered as part of the sole area. Plugs may be used to prevent inflow but shall be readily removable.
R	R	N	N	2.7	Entire cockpit to be solid, watertight strongly fastened and/or sealed. Weather-tight seat hatches are acceptable only if capable of being secured when closed

I II III IV

R R N N 2.8 Cockpit volume, including any floodable motor wells and/or compartments, to lowest points of coaming over which water can adequately escape, not to exceed .08 x LOA x Max. Beam x Freeboard aft. Cockpit sole at least .02 x LWL above LWL. For multihulls, the beam be taken as the sum of the beams of the hulls only.

3.0 Ship's Gear

R A N N 3.1 Separate emergency steering apparatus adequate to steer boat in event of loss of rudder. An inspector may require that the apparatus be demonstrated.

N N N R 3.2 Adequate paddle(s) or oars.

R R R R 3.3 An anchor of minimum weight $(LOA/17)^3$ lbs., with adequate chain and 150´ of anchor line equaling minimum weight $(LOA^2/80)$ lbs. LOA is measured in feet and weight is in pounds. If a lighter anchor is selected, then additional chain is to be carried to total the same (computed anchor/chain/line) combined weight.

R R A N 3.4 Additional anchor and rode as in 3.3.

R R R R 3.5 The yacht shall meet or exceed all Coast Guard requirements for equipment, machinery, and gear.

R R A N 3.6 Rigging wire cutter or hacksaw with tungsten carbide blade.

R R R R 3.7 Yacht's name on floatable safety gear.

R R R N 3.8 A radar reflector, all metal, of the tri-planar corner reflector type, each plane at least 12″ square or 12-1/2″ diameter to be carried at least 13 feet (4 meters) above the waterline. Other types of reflectors may be used provided that it has been demonstrated that they are equally effective under all conditions.

R R R A 3.9 Compass strongly mounted.

R R A N 3.10 Spare compass.

R R R R 3.11 Navigation lights to be shown, as required by the International Regulations for Preventing Collisions at Sea, mounted so that they will not be obscured.

R R A N 3.12 Spare running lights with separate power for night races.

R R A N 3.13 Radio capable of receiving weather bulletins in the race area.

R R R N 3.14a Radio transceiver with a minimum rated output power of 5 watts, capable of working the VHF/FM marine frequencies (156-158 MHz).

R R A N 3.14b Radio transceiver with a minimum rated output power of 6 watts, capable of working the VHF/FM marine frequencies (156-158 MHz). Provisions for emergency antenna must be made regardless of primary antenna location.

R R R N 3.15 Depth sounder or lead line.

R R A N 3.16 Lifelines shall be installed as stated in this paragraph to meet installation requirements in 3.16a and 3.16b, below, for all new lifeline installations after 2006.

Lifeline Minimum Diameters, Required Materials, Specifications:

a) Lifelines shall be of stranded stainless wire or single-braided UHMWPE (e.g. Dyneema®).

b) The minimum diameter of lines shall be as stated in Table 3.16, below.

c) Stainless steel line shall be uncoated and used without close-fitting sleeving. However, temporary sleeving may be fitted provided it is regularly removed for inspection.

d) When stainless steel is used, Grade 316 is recommended.

` e) When Dyneema® rope is used, Grade SK75 or SK78 is recommended.

I II III IV (3.16 cont.)

f) When Dyneema® rope is used, it is strongly recommended that terminations be spliced instead of using knots.

g) A taut lanyard of synthetic rope may be used to secure lifelines provided the gap it closes does not exceed 100mm (4 inches). This lanyard shall be replaced at least annually.

h) All wire, Dyneema® rope, fittings anchorage points , fixtures and lanyards shall comprise a lifeline enclosure system which has at all points at least the breaking strength of the required lifeline.

TABLE 3.16

LOA	Wire- Min. Diameter	Rope-Min. Diameter
Under 8.5M (28ft)	3mm (1/8")	4mm(5/32")
8.5M to 13M	4mm (5/32")	5mm (3/16")
Over 13M (43ft)	5mm (3/16")	6mm (1/4")

R R A N 3.16a For boats 28´ LOA or longer, fixed bow pulpit (within safe working distance of the jib tack) and stern pulpit. Upper rails shall be at the same height as the upper lifeline and shall be continuous around the bow and stern. Stanchions must not be angled at more than 10 degrees from vertical from base to head. If the stern pulpit is not continuous around the stern, lifelines as stated above in 3.16, may be used provided that no vertical opening may exceed 15 inches (0.4 m). Pulpit bases shall be securely attached to the deck with bolts, welds, or other equally strong structure.

Taut double lifelines, with upper lifeline at a height of not less than 2 feet above the working deck permanently supported at intervals of not more than 2 meters.

Lifelines (including lower and upper lines) shall not sag more than 4" under a 5lb. load applied halfway between the stanchions.

Lifelines shall be affixed to the bow pulpit or terminate at, or pass through, adequately braced stanchions 2 feet above the working deck, set inside of and overlapping the bow pulpit, provided that the gap between the upper lifeline and the bow pulpit shall not exceed 12 inches.

Carbon fiber is not permitted in pulpits, stanchions or lifelines.

R R A N 3.16b For all boats under 28´ LOA as in 3.16 and 3.16a above, but with a single taut lifeline not less than 18 inches above the working deck, and a bow pulpit and a stern pulpit or enclosing lifelines to the same height. If the lifeline is at any point more than 22 inches above the rail cap, a second intermediate lifeline must be fitted.

R R A N 3.16c Multi-hulls only. Catamarans shall have netting between the hulls at least as far forward as the jibstay. Trimarans shall have a bow pulpit and netting between connectives. Such netting forward shall extend from the pulpit to the cross-arm at a point at least 3 feet from the main hull. Otherwise, requirements stated above in 3.16 and 3.16a or 3.16b shall apply depending on boat LOA.

R R A N 3.17 Jack-lines with a minimum breaking strength of 4,500 pounds (2040 kg) shall be fitted each side from cockpit to bow such that crew can clip on before leaving the cockpit. Jack-lines shall be attached to fittings equal to the full strength of the attached jack-line.

All multihulls without pulpits and lifelines shall have anchor points for the attachment of safety harnesses in such numbers and places, that any point on deck may be reached with the harness lanyard attached.

R R R A 3.18 First aid supplies and manual with guidance for treatment of seasickness, pain, hemorrhage, skin injuries, injured parts, hypothermia, and maintenance of breathing.

R R R N 3.19 Adequate permanently installed manual bilge pump, operable with all cockpit seats, hatches, and companionways closed, and at all reasonable angles of heel. For multihulls under 35´ LOA, an adequate tethered bilge pump may be substituted for a fixed pump.

I	II	III	IV	
R	R	A	N	3.20 Second adequate bilge pump.
R	R	R	R	3.21 Bailer or bucket. Note: for Category IV, R is amplified by the following: suitable bailer or manual pump, (suction self-bailers not satisfactory). Exception: Category IV yachts with properly designed, completely self draining cockpits and hulls, need not carry a bailer or pump.
R	R	R	A	3.22 Two operable flashlights or hand lanterns
R	R	A	N	3.23 Electronic position finding devices such as GPS, LORAN, SATNAV, or Radio Direction Finder
R	R	A	N	3.24 Charts for area of race to be on board.
R	R	A	N	3.25 Heaving line, 50´ minimum length; "throwing sock" type recommended.

4.0 Living Accommodations

I	II	III	IV	
R	R	A	N	4.1 Properly secured marine toilet with positive closure method for any through-hull connections other than vents.
R	R	N	N	4.2 Permanently installed water tank or tanks minimum capacity 15 litres per required berth per 4.4 below.
R	R	N	N	4.3 Galley with permanent stove, sink, and storage cabinets.
R	R	N	N	4.4 Permanent berths as follows (may be transom, pipe or convertible from seat cushions); cockpit seats or other outside areas are not included:

up to 22.0´ LWL	2 berths
22.1´ - 25.0´ LWL	3 berths
25.1´ - 30.0´ LWL	4 berths
30.1´ - 35.0´ LWL	5 berths
35.1´ and up LWL	6 berths minimum

For multihull yachts two berths less than above, minimum two.

I	II	III	IV	
R	R	N	N	4.5 Interior appointments, i.e., partitions, doors, floorings, trim, counter tops lights, washbasins, cushions, hanging lockers, seats, tables, ventilators, heaters, curtains, securely fastened icebox, chart storage, drawers, storage compartments, etc., commensurate with a cruising yacht of the size. These items are not individually mandatory nor is this list all-inclusive, but collectively represents a nominal requirement and a significant percentage of displacement for a reasonably complete yacht, suitable and intended to cruise comfortably. The "stripped out" hull or only token compliance with this intent are specifically rejected.
R	R	A	A	4.6 All ship's gear, ballast, batteries, and other items which could cause bodily injury shall be secured.

5.0 Life Saving Equipment

I	II	III	IV	
R	R	R	R	5.1 Flotation device for each crew member readily available. Water ski belts are not adequate.
R	R	R	N	5.2 For night races, whistle and personal lights to be provided for each crew member.
R	R	A	N	5.3 Safety snap-on line and harness for each crew member. The recommended assembly shall be ready for use, all components attached. Load-bearing components, including attachment fittings, shall withstand a static load of at least 700 kilograms (1540 lbs.) The safety line shall attach to the harness at chest level and the harness shall support the upper back.
R	R	R	N	5.4 High visibility lifebuoy (horseshoe or ring type), large enough to slip into, with bright water light, drogue, and whistle attached, mounted ready for instant use. The water light may be omitted for daylight races.
R	R	A	N	5.5 Additional lifebuoy with whistle or Lifesling without drogue (or equal recovery device of floatable type) mounted ready for instant use.
				(5.6 – Deleted)
R	R	N	N	5.7 Flagpole which must float upright with high visibility 15″ x 15″ flag, top of flag to be 6 ft. above water. The pole is to be attached to 5.4 above to form one ring-light-drogue-flagpole assembly ready for instant overboard release. The Switlik MOM8-A (MOB) system is approved as an alternate if maintained in accord with manufacturer's requirements and installed to meet the above instant release requirement.
R	R	R	N	5.8 Coast Guard approved flares, minimum of four. Recommend aerial type, preferably meeting SOLAS requirements.
R	A	N	N	5.9 Adequate life raft(s) designed for life saving with capacity for containing entire crew. To be carried on deck or special compartment opening immediately to deck. If the raft weighs less than 88 lbs., it may be stowed below decks immediately adjacent to the companionway. The raft must be capable of being carried to the lifelines within 15 seconds. If inflatable, it is recommended that it have two parallel buoyancy compartments. The raft must have been inspected within two years with written certification and be equipped for both manual and automatic inflation. Raft must be equipped with drogue and painter. As an approved alternate to the life raft, a boat may be equipped with survival suits for each person aboard for whom life raft capacity is not provided. The suit shall be a universal size suitable for donning over regular clothing for keeping the wearer dry and afloat, shall be coverall type and shall include in its construction closed cell foam insulation designed to ensure survival from hypothermia of the wearer for a minimum of 3 hours when floating in 54°F water. The suit(s) may be stowed below decks but readily accessible to the companionway.

6.0 Auxiliary Power

I	II	III	IV	
R	R	R	N	6.1 Auxiliary Power, capable of moving yacht at a speed (knots) equal to the square root of the water line length (ft.)
				(6.2 – Deleted)
R	R	R	N	6.3 All fuel tanks with proper venting securely fastened and with fuel capacity for 6 hours at above speed (6.1).
R	R	R	R	6.4 Engine installation, fill pipes, tanks, vents, carburetors, batteries, etc., to meet Coast Guard requirements**.**
R	R	R	N	6.5 Outboard motor and fuel installation shall be the approximate equivalent of an inboard installation in respect to ventilation, safety and ease of use and sea worthiness. Specific requirements are as follows:
R	R	R	N	a) Motor shall be permanently attached to hull or transom or inboard well, ready for immediate use at all times while the boat is racing.

I II III IV **(6.5 cont.)**

R R R N b) Mounting shall be such that motor can be quickly and easily inserted into the water and operated during severe sea and wind conditions.

R R A N 6.6 Motor well, if used, to be watertight to level of deck or cockpit, or in watertight compartment.

R R R N 6.7 Propeller, if vessel is rated with prop, to be immersed on both tacks.

7.0 Spars and Rigging

R R R N 7.1 Spars, rigging, gear and fittings, must be capable of withstanding heavy weather.

R R A N 7.2 Yachts must be equipped with mainsail reefing and a heavy weather jib. Yachts carrying only one sail (e.g. catboats) shall be equipped with a stormsail having a maximum area of not more than 25% of the mainsail area and shall be of a weight of material at least equal to that of the mainsail. The method of setting the stormsail must not depend on use of the mainsail track or groove. Sail must be attached to the mast at or near the head and tack. Lace loops are specifically prohibited. A second halyard must be rigged and available.

A* A N N 7.3 Storm jib of area not exceeding 5% of I^2.

R R R N 7.4 Halyards must be capable of quick release. Masthead halyard locks, if used, must be capable of quick release from deck level.

R R A N 7.5 The sleeve-type jib that requires stay release to allow dousing or removal is prohibited unless there is an alternate stay set.

8.0 Identification

R R R N 8.1 Sail numbers, letters and emblems as to design shall conform to ISAF Rule 77, except that national letters are not required.

Numbers shall be obtained as follows:
(1) in U.S., from PIYA
P.O.Box 523
Olympia, WA 98507
Phone: (360) 754-7506
E-mail: jan@ussailing.net

(2) in Canada, from B.C.Sailing
304 1367 West Broadway
Vancouver, B.C. V6H 4A9
Phone: (604) 737-3126

N N N R 8.2 Identification for Category IV shall be as required by Class or Fleet rules.

9.0 Enforcement

9.1 Requests for interpretation of these requirements may be referred by any member club to the PIYA Technical and Inspection Committee.

R R R R 9.2 Category certificates are to be completed and signed annually by owner and kept on board.

R R R R 9.3 A yacht may be inspected at any time. If she does not comply with these Special Regulations she may be subject to protest by the Race Committee or by other competitors and suffer such penalty as may be prescribed by the racing rules, the notice of race, or by the sponsoring organization. Refusal to allow inspection may be cause for disqualification.

2010 Certification of Category

I hereby certify that my yacht meets the category requirements for the race(s) it is sailing.

Skipper (please print clearly.)

_____

Yacht Name_____

Sail No._____

Club _____

Signature & Date _____