

**12b. Spreaders.** Spreaders are optional. They may be of any material, any size and any number desired. They may be fixed or hinged.

**12c. Jib Intersection.** The jib stay or jib luff wire and the head stay shall lead to the head of the stem. The line of the jib stay or jib luff wire shall intersect the front of the mast at a point no more than 15 foot 3 inches above the deck measured from the intersection of the front of the mast and the deck at the deck centerline. This measurement shall be taken with the wire extended to the head of the stem.

**12d. Traveller or Bridle.** There shall be either a rigid traveller or a flexible bridle by which the mainsheet is rigged to the aft deck. Said traveller or bridle shall be located on the aft deck between the transom/deck intersection and Station 7 and shall lie substantially in one athwartship plane. The rigid traveller may be of any construction but shall not extend beyond the sheer line and shall at no point extend more than 6 inches above the deck. A flexible traveller may be of any material and any configuration. It shall be anchored to or pass through the deck at two points which shall lie in one athwartship plane.

**12e. Halyards.** There shall be a main halyard and a jib halyard. They may be internal or external. Halyard latches are optional but, if used, may be of any design at any

location. Halyards must lead straight down the mast and may not be used as stays.

**12f. Hiking Aids.** Except for foot holds or hand holds rigged inboard of the cockpit coaming, no outrigger, rope, wire sling, grab rail, or other device may be installed or used for supporting the weight of the skipper or crew.

### 13. Sails

**13a. General.** The only sails permitted are a mainsail and a loose footed jib, as shown on the official plans. Only one mainsail and one jib may be above deck at any time. The jib may be wung out on a whisker pole as needed. One mainsail and one jib constitute a suit of sails. Clewboards and tackboards are prohibited on all sails.

**13b. Cloth.** Sails shall be of woven synthetic material such as Dacron, weighing not less than 2.7 ozs. per yard 28 1/2 inches wide. Materials such as Kevlar, Mylar, Spectrum are prohibited unless authorized by the Executive Committee for experimental use.

**13c. Measurement.** All sail measurements shall be made on a flat surface, with or without battens, and smoothed out to eliminate wrinkles. No other tension shall be applied during measurement.

**13d. Sail Tax Labels.** All sails shall display a sail tax label. Sail tax labels are non-transferable. Said labels may be obtained from the class office for the fee listed in Appendix I of these By-Laws.

**14. Mainsail.**

**14a. Class Emblem.** The mainsail shall carry on each side, in the position shown on the plans, the Official Class Emblem. The star of the emblem shall be about 6 inches high and the emblem shall be as described in Article III of the Constitution.

**14b. Sail Numbers.** Sail numbers shall be placed on both sides of the mainsail in the general location shown in the official plans and they must be red. Sail numbers shall be between 10 and 12 inches in height.

**14c. Honor Awards.** The displaying of honor awards is optional but their use is strongly encouraged.

**14d. Battens.** The mainsail shall carry three battens. The upper batten shall be between 23 1/2 inches and 24 inches long. The lower two battens shall be between 29 1/2 inches and 30 inches long. Battens may be of wood (ash is recommended) or fiberglass. They may be of any thickness or width. The three battens shall be installed in the leech of the mainsail roughly perpendicular to the leech. The battens shall roughly divide the leech into four equal size sections.

**14e. Windows.** The mainsail may have any number of windows located as desired as long as the total area of all windows does not exceed 4 sq. ft.. The windows shall be made of pliable plastic sheet.

**14f. Boltrope/Slides.** The mainsail shall be bent to the mast and boom using a boltrope within an integral groove or grooved track on the aft face of the mast and the top face of the boom. In the event that slides are used there shall be at least 10 on the luff and 8 on the foot. They shall travel on the mast and boom on tracks. Slides shall be approximately evenly spaced over the entire length of the luff or foot. The slides may be of any material or construction. (Refer to Section 8a, Article XV if using slides.)

**14g. Headboard.** The mainsail may contain a headboard if desired. It may be of any material and may not be more than 5 inches across at any point measured perpendicular to the mast nor may it be more than 5 inches in height measured parallel to the mast. It shall contain a hole or holes near the top for attaching the main halyard.

**14h. Measurements.** The mainsail shall be of the following size exclusive of pigtailed or pendants. The corner to corner dimensions shall include the boltrope and shall be measured in straight lines.

**Luff length:** Between the highest point of the headboard and the lowest point of the luff at the tack. The tack is defined as the intersection of the luff and the foot extended. If the tack corner is cut away the tack measurement point shall be the intersection of the extensions of the luff and the foot. This dimension shall be 19 foot 3 inches maximum.



**Foot Length:** Between the forward-most point of the tack and the aftermost point of the clew. The clew is defined as the intersection of the foot and the leech. If the clew corner is cut away the clew measurement point shall be the intersection of the extensions of the leech and the foot. If the tack corner is cut away the tack measurement point shall be the intersection of the extensions of the luff and the foot. This dimension shall be 11 foot 4 inches maximum.

**Leech Length:** Between the clew (see above definition) and the highest forward point of the headboard. This dimension shall be 20 foot 4 inches maximum.

**Midgirth:** The boltrope is included for this measurement. The midpoint of the luff is determined by folding the sail upon itself with the topmost point of the headboard even with the tack as defined above. The midpoint of the leech is determined by folding the sail upon itself with the topmost point of the headboard even with the clew as described above. The midgirth of the mainsail is the straight-line distance between said midpoints of the luff and leech. This dimension shall not exceed 6 foot 10 inches. The midpoint of the leech shall lie on or outside a line drawn between the two points on the leech which lie at the upper and lower battens.

The mainsail when bent to the mast and the boom shall at no time extend beyond the limiting edges

of the colored bands placed on the spars as described in Sections 9a and 10a of this Article XV. Such limiting edges are the upper edge of the mast band and the forward edge of the boom band.

The mainsail tack cringle shall be carried in the gooseneck fitting while racing. The gooseneck fitting shall lie within a 2 inch radius of the intersection of the extension of the top edge of the boom and the aft face of the mast.

#### 15. Jib

**15a. Battens.** The jib shall not carry more than two battens. The upper shall be 10 inches long or less and the lower 12 inches long or less. Battens shall be installed approximately perpendicular to the leech and should divide the leech into three sections of about the same size. Jib battens are not required but are recommended.

**15b. Window.** The jib may contain one window of pliable plastic sheet. It shall not exceed 2 sq. ft. in area and may not be closer than 3 inches to any edge of the sail.

**15c. Luff Wire.** The jib may have a wire within the luff if desired. If a jib luff wire is not used then a jib stay must be used (see Section 12a of this Article XV). Jib hooks or clips are optional as to design, number and use.

**15d. Headboard.** Headboards are prohibited in the jib.

**15e. Measurements.** For purposes of measuring the jib leech, luff, and midgirth a pattern is used as described below.

**Head Triangle:**

A right triangle pattern measuring 14 1/8 inches on the luff, 13 1/2 inches on the foot and 19 1/2 inches on the leech shall be used. The sail shall be placed over the triangle pattern with its luff lying in the same vertical plane as the luff of the pattern. The sail shall then be adjusted up or down until the leech intersects the pattern at any point. The head of the pattern shall now serve as the head of the sail for measuring the luff, leech and midgirth.

Corner to corner dimensions shall be measured in straight lines as follows. Refer to Section 14h of this Article XV, for definitions of "tack" and "tack measurement point" as they apply to this Section 15e.

**Luff Length:** Between the head of the pattern and the lowest point of the luff at the tack. If the tack has been cut away use the tack measuring point. The measurement shall be 13 foot 2 inches maximum.

**Leech Length:** Between the head of the pattern and the lowest point of the sail at the clew. If the clew is not well defined it shall be determined for measuring by bisecting the angle between the foot and the leech at the clew cringle. The measurement shall be 10 foot 11 inches maximum.

**Midgirth:** The midgirth measurement point shall be determined by intersecting the luff and the leech with a 6 foot radius swung off the head of the pattern. ~~The midpoint~~ of the leech shall lie on or outside a line drawn between the two points on the leech which lie at the two battens. The measurement between these two intersections is the jib midgirth, and shall not exceed 3 foot 5 inches.

**Foot Length:** Between the tack and the clew as defined above. The measurement shall be 5 foot 5 inches maximum.

**Foot Roach:** The foot roach shall be measured by using the points used for the foot measurement and measuring downward. The maximum dimension shall be 7 3/4 inches measured downward from the line between the tack and the clew as defined above.

**16. Safety Equipment**

**16a. General.** For the safety of the yacht and her crew, it is mandatory that, in addition to carrying any equipment required by law (local and national), each yacht carry the equipment described in this Section 16. All safety equipment must be in useable condition, readily at hand, and of serviceable design and condition. Failure to carry any of the required items will result in disqualification from all races sailed without the proper equipment.

**16b. Anchor.** At least 4 lbs. in weight. Any standard type or style of yacht anchor is acceptable.