

- RB 16.03 The maximum thickness of the rudder blade below the bearing surface of the lower rudder fitting shall be 1".
- RB 16.04 The leading edge of the rudder above the bearing surface of the lower rudder fitting shall be installed parallel to the transom. The bearing surface of the lower rudder fitting, mounted in its normal position on the transom fitting, shall be no more than  $3\frac{1}{2}$ " above Reference Point A.
- RB 16.05 Notwithstanding the foregoing paragraphs of this Article, the Technical Committee may provide by rule interpretation for a rudder to be in compliance that is otherwise not in compliance in the following cases:
- RB 16.05.01 if the trailing edge of the rudder blade does not touch the line at  $15\frac{3}{4}$ "; or
- RB 16.05.02 if either the rudder blade does not meet the  $32\frac{3}{4}$ " minimum depth requirement or the lower rudder fitting exceeds the  $3\frac{1}{2}$ " maximum height limitation, but the depth of the rudder with respect to Reference Point A is greater than the minimum depth below A of a rudder that complies with both of these limits.
- RB 16.06 Below the bearing surface of the lower rudder fitting, the rudder blade shall have no convex radius of curvature less than 4" and no concave curvature.

## ARTICLE XVII – MAST

- RB 17.00 The mast shall be an aluminum extrusion with an integral luff track. The mast shall be supported by one pair of upper shrouds, one pair of lower shrouds, single spreaders, one headstay and one backstay. The mast may be reinforced in the vicinity of the jib halyard sheave box near the point of attachment of the headstay to the mast, and in the vicinity of sheave boxes near the deck partners. The mast may have a taper above the point of attachment of the headstay to the mast of between  $41\frac{1}{2}$ " and  $53\frac{1}{2}$ ". Tapered masts may be fitted with jumper struts and stays configured as those originally supplied by the O'Day Corporation.
- RB 17.01 The mast shall have an elliptical cross section, and its untapered portion shall conform with all of the following:
- length of section: 3.5" to 3.56"
  - width of section: 2.0" to 2.06"
  - wall thickness 0.092" to 0.094"
  - weight per foot: 1 pound minimum
- RB 17.02 The top of a 1" wide Reference Band around the mast shall be located 24' below the upper bearing surface of the main halyard sheave.
- RB 17.03 The top of that Reference Band shall be no higher than  $2'3\frac{1}{2}$ " above a line connecting the "Top of Deck" reference points *TDS* and *TDP*. (see Diagram RF 32.09).
- RB 17.04 The attachment of the headstay to the mast shall be such that the centerline of the headstay must not pass above a point located 17' 4" above the top of the Reference Band and  $1\frac{1}{4}$ " from the front face of the mast.

- RB 17.05 The spinnaker halyard shall be restricted in its hoist by a fitting that is attached no higher than 17' 5" above the Reference Band and which restricts the halyard from being more than  $2\frac{3}{4}$ " from the front face of the mast at that point.
- RB 17.06 The point of attachment of the upper shrouds to the mast shall be no more than 17' 4" above the top of the Reference Band.
- RB 17.07 The point of attachment to the mast of the lower shrouds, spreaders, and jumper stays (if fitted) shall be no more than 9' 4" above the top of the Reference Band.
- RB 17.08 The center point of the upper shroud in the spreader shall be no more than  $25\frac{1}{2}$ " and no less than  $23\frac{1}{2}$ " from the side of the mast at the spreader location.
- RB 17.09 The masthead cap shall be of such design that the distance measured perpendicular to the aft edge of the mast and from the bottom of the main halyard sheave groove to the centerline of the backstay shall not exceed  $3\frac{13}{16}$ ".

#### **ARTICLE XVIII – BOOM**

- RB 18.00 The boom shall be an untapered aluminum extrusion, oval in cross section, with the following dimensions:  
height: 2.65" to 2.75";  
width: 1.75";  
wall thickness: .085" to .095";  
weight: .8 to .9 pounds per foot.
- RB 18.01 Alternatively, a length of any untapered section of an allowed mast extrusion may be used for a boom.
- RB 18.02 The boom may be fitted with attachment points for an adjustable outhaul, a mainsheet system and vang, and may be reinforced.
- RB 18.03 The boom shall have a 1" wide reference band around its outboard end with the band's forward edge not more than  $9' 10\frac{1}{2}$ " aft of the line of the mast's luff track, with the boom in its normal position on the mast.

#### **ARTICLE XIX – SPINNAKER POLE**

- RB 19.00 The spinnaker pole shall be of wood or metal and shall not be more than 6' 9" in overall length, measured to the extreme end of all fittings.
- RB 19.01 The spinnaker pole shall be attached to the mast when in use. It may be used as a whisker pole to control the clew of the jib.
- RB 19.02 The bearing surface of any ring or other fitting attached to the mast supporting the inboard end of the spinnaker pole shall not extend more than  $2\frac{1}{2}$ " in any direction from the forward face of the mast on its centerline.



## ARTICLE XX – STANDING RIGGING

- RB 20.00 All standing rigging, including the backstay, shall be multi-strand wire. Individual strands need not be circular in section.
- RB 20.01 No adjustment shall be made to the headstay, upper or lower shrouds, or jumper wires after the warning signal in any race, except as necessary to make repairs.
- RB 20.02 Adjustment to the backstay while racing is specifically permitted.
- RB 20.03 Turnbuckles or equivalent adjustment devices may be added to the lower end of any stay or shroud.
- RB 20.04 The minimum diameter of the headstay, lower and upper shrouds shall be  $\frac{1}{8}$ ".
- RB 20.05 The minimum diameter of the backstay and jumper stays shall be  $\frac{3}{32}$ ".
- RB 20.06 The forward chain plate may be moved so that the center of the stay attachment point is no more than 83" from the center of the headstay attachment point.
- RB 20.07 The center of the shroud attachment point in the aft chain plate shall be between 13" and 15" aft of the center of the stay attachment point in the forward chain plate.

## ARTICLE XXI – SAILS

- RB 21.00 Sails shall be limited to mainsail, working jib, and spinnaker, shall be made of nonlaminated cloth and shall conform to the requirements of the following paragraphs:
- RB 21.00.01 The sail measurement given below shall, except as specifically noted, be made from the outside edges of cloth, bolt rope, or sail slugs, as the case may be. All measurements shall be made with the sail pulled hand tight along the line of measurement. Hand tight is intended to mean a pull of not less than 2 pounds as measured with a hand held scale. For girth measurements, spinnakers shall be doubled along the center vertical seam and laid as flat as possible, but shall not be pulled or stretched.
- RB 21.00.02 Except as indicated in RB 21.01.02 and RB 21.02.02 below, no battens or other means of artificially stiffening the sails shall be used. With the exceptions of seams, transparent windows, and sections reinforced for the purpose of adding strength (such as at the head, clew, and tack), all sails shall be made of a continuous, single thickness of material, the surfaces to be unbroken by openings or air vents. The size or shape of the sails may not be alterable or adjustable in any way other than by tension at the tack, clew, or head. The luff of the jib and mainsail shall not extend forward of their attachment points. Leech lines are not permitted on any sails, but flutter patches may be used.

RB 21.01 Mainsail:

RB 21.01.01 Each mainsail shall be equipped with a head board 4" wide, measured at right angles to the luff. In addition, no more than  $\frac{1}{2}$ " of sail material shall be allowed between the luff boltrope and the headboard.

RB 21.01.02 Each mainsail shall have three battens. The top and bottom battens shall be no more than 24 inches long and the intermediate batten 30 inches long. Batten pockets shall be not over 2 inches longer than their respective battens.

RB 21.01.03 The full length of the luff (except when reefed) and foot of all mainsails shall, when in use, be attached to the spars by having the bolt rope or slides run in slots in the spars. No loose footed or miter cut sails shall be used.

RB 21.01.04 Mainsails shall be made of material not lighter than 3.7 ounces per running yard,  $28\frac{1}{2}$  inches wide.

RB 21.01.05 When a mainsail is set the line of the top of the boom shall not be brought below the top of the reference band.

RB 21.01.06 The clew of the mainsail shall not be pulled out beyond the inner edge of the reference band on the boom.

RB 21.01.07 The mainsail may have a transparent window not more than four square feet in area as an aid to avoiding collision, and a second window of not more than two square feet as an aid to viewing jib trim.

RB 21.01.08 The size of each mainsail shall be governed by the following:

Luff: Reference band on mast

Foot: Reference band on boom

Leech: 25' maximum

Mid-girth: 5' 11" maximum

3/4-girth: 3' 8" maximum

NOTE ON MEASUREMENT: The distances above are to be measured in terms of the "points of measurement" (POM) shown in Diagram RF 32.10. The head POM is the point near the head of the sail where the line extending the luff intersects a line running perpendicular to the luff and tangent to the top of the headboard. The clew POM is the point near the clew where the line extending the leech intersects the line extending the foot. The tack POM is the point near the tack where the line extending the luff intersects the line extending the foot.

The length of the leech shall be measured as the distance from the head POM to the clew POM with the leech pulled hand tight. The mid girth shall be measured across the sail from the midpoint of the leech to the midpoint of the luff, and the 3/4-girth shall be measured across the sail from the 3/4 point of the leech to the 3/4 point of the luff. The midpoint of the leech shall be determined by folding the sail so that the head POM is superimposed on the clew POM and then marking the point where the fold line meets the leech. The 3/4 point on the leech is determined similarly by folding the sail so the head POM is superimposed on the leech midpoint. In each case the leech should be pulled hand tight from the fold point, with the same tension



on each side of the fold. The midpoint and 3/4 point of the luff shall be determined in the same way as for the leech, except that the head POM will be superimposed over the tack POM, or the midpoint of the luff, respectively.

RB 21.01.09 The leech of the mainsail shall form a convex arc, which may be composed of one or more straight segments.

RB 21.01.10 The tack shall be fastened by a pin at the designated position of the standard boom and no additional lanyards or special attachments capable of affecting the shape of the sail except by tension at the head, clew, and boom downhaul shall be permitted.

RB 21.01.11 The use of a Cunningham hole in the mainsail is allowed, provided the location of the hole (as measured from the center) is not more than 7 inches above and  $1\frac{1}{2}$  inches aft of the normal point of measurement of the tack.

RB 21.02 Working Jib:

RB 21.02.01 All working jibs shall be fitted with snap hooks or equivalent devices made of plastic or cloth all of which, when the sail is set, must be attached to the jib stay. Zipper luff or any type of continuous jib luff fore stay attachment is not allowed.

RB 21.02.02 The use of one or two twelve inch battens in the leech of the jib is optional. Jib batten pockets may be reinforced.

RB 21.02.03 Working jibs shall be made of material not lighter than 3.7 ounces per running yard  $28\frac{1}{2}$  inches wide.

RB 21.02.04 All jib measurements shall be taken from the points where lines extended along the outside edges of the cloth of the luff, foot, and leech intersect. The size:

Luff ..... 17' 0"

Foot ..... 7' 6"

Leech ..... 15' 1"

A tolerance of 8" minus and 0" plus is allowed.

RB 21.02.05 The jib may have a window of transparent material not more than two square feet in area located not less than 12 inches from the foot of the sail. The purpose of such a window shall be as an aid to avoiding collision.

RB 21.02.06 A jib foot rope is legal if the rope is secured (such as by sewing to the sail at both ends) and the rope tension or length cannot be adjusted during a race.

RB 21.03 Spinnaker:

RB 21.03.01 Spinnakers shall be of the parachute type with equal luffs.

RB 21.03.02 Spinnakers shall be made of material not lighter than 0.75 ounces per running yard  $28\frac{1}{2}$  inches wide.

RB 21.03.03 The size of each spinnaker shall be governed by the following:

Luff and Leech - measured to under side of swivel: 20' 0".

Foot - from clew to clew: 14' 0".

No smaller or larger lengths than the above spinnaker measurements shall be per-

mitted except for a tolerance of 6 inches plus or minus to take care of stretching or shrinking.

- RB 21.03.04 To control the girth, the spinnaker, when dry, shall be folded in half by putting the luff and leech and the two clews together, and then spread evenly and flat upon the floor. Two measurements "A" and "B" shall then be taken across the sail. Measurements "A" shall be taken between the two points found as follows: From under side of swivel 5' 0" down luff and leech. From under side of swivel 6' 0" down the opposite side of the sail as folded, NOT measuring around the contour. Measurement "A" shall measure 5' 7". Measurement "B" shall likewise be taken between two points 10' 0" down luff and leech and 11' 0" down the opposite side of the sail as folded, NOT measuring around the contour. Measurement "B" shall measure 8' 2". A tolerance of 3" plus or minus is allowed on spinnaker cross measurements "A" and "B" to cover stretching and shrinking.
- RB 21.04 Number of sails permitted: only one suit of sails, whether new or old, shall be added to any boat's equipment in any one calendar year. In case of accident the Executive Committee may waive this rule, and there shall be the following exception:
- RB 21.04.01 At the end of the first full calendar year following its purchase, a boat may have two suits of sails added to its equipment.

## **SECTION C – PERMITTED ALTERATIONS AND OPTIONS**

### **ARTICLE XXII – OUTBOARD MOTORS**

- RC 22.00      Outboard motors may be carried, but must be detached before the preparatory signal of a race and not re-shipped until after the finish. The position of an outboard motor shall not be shifted during the race.

### **ARTICLE XXIII – SELF BAILERS**

- RC 23.00      Self Bailers that are fitted flush to the outer surface of the hull are permitted.

### **ARTICLE XXIV – COCKPIT COAMINGS**

- RC 24.00      Cockpit coamings must be in place. The dimensions are optional.

### **ARTICLE XXV – STANDING RIGGING**

- RC 25.00      Standing rigging that is heavier than the minimums defined in Article XX may be used.

### **ARTICLE XXVI – BILGE PUMPS**

- RC 26.00      A permanently mounted bilge pump is permitted.

### **ARTICLE XXVII – RADIOS**

- RC 27.00      Radios capable of monitoring the race committee frequencies may be carried and used if required by the organizing authority or if the race committee uses radio communication to hail competitors, as in the case of OCS boats.



## **SECTION D – PROHIBITIONS AND LIMITATIONS**

### **ARTICLE XXVIII – HIKING STRAPS**

RD 28.00      All types of hiking devices must be inside the cockpit and may not extend above the cockpit coaming.

### **ARTICLE XXIX – TRAVELERS**

RD 29.00      When mainsheet traveler devices are installed within the cockpit, the top of the track shall not be higher than four inches as measured from the inboard edge of the seat to the top of the track.

### **ARTICLE XXX – BOOM VANGS**

RD 30.00      Boom vangs capable of exerting upward pressure are prohibited.

### **ARTICLE XXXI – INSIDE BALLAST**

RD 31.00      No inside ballast may be carried, except to bring the boat up to the minimum weight. Equipment, such as outboard motors and anchor chain, which is in regular use, shall not be considered as ballast, provided such equipment is always carried in the same location on the boat.



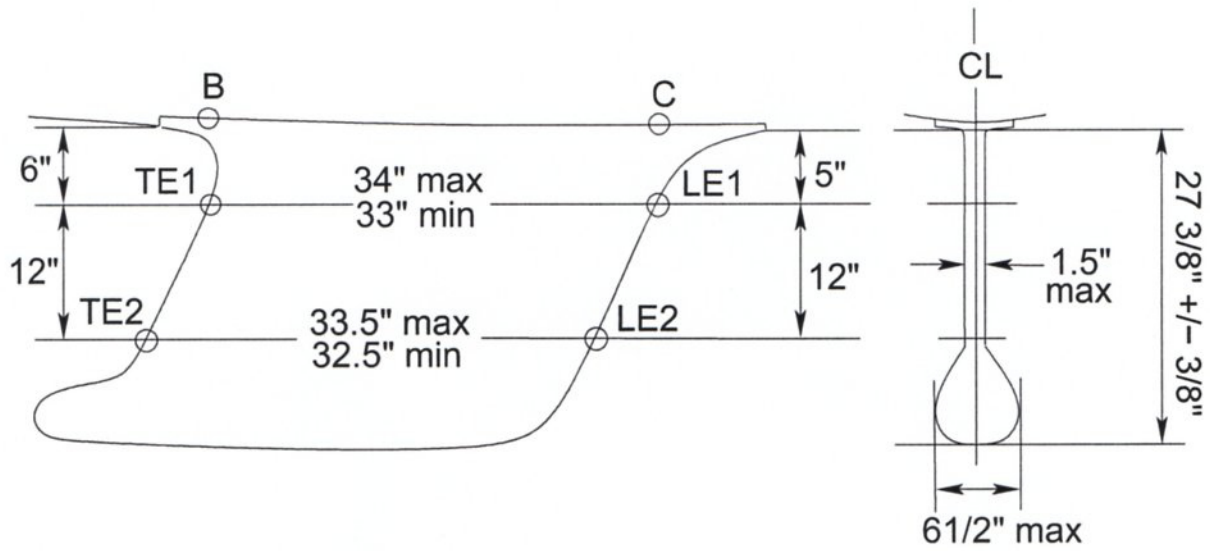
## **SECTION E – REQUIRED EQUIPMENT WHILE RACING**

### **ARTICLE XXXII – EQUIPMENT**

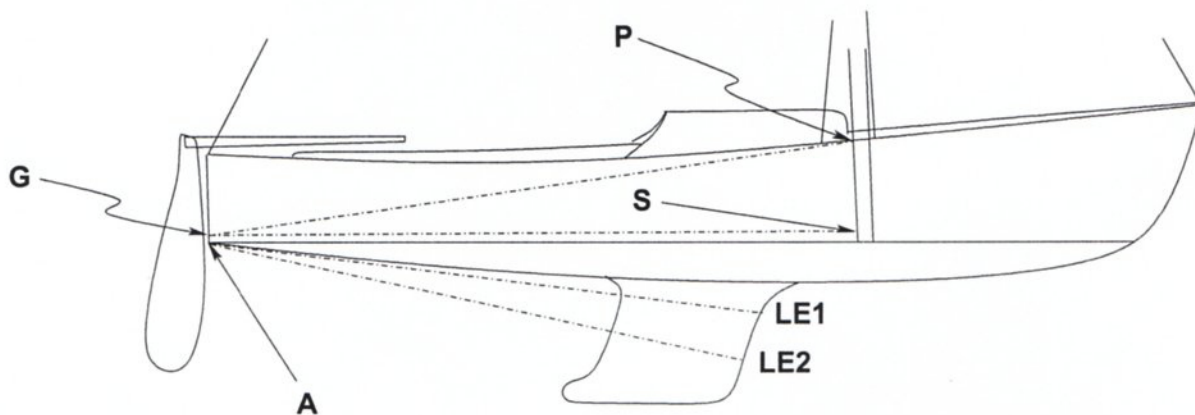
- RE 32.00 All equipment listed below shall be carried in every race:
- RE 32.01 4-pound Danforth anchor or equivalent.
- RE 32.02 Anchor line 100 feet long of 1/4" nylon or equivalent.
- RE 32.03 Serviceable life preserver for each person aboard.
- RE 32.04 Foghorn.
- RE 32.05 Marine compass. Electronic compasses or other electronic devices capable of providing tactical or navigational information, or any information other than or in addition to, real-time direction, are prohibited. Separate, unlinked, timing devices are permitted.
- RE 32.06 10 quart non-collapsible bucket.

## APPENDIX F – Diagrams

RF 32.07 Keel dimensions



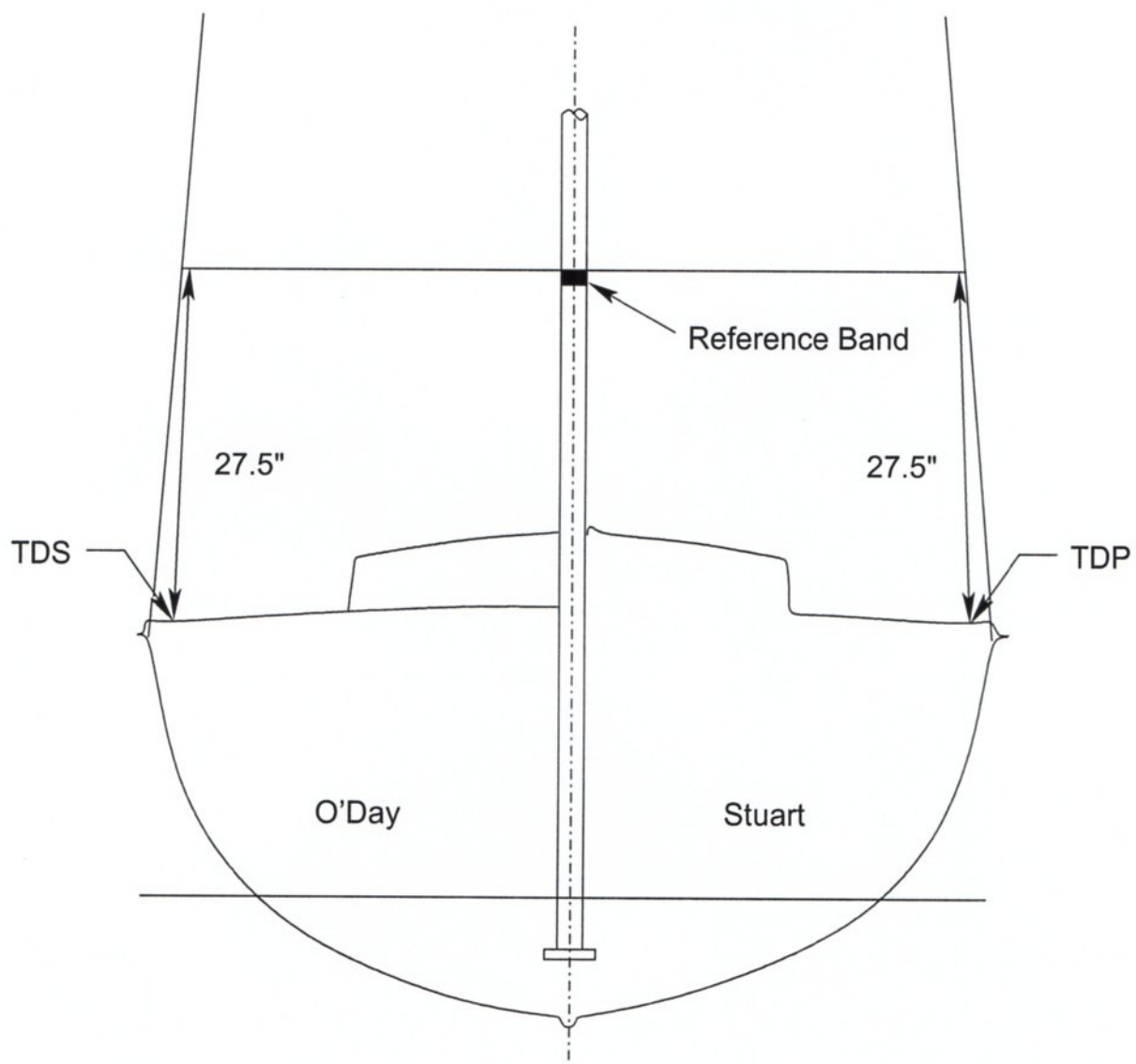
RF 32.08 Keel location and mast rake





RF 32.09

Mast Height



RF 32.10 Mainsail

