

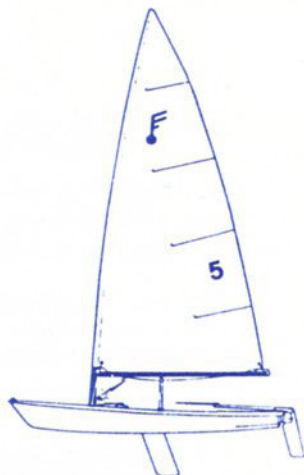
Force5

Force 5 Class Association

Bylaw 1 of the Force 5 Class Association,
Amended January 1, 1989

MEASUREMENT RULES

Force 5 Class Association



I. BASIC RULE

All racing sailboats entered in Force 5 Class events shall be manufactured by Alcott Sailboats or Sunfish Sailboats. No equipment additions, subtractions or alterations are allowed except as conform with the "One-Design Guideline Principles" set forth in Rule II or the "Personal Modifications or Adjustments" set forth in Rule III.

II. ONE-DESIGN GUIDELINE PRINCIPLES

These class rules are based on two guidelines which are intended to maintain the Force 5 Class as a truly one-design class:

1. It is recognized that certain modifications will be made by the owners to personalize their boats and maintain them seaworthy and in good operational condition. Such modifications are limited to those that do not effect boatspeed by any means that are definable, understandable and measurable.
2. A boat modified to the maximum extent permitted by this rule may be no more competitive than any brand new boat as furnished by the manufacturer. The intent of this rule is that new boats and old boats shall be equally competitive.

Nothing in these One-Design Guideline Principles shall be construed as license to repair, restore or rebuild any of the basic standard components to the competitive advantage of the owner. Any modifications not clearly within the letter or spirit of these Guidelines and Rule III are prohibited.

III. PERSONAL MODIFICATIONS OR ADJUSTMENTS

- A. Mainsheet may be of any length or diameter, of cotton or synthetic material.
- B. Quick release hardware may be substituted or added to facilitate rigging.
- C. The outhaul, downhaul, boom vang and traveler control lines may be of any length, diameter and type (except wire or Kevlar) provided they are used for their express purpose. The addition of knobs or loops to facilitate grasping is permitted.
- D. Outhaul and Cunningham cleats may be of any type, but must be mounted on the coaming cap. The vang cleat(s) may be of any type, but must either be attached to the vang block(s) or mounted on the coaming cap. Increasing or decreasing the purchase on Cunningham and mainsheet is allowed provided that no additional lines or equipment are used.
- E. The tiller may be shortened, but must be long enough to reach the preventer line where it attaches to the deck.
- F. Tiller extension may be of any length, diameter or size, attached in any manner provided it is used solely as an extension of the tiller. Tiller extension may be adjustable in length.
- G. The mounting of one or two compasses and a stopwatch is permitted provided that such installations are watertight.
- H. Bullet blocks may be attached to the traveler carriage rings (port and starboard) to reduce traveler control line friction.
- I. Inspection ports may be installed but must remain closed while racing.



- J. There are no restrictions as to the type, quality or degree of smoothness of finishes applied to the daggerboard or rudder.
- K. There are no restrictions as to the type or number of windvanes or telltails if used solely for the determination of wind direction.
- L. Sanding and smoothing of the daggerboard trunk is permitted.
- M. The daggerboard trunk may be modified to protect the daggerboard and reduce water splash provided that the material used does not project below the hull and that such modification does not create a jibing board.
- N. Mainsheet blocks may be moved to any location within the track on the boom.
- O. The boom vang system must permit the boom to rise 30 degrees from horizontal when cast off.
- P. Equipment may be updated to conform with factory-supplied equipment.
- Q. Mainsheet and traveler cleats may be mounted on either side of the cockpit to replace the standard traveler jam cleat. Cleats may be of owner's preference.
- R. Mainsheet blocks are of owner's preference but the system must not have more parts than the standard system except as permitted in Rule III.D.
- S. The substitution of a plug or stopper for the bailer cap is permitted so long as the bailer's female fitting remains in place.
- T. A JC preventer which may be adjustable may be installed with a block attached to the bow handle. The addition of cleats for the JC preventer is prohibited.
- U. The sail may be reefed vertically by removing the battens, if necessary, wrapping the sail around the mast and using a wire or line pennant from the clew to the outhaul.
- V. The hiking strap may be padded for comfort. The strap may be held up with a shockcord attached to an additional eyestay located at least 4" (10.2cm) below the cockpit lip. This new eyestay system must be installed watertight.
- W. A line or shockcord may be used for the sole purpose of positioning the daggerboard within the trunk.
- X. The addition of hose clamps or safety lines to the traveler car, gooseneck fitting and outhaul track is permitted.
- Y. The use of tapered battens is permissible, however, the same set of battens must be used throughout the regatta or series.
- Z. A substitute traveler may be installed provided the mechanical advantage, overall length and mounting location are the same as the factory-supplied system.

IV. Daggerboard and Rudder Specifications:

The daggerboard and rudder must be manufactured by Alcott Sailboats or Sunfish Sailboats.

A. Daggerboard

Length: $44 \frac{1}{4}" + \frac{1}{2}"$ (112.4cm + 1.25cm)

Width: $11 \frac{3}{4}" + \frac{1}{4}"$ (29.8cm + .64cm)

Preventer pin to bottom edge: $39 \frac{1}{2}" + \frac{1}{2}"$
(100.3cm + 1.25cm)

Thickness: $1 \frac{1}{16}" + \frac{1}{16}"$ (2.7cm + .16cm) at the line of maximum chord. The line of maximum chord shall be $4 \frac{3}{8}"$ (11.1cm) from the leading edge.

Fairing of the leading and trailing edges shall be permitted. The leading edge may be faired to within $\frac{1}{2}"$ (1.25cm) of the forward edge and the trailing edge may be faired to within 2" (5cm) of the trailing edge of the daggerboard. The trailing edge shall have a minimum thickness of $\frac{1}{8}"$ (.32cm).

The bottom edge shall make a 20 degree angle to a line drawn perpendicular to the leading and trailing edges. The bottom edge shall not be rounded.

The following radii shall be considered standard:

Daggerboard top: 18" (45.7cm)
Top forward corner: 1" (2.54cm)
Bottom forward corner: 6" (15.24cm)
Bottom aft corner: 1" (2.54cm)
Top aft corner: 3" (7.62cm)
Hand hole: 4" (10.2cm)

B. Rudder

Length: 35 1/2" + 1/2" (90.2cm + 1.25cm)
Width: 9 1/2" + 1/4" (24.1cm + .64cm)
Thickness: 7/8" + 1/16" (2.2cm + .16cm)
The sides shall be flat and parallel and may be tapered in the outer 1 3/4" (3.2cm).

The radius of the bottom forward corner shall be 3/4" (1.9cm) and that of the bottom aft corner 5" (12.7cm).

V. PERSONAL SAFETY

- A. Coast Guard approved personal flotation device (PFD) or equivalent must be carried on board at all times while racing. The Force 5 Class Association recommends that they be worn at all times while afloat.
- B. Wetsuits will not be considered a substitute for PFDs.

VI. WEIGHT

- A. The Force 5 Class will permit a total of clothing and equipment worn or carried by a competitor, including buoyancy garments, not exceeding 10 kg. (22.2 pounds) when saturated with water and weighed in accordance with Appendix 10 of the Yacht Racing Rules. Any competitor electing to wear a weight jacket shall also wear personal buoyancy capable to floating both the wearer and the weight jacket.
- B. All weight-adding devices must have neither sleeves nor long legs, must be equipped with quick release fastenings.
- C. If a sailor wears weight, it must be worn on all legs of all races of the regatta. No change in weight is permitted.

VII. SAIL NUMBERS

Numbers must be at least 10" (25.4cm) in height and must contrast with the sail. Sail numbers as issued by the Force 5 Class Association must appear on the sail when racing and must be located as follows: the starboard sail numbers shall be placed 1" (2.54cm) above the seam between the two lower battens and the first number shall be 2" (5cm) from the leech. The port numbers shall be placed 2" (5cm) below and directly in line with the starboard numbers. Numbers applied correctly as per previous instructions will be allowed, but all numbers applied after this change was issued must be applied as above. Outline numbers are not allowed.

VIII. SAIL WINDOWS

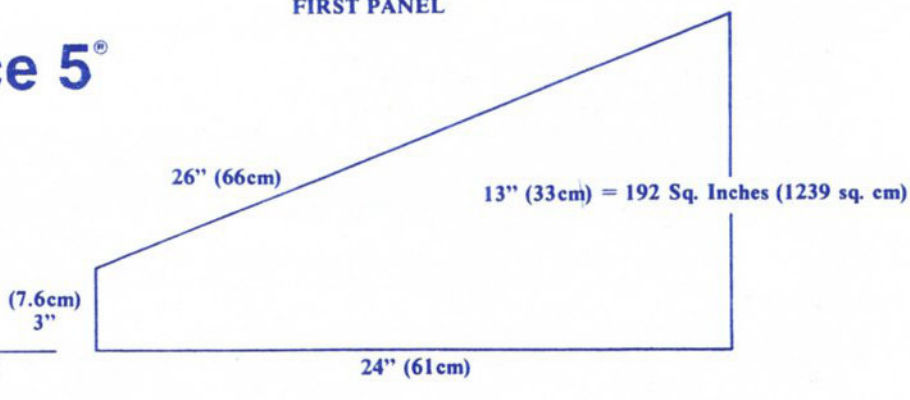
Sail windows are permitted subject to the following constraints:

- A. The entire sail window will be in either of the two lowest panels.
- B. No portion of a sail window or sail window seam may be less than 1" (2.5cm) from a foot seam, batten pocket, the tack patch or the luff sleeve seam.
- C. The total area of a sail window viewing may not exceed 202 square inches (1303 sq. cm).

- D. No edge of a sail window may exceed 50" (127cm) in length.
- E. The addition of a sail window may not increase or decrease the overall sail area.
- F. Windows must be either rectangular or trapedoidal in shape.
- G. Recommended window shape is as follows:

FIRST PANEL

Force 5[®]



IX. AGE REQUIREMENTS

There are no limitations on age for competition in Force 5 events.

X. CREW

The Force 5 sailboat may be sailed as doubles in all competition provided that the same two people sail in all races of a series. Force 5 sailors electing to sail as doubles are not allowed to wear weight additive clothing.

XI. SPECIFIC ITEMS PROHIBITED

- A. Planing and shaping of daggerboard and rudder except to conform to Rule IV.A.& B.
- B. Jibing boards.
- C. Tillers longer than 42.5" (106.7 cm).
- D. Removal of any portion of standard foam flotation.
- E. Any recutting of sails except for the express purpose of adding a window according to Class Rule Section VIII.
- F. Magic boxes or equivalent.
- G. Lever vang.
- H. Textured surfaces (e.g., riblets).
- I. The use of more than one hull or sail per regatta without special permission from the race committee. Extensive damage to hull or sail would be adequate grounds to request such permission.

XII. VARIATIONS

Any variation from "standard" not covered by the above rules will be deemed illegal until ruled upon by the Force 5 Rules Committee.