

# **SHIELDS CLASS SAILING ASSOCIATION**

## **SECTION V**

### **SAILS**

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## **1.0 Basic Rules Governing Sail Acquisition**

- 1.1 In the first calendar year a new Registered Yacht is delivered by an authorized builder, it may acquire one complete suit of sails. It may acquire only one sail in any later calendar year, except in accordance with Subsections 1.2, 1.3 and 1.4 below.
- 1.2 If a Registered Yacht defers acquiring a sail in any calendar year after the first year, the Registered Yacht will receive a "credit" permitting it to acquire such deferred sail in a later calendar year. Credits for deferred acquisition of sails may accumulate to a maximum of two.
- 1.3 A Registered Yacht may not acquire more than one sail of a given type (i.e., main, jib, spinnaker) in any twelve-month period.
- 1.4 No sale, transfer, charter, loan or other arrangement affecting ownership, possession or use of a Registered Yacht entitles the Registered Yacht to acquire additional or substitute sails, or otherwise alters the application of the Basic Rules Governing Sail Acquisition.
- 1.5 Under unusual circumstances, so that a Registered Yacht may have a fully competitive inventory (but not a competitive advantage over others), the Governing Board (but not any Fleet) may permit a Registered Yacht to acquire an additional sail or sails beyond those otherwise permitted by these basic rules. No Registered Yacht may be permitted to acquire more than three sails in a calendar year.
- 1.6 The acquisition date of a new sail is the day the sail is first measured by the Fleet Measurer of the Registered Yacht's Fleet. If the Registered Yacht is not normally sailed in the territory of a Fleet, it may be measured by a Fleet Measurer selected by the Executive Committee upon request to be the Fleet Measurer for that Registered Yacht.
- 1.7 Commencing January 1, 2000, each Registered Yacht must maintain a Sail Inventory Card. All sails in the Registered Yacht's inventory as of January 1, 1997 must be listed by acquisition date, sailmaker and type, and the card must be signed by an owner of the Registered Yacht, certifying that the information listed is true. Thereafter, when the Registered Yacht acquires a sail, the Fleet Measurer must list and certify on the Sail Inventory Card the acquisition date, sailmaker and type of sail acquired, and must sign the entry. Each Registered Yacht must deliver to the National Measurer no later than August 15 of each year beginning 2000, a copy of its current Sail Inventory Card.
- 1.8 A Fleet may adopt rules further restricting the acquisition of sails by Registered Yachts in that Fleet, but must not permit any acquisition that is not permitted by these Rules.

## **2.0 Basic Rule Governing Sail Alteration**

A Registered Yacht may alter its sails to repair damage, and to make minor modifications in shape, and luff or leach length. Any altered sail must continue to comply with the Specifications and must be remeasured and approved by the appropriate Fleet Measurer before use.

(See: Sec III - Basic Rules 2.0 Rules Governing Measurements and Inspections)

### **3.0 Basic Rules Governing the Use of Sails**

- 3.1 When a Registered Yacht races in any sanctioned race, it must only use sails it has acquired in compliance with the Basic Rules Governing Sail Acquisition. These sails shall have been measured, approved and marked as required by Rule 1.6 of the Basic Rules Governing Sail Acquisition; except only as permitted under Rules 3.3 and 3.4 below.
- 3.2 No sale, transfer, charter, loan or other arrangement affecting ownership, possession or use of a Registered Yacht entitles the Registered Yacht to use sails in any sanctioned race other than those acquired by the Registered Yacht in compliance with the Basic Rules Governing Sail Acquisition, except only as permitted under Rule 3.3 below.
- 3.3 If one or more owners or charterers of one or more Registered Yachts should borrow or charter a Registered Yacht for a race, series or regatta, including the National Championship Regatta, and only if the owner or regular helmsman of the borrowed or chartered Registered Yacht is not its skipper or co-skipper in the race, series or regatta, the borrowed or chartered Registered Yacht may race in such race, series or regatta using none of its sails. Only the sails acquired by one of the owners or charterers Registered Yachts, in accordance with the Basic Rules Governing Sail Acquisition and which comply with the sail qualification requirements for the race, series or regatta, may be used on the borrowed or chartered Registered Yacht. The intent of this rule is to prohibit the use of sails of more than one other Registered Yacht on a borrowed or chartered Registered Yacht while racing.
- 3.4 A Fleet may permit a Registered Yacht to race one or more sails they have not acquired for the limited purposes of short-term sail evaluation or sail testing. These sails may only be used in specific races for which the Notice of Race and Sailing Instructions disclose such permission, and the results of any such race shall not be scored toward any sanctioned race, series or regatta. Further, the Fleet Measurer must deliver prior written notice to the National Measurer specifying the details of such permitted use, and must obtain the written opinion of the National Measurer that such permitted use complies with the purposes and limitations of the first sentence of this Rule.
- 3.5 Fleets and regatta sponsors may specify rules further restricting the use of sails, but may not permit any use that is not permitted by these Rules.  
(See Sec. VI - Rules Governing the National Regatta 1.5)
- 3.6 If a Registered Yacht races with a sail whose use is not clearly permitted by these Rules, whether or not it is disqualified in the race for violation of class rules, and if the Governing Board determines after such hearing as the Governing Board deems reasonable and appropriate, that the unpermitted use was with the knowledge and consent of its owner and for the purpose of gaining an advantage that was unavailable under the Basic Rules Governing Sail Acquisition or under these Rules, the Governing Board may penalize the Registered Yacht by removing one or more of its existing or future sail-purchase credits.

#### **4.0 Sails - General Specifications**

##### **4.1 *Details of Sail Construction***

All new sails shall be constructed in accordance with these Specifications and with Official Plans I and 2. Recut sails shall conform to Specifications and to the Plans.

##### **4.2 *Conflicts***

These written Specifications supersede any conflicting information contained in Official Plan 1, the "Official Sail Plan", dated June 1973.

##### **4.3 *Sail Areas***

Sail areas (as shown on Official Plan 1) are for information purposes only and are not part of these Specifications.

##### **4.4 *Sail Construction***

Details of sail construction which are not expressly provided for in the Specifications, such as the direction of seams, width of panels or the type of weave, are optional.

##### **4.5 *Sail Fabric***

All sails shall be made of woven fabric. Mainsails and jibs shall be made of polyester cloth. They shall have a minimum weight of 6 1/2 ounces per sailmaker's yard (28 1/2 inches wide by 36 inches). "Coated" or "yarn-tempered" cloth is permitted. Laminated materials, film, two or more plies, triaxial, Mylar, Kevlar or other variations of such materials are prohibited. Spinnaker fabric shall be woven nylon (with or without coating) of a minimum weight of 3/4 ounce per sailmaker's yard.

##### **4.6 *Reinforcements of Sails***

Reinforcements of sails are permitted. The design and construction of such reinforcements is optional. Reinforcements shall be made only of permitted types of woven fabrics. They shall be flexible and capable of being folded in any direction. Glued seams may not be considered as reinforcements unless they are flexible and are capable of being folded in any direction. (See Sec V – Sails 4.5)

##### **4.7 *Boltropes and Tapes***

Boltropes and tapes may be of polyester or nylon. Normal tabling at the edges of the sail is permitted provided that it is not stiffened.

##### **4.8 *Battens***

Battens shall be of plastic, fiberglass or wood. Batten pockets shall be of a length no longer than sufficient to accommodate the batten.  
(See Sec. V – Sails 5.6 and 6.4.)

##### **4.9 *Windows***

A single (vision) window, not exceeding 6 square feet in area, may be located in both the main and the jib. No part of such window(s) shall be more than 5 feet above a straight line between the "measured" tack and clew of each sail. Up to three telltale windows not exceeding 50 square inches each are permitted in the jib. Up to three telltale windows are permitted in the main. One such window may be a spreader window. The sum of the areas of these windows shall not exceed 150 square inches.

##### **4.10 *Telltals***

Telltals on sails are permitted. (See Sec. IV – Specifications 10.7)

## **5.0 Mainsails - Specifications**

### **5.1 *Foot Attachments***

The foot shall be attached to the boom by a boltrope which may terminate 6 inches from the clew. A clew slide may be added. Roach reefs, zippers and similar foot control devices are prohibited.

### **5.2 *Luff Attachment***

The luff may be attached to the mast either by sliders, tape or a bolt rope.

### **5.3 *Cunningham***

One Cunningham cringle is permitted on the luff above the tack eye or tack cringle. It shall be located no more than 12 inches center to center. The arrangement of control lines for the cunningham is optional.  
(See Sec IV – Specifications 2.5, 10.4)

### **5.4 *Tack Eye/Cringle***

The tack eye or cringle shall be attached to the boom by a tack pin located 1 1/2 inches from the aft face of the mast.

### **5.5 *Reef Point***

A reefing cringle (center) may be located at a minimum height of 3 feet above the foot boltrope. Tack and clew reefing reinforcements are permitted in accordance with Sails Specification 4.6.

### **5.6 *Battens***

There shall be 3 lower battens each 42 inches long, and a top batten 36 inches long. These are maximum lengths. The maximum width of any batten is 2 inches. Battens shall be spaced at equal intervals along the leech.  
(See Specification - Sails 4.8.)

### **5.7 *Leech Line***

A leech line is permitted.

### **5.8 *Official Class Insignia or "Logo"***

The Class Insignia (a black "S", approximately 15 inches high on a red shield approximately 20 inches high, shaped as shown in Appendix I) shall be fixed on both sides of the mainsail approximately two-thirds of the height of the sail above the boom. National Champions and former National Champions may substitute a gold for the red shield.

### **5.9 *Chevrons***

- (a) National Champions, District Champions and Fleet Champions may display chevrons immediately beneath the Class Insignia. Chevrons shall be colored gold for National Champions, red for District Champions and black for Fleet Champions. A winner of multiple events may display multiple chevrons but always in the order of gold over red over black with approximately 1 inch between each chevron. There is no limit to the number of chevrons multiple champions may display.
- (b) Chevrons shall be 1 1/2 inches wide, 10 inches high and shall extend to the width of the Class Insignia. (See Appendix I).
- (c) Chevrons shall be removed from the sail when the boat changes ownership.

**5.10 Sail Numbers**

The number of the Registered Yacht, approximately 5 inches high, shall be fixed on both sides of the mainsail at least one-half the height of the sail above the boom but not back to back.

**5.11 Draft Stripes**

Draft stripes are permitted.

**6.0 Jibs - Specifications**

**6.1 Jib Luff**

- (a) The luff of the jib may be constructed with tape, rope, wire or any combination thereof. Any luff tape, rope or wire shall be permanently attached to the sail at the head and tack and at intermediate points if desired by the sailmaker. While racing, luff tension shall be adjusted solely by means of the halyard. (See Sec. IV – Specifications 8.10)
- (b) Zipper luffs and double luffs are prohibited. The luff of the jib shall be attached to the headstay by at least 5 metal hanks of the side-pull or end-pull type. Glove-snap fastenings are not hanks and are prohibited.

**6.2 Adjustable Jib Luff Downhaul**

An adjustable luff downhaul is prohibited.

**6.3 Jib Leech Line**

A leech line is permitted.

**6.4 Jib Battens**

There shall be 3 battens spaced at approximately equal intervals along the leech. The top batten shall be 15 inches long. The middle and bottom battens shall each be 18 inches long. These are maximum lengths. All battens shall be 2 inches wide. (See Sec V - Sails 4.8.)

**6.5 Draft Stripes**

Draft stripes are permitted.

**7.0 Spinnakers - Specifications**

**7.1 Shape**

Spinnakers shall be tri-cornered and symmetrical along a straight line between the head and the center of the foot.

**7.2 Vents/Apertures**

Spinnakers shall contain no vents or artificial apertures.

**7.3 Luff Tension Adjustment**

Any means of adjusting luff tension is prohibited.

**7.4 Sail Numbers**

The number of the Registered Yacht shall be affixed to both sides of the spinnaker at approximately the middle of the sail, but not back to back.

**7.5 Snap Arrangements**

Snaps on the sail to accommodate a "Swedish/Turkish" roll are permitted.

## 8.0 Sail Measurement - General Instructions

- 8.1 See Sec. III - "Basic Rules of "Uniformity", "Measurements and Inspections" of Sails, "Sail Purchases", "Sail Alterations" and "Admonition to Sailmakers and Other Manufacturers".
- 8.2 All Sail Measurement Specifications shall be read in their entirety and followed by sailmakers and measurers as they apply to the measurement of all sails.
- 8.4 All new and recut sails shall be measured in accordance with the Specifications regarding sails and the measurements and procedures herein outlined.
- 8.5 Sails shall be measured when dry and shall be laid on a flat surface. All measurements shall be taken in a straight line.
- 8.6 Boltropes, tapes or wire, when used on the edges of any sail, shall be considered part of the sail when measuring all dimensions or locations unless otherwise specified. Sliders on the luff of the mainsail shall be ignored for measurement purposes.
- 8.7 The measurement "apex" points shall be determined by the intersections of the extensions of the respective outside edges of any sail. Such extensions should be taken to a length of 18 to 24 inches (along the actual edges of the sail). Cringles, thimbles or other hardware that are partly or entirely external to the sail shall be disregarded.
- 8.8 The leech of the jib and mainsail may be of any shape provided that the shape does not violate the letter or the intent of the controlling girth measurements.

## 9.0 Mainsails - Measurements and Measurement Procedures

### 9.1 *Dimensions*

Mainsails shall conform to the following dimensions (See Sec. VII - Official Plan 1, "Official Sail Plan").

	Maximum	Minimum
Luff	33 ft. 3 in.	32 ft. 3 5/8 in.
Leech	35 ft. 6 in.*	35 ft.
Foot	13 ft. 3 5/8 in.	12 ft. 9 5/8 in.
Mid-girth	8 ft. 2 1/2 in.	
Upper girth	4 ft. 7 1/2 in. Minimum	

\*Note: There is an allowance for elongation of 1 inch for each year (of age) after the first year.

### 9.2 *Measurements of the Luff, Leech and Foot*

The luff, leech and foot shall be measured when pulled at a tension of 15 pounds. The luff and the leech shall be measured in a straight line between the top of the headboard (including any fabric) and the respective apex points at the tack and clew as defined by paragraph 8.5 of the "General Instructions". The foot shall be measured between the tack and clew apex points.

9.3 *Girth Measurements*

- (a) The girth measurements are the distances between the midpoints of the luff and leech and between the upper quarterpoints of the tuff and leech.  
(See Sec. VII - Official Sail Plan)
- (b) Midpoints and quarterpoints are determined by folding the sail on itself. The midpoint of the luff is at the fold when the top of the headboard is laid even with the bottom of the boltrope at the clew.
- (c) Upper quarterpoints are at the folds when the top of the headboard is laid even with the luff and leech midpoints.
- (d) Midpoints and quarterpoints shall be located and girth measurements shall be taken when the sail is pulled out with tension just sufficient to remove wrinkles across the line of measurement. A preferred alternative is to mark the girth points when measuring the luff and leech.

9.4 *Measurements at the Head of the Sail / Headboard*

The width of the headboard, excluding the boltrope, shall be measured horizontally at its widest point. The width shall not exceed 5 1/4 inches. Any additional material that extends the width shall not exceed the width of the headboard. The girth of the head of the sail at its widest point shall not exceed 6 1/2 inches. The headboard may be the old "drop-type" or the 90 degree type.

**10.0 Jibs - Measurements and Measurement Procedures**

10.1 *Dimensions*

Jibs shall conform to the following dimensions.

	Maximum	Minimum
Luff	28 ft. 7 in.	27 ft. 11 in.
Leech	27 ft. 2 in.	26 ft. 2 in.
Foot	10 ft. 3 1/2 in.	9 ft. 1 1/2 in

(See Spec 10.4 "Shape of the Foot" for "round" measurement)

Mid-girth	61 5/8 in.
Upper girth	30 5/8 in.

10.2 *Measurements of the Luff, Leech and Foot*

The luff, leech and foot shall be measured under tension of 15 pounds. The head, tack and clew shall be the apex points as defined by paragraph 8.7 of the "General Instructions".

10.3 *Girth Measurements*

- (a) The girth measurements are the distances between the midpoints of the luff and leech and between the upper quarterpoints of the luff and leech.
- (b) Midpoints and quarterpoints are determined by marking points that are correspondingly one-half and one-quarter of the length of the luff and the leech between the apices of each.

- (c) If the points are determined by folding the sail (a less desirable method), the distance between the cloth at the head of the sail and the head apex shall be included.
- (d) Girth measurements shall be taken with the sail pulled out with tension just sufficient to remove wrinkles across the line of measurement.

#### 10.4 *Shape of the Foot*

The foot of the sail may be rounded in a convex shape. No part of the "round" may extend more than 8 inches below a straight line taken between the tack and clew. A loose accordion fold should be made parallel to the foot and approximately eighteen inches above the foot before measuring. The shape, if any, of this extended portion of the sail shall form a fair curve approximating the arc of a constant radius. (See Appendix V – Measurer's Interpretations, Jib round)

### 11.0 **Spinnakers - Measurements and Measurement Procedures**

Specifications 8.1 through 8.8 and Specifications 11.1 through 11.6 shall be read in their entirety and followed by sailmakers and measurers as they apply to spinnakers.

#### 11.1 *Dimensions*

Spinnakers shall conform to the dimensions shown on Official Plan 1, "Official Sail Plan", when measured as detailed below.

#### 11.2 *Luff Length Measurement*

The length of the luffs shall be determined with the sail folded in half with the luffs together. The luffs shall be measured when pulled at a tension of 10 pounds. The lengths shall be measured in a straight line from the highest point the sail to the lowest point of the sail directly below the center of the clew cringle.

#### 11.3 *Radial and Girth Measurements*

The radial and girth measurements shall be taken with the sail folded in half with the luffs together and when the sail is pulled out with tension just sufficient to remove wrinkles across the line of measurement.

#### 11.4 *Foot Length*

The length of the foot shall be measured in a straight line between the outer edges of the sail directly opposite the centers of the clew cringles with the sail laid open and pulled out with tension just sufficient to remove wrinkles across the line of measurement.

#### 11.5 *Distance Between Lowest and Highest Points on the Sail*

In addition to the dimensions shown on Official Plan 1, the distance between the lowest point of the sail at the middle of the foot roach and the highest point of the sail shall not exceed 34 feet when the sail is pulled out between these points at a tension of 10 pounds.

#### 11.6 *Spinnakers Measured at Room Temperature*

Spinnakers shall be measured when dry and the cloth shall be at room temperature. Any Spinnaker measured and found to be both damp and in excess of any proscribed dimensions may be dried and remeasured. If the sail is then found to be in excess of any proscribed dimension, it shall be declared ineligible and shall not be remeasured until it is recut.