

the additional features of the Santana 22 as a family cruising boat, and as a handicap racing boat.

ARTICLE VI - Eligible Yachts

1. A yacht shall be eligible only if:
 - (a) It has been issued and holds a currently valid "Certificate of Measurement and Registration".
 - (b) It is owned by a member in good standing in SODA and a Fleet.

ARTICLE VII - Design, Characteristics and Equipment

1. No mold of the Santana 22 may be produced without the express permission and approval of the W. D. Schock Company.
2. Changes in the design characteristics, and equipment of the Santana 22 without prior express approval in writing by the Governing Board of SODA shall be illegal, and any Santana 22 yacht incorporating such changes is ineligible for racing and membership in SODA.
3. Numbers, which shall correspond with racing numbers on the main sail, shall be molded into the hull of each Santana 22 at the time of manufacturing, and such numbers shall be issued only by the W. D. Schock Company, its successors in interest, or assignees, except that sail numbers issued by USYRU or regional authority, or YRA of San Francisco may be displayed on the main sail in lieu of the hull number provided both the hull number and the sail number appear on the official Measurement Certificate.
4. No material change in design, characteristics, or equipment shall be made subsequent to manufacture and measurement unless previously approved by the Chief Measurer of SODA in accordance with his authority as prescribed by the Governing Board.
5. A motor, plus motor fuel and ballast, shall be carried to total not less than fifty (50) lbs. nor more than one hundred twenty five (125) lbs. The motor and ballast shall be secured in any location and cannot be moved during a race. Motor fuel, *with the exception of fuel in an outboard with integral fuel tank*, shall not be carried inside the cabin. (Revised July 1995)
6. All Coast Guard and SODA required equipment must be carried, including suitable anchor, anchor line, horn, and required life jackets and floatation devices.

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7. *Mast and Standing Rigging: The mast and standing rigging shall meet the following dimensions of the Measurement Checklist (page 25) and Drawing 001 (page 26) (Adopted May 1997)*

ARTICLE VIII - Sails

1. It is declared to be the policy of SODA to discourage the use of sails designed to avoid the spirit of the rules governing the sail plan established by SODA.
2. The main sail shall carry the official Santana class insignia and the racing number of the yacht.
3. A National Champion, District Champion, or Fleet Champion shall be entitled to carry a chevron of the appropriate color (gold for National, red of District, blue for Fleet), and the last two numerals of the year of the championship on his main sail in an area not larger than six (6) inches square, and upon winning the National Championship two or more times shall be entitled to carry the Santana class insignia in gold colors on his main sail. Only the highest and most recent award should be carried.
4. Each sail shall be measured by the Fleet Measurer and if approved shall be stamped with the official stamp of SODA within a six inch square of the tack. A Fleet Measurer shall initial and date the stamped area with indelible ink or pencil. A sail not stamped with the official stamp of SODA may not be used in any race in which more than one Santana yacht participates when that race is a sanctioned class event.
5. There shall be collected by the Fleet Measurer a fee of \$1.50 for each sail measured. This fee may be retained by the Fleet.
6. A new sail may be used for a period of not more than thirty (30) days after acquisition before measurement, except that any sail used in a National Championship Regatta shall be measured before use in such regatta. Should the measurement of the sail be challenged during this thirty day period, then the sail shall be measured and must be shown to meet the required measurement specifications in order to qualify.
7. *Sail Cloth Limitations: Sail cloth, fibers and film on main sail and class lapper used in one-design racing shall be limited to Polyester products. (July 1995)
Sail cloth, fibers and film on 155% genoas used in other fleet racing shall be limited to Polyester and Kevlar products. (added 2003)*
8. Sail measurements are as follows:
 - (a) Main Sail

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- (1) Measurements shall be taken for width of headboard and height of sail numbers. A cross measurement shall be taken at the mid-point of the luff and leach which shall not be greater than six feet and four and one half inches (6'-4 1/2"). Another cross measurement shall be taken at the three-quarter point of the luff and leech, which shall be not more than three feet and nine inches (3' 9"). The leech is measured between the top after end of the headboard and the projected intersection of the line from foot and leech; and the luff is measured between the top forward end of the headboard and the projected intersection of the line from foot and luff. (added 2003) The main sail leach must be a fair curve without scallops. Maximum leach to measure not more than twenty three feet and nine inches (23'-9").
- (2) Headboard may be of any material. The maximum width of the headboard is measured in accordance with the rules of IOR and shall be three and one half inches (3-1/2").
- (3) The hoist of the main sail shall be limited by bands of one inch (1") width painted in contrasting color around the mast as follows:

Lower band - The lower band shall have its upper edge at a height of two feet and three inches (2'-3") above the top of the house at the mast step.
Upper band - The upper band shall have its lower edge at a height not exceeding twenty one feet and nine inches (21'-9") above the upper edge of the lower band.
- (4) The main sail shall not be carried outside the inner edges of the upper and lower bands.
- (5) The foot of the main sail shall be limited by a painted band of contrasting color around the boom at a maximum distance of nine feet and ten inches (9'-10") from the after side of the mast.
- (6) The main sail shall not be carried outside the inner edge of the band on the boom.
- (7) Battens - Battens may be used only in the main sail, shall be limited to four (4) in number, and shall be placed so as to divide the leach of the main sail into approximately five equal parts. In determining the equality of the parts, two inches leeway plus or minus shall be allowed.

Batten lengths are specified as follows: (Revised July 1995 and Jan 2003)

<i>Batten</i>	<i>Maximum Batten Length*</i>
#1 Upper	Unrestricted** (changed 2003)
#2 Second	40 inches
#3 Third	40 inches
#4 Lower	30 inches

**Sails with longer battens that have been measured before July 21, 1995 will be grandfathered in.*

*** If the top batten is longer than 24 inches and the sail has not been measured before July 21, 1995 the distance between the top of the leech and the centerline of the top batten in the pocket must be at least four feet, six inches (4' 6"), measured along the leech. (added 2003)*

- (8) Ookers may be installed on the luff and foot of the main sail.
- (9) Adjustable outhauls are permitted.
- (10) Windows may be installed in the main sail. (changed 2003)
- (11) Roach reefs are allowed in the foot of the main sail, but not in the luff.
- (12) Roller reefing, regular reefing, or jiffy reefing is allowed for the main sail.

(b) Jib Sail

- (1) Maximum Lengths of jib sail measurements shall be as follows:
 - Luff, twenty four feet and seven inches (24'-7").
 - Leach, twenty two feet and eleven inches (22'-11").
 - Foot, eleven feet and six inches (11'-6").

All measurements shall be made to the intersection of lines extended from the edges of the sail including the luff.

- (2) No artificial reinforcement except for up to two battens in the leach, each not exceeding 18 inches long shall be allowed in the patches, head, clew, and leach, or foot of the jib sail. (changed 2004)
- (3) Before January 1, 2006 the maximum roach in the foot of the jib sail shall be five inches (5"). (changed 2003)
- (4) The cross measurement of the jib sail taken at the mid point of the luff and leach shall not exceed five feet and nine inches (5'-9").
- (5) The maximum length of the whisker pole shall be ten feet (10').
- (6) The whisker pole may be attached only to the mast and the clew of the jib sail when in use.

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- (7) Windows may be installed in the jib sail. (changed 2003)
- (8) *The jib may be led to any place on the deck or cabin top. Barberhaulers are legal. (July 1995)*
- (c) 155% Genoa (added January 2003)
- (1) Maximum Lengths of 155% genoa measurements shall be as follows:
 - Luff, twenty five feet and four inches (25'-4").
 - LP (minimum distance between clew and luff), 155% of J, where J is defined in 6(d)(1). The clew shall be measured at the intersection of lines extended from the edges of the foot and leech. Sails measured prior to January 1, 2003 that exceed the luff limitation (but not those that exceed the LP limitation) shall be grandfathered in.
- (2) No artificial reinforcement shall be allowed in the patches, head, clew, and leach, or foot of the 155% genoa.
- (3) The maximum length of the whisker pole shall be ten feet (10').
- (4) The whisker pole may be attached only to the mast and the clew of the 155% genoa sail when in use.
- (5) Windows may be installed in the 155% genoa.
- (6) *The 155% genoa may be led to any place on the deck or cabin top. Barberhaulers are legal.*
- (d) Spinnakers
 - (1) At the 1976 Fleet I Spring meeting, the membership voted to adapt IOR Mark III rules for the definition of the Santana spinnaker. The I and J dimensions, from the sail plan (Drawing #8-U) obtained from Gary Mull are 25'-10-3/4" and 8'-7".
 - (2) In order to assist the measurer in carrying out his duties, Fleet members in rigging their boats, and sailmakers in laying out Santana spinnakers, some additional information has been compiled. This was done by selecting from the IOR Mark III rules those sections pertinent to spinnakers and inserting, where appropriate, dimensions for Santanas. The results are attached. (Numbers in parentheses refer to the applicable IOR Mark III rule).

- (3) Luff and leach must be equal length. The sail must be symmetrical about a line joining the head to the center of the foot. The mid girth shall not be less than 75 percent of the foot length. (817)
- (4) Spinnakers shall be measured with such tension as will remove all wrinkles across the line of measurements (818 to 825)
- (5) The spinnaker headboard shall not exceed 5.15 in.
- (6) The spinnaker maximum width, measured across the body of the sail between points on the luff and leach equidistant from the head, shall not exceed 15'-5-3/8".
- (7) The spinnaker luff or leach measured around the edge of the sail, shall not exceed 25'-11". When stiffening is used to extend the angles at the tack and clew of the spinnaker beyond an included angle of 110 degrees, the greatest length of any such stiffening in the foot of the sail measured from the clew shall be added to the luff length to determine the luff length measurement.
- (8) The luff Limit is determined from the formula:

$$LL = 0.95 \sqrt{I^2 + J^2}$$

- (9) Battens shall not be used in spinnakers and adjustable leach lines are not permitted.
- (10) The spinnaker pole length, measured from the centerline of the yacht to the extreme outboard end when the pole is in its fitting and set in a horizontal position athwartships, shall be 8'-7" or less. (808)
- (11) The maximum height of the spinnaker pole measured from the centerline of the pole when horizontal and the intersection between the forward edge of the mast and the house top shall be 5'-7-1/4". Pole height shall be limited by length of track or by the lower edge of a painted band corresponding to maximum height of the centerline of the pole. (810)

(d) General

- (1) Where any question of sail measurement arises, the measurement rules of the IOR shall govern.
- (2) ~~Unless tacking or jibing, the jib sail may not be trimmed forward of the fairleads except with the whisker pole.~~ (Deleted July 1995)

SANTANA SAIL MEASUREMENT CHECKLIST

Date						
Hull No.						
Sail No.						
Owner						
Measurer						
Fee	\$1.50 per sail					

MAINSAIL	Loft					
Material	Polyester only ⁴					
Headboard	3.5"					
Leach ¹	23' 9"					
Mid point	6' 4.5"					
Top 1/4 point	3' 9"					
Upper bat	Unrestricted ²					
2 nd batten	40"					
3 rd batten	40"					
Lower bat	30"					
Between bats	5 equal parts					

JIB	Loft					
Material	Polyester only ⁴					
Luff	24' 7"					
Leach	22'11"(battens?) ⁵					
Foot	11' 6"					
Foot roach 5"	(before Jan '06) ³					
Mid point	5' 9"					

155 GENOA	Loft					
Material	Polyest or kevlar					
Luff	25' 4"					
LP	13' 3.65"					

SPINNAKER	Loft					
Material	Polyester only ⁴					
Headboard	5.15"					
Luff/leach	25' 11"					
Max width	15' 5 3/8"					
Foot						
Mid-girth	\geq Foot*0.75					

Notes:

¹ Mainsail luff and leach measured from top of headboard; all others from intersection of imaginary lines extending luff, leach or foot

² If top batten is longer than 24" then top of leach to CL of batten along leach \geq 4' 6"

³ Foot roach is measured under tension

⁴ Polyester products include Dacron and Mylar

⁵ Up to two battens, each up to 18" long, are allowed in the jib leach