OFF SOUNDINGS CLUB

MEASUREMENT CERTIFICATE

1975

Name of Yacht ..... Owner .....

Former Name(s) ..... Address .....

Rig ..... Sail No. .... Zip.....

Propeller: Type ..... No. of Blades ..... Inboard ☐ Outboard ☐

Rudder: ☐ Conventional (attached to ballast keel) ☐ Spade ☐ with Skeg

Keel: ☐ Conventional ☐ Fin ☐ Centerboard ☐ Other (describe)

Description of Yacht (pertinent information: Hull form, light displacement, cruising accommodations, etc.):

.....

.....

.....

Builder's Class Name: .....

LOA .....
OHF .....
OHA _____
LWL .....
0.25 LOA .....
BEAM .....
Difference ..... X2= .....

Beam correction (BC)=2 times difference in greatest beam and 0.25 LOA. Excess is subtracted from and deficiency added to PL. BC cannot be greater than $\frac{LOA}{6}$ = ...

LOA .....
+ LWL .....
÷2 [ ]
PL .....
(±) BC ( ) _____
L = ...

Rated Sail Area

Mainsail: P ..... B ..... G ..... H ..... D ..... 0.3 PB + 0.2 B (P-2B)

Mule — Actual Area: X0.30

Fore Triangle: P ..... Jc ..... MSPL ..... MSW ..... MSW ÷ (1.8) .....

LP ..... PB .....

$\frac{LP}{J}$ ..... $\frac{PB}{(\frac{1}{2} P_2 Jc)}$ .....

J ..... $(\frac{1}{2} P_2 Jc)$ .....

Rated Sail Area $= (\frac{1}{2}P_2 Jc)(\frac{LP}{J} + 0.50) + 0.3J (P_2 - 2J)$ .....

Area between Masts of Schooner: B_1 ..... P_1 ..... P_3 .....

Mizzen: Pz ..... Bz ..... Gz ..... Hz ..... 0.1 Pz Bz .....

0.04 (0.3 PB + ½ P_2 Jc) .....

P_Δ .....

Spinnaker Luff Length .....

0.04 P_2 .....

TOTAL RSA

Rating = $\left(\frac{L + [2 \times \sqrt{RSA} \times \text{Rig Allow.}]}{3.0} \right) \times$ Prop. Allow. = [ ]

This certificate expires three years from the date of the complete measurement or immediately upon alteration affecting the factors entering into the computations. It is the owner's responsibility to have his yacht measured after changes. Major alterations will require a new complete measurement. Minor alterations may be accommodated by revision to this certificate, at the measurer's discretion, but the expiration date remains unchanged. Give the nature of the revision below.

Date of Complete Measurement	
Expiration Date of Certificate	
Measured by:	
Address	
Title	
Signature	
Revision Date	
Signature	

GENERAL INFORMATION

Measurers—Measurers must be designated yacht club, yachting association or similar yachting organization measurers or one from the list of measurers prepared by the Off Soundings Club. Measurers shall not measure yachts in which they have participated in the design, construction or alteration; or yachts designed, in which they have a business interest; or yachts of which they themselves are the owners or part owners, or regular crew members.

Unusual Yachts—If in measuring a yacht the measurer encounters peculiar form of hull or rig which makes it appear that the yacht will not rate fairly under the Off Soundings Club rule this shall be reported to the Measurer of the Club. The Measurement Rule Committee shall have final resolution.

Fee for Measurement—It is recommended that the fee for measurement not exceed Twenty Dollars ($20.00).

Dimensions which correspond to the points described herein may be taken by the measurer from a valid International Offshore Rule (IOR) measurement certificate. Measurer shall note that this has been done and shall show the date of IOR certificate.

To be considered valid, a copy of this certificate must be on file with the Off Soundings Club Measurer.

The owner shall assure the measurer that the yacht's propeller is adequate (see Page 4). It is not intended that its diameter and pitch be measured or that the yacht's speed under power be determined by the measurer.

Only one mizzen staysail may be carried by any yacht in an Off Soundings Club race except for staysail ketches.

HULL MEASUREMENTS

To be made with yacht afloat completely rigged and with all sails to be used when racing onboard stowed in the normal racing stowage position. Working jib and main to be rigged or stowed in working position. Water and fuel tanks wholly below the lowest cabin sole must be full and pressed up. Tanks wholly or partially above the lowest cabin sole must be empty. Bilges or sump tanks shall be empty. All equipment necessary to support a weekend cruise (other than consumable (optional) supplies) shall be onboard. All equipment which will be aboard while racing must be aboard and in the place occupied while racing.

LOA—Length Over All—shall be the length from the aftermost part of the hull or taffrail to the intersection of the forward side of the stem and the top of the covering board, or the fair extension of either, or both, if necessary.

OHF—Overhang Forward—shall be the horizontal measurement from the forward point determining LOA and the intersection of the face of the stem with the plane of flotation.

OHA—Overhang Aft—shall be the horizontal measurement from the aftermost point determining LOA to the intersection of the stern profile with the plane of flotation. Any rudder that is a fair extension of the hull lines at the waterplane shall be interpreted to be an extension of the waterline.

LWL—Load Water Line—shall be the length determined by subtracting from LOA the sum of OHF and OHA.

BEAM—shall be the greatest beam (excluding rub rails, flanges etc.) but including tumblehome.

RIG AND SAIL MEASUREMENTS

Mainsail:

B = The measurement from fair extension of afterside of mast, sail track or groove to aftermost position to which mainsail clew can be extended, or to inner edge of boom black band.

P = The distance from fair extension of top of boom track when touching lowest point of goose neck, or from top of black band, if used, to top of main halyard sheave or to underside of masthead black band if a band is used and appropriate halyard marking is included. The 1" wide black bands and halyard marking must be accurately maintained whenever boat is raced. The distance P_Δ from the underside of the upper black band for measuring P to the upper point of P_2, measured upward, shall not be greater than 0.04 P_2.

G = the extreme length of the gaff when lying on the top of the boom to the mast proper.

H = the perpendicular measurement along afterside of mast from the throat cringle of sail to upper side of boom.

Rated Sail Area — Jib headed = $0.3PB + 0.2B\,(P - 2B)$

If PB is greater than 2.5 ($\frac{1}{2}$ P_2 Jc), use:

$= 0.5PB + 0.2B\,(P - 2B)$

— Gaff headed = $\dfrac{(B \times H) + (G \times D)}{2}$, Where $D = 0.96\sqrt{B^2 + H^2}$

Correction to rated mainsail area due to aspect ratio, 0.2 B (P — 2B), shall only be made if a plus quantity.

Mizzen: (Pz, Bz, Gz, Dz and Hz correspond to P, B, G, D and H for mainsails.)

Rated Sail Area — Jib headed = 0.1 PzBz

— Gaff headed = $\dfrac{(Bz \times Hz) + (Gz \times Dz)}{10}$

Fore Triangle:

P_2 = The distance from intersection of forward face of mast with centerline of main deck, produced if necessary, to the intersection of the forward face of the mast, produced fairly, with the centerline of the headstay, or strop carrying the highest headsail, or spinnaker halyard block, or to the center of the eye used to carry the highest headsail or spinnaker halyard block, whichever point is highest. P_2 may be measured in the same manner as "I" is measured under the IOR.

J = distance from forward side of mast at deck to intersection of foremost stay on which the largest headsail is normally carried, with top of bowsprit, if used, or top of rail, including cap.

MSW = The greatest width that can be found in the spinnaker, measuring between points on the luff and leech equidistant from the head with such tension applied as will remove all wrinkles across the line of measurement.

MSPL = The distance from the centerline of the mast to the extreme outboard end of the spinnaker pole including all fixed fittings when the pole is set horizontal and at right angles to the centerline of the yacht.

Jc = The greatest of J, MSPL, or $\frac{MSW}{1.8}$.

LP = The shortest distance between the extreme after end of the clew cringle and the forward side of the luff rope, wire, or tape, measured on the largest headsail elected to be carried in a race using this rating.

Luff Length Limit—The maximum luff length of any spinnaker is $0.95\sqrt{P_2^2 + Jc^2}$. For jibs, no combination of jib-luff and tack pennant may be set in which their combined length cannot be fully stretched when hoisted on the highest jib halyard and tacked at the foremast measurement point of J.

$$\text{Rated Sail Area} = (\tfrac{1}{2} P_2\ Jc)\ (\frac{LP}{J} + 0.50)\ + 0.3\,J\ \ (P_2\ - 2J\ )$$

If either PB or {(B X H) + (G X D)} is greater than 2.5 ($\frac{1}{2} P_2$ Jc), use:

$$= (\tfrac{1}{2} P_2\ Jc)\ (\frac{LP}{J}) + 0.3\,J\ \ (P_2\ - 2J\ )$$

Corrections to actual fore triangle measured area due to aspect ratio, $0.3J\ (P_2\ - 2J\ )$, shall only be made if a plus quantity. The minimum value to be used for $\frac{LP}{J}$ is 1.50.

Area between masts of schooners:

B_1 = the distance at the deck between the foreside of the mainmast and the afterside of the foremast.

P_1 = a perpendicular measured along the afterside of the foremast from the top of the highest halyard block used for sails aft of the mast to the upper side of the boom when resting against the lowest point of the gooseneck.

P_3 = the perpendicular measured along the foreside of mainmast from the top of highest halyard block used for sails forward of the mast to the upper side of the boom of the foresail when resting parallel to the deck against the lowest point of the gooseneck. If no fisherman staysail is carried, measure from point opposite highest halyard block used on afterside of mainmast.

$$\text{Rated Sail Area} = 0.05\ \frac{(P_1 + P_3)}{2}\ \text{X}\ B_1$$

Maximum width of spinnaker may be measured by sailmaker and so noted on head of sail in indelible pencil with sailmaker's name. Clew to luff (LP) on headsail may be measured by sailmaker or approved OSC measurer and so noted on head or clew of sail in indelible pencil with sailmaker's or measurer's name.

RIG ALLOWANCES

Jib Headed Sloops and Catboats	100%
Jib Headed Yawls	97%
Gaff Sloops and Catboats	95%
Staysail Schooners	85%
Gaff Yawls	75%
Jib Headed Schooners	75%
Gaff Schooners	65%

Ketches: If 0.1 PzBz is greater than 0.04 (0.3 PB + ½ P_2 Jc), yacht is classified as a ketch. Calculate rig allowance as follows:

$$\text{Rig Allowance} = 1.05 - 2.0 \left\{ \frac{0.1\ PzBz}{0.3PB + \tfrac{1}{2} P_2\ Jc} \right\}$$

If 0.1 PzBz is less than 0.04 (0.3 PB + ½ P_2 Jc), yacht receives a yawl rig allowance.

Rig allowances are determined by mainsail, except staysail schooners. For a ketch with a gaff sail, use the gaff headed sail area expression in place of the jib headed expression. If 0.1 PzBz is greater than 0.1 (Mainsail rated sail area + ½ P_2 Jc), use schooner rig allowance.

PROPELLER ALLOWANCES

In order for a propeller to be rated, it must be capable of propelling the yacht at a speed (in knots) equal to $\sqrt{LWL}$ in smooth water with no wind. For outboards, the outboard must be of normal size to propel the vessel as above and the propeller kept in the water throughout the race and during measurement in order to be eligible for a propeller allowance. A propeller allowance will not be given where an outboard is mounted in way of a removable transom piece, unless the design incorporates a suitable means equal to the normal transom to exclude water from the cockpit.

Folding 99% Feathering 98% Two Blade Solid 96% Three Blade Solid 94%

OFF SOUNDINGS CLUB MEASURER

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