

14888 SNIPE CLASS INTERNATIONAL RACING ASSOCIATION

MEASUREMENT DATA SHEET

Sheet F - Revised January 1992
For all boats built after January 1, 1992,
EXCEPT AS NOTED.

Use Standard Marking Procedure on this form:

- When NOT within the tolerance limits allowed, mark an "X" in the margin and state actual measurements.
- Otherwise, do not write in the measurements of this boat except where specifically called for.
- Draw a neat circle around the number of each paragraph when you have verified or carried out all its details.
- Thus, when your examination is completed, every paragraph number will be "circled" (indicating conformity); or will bear an "X" in the margin (something to be rebuilt or to be submitted to the International Rules Committee for decision).

****PLEASE PRINT****

- Measurers must fill in every blank space provided on this sheet. Each dimension shown must be verified by the measurer and if the dimension is not either the maximum or minimum or between the two, the measurer may recommend certificate good for local races only on home built boats, if discrepancy is MINOR and clearly shown. No discrepancies permitted on professionally built boats.
- This boat must have been assigned a racing number by the Association which must be carved, burned, or molded into the centerboard trunk in an unobscured position. Minimum height of these numbers must be 1/2" (13mm). Unless this is done, the boat cannot receive a Certificate of Measurement. In order to be eligible to race, every boat must have an official decal for the current year, permanently attached to the starboard side just forward of the transom. Decals will be issued by the appropriate secretary for each year that dues are paid.

3. Official Racing Number of boat on trunk. 14 888

4. Boat's Name.

5. Full name(s) and address(es) of owner(s).

Carlos Bosch
Bermuda

6. Name and charter number of the fleet in which this boat is expected to compete.

GENERAL RESTRICTIONS

7. Boats to be eligible to race in this class must be built to conform in every way to this data sheet. A boat that does not meet all these requirements shall be ineligible to receive a Certificate of Measurement but it must retain its identifying number. Such boats cannot take part in any open or closed regattas whatsoever. Owners of such boats shall be ineligible to join SCIRA. The measurer must notify the Executive Director of any boats that cannot pass these requirements, giving the boat number, and name and address of both the builder and owner.

8. Options. Nothing is optional in these plans, specifications or restrictions unless definitely stated as such.

The purpose of the restrictions under which Snipe hulls and sails are approved is to insure that, to as great a degree as possible, all hulls and sails have identical racing capability. It is impossible to list every single variation that might turn up in the future, and it is impossible to make any set of restrictions in which, at some future date, someone cannot find what appears to be a legal means of obtaining some racing advantage. Any boat or sail having features which are not consistent with this purpose will not be approved and cannot race even though there is no specific restriction preventing the item in question. Improvements and changes will be made only when these changes do not obsolete older boats from the standpoint of racing capability or when they can be accomplished by anyone at reasonable expense.

APPROVED OPTIONS NOT COVERED ELSEWHERE:

- Self-bailing cockpit: No restriction on method of construction.
- Hiking Straps: No restriction on number or location.
- Tiller Extension: No restriction on cross section or length.
- Boom Vang: No restriction on type. May be used at any time.
- Cleats for Jib Sheets or Mainsail Sheets: No restriction on number, type or location.

- Jib Fairleads: Any type or location permitted.
- Mainsheet Bridle: Any type or location permitted. May be adjusted while racing.
- Attachment of Jib Tack: The jib luff wire at the deck must be attached so it cannot be moved while racing. Tension on the cloth in the jib luff may be adjusted while racing. This restriction shall apply to all boats without regard to date of manufacturer.
- Mainsail Clew Outhaul: Any type permitted. May be adjusted while racing.
- Sliding Goosenecks: May be on track or in slot in mast. May be swiveling and may incorporate rollerreefing gear. Must have some means to prevent downward movement beyond position giving maximum legal length of luff. The position of the gooseneck may be changed while racing. The tack of the sail shall be so located that the bolt ropes do not deviate appreciably from a straight line.
- All metric measurements are taken to the nearest one-tenth of one millimeter. Questions must be resolved by using the customary system which is also shown, and which was used in designing the boat.
- Movement of the mast, fore and aft or lateral, may be restrained by blocks at the deck level. Fore and aft guys may be used, with the guys attached to the mast no higher than the top band of the lower set of bands. Mast shall not be moved at the maststep while racing.
- Floorboard are optional.
- FOR ALL BOATS: The maximum overall length of the whiskerpole is 104" (2641.6 mm) and it may not extend in front of the bow of the boat or aft of the boom when not deployed. Pole launcher and retractor systems using shock cord are allowed.
- FOR ALL BOATS: Aramid fiber lines may be used only in the running rigging, but carbon or aramid fibers or micro-grooved film are not to be used elsewhere in the hull construction, or equipment.
- No electronic devices other than timers shall be used on the boat.

9. Boats must be measured by officially appointed or elected Fleet Measurers or by Class Measurers approved by SCIRA. No certificate shall be acceptable unless recommended and signed by such a Measurer. Boats must be weighed at the start of each season. Sails are subject to remeasurement and to cancellation of approval at any time. They must be measured at the start of each season and so marked. On any measured item (mast, boom, rudder, or centerboard), only one can be measured and these items can be changed only on irreparable damage or loss.

HULL

- Thickness of sides, transom, sides of centerboard trunk and bottom:
Fiberglass: 1/8" (3mm) min.
Fiberglass & Foam Sandwich or Fiberglass and Honeycomb Sandwich: 1/8" (3mm) Outerskin and 1/16" (1.5mm) Innerskin min.
Wood: Density of .0185 lbs per cubic inch (512 Kg per cu. meter) or greater - 1/2" (12.7mm) min. Density of less than .0185 lbs per cubic inch (512 Kg per cubic m) - 3/4" (19.1mm) min.
Plywood: 3/8" (9.5mm) min.
Plywood and fiberglass: 3/8" (9.5mm) minimum plywood, plus fiberglass.
Thickness of plywood deck: 1/4" (6.4mm) minimum. Exterior grade may be used.
- Keel width 4" (101.6mm) + or - 1/8" (3.2mm) on flat under surface from stern to station 2 and minimum 2" (50.8mm) wide at station 1.
- Stem must be a smooth curve and it must follow the table of stem offsets as shown on drawing.
- Maximum chine radius is 3/4" (19.1mm) at station 1, tapering to 1/8" (3.2mm) at station 2, and is 1/8" (3.2mm) from there aft.
- Maximum lack of flatness in any cross section is 1/8" (3.2mm) per foot (304.8mm) of distance over which the lack of flatness is being checked.
- 15 - 18. Deliberately left blank.

DECK

- Forward deck. This must extend the full width of the boat to a point at least 72 1/2" (1841.5mm) aft of the stem. Maximum crown of deck 5" (127mm). The top of the sprayboards must be minimum 2" (50.8mm) vertically above deck for minimum 2' (609.6mm) of their respective lengths. Maximum projection of deck or sheer molding beyond sheer is 1 1/4" (31.8mm) in a horizontal plane, level with the sheer.
- After deck minimum 18" (457.2mm) in length.

COCKPIT

- Maximum width of cockpit 40" (1016mm). If the deck alongside the cockpit curves down on a radius, the maximum width shall be checked at the intersection of the deck with a plane 2" (50.8mm) below the sheer. Cockpit corners may be square or rounded to any desired radius.

CENTERBOARD

25. Verify dimensions with drawing. No other shape permitted. Slot in centerboard trunk maximum 21-1/2" (546.1mm) long and no more than 1/2" (12.7mm) in width if in fiberglass nor 9/16" (14.3mm) if in wood or plywood. The aft edge of centerboard trunk shall be perpendicular to base line. Forward edge of centerboard trunk shall either be perpendicular or slope forward 1/4" (6.4mm) maximum at the top of trunk.

Boards must be uniform thickness except within 1" (25.4mm) of edges which may be tapered off. Centerboard may be cut out for lightness. (See drawing.) The top of the front leg of a centerboard may be sloped back at an angle not greater than 45 degrees, starting at a point 12" (304.8mm) above the centerpunch mark 33-1/2" (850.9mm) from the bottom of the board. The handle of the centerboard shall be installed in such a manner that the aft edge of the centerboard is perpendicular to the base line when the centerboard is completely down.

26. FOR ALL BOATS: The centerboard must be restricted while racing, in such a manner that not less than 12 inches (304.8mm) extends below the keel when the board is at its maximum height. To permit checking the position of the centerboard while racing, a band 1" wide shall be painted on each side of the board, the top of the band being even with the surface of the deck at the centerline of the boat when the board is raised to this maximum height. A safety line must be used on the centerboard while racing.

27. The dimensions for centerboards as given on the drawing on the back of this sheet must be adhered to. There shall be no inserts or other means of changing the distribution of the weight. Centerboards shall be made of any hard aluminum alloy. 6061 T6 or its equivalent is recommended. The thickness of the centerboard shall be 3/8" (10mm). If seals are used on the centerboard trunk, they shall be used at the top of the trunk only. Any type of seals may be used.

RUDDER

28. See that rudder is substantially made of wood, fiberglass or fiberglass and foam. See that tiller is strong and attached firmly to rudder head in such a manner that it cannot be slid fore and aft. There shall be a suitable means of preventing rudder from falling off with boat inverted.

29. The basic rudder thickness above and below the waterline shall be 3/4" (19.1mm) minimum and 1-1/2" (38.1mm) maximum.

31. The width of blade below waterline shall be 10-1/4" (260.4mm) maximum and 10" (254mm) minimum. This measurement is taken across rudder at approximately right angles to its leading edge.

32. Metal rudder blades are prohibited. Where pivoting rudders are desirable because of purely local conditions, they may be used for local point score races only. They may not be used in any regattas or championships.

Tillers must be direct connected and all above the aft deck. Rudder must at all times be mounted essentially parallel to the transom. Vertical adjustments or changes in angle are not permitted. Rudder must be attached to the transom and as close to the transom as conveniently possible with 1-1/2" (38.1mm) maximum clearance. The minimum weight of the rudder including pintles shall be 6 pounds (2.72 kg) on all boats.

MAST, BOOM AND RIGGING

33. Only one mast may be used during a regatta unless irreparable damage has occurred. It shall be stepped on the keel, or no higher than 2" (50.8mm) above the top of flotation tank in bottom. The butt of the mast shall be positively retained in the step by means of a collar, cable or other suitable means.

34. The minimum allowable length from sheer molding shall be 20'1" (6121.4mm).

35. The center line of the mast shall be located 60 (1524mm) to 64 inches (1625.6mm) aft of the stem. This measurement shall be taken to the mast step. The hole in the deck where the mast goes through the deck shall have a maximum size of 3" (76.2mm) athwartship x 10" (254mm) fore and aft. A 60" (1524mm) mark showing on either side of the mast step shall be molded in the hull.

36. Rotating masts are prohibited.

37. The mast must be minimum 1-1/4" (31.8mm) athwartships at the top band or at any point below. On all boats: Any taper in the mast above the stay intersection shall be essentially a uniform taper.

38. If mast is made of wood, it must be minimum 2" (50.8mm) athwartships and minimum 3" (76.2mm) fore and aft at deck. If mast is round (not streamlined), the dimension at deck shall be minimum 2-1/2" (63.5mm) in diameter.

39. Spreader length and rake limit shall not be adjustable while racing, on any boat.

41. Measure distance from sheer to the intersection of the jib stay with surface of the mast. See sketch on measurement drawing for method of determining the intersection. The shroud, jibstay, and jib halyard intersections with the surface of the mast shall be between 14'8" (4470mm) and 15'0" (4572mm) above the sheer. This shall apply to all boats built after January 1, 1992 and to replacement masts on older boats if so desired.

42. Halyards must be used, and they must lead down the mast toward the boat, alongside or inside the mast. The length of the luff of the mainsail shall be limited while racing by the following means:

Bands 1" (25.4mm) wide shall be painted around the mast in color to contrast with the color of the mast, the bands being located as follows:

1. The lower edge of the top band to be not more than 20'1/2" (6108.7mm) above the sheer.

2. An additional band, the upper edge of which shall be a maximum of 16'9-1/4" (5111.8mm) below the lower edge of the corresponding top band.

3. Two additional bands, the lower edge of each band being 6" (152.4mm) below the lower edge of the previously specified bands, may be installed. These additional bands are optional.

In racing, the sail must be set so that the edge of the sail is limited at the top by the lower edge of one of the bands, and at the bottom by the top edge of a corresponding band. Tape which is not readily removable and which soon becomes as permanently attached as paint (such as one mil mylar) may be used for bands. Easily removable tape such as electricians or plastic decorative tape is not acceptable.

43. Length of boom shall be 8'8" (2641.6mm) maximum, 8'6" (2590.8mm) minimum, measured from the aft side of the mast (the aft side of the mast includes the sail slot and material enclosing the boltrope). The foot of the mainsail shall not be stretched beyond the following limit while racing; the aftermost edge of the sail at the clew shall not be farther aft than the forward edge of a band 1" (25.4mm) wide, and forward side of which is 8'4-7/8" (2562.2mm) aft of the aft edge of sail slot in the mast.

44. The maximum depth of boom, no matter what type or material shall be 4" (101.6mm) at its widest point, minimum 3-1/2" (88.9mm) for a wood boom. Maximum width at any point 3" (76.2mm). Minimum thickness of plank boom 3/4" (19.1mm). If slotted boom is used, the maximum depth of 4" (101.6mm) includes the material forming the slot. Booms shall be essentially straight and shall not be tapered nor have lightening holes.

45. Aluminum extrusions may be used for masts and booms and masts may be tapered subject to Para. 37. Masts must be made of alloy 6061 T6 or equivalent. Booms may be made of alloy 6063 T6 or equivalent. Weight of such mast with winches, halyards, stays, gooseneck, spreaders and butt end must be at least 20 lbs (9.1kg), and nothing may be added to the basic mast except necessary fittings or reinforcements. Center of gravity in the condition when weighed, with the stays and halyards extended full length and temporarily taped to the mast, shall be at least 60 inches (1524mm) above the upper band of the lower set of bands. Masts having an athwartship dimension of 2-1/8" (54mm) or less must use spreaders. Any section which may be used for a mast may be used for a boom. For booms only, a basic section 2-1/2" (63.5mm) deep and at least 7/8" (22.2mm) wide at its widest point may be used. The height of the boom at either end may be reduced for access to the boltrope.

46. Boom and mast may be slotted to take sail bolt rope provided dimensions are met.

47. Deliberately left blank.

48. All boats must have a jib stay and two side shrouds. The jib stay must be all metal 3/32" (2.4mm) minimum diameter, either wire or rod and must be fastened to a tang or other deck fitting. The length of the jib stay shall be such that it does not allow the mast to touch the back of the partner when the mast is restrained only by the jib stay and shrouds and the mast push/puller is off. THIS APPLIES TO ALL BOATS. No backstay may be used. Shroud anchorages or through-the-deck fairleads must be not more than 4" (101.6mm) in from the sheer, and between 70" (1778mm) and 78" (1981.2mm) aft of stem. Anchorages of jib stay and shrouds may be under deck, but location and length of jib stay and shrouds must be incapable of change during a race. The use of elastic light line between the shrouds and the mast is permitted.

50. All other rigging optional. So-called streamlined rigging not permitted. Running rigging optional. If, in the opinion of the Measurer, the rig shall be considered unsound, weak or unseaworthy, the Measurer must not recommend a Measurement Certificate. Changes must not be made after the Certificate is issued, unless the owner has Measurer recheck the rig.

WEIGHT LIMIT

51. THE BOAT COMPLETE MUST BE WEIGHED. THIS WEIGHT DOES NOT INCLUDE PADDLE, LIFE PRESERVERS, BAILING EQUIPMENT (unless permanently attached), SAILS, OR ANY OTHER LOOSE GEAR. IT DOES INCLUDE MAST, BOOM, RIGGING, MAINSHEET, WHISKERPOLE OR WHISKERPOLE LAUNCHING SYSTEM, CENTERBOARD, RUDDER, AND TILLER. BOATS THAT DO NOT MEET THE WEIGHT LIMIT MUST HAVE WEIGHT PERMANENTLY ADDED BEFORE THEY CAN BE GIVEN MEASUREMENT CERTIFICATES.

52. The weight of this boat as outlined above is 381 Lbs.

Amount of ballast 4 Lbs.

BALLAST LOCATION MUST BE MARKED
ON DIAGRAM ON PAGE FOUR.

53. All boats must be weighed before issuing a measurement certificate and must be re-weighed at the start of each season.

54. The Measurer shall either witness the weighing of the boat or require the owner to furnish a weight certificate signed by at least two witnesses and the owner as well as the owner of the scales, that the minimum weight of the boat complete complies with this paragraph. The minimum weight shall be 381 lbs (172.8 Kg). The bare hull including deck, centerboard trunk, floorboards, flotation, hull fittings, and sailaway equipment shall weigh 276 lbs (125.2 Kg) minimum. In addition ballast up to 33 lbs (15Kg) may be permanently added in any location, subject to the requirements for Moment of Inertia. All ballast must be installed where it may be seen and it shall be attached with peened over bolts or glass cloth. The bare hull including ballast as defined above shall be subjected to the moment of inertial test as contained in the Supplement to the Measurement Data Sheet for Moment of Inertia Test.

55. Weight certificates from builders will not be accepted.

56. All boats shall comply with the following flotation requirement: When the boat has been capsized and has remained in any position long enough to take in as much water as possible in high wave conditions, it shall, upon being righted, float so that the lowest point around the cockpit edge where water might enter the boat is at least 6" (152.4 mm) above the water when the boat is supporting 300 lbs (136.1 kg). This may be accomplished by means of tanks, flotation bags, self-bailing cockpits, increased low density flotation material, or other suitable means. Holes with maximum total area 100 square inches (645.2 sq.cm) may be made in the transom to facilitate drainage. Where transom drains are used to comply with this rule they should have a minimum of 45 square inches (290.3 sq.cm) total. In boats meeting the requirements of this rule, the centerboard trunk may have a minimum height of 9" (228.6 mm) above the outside of the keel if the boat, after capsizing and being righted, floats high enough so that water will flow out of the trunk; otherwise, the trunk shall be 2" (50.8 mm) above the water level in the boat after capsizing and being righted.

MISCELLANEOUS

58. Measurer must notify the owner of the following essential requirements: Boat must carry wearable life preservers for all occupants at all times, and race committees may require wearing them when racing when they consider it necessary. Suitable paddle or oar must be cared. A towline of 33' (10 meters) minimum length, and 1/4" (6mm) minimum diameter must be carried. SCIRA makes no prescription on anchors but some local authorities may require them. This applies to all boats.

59. There shall be no advertising matter whatever on the outside or inside of any boat or on its sails, except as allowed by the SCIRA Event Sponsorship Policy. Any boat infringing this ruling shall be subject to loss of measurement certificate. Measurers shall not issue a certificate to any such boat.

60. Name, complete mailing address and telephone or Fax number of Builder:

61. Sliding seats, hiking boards, trapeze rigs, and other artificial methods of supporting the skipper's or crew's weight to balance the boat are prohibited. This does not prevent the use of hiking straps or any kind of line or cord attached to the boat within 8" (203.2 mm) of the top of the deck. It is permissible for the crew to hold on to the side stays.

CONSTRUCTION OF FIBERGLASS HULLS

76. Only professional boat builders can make fiberglass Snipe hulls. Effective January 1, 1965, the construction of fiberglass hulls has been allowed under the same tolerances as approved by IYRU and now in effect for wood hulls. The loft lines do not show any sheer molding. Part or all of a sheer molding may be molded with the hull.

MATERIALS: Fiberglass cloth, woven roving or mat may be used, with either polyester or epoxy resins. Glass content must be at least 30% by weight.

FLOTATION: 6-1/2 cubic feet (.184 cu.m) of Styrofoam, Urethane foam, or equivalent, having a density of 2-1/2 kg per cubic foot (40 kg cu.m) maximum must be built into the hull. Balsa wood enclosed in resin-impregnated fiberglass cloth is considered equivalent. Supposedly airtight compartments are not considered adequate.

TOLERANCE: All fiberglass boats are to be measured to standard tolerances. The thickness of the hull must be uniform except where reinforced locally such as at the keel, the chine, the stem, the mast step, and where the stay anchorages and rudder gudgeons are attached. Increased thickness due to incorporation of flotation material in either the sides or bottom of the hull is not a violation of this requirement. If desired, floorboards may be bonded directly to the bottom of the boat, omitting

supports. A fiberglass and foam sandwich floor structure may be used. Wood and plywood are acceptable local reinforcements.

DECKS: the deck may be plywood as specified in the measurement data sheet, or it may be fiberglass. In general, a fiberglass deck will require some type of double surface and core construction to secure adequate stiffness. Each builder's method of construction must be approved by the Rules Committee.

CONSTRUCTION OF PLYWOOD HULLS

77. BOTTOM AND SIDES: The weight of the plywood used must be at least one pound, two and one-half ounces per square foot (5.65 kg. Per square meter). If 3/8 inch (9.5 mm) material is used throughout, fiberglass or other covering material may be used to bring the hull up to a minimum weight.

FLOTATION: Three cubic feet (.085 cu.m) of Styrofoam must be installed in the hull.

MOMENT OF INERTIA TEST

78. All bare hulls, as defined in paragraph 54 must be subjected to the moment of inertia test. (For a full description of the method, see SUPPLEMENT TO THE MEASUREMENT DATA SHEET FOR MOMENT OF INERTIA TEST.)

The moment of inertia of the hull is calculated from the following formula:

$$I = \frac{C D^2 T^2}{4 \pi^2}$$

Where: I = Moment of inertia
C = Spring constant, lb. per ft. (Kg. per M.)
D = Distance to axis, Ft (M)
T = Time of one complete oscillation, seconds
 $\pi = 3.1416$

For our purpose, $D = 104'' - 1'' + 9/32'' = 103.281 = 8.6067(2.6233M.)$ The spring constant will be furnished with springs from SCIRA. We can now simplify the formula to:

$$\text{(English)} I = \frac{8.6067 \text{ ft}^2 C T^2}{4 \times 3.1416^2} = 1.8763 (C T^2) \text{ slug ft.}^2$$

$$\text{(Metric)} I = \frac{2.6233 \text{ m}^2 C T^2}{4 \times 3.1416^2} = .1743 C T^2$$

The minimum moment of inertia of the hull as determined from the formula above shall be:

English - 200 (slug foot squared)
Metric - 27.6 (metric slug meters squared)

If the hull moment of inertia does not meet this minimum, weight shall be moved to or added to the ends to bring it up to the minimum.

The Moment of Inertia for this boat is:

210

Amount of weight and detailed description of location of weight added to conform to MOI requirements: (Location must be marked on diagram on page 4.)

4-5# BOLTED TO SIDE DECK SUPPORT

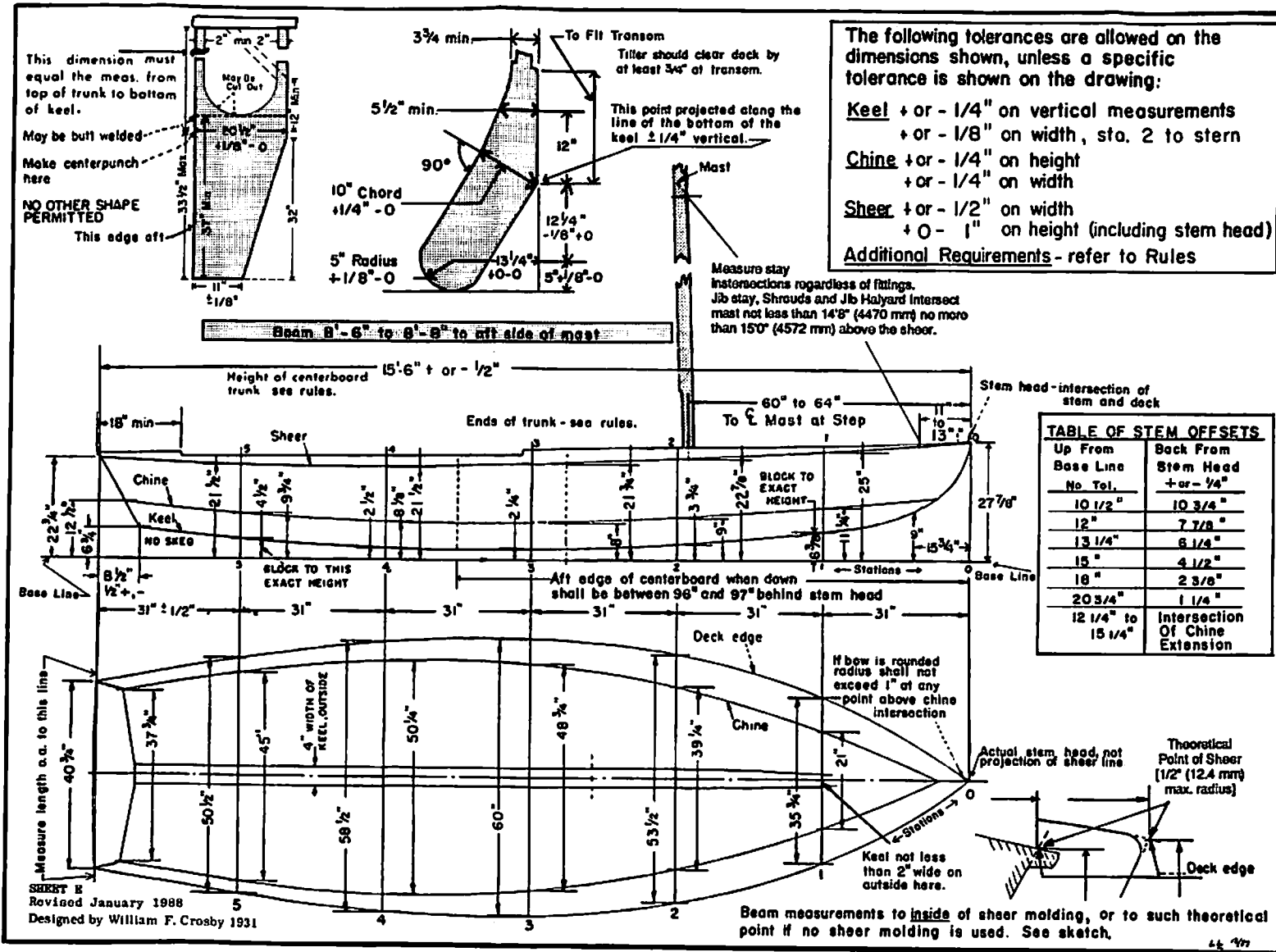
EXCEPTION TO APPLICABILITY OF PRIOR RULES

The new centerboard shape and thickness must be used after January 1, 1976 on all boats in the World Championship, Western Hemisphere Championship and European Championship. Those existing boats which cannot use a 3/8" (10mm) thick board because of trunk slot width shall use a 5/16" (8mm) thick board of the new shape. The length of the trunk slot shall be 21-1/2 inches (546.1mm) maximum.

MEASURERS ARE CAUTIONED TO FILL OUT THIS DATA SHEET IN FULL AND AS ACCURATELY AS POSSIBLE:

Those measurements found correct should be "circled" carefully on the drawing below, preferably with colored pencil. If certain measurements are *not* within the limits shown, cover same on the drawing with an "X" and use a reference letter or line across to your marginal note, giving the actual measurement.

Briefly note exceptions here
(If additional explanatory sheet is attached, check. . .)



The following tolerances are allowed on the dimensions shown, unless a specific tolerance is shown on the drawing:

Keel + or - 1/4" on vertical measurements
+ or - 1/8" on width, sta. 2 to stern

Chine + or - 1/4" on height
+ or - 1/4" on width

Sheer + or - 1/2" on width
+ 0 - 1" on height (including stem head)

Additional Requirements - refer to Rules

Up From Base Line No. Tol.	Back From Stem Head + or - 1/4"
10 1/2"	10 3/4"
12"	7 7/8"
13 1/4"	6 1/4"
15"	4 1/2"
16"	2 3/8"
20 3/4"	1 1/4"
12 1/4" to 15 1/4"	Intersection Of Chine Extension

Hull Reworked and brought into tolerance by Mike McLaughlin at Eclipse Mfg.

PLEASE USE INK

Divisional Fleet, Charter No. _____

I hereby certify that I am the official measurer of the _____
I certify and affirm that I have carefully measured this boat No. 14888 to the best of my ability and that all the measurements written herein or checked by me were found to be exactly as indicated. I am ready and willing to swear to this before any accredited notary public.

(Date) 7/1/94 (Measurer's Signature) Scott Cline

Recommended for Certificate ASC (Initial) Not Recommended _____

Note: The Fleet Measurer must under no circumstances give the Certificate of Measurement to the owner unless he is positive that the boat fully complies with these restrictions. If positive, the Measurer gives the Certificate to the owner and sends this Data Sheet to the Secretary.

14888

MAKE OUT IN FULL BY MEASURER
Must Be Signed by Fleet Measurer to be Valid

Applies To All Boats For
Which Numbers Were
Issued After 12600

SNIPE CLASS
INTERNATIONAL RACING ASSOCIATION
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1. Measurers must fill in every blank space provided on this sheet. Each dimension shown must be verified by the measurer and if the dimension is not either the maximum or minimum or between the two, the measurer may recommend certificate only if discrepancy is MINOR and clearly shown.

2. This boat must have been assigned a racing number by the Association which must be carved or burned clearly into the surface of the keel batten directly abaft the center-board trunk. These numbers must be at least 1" high. Unless this is done, the boat cannot receive a Certificate of Measurement.

3. Official Racing Number of boat on keelson or on a plate if fiberglass boat 14888

4. Boat's Name O'KELLY III

5. Full name(s) and address(es) of owner(s) (please print)
BASIL T. KELLY
P.O. Box 865
NASSAU, BAHAMAS

6. Name and charter number of the fleet in which this boat is expected to compete.
NASSAU FLEET

(also home port, bay or lake where it probably will be moored.)

GENERAL RESTRICTIONS

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The purpose of the restrictions under which Snipe hulls and sails are approved is to insure that, to as great a degree as possible, all hulls and sails have identical racing capability. It is impossible to list every single variation that might turn up in the future, and it is impossible to make any set of restrictions in which, at some future date, someone cannot find what appears to be a legal means of obtaining some racing advantage.

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Improvements and changes will be made only when these changes do not obsolete older boats from the standpoint of racing capability or when they can be accomplished by anyone at reasonable expense.

Approved Options not covered elsewhere:

- 1. Self-bailing cockpit: No restriction on method of construction. Bailing equipment must still be carried.
- 2. Hiking Straps: No restriction on number or location.
- 3. Tiller Extension: No restriction on cross section or length.

4. Boom Vang: No restriction on type. May be used at any time.

5. Cleats for Jib Sheets or Mainsail Sheets: No restriction on number, type, or location.

6. Jib Fairleads: Any type or location permitted.

7. Mainsheet Bridle: Any type or location permitted. May be adjusted while racing.

8. Attachment of Jib Tack: Any method permissible. Height above deck may be adjusted while racing.

9. Mainsail Clew Outhaul: Any type permitted. May be adjusted while racing.

10. Sliding Goosenecks: May be on track or in slot in mast. May be swiveling and may incorporate roller reefing gear. Must have some means to prevent downward movement beyond position giving maximum legal length of luff. The tack of the sail shall be located so that the bolt rope does not deviate appreciably from a straight line.

11. In countries where Styrofoam or equivalent material cannot be secured, the use of flotation bags will be permitted. At least two bags must be used and be of approximately equal capacity. Twice as much flotation must be provided as is required with Styrofoam.

9. Boats must be measured by officially appointed or elected Fleet Measurers. No Certificate shall be acceptable unless recommended and signed by such a Measurer. See "Instructions for Fleet Measurers" in the Rule Book.

HULL

10. Check hull materials below. Where O.K., use check-mark. Give actual dimension only when found different.

Molded depth of frames - - - - - (2 1/4")

Frames must be located within 1/4" of station lines.
Thickness of frames - - - - - (1/2")

(Frames may be made of fir exterior plywood in one piece or in four pieces joined by suitable gussets at the chine and floor timbers at the keel.)

Thickness of gussets at chine - - - - - (1/2")
(Gussets at chine may be made of 1/4" fir exterior plywood if double, and 1/2" fir exterior plywood if single.) No gussets required if the frames are made in one piece.

Dimensions of chine pieces - - - (1/2" x 1 1/2")

Dimensions of clamps - - - - - (1/2" x 1 1/2")

Clamps shall be bonded to the side of the boat at the sheer on plywood hulls. They may be installed in this manner on fiberglass or planked hulls or may be omitted entirely.

Thickness of side planking - - - - - (1/2")

Thickness of bottom planking - - - - - (1/2")

Thickness of sides of trunk:
1/2" minimum, 1/2" recommended

Thickness of transom (estimate acceptable) (1/2")
A 1/4" exterior plywood transom may be used.

Thickness of deck - - - - - (1/2")

Deck may be made of 1/4" exterior plywood.

Dimensions of transom cheek pieces - (1/2" x 2 1/4")

Width and thickness of keel batten - (1/2" x 5")

Width and thickness of keel - - - (1/2" x 4")

11. Planking. Must be at least $\frac{3}{4}$ " thick throughout the sides and bottom of the hull. Double or triple planking may be used but the total thickness must be $\frac{3}{4}$ ". For boats in countries other than the United States where suitable light-weight wood for planking is not readily available, the use of $\frac{1}{2}$ " mahogany planking (unit weight of .0185 pounds per cubic inch or greater) will be allowed, upon appeal by the National Secretary made to the International Rules Committee. When the $\frac{1}{2}$ " mahogany planking is used, it will also be required that the frames, keel, keel batten, stern, and centerboard trunk be made of mahogany, and to dimensions as shown in the Measurement Data Sheet, except as altered in this paragraph. The thickness of the keel will be $\frac{1}{2}$ " inch and the thickness of the keel batten will be 1 inch. In any case, uniform thickness will be required throughout the sides and bottom of the hull. Canvas or other filler between layers shall not be considered as part of this dimension. Transom must be $\frac{3}{4}$ " thick.
12. Hull Structure. The entire hull must be built like the plans and specifications and restrictions. Kind of wood used is optional but the 425 pound minimum weight limit must be observed. The materials specified in plans are best suited. Boats must be weighed at the start of each season, and the fleet measurer shall note the weight on the owner's membership card.
13. No tapered timbers, frames, etc., permitted.
14. The dimensions as given above are minimum for all sizes. They are the sizes specified in plans.
15. Keel must be at least 4" wide on flat under surface from stern to frame 2. It must be at least 2" wide at frame 1.
16. Holes cut in any part of frame structure for lightening hull are forbidden.
17. Snipe hulls may also be built of fiberglass or plywood. The specifications and restrictions on the use of these materials are listed in a supplement to the Measurement data sheet and may be obtained from the Executive Secretary.

DECK

19. Forward deck. This must extend the full width of the boat to a point at least 6'8" abaft of the bow. Maximum crown of deck not to exceed 5". The top of the sprayboards must be at least 2" vertically above the deck for not less than 2' of their respective lengths. Maximum projection of deck or sheer molding beyond sheer is $1\frac{1}{4}$ " in a horizontal plane, perpendicular to the sheer.
20. After deck may not be less than 18" in length.
21. If the deck is covered with $\frac{1}{2}$ " planking, 16 deck beams, $\frac{3}{4}$ " x 2", shall be used. If the deck is covered with $\frac{1}{4}$ " plywood, a simplified structure may be used. Ahead of and in back of the cockpit, there shall be two $\frac{3}{4}$ " x $1\frac{1}{2}$ " fore and aft stiffeners, one on each side of the centerline, with the $1\frac{1}{2}$ " dimension vertical, and one $\frac{3}{4}$ " x $1\frac{1}{2}$ " fore and aft stiffener on the center line. This may lay flat. There shall be $\frac{3}{4}$ " x 3" deck beams at station 1, station 2, and at the fore and aft ends of the cockpit. If the aft end of the cockpit is forward of station 5, there shall be an additional deck beam between it and the transom. Approximately equally spaced between the deck beams at the fore and aft ends of the cockpit, there shall be two stiffeners from the side of the boat to the cockpit side rail on each side, and also from the side rail to the chine piece. These shall be at least $\frac{3}{8}$ " thick. Fore and aft members shall be spruce or equivalent; deck beams and stiffeners may be either plywood, spruce, or equivalent wood.

COCKPIT

22. Greatest length of cockpit 25" Greatest width 30" (The cockpit as designated in plans is recommended 2' x 6'). Boats having cockpits more than 36" in width cannot receive a measurement certificate. If the cockpit has a radius, the width is measured at sheer height. Cockpit corners may be square or rounded to any desired radius.
23. Floorboards may be reasonably spaced, must be adequate for their purpose and must approximate the cockpit opening in coverage. Must not be over $\frac{3}{4}$ " thick. May be of plywood. Floorboards must be installed on the frames or floorboard supports, unless made of plywood and bonded to the bottom of a fiberglass hull. The area of the bottom covered by the floorboards shall be of at least the width and length of the cockpit, and the area of the floorboards shall be at least 60% of the area they cover.

CENTER-BOARD

24. Check type on this boat. Dagger Pivoted
25. Verify dimensions with sketch. No other shapes permitted. Slot in dagger board shall not be more than $1\frac{1}{2}$ " longer than the width of board. Boards must be of uniform thickness except within 1" of edges which may be tapered off. Dagger board may be cut out for lightness either radius or straight cut. (See plans.) The top of the front leg of a daggerboard may be sloped back at an angle not greater than 45 degrees, starting at a point 12" above the centerpunch mark $33\frac{1}{2}$ " from the bottom of the board.
26. A dagger board cannot be used in the slot of a pivoted center-board.

27. No center-board of either type shall exceed 80 lbs. in weight. The dimensions for boards as given on the sketch on the back of this sheet must be adhered to. All types of center-boards must be made of one single kind of metal. There shall be no inserts or other means of changing the distribution of the weight. Aluminum boards may be made of any hard aluminum alloy. 6061T6 or its equivalent is recommended. Minimum thickness of aluminum boards $\frac{3}{4}$ ". Minimum thickness of steel or bronze boards $3/16$ ". Recommended minimum thicknesses are $5/16$ " for aluminum and $1/4$ " for steel or bronze. Only one center-board shall be permitted to be measured. Only steel, bronze, and aluminum boards are approved.

RUDDER

28. See that rudder is substantially made and properly doweled. May be made of $\frac{3}{4}$ " exterior plywood. See that tiller is strong and attached directly to rudder head.
29. Thickness above waterline $3/4$ ($\frac{3}{4}$ " minimum).
30. The length from underside of keel to bottom of rudder, measured diagonally across should be $1'-11\frac{1}{2}"$ (allowance 1" plus or minus).
31. The width of blade below waterline must be not less than $9\frac{3}{4}"$ at any point. This measurement is taken across rudder at approximately right angles to its leading edge.
32. Metal rudder blades are prohibited. While pivoting rudders are desirable because of purely local conditions, they may be used for local point score races only. They may not be used in any regattas or championships. Tillers must be direct connected and all above the aft deck. Rudder must at all times be submerged as shown in the plans. Vertical adjustments or changes in angle are not permitted. Rudder must be attached to the transom and as close to the transom as conveniently possible with 1" maximum clearance.

MAST, BOOM AND RIGGING

33. Maximum allowable length of mast from top of mast (not counting wind indicators) to top of sheer shall be 20'3". Only one mast may be measured.
34. The minimum allowable length from sheer molding shall not be under 20'1".
35. The center line of the mast shall be located 60 to 71 inches aft of the stem. This measurement shall be taken to the mast step. Where the mast is stepped on the keel, the hole in the deck where the mast goes through the deck may be of any size and location.
36. Mast may be stepped on deck provided height above sheer is correct. Rotating masts and any means of artificially inducing bending prohibited.
37. The mast must be at least $1\frac{1}{2}$ " athwartships at top.
38. If mast is made of wood, it must be at least 2" athwartships and 3" fore and aft at deck. If mast is round (not streamlined), the dimension at deck must be not less than $2\frac{1}{2}$ " in diameter. Give dimension of this mast 3"
39. Give shape of mast. Square Round Pear shaped
40. Is mast hollow or solid? H. In hollow wooden masts the walls must be at least $\frac{3}{8}$ " thick. Verify if in serious doubt.
41. Measure distance from sheer to the intersection of the jib stay with surface of the mast. . . See sketch on measurement drawing for method of determining the intersection. Dimension may be 15' maximum, 14'11" minimum. Shroud intersection must be within 2" above jib stay intersection or 4" below.
42. Halliards must be used, and the top of main halliard must lie not less than 1" from top of mast. If a tube is used instead of a sheave, the end of the tube must be 1" from the top of the mast. The luff of the mainsail shall not be stretched beyond 16'-7" in length while racing. To permit checking this, bands 1" wide shall be painted around the mast in a color to contrast with the color of the mast. The center lines of the bands shall be located as follows:
- To coincide with the center of the grommet in the head-board of the sail when the sail is hoisted as far as possible.
 - Six inches and twelve inches below the top band.
 - Sixteen feet seven inches below each of the above bands. The sail may be set at any height desired as long as the sail luff is not stretched so that the distance between grommets in the headboard and tack is greater than the distance between corresponding bands.
43. Length of boom shall be 8'-8" maximum, 8'-6" minimum, measured from aft side of mast. Only one boom may be measured. The foot of the mainsail shall not be stretched beyond 8'-3" in length while racing. To permit checking this, a band 1" wide shall be painted on the bottom in a color to contrast with the boom, the center line of the band being 8'-3" from the center line of the grommet in the tack of the sail when the tack is attached to the gooseneck.
44. The maximum depth of boom no matter what type or material shall not exceed 4" at any point, minimum 2". Check H. The boom shall not be in excess of 3" wide at any point. If a plank boom is used, it must be at least $\frac{3}{4}$ " thick

throughout. If slotted boom is used, it shall not exceed 4" in depth including the wood forming the slot. Round booms must have a minimum diameter of 2". Any type boom must equal stiffness of 2" diameter solid spruce boom.

45. Aluminum extrusions may be used for masts and booms. Currently approved sections are as follows:

(1) An extrusion, measuring 2.65" fore and aft, and 1.75" athwartship, with a wall thickness of .085". When used as a mast, this section must use diamond stays below the shroud anchorages with a spreader having an overall length of at least 15".

(2) An extrusion, having a fore and aft dimension of 2.70"; an athwartship dimension of 2.19"; a varying wall thickness; and a weight of .796 lbs. per foot. Swinging spreaders at least 17" long must be used between the mast and the side-stays when used as a mast.

(3) An extrusion having a fore and aft dimension of 3.0825"; an athwartship dimension of 2.375"; a varying wall thickness; and a weight of .938 lbs. per foot. This section is approved for a mast without spreaders.

(4) A special section for booms only—4" deep and 1" wide with a minimum wall thickness of .050". All masts must be of alloy 6061 T 6 or equivalent. Booms may be 6063 T 6 or equivalent.

46. Boom and mast may be slotted to take sail bolt rope provided dimensions are met.

47. No restrictions on whisker pole length or its location.

48. Shroud anchorages must be not more than 4" in from the edge of deck, not counting sheer molding. Anchorages of jib stay and shrouds may be under deck and locations and length of shrouds must be incapable of change during a race. The length of the jib stay may be changed during a race. The use of elastic light line between the shrouds and the mast is permitted.

49. All boats must have regulation jib stay and two side shrouds as per plans and restrictions. No back stay may be used.

50. Side shrouds and jib stay must be as shown in plans (within allowable variations). All other rigging optional. So-called streamlined rigging not permitted. Running rigging optional. Double jib stays not permitted. Mast rakers not permitted. If, in the opinion of the Measurer, the rig shall be considered unsound, weak or unseaworthy, the Measurer must not recommend a Measurement Certificate. Changes must not be made after the Certificate is issued, unless the owner has Measurer recheck the rig.

WEIGHT LIMIT

51. THE BOAT COMPLETE MUST WEIGH 425 POUNDS MINIMUM. This weight does not include anchor, paddle, life preservers, bailing equipment (unless permanently attached), Sails, sheets, or and other loose gear. Boats that do not meet this weight limit must have weight permanently added before they can be given measurement certificates.

52. The weight of this boat as outlined above is 425 lbs.

53. Weight of anchor (minimum weight 4 lbs.) _____ lbs.

54. All boats must be weighed before issuing a measurement certificate and must be re-weighed at the start of each season. The weight and the amount of ballast, if any, shall be noted on the membership card.

55. The Measurer shall either witness the weighing of the boat or require the owner to furnish a weight certificate signed by at least two witnesses and the owner as well as the owner of the scales, that the boat complete weighs 425 pounds or more. A boat that weighs less will not be issued a Certificate under any conditions. Ballast, up to 10 pounds, may be permanently added immediately under and attached to the deck. If the boat's centerboard weighs less than 80 lbs., ballast up to an amount equal to the difference between the weight of the board and 80 lbs. may be in any location. All ballast must be bolted, screwed, or bonded securely to the structure of the boat.

56. Weight certificates from builders will not be accepted.

57. The weight not to include any trailer, truck, packing cases, crates or cradles, or weights other than the hull, rigging, spars, and rudder.

58. If this boat has a weight certificate, it must be attached to this Measurement Data Sheet and sent to the class Secretary. A duplicate weight certificate may be retained by the owner.

MISCELLANEOUS

59. Measurer must notify the owner of the following essential requirements: Boat must carry two life preservers or buoyant cushions. Small inflatable pocket-type life preservers are not considered adequate. They must be carried at all times—regardless of whether the boat is racing or not! Suitable paddle (or oar), and adequate bailing equipment must be carried. Electric bilge pumps are approved. No dead ballast may be carried. Anchor of not less than 4 lbs. must be carried with 25' suitable line.

60. There shall be no advertising matter whatever on the outside of any boat or sails. Any boat infringing this ruling shall be subject to loss of measurement certificate. Measurers shall not issue a certificate to any such boat.

60. Give name and address of builder of boat. LIPPINCOTT BOAT WORKS INC., RIVERTON, NEW JERSEY

61. Sliding seats, hiking boards, trapeze rigs, and other artificial methods of supporting the skipper's or crew's weight to balance the boat are prohibited. This does not prevent the use of hiking straps or any kind of line or cord attached to the boat within 8" of the top of the deck. It is permissible for the crew to hold on to the side stays.

SAILS

62. Any means of artificially changing the shape or length of the foot, leech or luff of either jib or mainsail is prohibited.

63. No extra battens or other means of artificially stiffening the leech of either sail shall be used.

64. In all races, skipper must use their own sails. Borrowed sails may not be used.

65. Material: Any type of woven fabric may be used as long as it has a minimum weight of 3 ounces per square yard (note: most weights for sail material are given in ounces per lineal yard and in varying widths, which are generally around 28"). A transparent window of non-woven material may be used in the jib if desired. Maximum area, one square foot.

66. The dimensions for sails as given are for maximum measurements. Sails over dimensions on any side are not allowable. A new sail must not be approved which, in the Measurer's opinion, will not be within the specified limits after "break-in." Sails are subject to remeasurement and to cancellation of approval at any time. They must be measured at the start of each season and so marked. Disregard roaches; use straightline measurements, taken to the center of the mainsail headboard hole and in all other instances to the centers of the grommets normally located just inside the roping at the corners of sails. The supplemental drawing on limiting sail dimensions shall be used when it appears that an effort has been made to make an over-sized sail. Grommet locations may be averaged. A light pull of about 3 lbs. shall be applied to the corner which is opposite the side being measured. The luff of the jib shall be subjected to a direct-line pull of 16 lbs., while it is being measured; and leeches shall be subjected to a direct-line pull of 8 lbs. Mainsails should be measured with battens in place.

67. Mainsail Allowance

	Over	Under
Leech _____ (17'-6")	None	No limit

Mainsail luff and foot need not be measured. A limiting dimension of 16'7" on the luff and 8'-3" on the foot will be checked on the mast and boom when the boat is racing. The maximum dimension across the sail from the midpoint of the luff to the midpoint of the leech is 5'10 1/2". Determine the midpoint of the luff by folding the sail until the center of the grommet in the headboard coincides with the center of the grommet at the tack. Determine the center of the leech using the headboard grommet and the grommet at the clew. Spread the sail out flat, smoothing out the wrinkles and measure between the points. No tension need be applied unless necessary to remove wrinkles.

68. Battens in mainsail may be shorter but not longer than: (Pockets not over 1 1/2" longer than batten)

Top batten _____	(18")
Center batten _____	(27")
Lower batten _____	(24")

69. The headboard in mainsail shall not exceed 6" measured perpendicular to the luff.

70. Racing numbers shall be at least 10" in height and on both sides of the mainsail. The class insignia must also be on both sides of the mainsail before sail is approved. Letters to designate the nation under which the boat is registered may be used if desired. Insignia denoting honor awards consisting of chevrons may be worn. See Para. 70 in the Rule Book for details.

71. Jib Allowance

	Over	Under
Foot _____ (6'-4")	1" (note)	No limit
Roach on Foot _____ (6")	None	No limit
Luff _____ (12'-3")	None	No limit
Leech _____ (11'-6")	None	No limit

72. Genoa jibs must have all snap hooks properly attached to stay when racing. May be sheeted inside or outside shrouds. No battens whatever allowed in jib. No headboard permitted in genoa jib. Jibs must have at least five hooks, one near each end of the luff and the other three evenly spaced between. All jibs must have a wire in the luff to prevent pulling of the jib beyond the dimensions given in Paragraph 71 above.

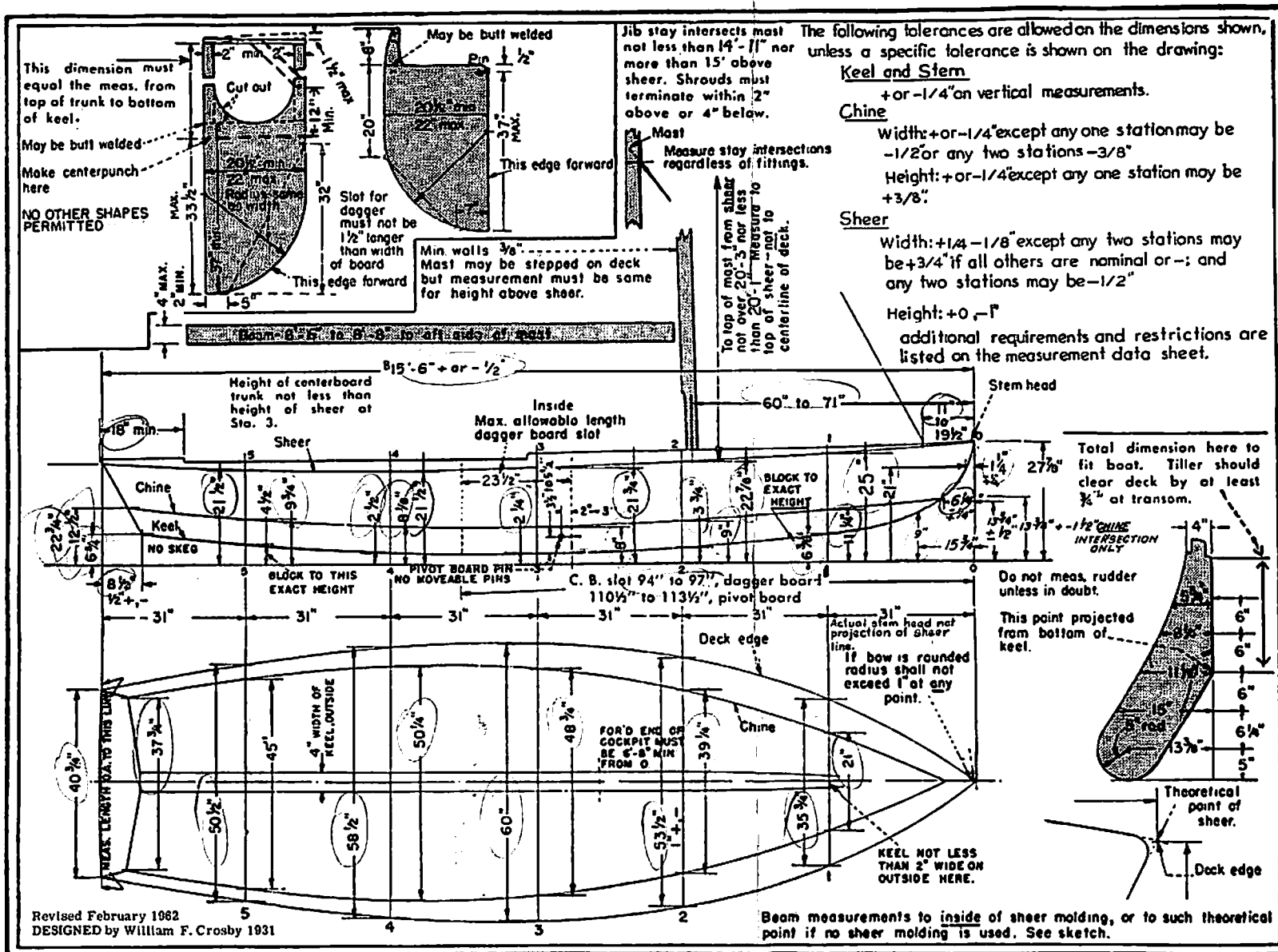
73. Loose-footing any mainsail prohibited. Spinnakers not permitted.

74. Measurer shall mark the tack of each approved sail with the date, fleet number, and his initials before it may be used in any race.

MEASUREMENTS ARE CAUTIONED TO FILL OUT THIS DATA SHEET IN FULL AND AS ACCURATELY AS POSSIBLE.
 Those measurements found correct should be "circled" carefully on the drawing below, preferably with colored pencil.
 If certain measurements are not within the limits shown, cover same on the drawing with an "X" and use a reference letter
 or line across to your marginal note, giving the actual measurement.

Briefly note exceptions here.
 (If additional explanatory sheet is attached, check...)

Complete Snipe plans \$5.00 from Exec. Sec.



Revised February 1962
 DESIGNED by William F. Crosby 1931

PLEASE USE INK

I hereby certify that I am the official measurer of the 4888 Divisional Fleet, Charter No. 46
 I certify and affirm that I have carefully measured this boat No. 4888 to the best of my ability and that all the measurements written herein or checked by me were found to be exactly as indicated. I am ready and willing to swear to this before any accredited notary public.
 (Date) Mar 11-64 (Measurer's signature) W.D. Cochran Sr

Recommended for Certificate W.D.C. (Initial) Not Recommended

Note: The Fleet Measurer must under no circumstances give the Certificate of Measurement to the owner unless he is positive that the boat fully complies with these restrictions. If positive, the Measurer gives the Certificate to the owner and sends this Data Sheet to the Executive Secretary together with \$7.50 for the owner's dues for the current year. These Data Sheets are not to be broadcast promiscuously but are primarily for the Association's files.