

Certificate of Measurement

Snipe Class International Racing Association, Inc.

I Hereby Certify that I am the Official Measurer of the

SAN FRANCISCO BAY Fleet No. 12 SCIRA

and that I have carefully measured the Snipe Class boat

Named DIRTY BIRD, Registration No. 15510

and have found her to be as recorded on the Measurement Data Sheet filed with the Executive Secretary of SCIRA. I approve this Certificate to permit entry of this boat in Snipe Class Racing and have given this copy to the owner as evidence thereof.

Date Sept 4 1961 Signed Charles R. Mattson

(This certificate is automatically invalidated by any changes made in hull or standing rigging hereafter.)

(OVER)

MAKE OUT IN FULL BY MEASURER ¹⁵⁵¹⁰
Must Be Signed by Fleet Measurer to be Valid

SNIPER CLASS
INTERNATIONAL RACING ASSOCIATION
MEASUREMENT DATA SHEET

Use Standard Marking Procedure on this Form:

- (a) When NOT within the tolerance limits allowed, mark an "X" in the margin and state actual measurements.
(b) Otherwise, do not write in the measurements of this boat except where specifically called for.
(c) Draw a neat circle around number of each paragraph when you have verified or carried out all its details.
(d) 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 re-built or to be submitted to the International Measurement Committee for decision).

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 15510

4. Boat's Name _____

5. Full name(s) and address(es) of owner(s) (please print)
WILLIAM H SCHWARZ
11705 MORA DRIVE
LOS ALTOS, CALIF

6. Name and charter number of the fleet in which this boat is expected to compete.
San Francisco Bay # 12

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

GENERAL RESTRICTIONS

7. Boats to be eligible to race in this class must be built to conform in every way to this data sheet. Boats that do not meet all these requirements shall be ineligible to receive a Certificate of Measurement but they must retain their identifying numbers. Such boats cannot take part in any open or closed regattas whatsoever. Owners of such boats shall be ineligible to join S.C.I.R.A. The measurer must notify the Executive Secretary 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. Boats must be built to plans and offsets. Dimensions shown on this sheet are for checking purposes only and tolerances are to take care of accidental and unavoidable variations from the nominal dimensions and changes in shape which occur as the boat becomes older. The stem must be a smooth curve as shown in the plans. 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:
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%) _____
Frames must be located within 1/2" of station lines.
Thickness of frames - - - - (3/4") _____
(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 - - - - (3/4") _____
(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 - - - (3/4"x1 1/2") _____
Dimensions of clamps - - - - (3/4"x1 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 - - - - (3/4") _____
Thickness of bottom planking - - - - (3/4") _____
Thickness of sides of trunk:
3/4" minimum, 1/2" recommended - - - - _____
Thickness of transom (estimate acceptable) (3/4") _____
A 3/4" 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 - (3/4"x2 1/4") _____
Width and thickness of keel batten - (3/4"x5") _____
Dimension of deck beams
(plywood or spr.) - - - - (3/4"x2") _____
Width and thickness of keel - - - (3/4"x4") _____

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 $\frac{3}{4}$ " 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 $\frac{3}{4}$ inch mahogany planking is used, it will also be required that the frames, keel, keel batten, stem, 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.
14. No tapered timbers, frames, etc., permitted.
15. The dimensions as given above are minimum for all sizes. They are the sizes specified in plans.
16. 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.
17. Holes cut in any part of frame structure for lightening hull are forbidden.
18. 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 $\frac{3}{4}$ " 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 27 Greatest width 63. (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 deck alongside of the cockpit curves down on a radius, the maximum width of 36 inches shall be checked at the intersection of the deck with a plane through the sheer. 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 $\frac{1}{4}$ " thick. May be of plywood. 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 centerboards 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 $\frac{1}{4}$ ". Minimum thickness of steel or bronze boards $3/16$ ". Recommended minimum thicknesses are $5/16$ " for aluminum and $\frac{1}{4}$ " 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 _____ ($\frac{3}{4}$ " 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 $9\frac{1}{2}"$ 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 ~~18'10"~~ 20'11"
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 must not exceed 6" x 8" in size.
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 2 7/8
39. Give shape of mast. Square Round Pear shaped
40. Is mast hollow or solid? 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 16' maximum, 14'-9" minimum. Shroud intersection must be within 2" above jib stay intersection or 4" below.
42. Halliards must be used. The length of the luff of the mainsail shall be limited while racing by the following means: Bands 1" 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 feet $\frac{1}{2}$ inch above the sheer.
 2. Two more bands whose lower edges are 6" and 12" below the lower edge of the top band.
 3. Three additional bands, the upper edge of each band being $16' 9\frac{1}{4}"$ below the lower edge of the corresponding top band.
 In racing, the sail must be set so that the distance from the highest point on the headboard to the lowest point on the sail at the foot (including boltrope) does not exceed the distance from the lower edge of any band at the top of the mast to the upper edge of a corresponding band at the bottom of the sail.
43. Length of boom shall be 8'8" maximum, 8'6" minimum, measured from the aft side of the mast (the aft side of the mast includes the sail slot and material enclosing the bolt-rope). 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" wide, and forward side of which is $8' 4\frac{3}{4}"$ aft of the aft side of the mast.
44. The maximum depth of boom no matter what type or material shall not exceed 4" at any point, minimum 2". Check _____ 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. Any section approved for a mast may also be used as a boom. Masts must be made of alloy 6061T6 or equivalent. Booms may be made of 6063T-6. Currently approved sections are as follows:

- (1) A section measuring 2.65" fore and aft and 1.75" athwartship, with minimum wall thickness of .085", with diamond stays below the shroud anchorages and a spreader with an overall length of at least 15".
- (2) A section measuring 2.70" fore and aft and 2.19" athwartship, a varying wall thickness and a weight of .796 lbs. per foot, with swinging spreaders at least 17" long.
- (3) A section 3.0825" fore and aft and 2.375" athwartship, a varying wall thickness and a weight of .938 lbs. per foot, no spreaders required.
- (4) A section measuring 2-11/16" fore and aft, 2 1/2" athwartship, and a minimum thickness of .063". (No spreaders required).
- (5) For booms only, a section measuring 4" deep and 1" wide with a minimum wall of .050".

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, 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.
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. 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 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 415 lbs.
Weight of anchor (minimum weight 4 lbs.) 4 lbs.
53. 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.
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 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. On all-fiberglass boat (hull, deck, floorboards, etc.) 20 lbs. maximum ballast can be carried. 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.
55. Weight certificates from builders will not be accepted.
56. The weight not to include any trailer, truck, packing cases, crates or cradles, or weights other than the hull, rigging, spars, rudder, and tiller.
57. 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

58. 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. Anchor of not less than 4 lbs. must be carried with 25' suitable line.
59. 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 _____
V.A.H. Y.P.Y. Gardenia

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.

62. SAILS
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 main-sail 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. The luff of the jib shall be subjected to a direct-line pull of 16 lbs., while it is being measured; and the foot of the jib and leeches shall be subjected to a direct-line pull of 8 lbs. Mainsails should be measured with batten 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. The insignia must be an accurate reproduction of the official emblem which may be obtained from the Executive Secretary. The use of a letter on the sail to designate the country in which the boat is registered is optional except in International Championship Regattas where it is required. The letters must be those specified by the International Yacht Racing Union. The height shall be 10" and they shall be placed above the number, below the class insignia. 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'-5") | None | 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.

