

SNIPER CLASS INTERNATIONAL RACING ASSOCIATION

29501

MEASUREMENT DATA SHEET

Sheet G - Revised January 1996
For all boats built after January 1, 1996, except as noted.

Use Standard Marking Procedure on this form.

- (a) When NOT within the tolerance limits allowed, mark on "B" in the margin and type actual measurements.
- (b) Otherwise, do not write in the measurements of this boat, except where specifically called for.
- (c) Draw a circle around the number of each photograph, if any, verified or carried out at its detail.
- (d) Thus, when your examination is completed, every page of this form will be "circled" (indicating conformity) or will bear an "X" in the margin (something to be carried to be submitted to the International Rules Committee for decision).

PLEASE PRINT

1. Measurers must fill in every blank space provided on this sheet. Each dimension shown must be verified by the measurer and if the dimensions do not agree, the measurement of measurement between the two, the measurer may recommend a sufficient amount for local races only on home built boats of discrepancy of MINOR and less than 1/16". No discrepancy permitted on professionally built boats.

2. This boat must have been inspected and approved by the Association which must be carried forward from the certificate of approval 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 measurer's permanent address attached to the starboard side of the hull of the boat. This will be verified by the measurer's secretary for each year that they are paid.

3. Official Racing Number of boat or event: 29501
 4. Boat's Name
 5. Full name of and address of owner(s):
John James Morrison

37 Flume Avenue, Waltham
MA 01981

6. Name and home number of the person to whom the boat is registered:
John James Morrison No 3622

General Restrictions

7. Boats eligible to race for this class must be built to measurement in any way fitting this sheet. Also that the measurement of the equipment must all be eligible to receive a Certificate of Measurement or both must be an identifying number. Such boats cannot take part in any open classed regatta whatsoever. Owners of such boats shall be eligible to race for SCIRA. The measurer must take all necessary direct action but they cannot pass these requirements on to the boat number and name and address of both the hull and owner.

8. Options: Nothing is optional in this class, as specific there in restrictions, unless definitely stated as such.

The purpose of the restrictions, which apply to hulls and sails are approved to ensure that, to the greatest degree possible, all hull and sails have identical racing capability. It is impossible, however, to have variation that might stem up the fabric, and it is impossible to make a set of restrictions in which, at any given date, something cannot be built that appears to be a legal means of obtaining some racing advantage. A hull 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:

- 8.1. Self-bailing cockpit: No restriction on method of construction.
- 8.2. Hiking Straps: No restriction on number or location.
- 8.3. Tiller Extension: No restriction on cross section or length.
- 8.4. Boom Yang: No restriction on type. May be used at any time.
- 8.5. Cleats for Jib Sheets or Main Sail Sheets: No restriction on number, type or location.
- 8.6. Jib Fairleads: Any type or location permitted.

8.7. Masthead Brails: Any type or location permitted. May be adjusted while racing.

8.8. An adjustment of Jib Tack: The jib luff wire at the deck must be attached to a point that moves while racing. Tension on the cloth in the jib luff must be adjusted while racing. This restriction shall apply to all boats without regard to date of manufacture.

8.9. Masthead Sheer Control: Any type permitted. May be adjusted while racing.

8.10. Sheer Stop Benefits: 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 lateral length of hull. The position of the gooseneck may be changed while racing.

8.11. All other 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.

8.12. Movement of the mast fore and aft or lateral, may be restrained by blocks on 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.

8.13. Floors and are optional.

8.14. POLE LAUNCHERS: The maximum over all length of the whisker pole is 12' (3658mm), and it may not extend in front of the bow of the boat at any of the boom when not deployed. Pole launcher and retractor system using shock cord are allowed.

8.15. FOULING BOTTOMS: Cores of aramid fibers or micro-grooved film shall not be used in hull construction or major equipment. Exotic materials may be used in running rigging and fittings only if commonly manufactured and readily available on the open market at prices comparable with similar type equipment of non-exotic material.

8.16. Timing devices: Other than timers shall be used on the boat.

8.17. Race number measurers: Officially appointed or elected Fleet Measurers or Class Measurers approved by SCIRA. No certificate shall be required to be recommended and signed by such a Measurer.

Boats must be weighed at the start of each season. Sails are subject to removal at any time and require a certificate of approval at any time. They must be measured at the start of each season and so marked. On any measured item (hull, mast, deck, etc.) only one can be measured and these items can be changed only on irreparable damage or loss.

Hull

9. Thickness of deck, transom, sides of centerboard trunk, and bottom: Minimum 1/8" (3.2mm) min.

10. Core: Balsa, cork, or other approved materials. Honeycomb Sandwich: 1/2" (12.7mm) Outer skin and 1/16" (1.6mm) inner skin min.

Wood: Density of 0.135 lbs per cubic inch (5.12 Kg per cu meter) or greater - 1/2" (12.7mm) min. Density of less than .0185 lbs per cubic inch (5.12 Kg per cubic m) - 3/4" (19.1mm) min.

Blywood: 1/8" (3.2mm) min.

Plywood and fiberglass: 3/8" (9.5mm) minimum plywood, plus fiber glass.

Thickness of plywood deck: 1/4" (6.4mm) minimum. Exterior grade may be used.

11. Keel: min 4" (101.6mm) or 1/8" (3.2mm) on flat under surface from stem to station 2 and minimum 7" (177.8mm) wide at station 1.

12. Stem must be a smooth curve and it must follow the table of stem curves for class on drawing.

13. Stem must be a minimum 3/4" (19.1mm) at station 1, tapering to 1/8" (3.2mm) at station 2, and 1/8" (3.2mm) from there aft.

14. The maximum thickness of the keel at station 1 in any cross section is 1/8" (3.2mm) in a horizontal plane level with the sheer.

15. The maximum distance over which the lack of flatness is measured is 10' (3048mm).

16. 1/8" (3.2mm) field evenly distributed.

Deck

19. Forward deck: This must extend the full width of the boat to a point at least 1/2" (12.7mm) 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 1/4" (6.4mm) in a horizontal plane level with the sheer.

20. After deck minimum 19" (482.6mm) in length.

Cockpit

22. Maximum width of cockpit 49" (1244.6mm). If the deck along side the cockpit is sloped down at a 5° angle, 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. No air centerboard trunk maximum 2 1/2" (63.5mm) maximum depth not more than 2" (50.8mm) in width in the upper part 2 1/2" (63.5mm) in width of plywood. The aft edge of centerboard trunk shall be perpendicular to the line. Forward edge of centerboard trunk shall either be perpendicular or slope forward 1/4" (6.35mm) maximum at the top of trunk.

Boards must be uniform thickness except within 1 1/2" (38.1mm) at edges which may be tapered off. Centerboard may be cut out for lighter (see drawing.) The top of the front face of centerboard may be sloped back at an angle not greater than 45 degrees starting at a point 1 1/2" (38.1mm) above the centerline mark 3 1/2" (88.9mm) from the bottom of the board. The handle of the centerboard shall be made of such a material 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 removed while racing in such a manner that no point on the bottom edge extends less than 2 inches (50.8mm) below the keel. To permit marking the position of the centerboard while racing a band 1/2" wide shall be painted on the edge of the board, the top of the band being on within 1/4" of the top edge of the centerline of the boat when the board is raised to the maximum height. A safety line must be used on the centerboard while racing. Any type of retaining system may be used, provided such a system allows the crew to extend the board completely when hoisted without swimming under the boat.

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" (9.5mm). 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 fiber glass and foam. See that tiller is properly attached firmly to rudder post in such a manner that it cannot be shifted or any part. There shall be no inserts or means of preventing rudder from falling off with boat inverted.

29. The basic rudder thickness is above and below the waterline shall be 3 1/2" (89.1mm) maximum and 2 1/2" (63.5mm) minimum.

30. The width of blade below waterline shall be 10 1/2" (266.7mm) maximum and 10" (254mm) minimum. The rudder can curve downward at rudder at approximately right angle to its leading edge.

31. Metal rudder blades are prohibited. Where plastic 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 regatta 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 pinnet shall be 6 pounds (2.72kg) on all boats.

Mast, Boom and Rigging

33. Only one mast may be used during a regatta unless a major damage has occurred. It shall be stepped on the deck or no higher than 2' (609.6mm) 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 2' 0 1/2" (612.14mm).

35. The centerline of the mast shall be located 60" (1524mm) to 62 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) shallow (up to 10" (254mm) flat) and a 60" (1524mm) mark showing weather side of the mast deck shall be molded in the hull.

36. Rotating masts are prohibited.

37. The mast must be minimum 1-1/4" (31.5mm) diameter 1/2" above 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 made of round (not streamline), 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.

40. 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 inter section. The spreader, jib stay, and jib halyard intersections with the surface of the mast shall be between 14" (354.7mm) and 15" (381.2mm) above the sheer. This shall apply to all boats built after January 1, 1992 and to replacement masts on older boats if so desired.

41. Halyards must be used and they must lead down the mast toward the

base, 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" (519.1mm) above the sheer.

2. An additional band, the upper edge of which shall be a maximum of 16" (406.4mm) 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 used. 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 the corresponding band. Tape which is not readily removable and which is not adhesive is temporarily attached at point (such as one mil mylar) may be used if it is readily removable tape such as electricians or plastic department store brand acceptable.

4. Length of luff of the 3" (76.2mm) maximum 5' 6" (1676.8mm) maximum spreader 2" from the aft side of the mast (the aft side of the mast includes the cable and material enclosing the bolt rope). A screw or other device shall limit the stretch of the mainsail foot so that the aftermost edge of the sail at the edge of the slot at the crew shall not be farther aft than the forward edge of a band 1" (25.4mm) wide, and forward side of which is 2" (50.8mm) aft of the aft edge of sail slot in the mast.

5. The maximum depth of boom, no matter what type of material shall be 4" (101.6mm) open at its widest point, minimum 3-1/2" (88.9mm) for a wood boom. Minimum width at any point 8" (203.2mm). Minimum thickness of boom 1/2" (12.7mm). If bonded 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.

6. Aluminum extrusion 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. Deck may be made of alloy 6063 T6 or equivalent. Weight of masts, booms, wire, halyards, stays, goose-neck, spreaders and butt ends must be at least 20 lbs (9.07kg) and nothing may be added to the basic mast except pins or fittings of reinforcements. Center of gravity in the mast must be in weight with the stays and halyards extended full length and must be kept to the mast, shall be at least 60 inches (1524mm) above the upper band of the lower set of bands. Masts having an aluminum pin diameter of 3/8" (9.5mm) or less must use spreaders. Any reason which may be used for masts may be used for a boom. For booms which are aluminum 1 1/2" (38.1mm) deep and at least 7/8" (22.2mm) wide at the widest point may be used. The height of the boom at either end may be reduced for access to the bolt rope.

7. Boom and mast may be drilled to take sail bolt rope provided dimensions are met.

8. Unilaterally left hand.

9. All boats must have a jib stay and two side shrouds. The jib stay must be at least 3/32" (2.38mm) minimum diameter, either wire or rod and must be fastened to a ring or other deck fitting. The length of the jib stay shall reach the end of the mast to allow the mast to touch the back of the partner when the mast is strained only by the jib stay and shrouds and the mast push collar is off. THIS APPLIES TO ALL BOATS. No backstay may be used. Shroud anchorage is through the deck fairleads must be not more than 3" (76.2mm) 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 changing during a race. Throws of elastic light line between the shrouds and the mast is permitted.

10. Another rigging optional. So-called "simplified" rigging not permitted. Rigging optional. In the opinion of the Measurer, the rig shall be suitable for the boat and, if not seaworthy, the Measurer must not permit the boat to race. Changes must not be made after the start of the race unless the owner has the Measurer recheck the rig.

Weight Limit

42. The boat complete must be weighed. This weight does not include partial. The crew, crew's, boating equipment (unless permanently attached), sails or any other loose gear. It does include mast, boom, rigging, mainsheet, whisker pole or whisker pole launching system, centerboard, rudder and tiller. Boat load does not meet the weight limit must have a weight permanently added before they can be given Measurement Certificate.

43. The weight of this boat as outlined above is 173 lbs (circle 173)

Amount of ballast 12 lbs (circle 12)

Ballast Location Must Be Marked on Diagram on Page Four

