

# Jet 14 Class Association Specifications

*As revised and published January 15, 2007 and in effect as of February 1, 2007*

## ARTICLE XVIII – SPECIFICATIONS

No specification can cover all situations which may arise. In case of doubted legality, the facts shall be referred to the Chief Measurer for a decision. In any case involving specifications of the Jet 14, the intent of the meaning as interpreted by the Chief Measurer will govern. All decisions made by the Chief Measurer not involving interpretation of existing specifications shall be presented through Class channels for final approval by the Governing Board at the Annual Meeting.

### 1. Measurement

- A. Measurement shall be carried out using this specification in conjunction with the official plans and measurement and registration certificate. The materials used in construction shall be those normally used in boat building unless otherwise noted.
- B. Builders must obtain the approval of the Measurement Committee and the Governing Board of the Jet 14 Class before constructing any mold or plug.

### 2. Hull (Wood)

- A. A wooden hull shall be of molded plywood with body lines identical to a plug approved by the Jet 14 Class Association. The wood used in construction shall not be lighter than 22 pounds per cubic foot.
- B. All hull dimensions shall conform to the official plans. Except at terminations of structural members such as the keel and hull core material, hulls shall be uniform in thickness. Fillers may be used to create a locally fair hull. Attempts to alter the overall hull shape from that of its approved mold are prohibited. Carbon fiber and other high-tech materials are allowed in hull and deck construction only to reinforce local high-load areas.
- C. The sheer can be a straight line or a fair concave curve; convex or reverse sheers are prohibited.

### 3. Hull (Fiberglass – Reinforced Plastic)

- A. All fiberglass – reinforced plastic hulls shall come from a mold approved by the Jet 14 Class Association.
- B. Dimensions governing the wooden hull will pertain to the fiberglass Jet 14 except where otherwise noted.
- C. All materials used in construction of fiberglass Jet 14s shall meet with the approval of the Measurement Committee.
- D. The centerboard pin shall be positioned as shown in the official plans. To compensate for lack of keel, the centerboard case shall house the fully retracted board.
- E. The design and structural engineering involved in bonding and securing all components of the fiberglass Jet 14 must be approved by the Measurement Committee.

### 4. Internal Bracing, Beams, Carlins, etc. of Wood and Composite Boats

- A. Refer to official plans for dimensions.

### 5. Transom

- A. The transom outline and dimensions shall be as shown on the official pattern and plans.

### 6. Centerboard Trunk

- A. Refer to official plans for dimensions.
- B. The trunk may be made to accommodate a one piece thwart.
- C. Gaskets or other means of enclosing the bottom or inside of the trunk are prohibited. Gaskets enclosing the top of the trunk are allowed.
- D. Blocks or other devices fastened to the inside of the trunk for the purposes of a jibing centerboard are allowed. A maximum of two (2) blocks at the top of the trunk and two (2) at the bottom are permitted with a maximum of two square inches for any one block or a maximum of eight square inches total.

### 7. Bailers

- A. Two (2) transom bailers are allowed. There is no restriction on through-the-hull bailers. All bailers shall retain the boat's water-tight when closed.

- B. Specifications regarding transom bailers shown on the official plans are modified as described in the following paragraph: Two transom bailers may be used with a maximum opening of 20 square inches each. The bailers must be symmetrical-ly shaped and located on either side of the vertical axis of the transom. They must not be closer together than 3". They must have a provision for being water-tight when not in use. In wood Jets a structural knee must be located between the bailers and secured by bonding to the transom and keel. The knee must extend 2" above the bailers and 3" along the keel. The width and depth of the knee must be at least 1". On fiberglass Jets the transom area may require reinforcing to accommodate loss of structural integrity.

#### 8. Decks

- A. Refer to official plans for dimensions.
- B. The wooden deck shall be of marine plywood, 1/4" or 6 mm minimum thickness.
- C. Openings on foredeck for spinnaker storage are no longer allowed.
- D. A deck color band limiting the aft mast position is required as shown on the official plans.
- E. The following modifications to existing or new boats are permitted:
  - 1. The fore-deck may be raised up to 2" above the straight line between stem and stern as measured at the deck color band.
  - 2. The vertical aft face of the fore-deck may be located as far forward as the aft edge of the deck color band.

#### 9. Mast Step

- A. The fore and aft location of the mast step on the keel is shown on the official plans.
- B. Masts may be stepped on deck with the following restrictions: one or more wooden supporting stanchions shall be permanently fastened between the keel and partners in place of the eliminated mast section. The only exception to this is when a boat incorporated a lateral bulkhead forward as in self-rescue boats. The stanchions(s) shall then be a minimum of 1 1/8" by 2".
- C. Keel-stepped masts shall be as shown on official plans: 19"  $\pm$  1/2" from centerline of mast to centerline of center-board pivot bolt. Deck-stepped masts shall be within partner limits: 6" maximum range as show on drawings. Aft limiting band shall be 59" maximum for wood boats and 59 3/4" maximum for glass boats. Minimum dimensions are 53" and 53 3/4" respectively to the forward edge.

#### 10. Flotation

- A. All wood Jet 14s must carry flotation material capable of supporting a minimum weight of 400 pounds. Flotation in the form of buoyancy bags, built-in air tanks or other materials such as Styrofoam must be distributed so that the boat will float on an even keel after capsize. Applied flotation must be securely fastened to the hull so it will not float off when under water pressure.
- B. Glass Jet 14s shall have three (3) cubic feet and cored and composite Jet 14s two (2) cubic feet of additional uni-formly distributed and permanently fastened closed-cell flotation material.
- C. One (1) cubic foot of flotation and 62.4 pounds of buoyancy shall be considered equivalent for the purposes of satisfy-ing individual boat flotation requirements.

#### 11. Thwart

- A. Refer to official plans for dimensions.
- B. The thwart may be eliminated in double-bottomed boats of approved design in which the floor acts as a supporting member for the centerboard case.
- C. The forward edge of the thwart may be brought forward to a maximum distance of 78.5" from the aft face of the transom. Minimum width of the thwart is 3". A small seating surface may be added between the forward edge of the thwart and the centerboard trunk. This seating surface shall not exceed 30 square inches on either side of the centerboard trunk and not extend more than 8" along the thwart from the centerboard trunk plate edge.
- D. Hulls after 1142 may have a sloped thwart with an angle less than 90 degrees to the centerboard trunk per the approved molds.



**12. Centerboard**

- A. The centerboard shall conform to the outline shown in the official Jet 14 plans.
- B. No cut outs are allowed.
- C. The centerboard may be made of steel, stainless steel, bronze or aluminum.
- D. A centerboard pin hole may be used as an alternative to the 5/8" slot.
- E. A tang may be added to the centerboard to permit its rotation in the down position to be unrestricted. A stopper pin must be included on fiberglass boats to prevent the tang from entirely moving into the centerboard trunk.
- F. Control dimensions for centerboard pivot location is  $74\frac{1}{2}'' \pm \frac{3}{8}''$  from stem along keel. Boats built prior to 2003 may sail with the centerboard pivot pin in its current location. New boats and centerboard pins that are repaired or altered shall meet this requirement.
- G. Centerboard tolerances are maximum length from centerline of pivot bolt to bottom edge at leading edge is 49"; maximum width is 17" perpendicular to leading edge; and maximum width at bottom is 8" perpendicular to leading edge to imaginary intersection of bottom and aft edge. All remaining dimensions as shown on official plans are  $\pm 1''$ .

**13. Rudder**

- A. The rudder may be constructed from any material. Its minimum weight, with all mounting hardware and less tiller, shall be 4 1/2 pounds.
- B. Below the waterline the rudder shall conform to the profile shown on the official plans. Shaping the underwater area is allowed provided the thickness does not exceed 13/16" maximum.
- C. Above the waterline the shape is unrestricted. The minimum thickness shall be 11/16".
- D. The distance from the bottom after edge of the keel to the furthestmost trailing edge of the rudder shall be as shown on the plans.
- E. Pop-up rudders are permitted providing that they conform to all the underwater dimensions. Pop-up rudders shall be locked in the "down" position in sanctioned regattas.

**14. Tiller**

- A. Tiller and hiking stick are unrestricted.

**15. Rub Rails**

- A. Rub rails are optional. See official plans for maximum dimension.

**16. Spray Boards**

- A. Spray boards are unrestricted.

**17. Fittings**

- A. Fittings are optional, unless specifically prohibited.

**18. Electronics**

- A. Digital electric compasses (integral timers) are permitted.

**19. Whisker and Spinnaker Pole**

- A. The length shall be measured with the pole attached to the mast fitting and resting against the forestay of jib luff. The length is the distance from the mast to the bearing face of the outer fitting and shall not exceed 80".
- B. When used with the jib, the outward pole shall be in contact with the jib clew or securing device not more than 1" from the clew grommet.

**20. Traveller**

- A. Any type of traveller may be used.

**21. Mast Measurement**

- A. Mast dimensions and location of fitting color bands and control sections are as shown on the official plans. Forward and aft face of mast at deck must remain within 53" and 59" of stem respectively for wood hulls, and 53 3/4" and 59 3/4" for fiberglass hull respectively.
- B. The mast shall be inherently straight. An allowance may be made for warpage or accident.
- C. Rotating masts are prohibited.
- D. The jib halyard sheave (or tube) should be placed just below the control section or as close to it as the forestay fitting will allow.
- E. The main halyard may run through a tube, double sheave, or other device at the mast head.
- F. Two (2) fixed or hinged spreaders may be used in conjunction with the existing shrouds. Fixed spreaders are mandatory on certain approved aluminum mast sections. See list of approved sections (Appendix A). Spreader shape is optional.
- G. The mast shall be all wood or all aluminum.

**22. Mast, Wood**

- A. The mast shall be solid and made of Sitka spruce or fir. It may be laminated with a maximum of four (4) pieces. The mast dimensions shall be those shown in the official plans.
- B. The mainsail shall be attached by 5/8" sail track and slides.

**23. Mast, Aluminum**

- A. Mast shall be untapered and inherently straight. Only approved sections shall be used. A list of approved sections is part of these specifications. See Appendix A.
- B. Sections may be grooved for bolt rope or luff slugs.
- C. Internal halyards are permitted.
- D. Alterations for the express purposes of influencing basic mast deflections, characteristics, or simulating a tapered aluminum section are not permitted.

**24. Boom**

- A. The boom may be wood or aluminum and shall be inherently straight.
- B. The wooden boom shall be solid, not thinner than 1 1/8" in any dimension and not greater than 3" vertically, except that it may be tapered to 3/4" forward to allow for the gooseneck fitting. The foot of the sail shall be attached to the wooded boom with 5/8" sail track and slides.
- C. The aluminum boom may be any section that will meet the dimensions specified for wooden boom and may be any shape. The method for attaching the sail may be either a groove or 5/8" sail track. Other specifications such as the color-band position will be the same as for wooden booms.
- D. A color band shall be painted on the boom. See the official plans for location.
- E. Slotted wood booms are prohibited.

**25. Standing Rigging**

- A. Standing rigging is limited to a forestay and two shrouds located as shown on the official plans. The forestay shall be stainless steel or galvanized steel cable 3/32" minimum diameter or cordage of comparable strength. Stays shall be stainless steel or galvanized, 3/32" minimum diameter. In the control section, tangs are required for wood but not for aluminum masts.
- B. No standing rigging may be adjusted during a race.
- C. A forestay is optional only if jib furling is utilized.



**26. Running Rigging**

- A. Main and jib halyards may be of rope or stainless steel wire. Minimum wire diameter is 1/16", 7 by 7 by 19. Minimum breaking strength of a line is 500 pounds. Spinnaker halyard is unrestricted.
- B. The main sheet shall be attached to the traveller.
- C. The spinnaker halyard measurement on the official plans shall read 50" minimum and shall be measured to the top bearing surface of the spinnaker halyard sheave.

**27. Weight**

- A. The minimum all-up weight shall be 285 pounds. This weight includes centerboard, rudder, tiller, mast, boom, rigging and fittings. Not included are sails, paddles, personal gear, and safety equipment (life jackets, bailing device, and 30 feet of 3/16" line). Boats can be bought up to the minimum weight adding structural members, fittings, or lead. When lead weights are used, up to 10 pounds of corrector weights shall be permanently attached to the boat at a location determined by the owner. Any additional corrector weight must be permanently attached to the boat at a location less than one foot from the transom or less than one foot from the stem, or distributed between the above mentioned stem section or transom section at the owner's discretion.

**28. Restrictions**

- A. Sliding seats, trapezes and hiking posts are prohibited.

**29. Official Numbers**

- A. The minimum height of number is 2".
- B. In wooden Jet 14s, the numbers shall be cut into the keel aft of the centerboard trunk.
- C. In fiberglass Jet 14s, the numbers of plastic or other materials shall be bonded to the after centerboard trunk or marked on the trunk gelcoat.

**30. Required Safety Gear**

- A. In any class-sanctioned race, a Jet 14 shall have on board two (2) wearable life jackets, 30 feet of 3/16" line, a bailing bucket and a paddle. Life jackets shall be Type III U.S. Coast Guard approved.

**31. Sails**

- A. Sails shall be those mainsails, jibs, and spinnakers which have been approved for the Jet 14 as shown on the official plans.
- B. A sail royalty per sail shall be paid by the sailmaker to the Jet 14 Class Association. A royalty label shall be sewn to the tack of each sail as proof of payment. Labels can be purchased from the Class Secretary.
- C. Sail material is limited to woven material, with no weight limit.

**32. Mainsail**

- A. The official class insignia must be on both sides of the upper half of the mainsail and placed so that the Jet emblem is horizontal. Color must contrast with the mainsail.
- B. Racing numbers must be at least 10" high and attached to both sides of the mainsail in a color contrasting with the mainsail.
- C. The roach of the mainsail must be a continuous fair curve, measured through the after edge of the batten packets. Between the batten pockets, the leech may be curved, straight, or hollow as suits the sailmaker.
- D. Cunningham holes are allowed in mainsail tack area.
- E. Zippers are allowed only in the foot of the mainsail for draft control.
- F. When bent to spars, the centerline of head, tack and clew grommets shall not extend beyond the centerline of the mast and boom color bands.
- G. All dimensions shown are maximum allowed. Leach measurement is the centerline of the grommets.
- H. Total area of windows in mainsail shall not exceed 350 square inches.
- I. Batten locations shall be as dimensioned on official drawings  $\pm 2"$ .

## 33. Jib

- A. Battens, headboard, or clewboard are prohibited.
- B. Total area of windows in jib shall not exceed 300 square inches.
- C. Leech, luff, and foot measurements are to the centerline of grommets. All dimensions shown are maximum allowed.

## 34. Spinnaker

- A. All measurements shall be taken with a three-pound pull. Leech, luff, fold and foot measurements shall be taken to the centerline of grommets
- B. Contrasting color racing numbers, at least 10" high, shall be attached to one side of the spinnaker.
- C. All dimensions shown are maximum allowed except as noted.

## ARTICLE XVIII — SPECIFICATIONS

## Appendix A – Official Plans

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# Approved Aluminum Mast Sections — in effect as of February 1, 2007

SECTION	DIMENSIONS				MOMENTS OF INERTIA		CURRENT STATUS
	FORE & AFT	ATHWART	POUNDS PER FT	WALL THICKNESS	FORE & AFT: I X	ATHWART: I Y	
HELMS	2.785	2.245	N/A	N/A	.515	.346	No longer available (N/A)
DUBDAM	2.785	2.000	N/A	N/A	.476	.317	No longer available (N/A)
ZEP 2	2.750	2.120	N/A	N/A	.366	.272	No longer available (N/A)
KENYON - A	2.375	1.875	.587	.070	.250	.190	Deckstep length / Fixed spreaders mandatory (N/A)
KENYON - B	2.750	1.750	.824	.094	.476	.251	No longer available
KENYON - C	2.875	2.250	.748	.075	.501	.284	No longer available
DAMCO - 1	2.250	2.000	.533	.060	.235	.189	Fixed spreaders mandatory
DAMCO - 2	2.500	2.250	.776	.070	.361	.343	Available
ZEPHYR - 1	2.65	1.750	.800	.085	.530	.220	Available
BRUCE	2.875	2.375	N/A	N/A	.405	.288	No longer available (N/A)

NOTES: 1) Additional sections can be approved as needed by the Chief Measurer

2) Approved aluminum mast sections for all new or replacement masts after February 1, 2007 shall be Dwyer DM-1 or DM-2.

Dwyer Aluminum Mast Company (DAMCO) • 203 / 484-0419

2 Commerce Drive, North Branford CT 06471

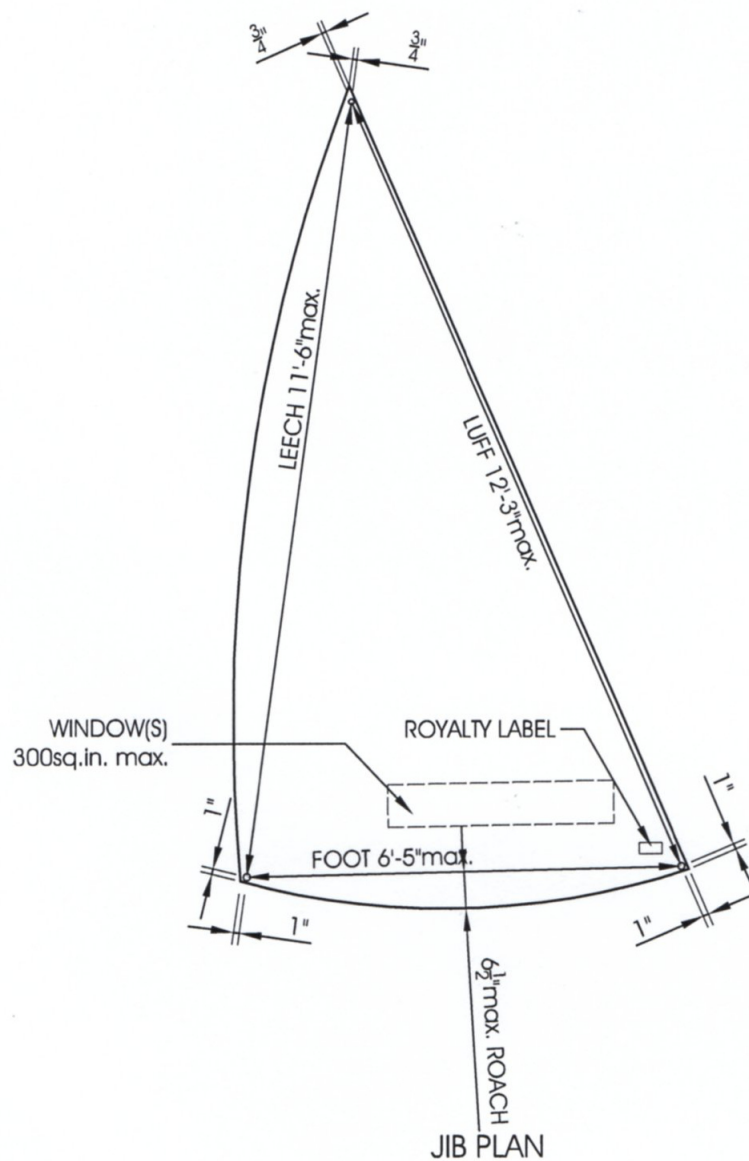
www.dwyermast.com



A ONE DESIGN RACING SLOOP  
DESIGNED BY HOWARD V. SIDDONS

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CORRECTED by m stanfield 2008feb13





## JET 14

A ONE DESIGN RACING SLOOP  
DESIGNED BY HOWARD V. SIDONS

scale  $\frac{3}{8}" = 1'-0"$

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# JET 14

A ONE DESIGN RACING SLOOP  
DESIGNED BY HOWARD V. SIDMONS

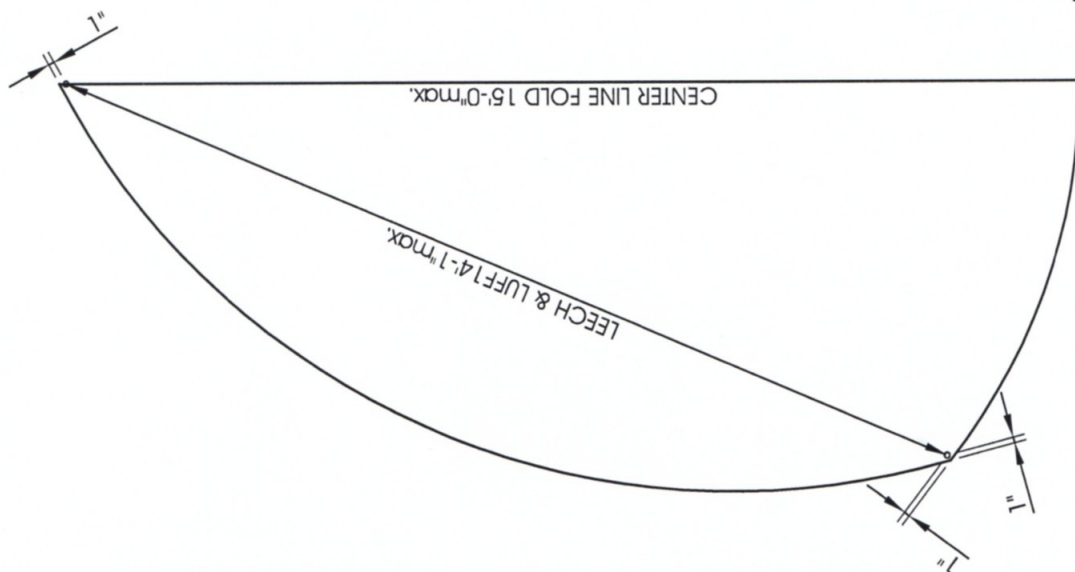
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February 13, 2008 A-4

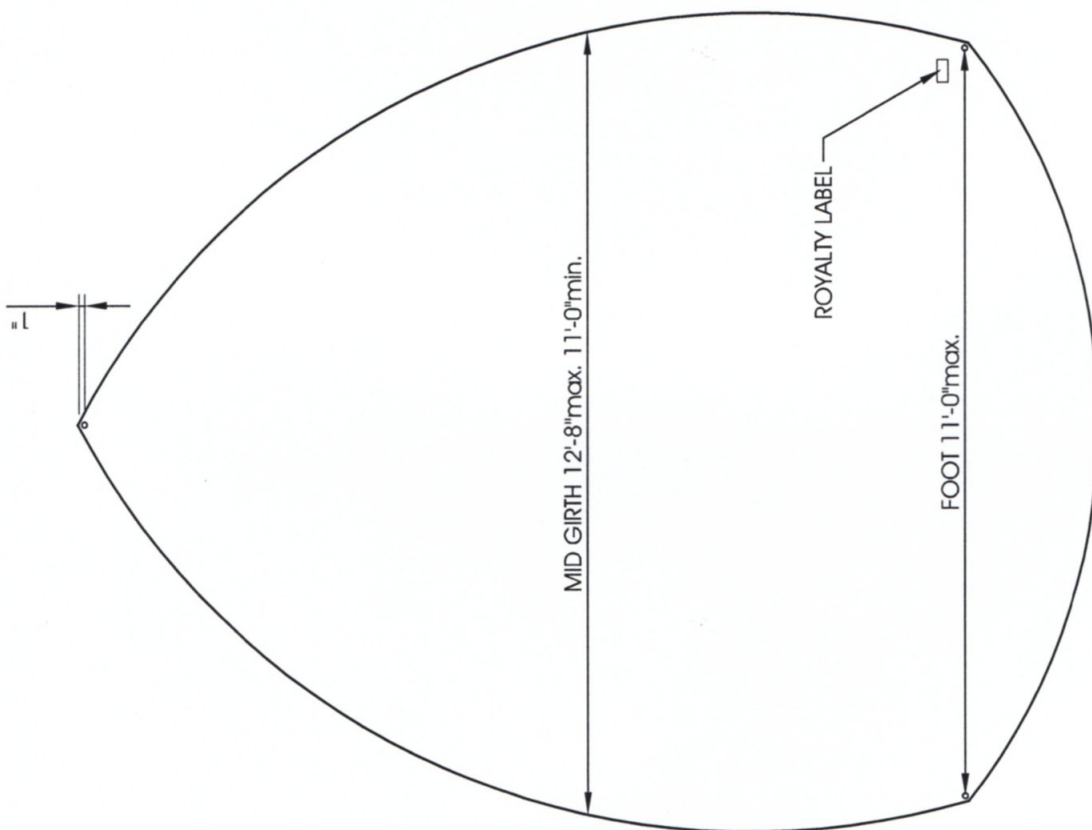
SPINNAKER PLAN

folded



SPINNAKER PLAN

open

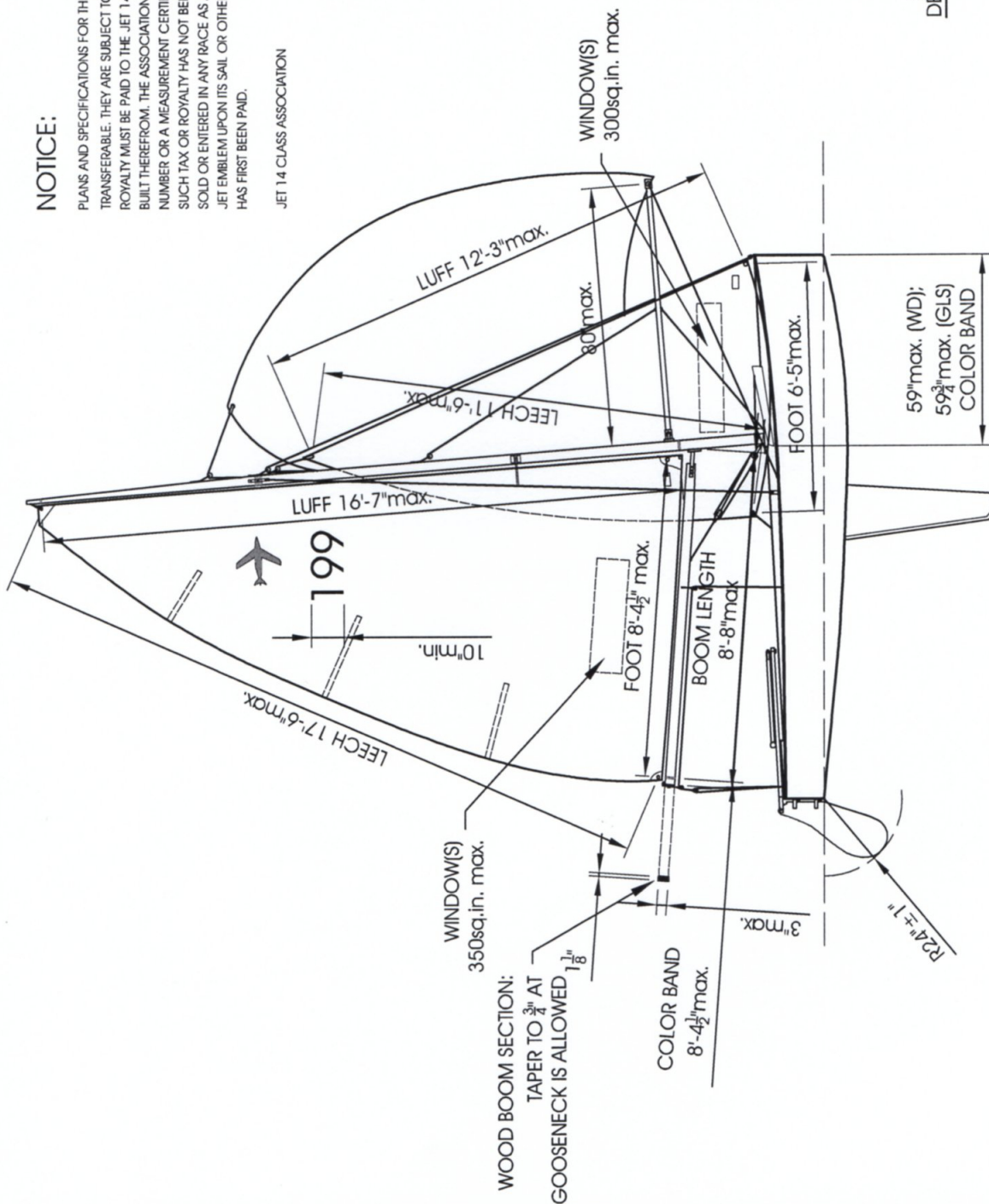




# NOTICE:

PLANS AND SPECIFICATIONS FOR THE JET 14 CLASS SLOOP ARE NOT TRANSFERABLE. THEY ARE SUBJECT TO ANNUAL REVISION. A NUMBER TAX OR ROYALTY MUST BE PAID TO THE JET 14 CLASS ASSOCIATION ON EACH BOAT BUILT THEREFROM. THE ASSOCIATION WILL REFUSE TO ISSUE EITHER A NUMBER OR A MEASUREMENT CERTIFICATE FOR ANY BOAT UPON WHICH SUCH TAX OR ROYALTY HAS NOT BEEN PAID. NO BOAT MAY PROPERLY BE SOLD OR ENTERED IN ANY RACE AS A "JET 14" OR AT ANY TIME DISPLAY THE JET EMBLEM UPON ITS SAIL OR OTHERWISE, UNLESS SUCH TAX OR ROYALTY HAS FIRST BEEN PAID.

JET 14 CLASS ASSOCIATION



WOOD BOOM SECTION:  
TAPER TO 3/4" AT  
GOOSENECK IS ALLOWED  
1 1/8"

## JET 14

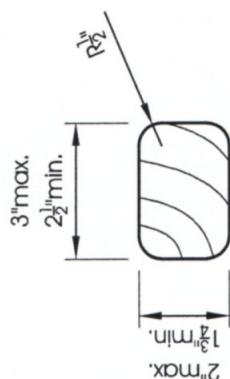
A ONE DESIGN RACING SLOOP  
DESIGNED BY HOWARD V. SIDMONS

scale AS NOTED

### RIGGING ELEVATION

scale: 1/4" = 1'-0"

DRAWN BY CJ ENGLE 1958nov10  
REDRAWN BY J SHIPMAN 1974mar09  
CORRECTED BY J SHIPMAN 1976apr15  
REDRAWN by m stanfield 2006may03  
CORRECTED by m stanfield 2008feb13



scale 3"=1'-0"

scale 3"=1'-0"

# JET 14

A ONE DESIGN RACING SLOOP  
DESIGNED BY HOWARD V. SIDMONS

scale AS NOTED

**NOTE:** Aluminum Mast  
For approved section, see specification. All  
measurements except cross sections are  
the same as wood. Internal Halyards are  
allowed.

## SOLID WOOD MAST

scale:  $\frac{1}{4}" = 1'-0"$

DRAWN BY CJ ENGLE 1958nov10  
REDRAWN BY J SHIPMAN 1974mar09  
CORRECTED BY J SHIPMAN 1976apr15  
REDRAWN by m stanfield 2006may03  
CORRECTED by m stanfield 2008feb13





NOTES:

1. SHEER LINE NOT SHOWN ON THESE PLANS
2. DETERMINATION OF SHEER LINE:

STEM HEIGHT: 19"min.; 23"max.; 19 1/2" suggested

INTERIOR HALF GIRTH SECTION B-B: 35 1/2"min.; 36 1/2"max.; 35 1/2" suggested (MEASURED ALONG INSIDE OF HULL)

EXTERIOR HALF GIRTH SECTION B-B: 37 1/2"min.; 39 1/2"max. (MEASURED ALONG THE OUTSIDE OF HULL)

INTERIOR HALF GIRTH SECTION A-A: 21 1/2"min.; 22 1/2"max.; 21 1/2" suggested (MEASURED ALONG INSIDE OF HULL)

EXTERIOR HALF GIRTH SECTION A-A: 23 1/2"min.; 24 1/2"max. (MEASURED ALONG THE OUTSIDE OF HULL)

3. DETERMINATION OF DECK CROWN: AFTER SHEER IS CUT, STRETCH STRING FROM TOP OF STEM TO TOP OF TRANSOM ALONG CENTER LINE. PLACE STRAIGHT EDGE ATOP SHEER AT EACH DECK BEAM. MEASURE HEIGHT TO STRING AND BEAM WIDTH AT EACH (HULL HAS TO BE DRAWN IN TO BEAM DIMENSIONS BEFORE HAND). CUT BEAMS TO CORRESPONDING CAMBERS.

4. WHERE NO MAXIMUM/ MINIMUM DIMENSIONS OR TOLERANCES ARE SHOWN, SCANTLINGS ARE MINIMUMS. STRUCTURAL MEMBERS MAY BE DIVIDED AND/ OR DISTRIBUTED IF THE RESULT IS EQUAL OR SUPERIOR STRENGTH AND SIMILAR WEIGHT DISTRIBUTION.

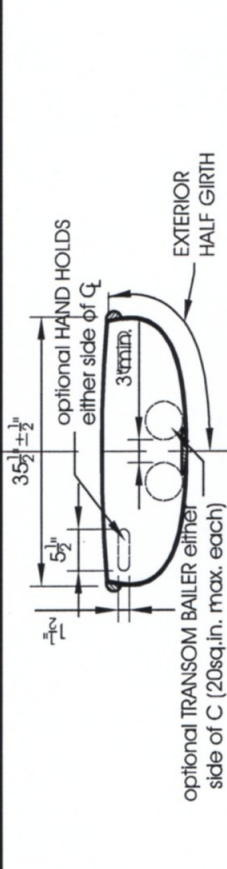
5. HIGHER TRUNK OR SOLID THWART CAN BE DESIGNED BY BUILDER.

6. CLASS SPECIFICATIONS SHOULD BE CONSULTED BEFORE STARTING CONSTRUCTION.

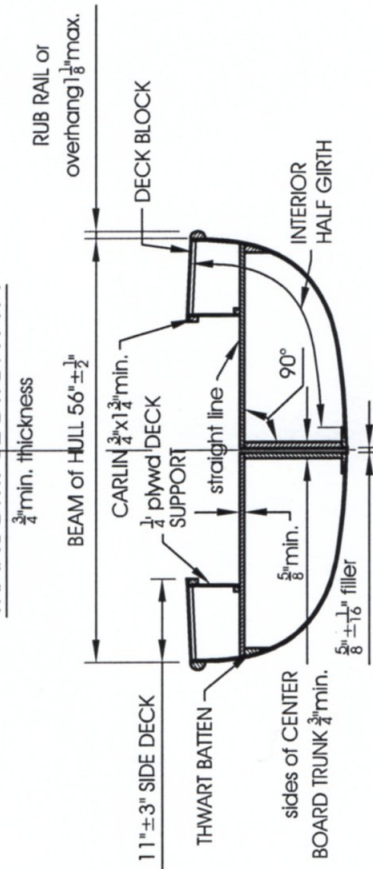
7. CONSTRUCTION MATERIALS ARE OPTIONAL.

8. GIRTH MEASUREMENTS ARE TAKEN FROM INSIDE EDGE OF KEEL. PERPENDICULAR TO KEEL ALONG INSIDE OF HULL.

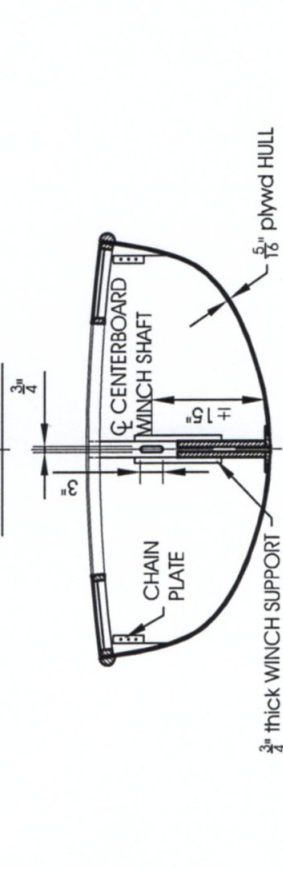
9. BEFORE MAKING ANY CHANGES IN STRUCTURAL MEMBERS, CONSULT THE CHIEF MEASURER OF THE CLASS.



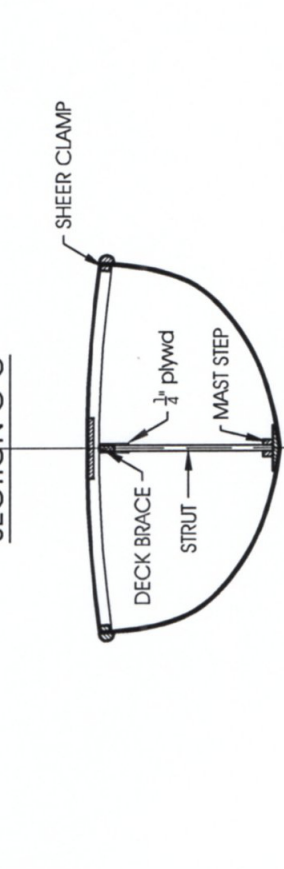
TRANSOM: SECTION A-A



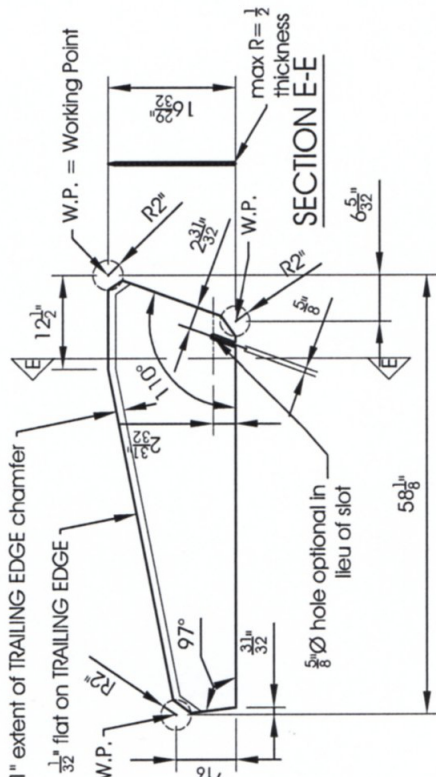
SECTION B-B



SECTION C-C



SECTION D-D



CENTERBOARD: material 1/4" steel or 3/8" aluminum

# JET 14

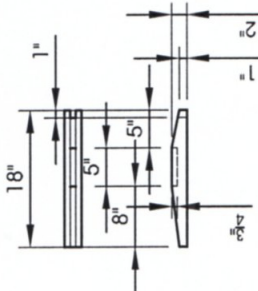
A ONE DESIGN RACING SLOOP  
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SCALE 1/2" = 1'-0"

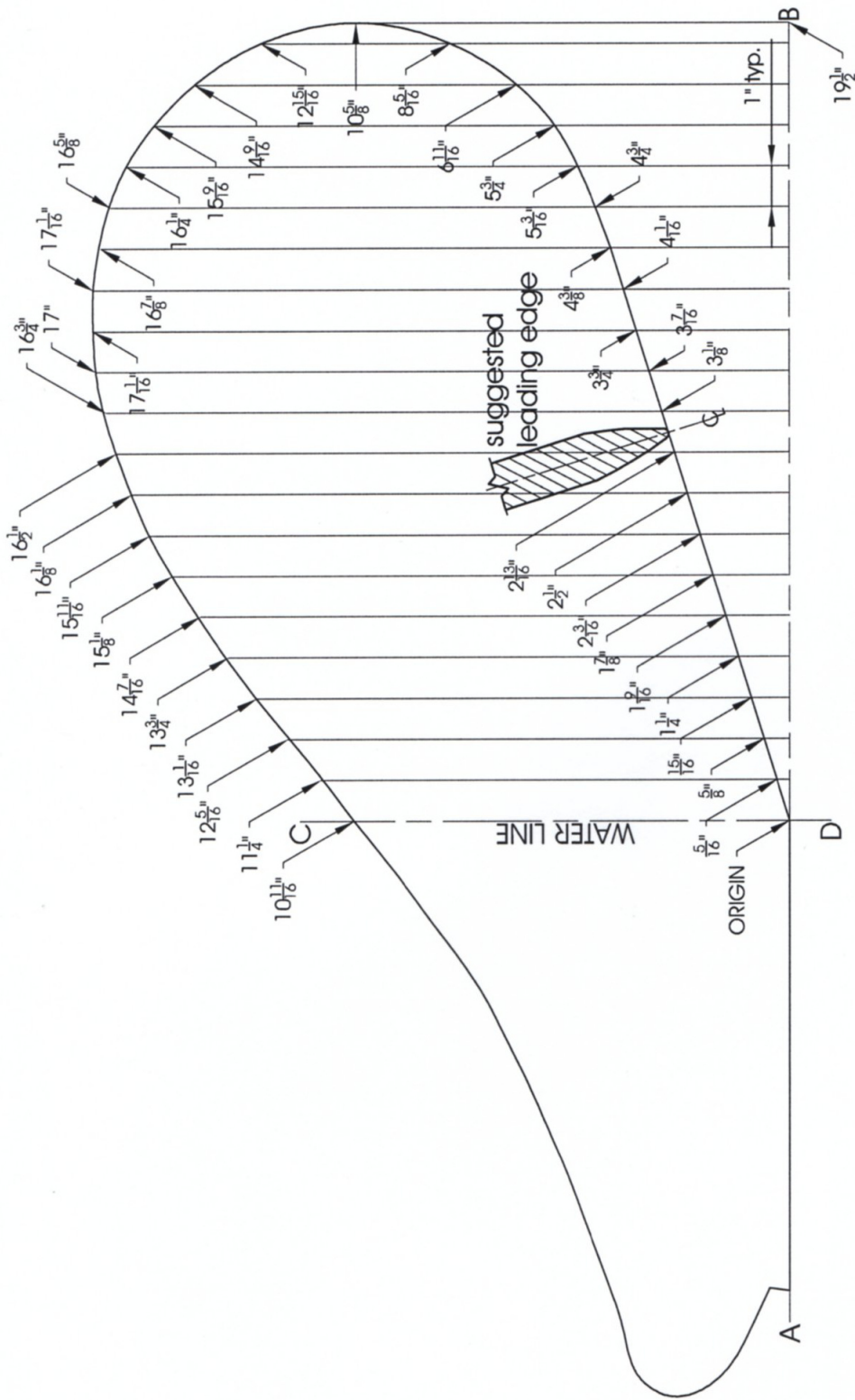
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REDRAWN BY C.J. ENGLE 1958apr24  
CORRECTED BY J. SHIPMAN 1974feb18  
REDRAWN BY m. stanfield 2006may03  
CORRECTED BY m. stanfield 2008feb13

## MAST STEP

3 pieces @ 3/4"x2"







RUDDER PATTERN:

THICKNESS =  $\frac{1}{8}$ " max. BELOW WATERLINE

UNDERWATER PROFILE MUST BE MAINTAINED WITHIN  $\pm \frac{3}{8}$ "

ABOVE WATER LINE SHAPE IS OPTIONAL, STANDARD AS SHOWN.

ALL PROFILE COORDINATES MEASURED FROM BASE LINE "A-B" IN 1" INTERVALS FROM BASE LINE "C-D"

SUGGESTED MATERIAL: MARINE GRADE MAHOGANY PLYWOOD.

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scale 3" = 1'-0"

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scale 3"=1'-0"

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