

SPECIFICATIONS
HAMPTON ONE DESIGN CLASS

April 16, 1951

Revised January 2007

TITLE I - GENERAL

1. Plans:

Official Hampton One Design Class plans are obtainable from the Class Secretary for a price established by the National Executive Committee.

2. General Requirements:

Hull - its spars and sails must conform strictly throughout with respect to design, dimensions, construction and material to the plans and specifications except as otherwise herein provided. Alternate construction of the Hampton One Design is permitted so as to allow construction of the hulls using either fiberglass or plywood in place of conventional planking. In the event that plywood is used the plywood must be 3/8" min. or 9 mm thickness. Regardless of which material is used the weight per square foot of sides, bottom and deck must not be less than the weight per square foot of the new conventionally planked red cedar hulls. Furthermore, regardless of which material is used the total weight of hull, rig and equipment must not be less than 500 lbs. Plywood boats must have standard framing as to the thickness and material. All boats, either plywood or fiberglass, must conform to standard Hampton exterior hull lines called for in plans and specifications.

3. Racing Numbers and Emblem:

Emblem - Arrow head to point toward mast on both sides and shall be at least 15 in. high.

Number to be 12 in. high, block type of suitable easily distinguished color, sewed on both sides of mainsail. Top of emblem to be 4 ft. 0 in. below headboard and number below.

Racing numbers are assigned by the Secretary.

4. Measurements:

Length overall from forward side of stem to aft side of transom at deck line. All deck measurements to be exclusive of molding and trim.

TITLE II - HULL DIMENSIONS

1. Length overall 18 ft. 0 in.
2. Length water line 14 ft. 0 in. - not an official measurement.
3. Beam at deck (maximum) 5 ft. 9 1/2 in.
4. Draft of Hull only 7 1/4 in. - not an official measurement.
5. Beam at chine (maximum) 5 ft. 2 1/4 in.
6. Half breadths and depths of hull at various stations as per plans.

TITLE III - PLANKING

1. Keel, mahogany or oak 1 in. thick, width 7 1/2 in. in way of centerboard trunk, tapered in width at ends as per plans.
2. Bottom planking - Cedar, White Pine, Mahogany or Cypress 5/8 in. thick.
3. Side planking - Cedar, White Pine, Mahogany or Cypress 5/8 in. thick.
4. Sternboard - Mahogany or Oak 7/8 in. thick. Scuppers in the transom are prohibited or option 3/4 in. Marine Mahogany plywood.
5. Options - Sides and bottom planking may be shiplapped; garboard and keel may be rebated; hull covering such as fiberglass may be used.

TITLE IV - STEM

1. Stem - Oak, Mahogany or Ash sided 2 1/2 in., molded as per plan.

TITLE V - FRAMING

1. Side frames - Oak or Mahogany sided 13/16 in. or 3/4 in. molded 1 3/4 in. at deck, and 2 3/4 in. at chine.
2. Bottom frames - Oak or Mahogany sided 13/16 in. or 3/4 in. molded 2 in. at chine, 3 in. at keel.
3. Deck beams - Spruce, Cedar, Cypress or White Pine sided 13/16 in. molded 1 3/4 in. Camber shall be 3 3/4 in. in 6 ft. as measured at frame No. 6; same camber from frame No. 6 aft. Camber for beams forward of frame No. 6; to suit straight line from frame No. 6 stem at sheer on center line.
4. Stern knee - Oak or Mahogany 1 3/4 in. thick, molded as per plan.
5. Chine - Oak, Mahogany, Spruce or Yellow Pine 3/4 to 1 3/4 in.

TITLE VI - CENTERBOARD TRUNK

1. Bed log - Spruce, Mahogany or Cypress sided 1 1/8 in. molded as per plan.
2. Upper log - Cedar, White Pine, Mahogany, Fir or Cypress sided 7/8 in. molded as per plan.
3. Or 3/4 in. Marine Mahogany in one piece vs. the two piece design above.
4. Kingspost - Oak or Mahogany sided 13/16 in. or 3/4 in. molded as per plan.
5. Options - Forward Upper Corner of centerboard well may be cut off 5 inch by 5 inch as per plan.

TITLE VII - DECKING

1. Planking - Cedar, White Pine, Mahogany, or Cypress 5/8 in. thick, or fiberglass or 9 mm marine plywood.
2. Deck Covering - Canvas No. 12 recommended. Painted or varnished deck without canvas is permitted.
3. Molding - Mahogany, Oak rubber or synthetic rubber 1 in. x 5/8 in.
4. Clamps - Fir, Cedar, White Pine, Spruce or Cypress 3/4 in. x 1 3/4 in.

TITLE VIII - COCKPIT

1. Size and shape of cockpit shall be as per plan.
2. Coaming - Mahogany or Oak 5/8 in. thick, molded as per plan.
3. Thwarts - Cedar 7/8 in. thick. Installation optional.
4. Footings (floorboards) - Cedar (or any material 5/8 in. thick); width and spacing as per plan. Number of floor boards shall be eight, and shall extend between frames 6 and 12 or 13.
5. Options: Centerboard seat, brace at aft end of wall, stern seat and the two outboard floorboards may be omitted.
6. Point of intersection of the cockpit coaming forward of the mast may be rounded off to round corner not to exceed 2 in. in radius.

TITLE IX - FASTENINGS

1. Fastenings - plankings to frames, galv. boat nails.
2. Deck - planking to beams, galv. boat nails.
3. Frames bolted with 1/4 in. bronze bolts at chine. 4 sheer.
4. Stem and stern knee bolted with 1/4 in. bronze bolts.
5. Keel to bed Log - brass screws No. 14 x 2 3/4 in.
6. Options: Material, type and size.
7. Or fasteners can be of resistant material in lieu of the above.

TITLE X - MAST STEP AND PARTNER

1. Mast step - Oak, Mahogany 1 in. - 2 in. thick, 5 in wide. Mast Partner - Oak, or Mahogany 1 in. thick, 8 in. wide or 3/4 in. plywood 8 inches wide or 1/8 in. thick aluminum channel.

TITLE XI - SPARS

1. Mast - Wood or aluminum, solid or hollow, slotted or with sail track with external or internal halyard. Mast cross-section may be square, round, oval or streamlined. Length overall 25 ft.-3 in. with limitations, under 3 in., over 7 in. Weight of bare spar not to be less than 21 pounds. "Bare Spar" means the mast with sail track or tube, halyard tube or sheave, tangs, heel plate, and spreader attachment fittings.
2. Revolving mast barred. Mechanical means of adjusting the mast at the step barred. Rake of mast recommended, one half inch per foot.
- 3a. Except as provided in Option 3b below, the following specifications shall apply. Top limit of the luff of the mainsail is to be clearly indicated by a one inch band of any contrasting color placed on the mast, so that the upper edge of the band shall be 23 ft. 7 3/4 in. above deck. An additional band shall be placed on the mast with the top edge 23 in. above deck. The distance between the top edges of each band shall be 21 ft. 8 3/4 in. The mainsail may be hoisted and flown between the top edges of the bands described in this subsection.
- 3b. **Option:** For boats using mainsails measured and approved prior to January 1, 2007 under Title XV, subsection C, the following optional specifications may be used to establish the position of the mainsail on the mast. Top limit of the luff of the mainsail to be clearly indicated by a one inch band of any contrasting color placed on the mast, so that the lower edge of the band shall be 23 ft. 1 3/4 in. above deck. An additional band to be placed on the mast with the top edge 14 in. above deck 21 ft. 11 3/4 in. between bands. An additional set of bands of a color other than and in addition to the above may be placed on the mast so that the lower edge of the band shall be 23 ft. 6 3/4 in. above deck. The lower band of the same color is to be placed on the mast with the top edge 19 in. above the deck. The main sail may be hoisted and flown between either of the two sets of bands described above as long as the top and bottom band used at the time are the same color.

4. Boom - Wood or aluminum, slotted or with sail track. Boom at aft end must bear a one inch band of any contrasting color positioned so that the forward edge shall be no more than 10 ft.-3 in. from the aft side of the mast. Boom may be any shape or diameter including round, square, oval or tee, but not more than 5 inch total vertical depth at any point. Flexing of the boom is permitted only by use of the main sheet and the boom vang.
5. Whisker Pole - Material and length optional.
6. Reefing gear - One set of reefing points may be used in the mainsail.
7. Fittings - Optional.
8. Options - Position of mast at deck as shown on plan, may be shifted 4 inches forward or aft for balance. Rake of mast as desired.

TITLE XII - CENTERBOARD

1. Centerboard - 3/16 in. to 1/4 in. aluminum, plate, shape and dimensions as per plan.
2. Options - Forward upper corner of centerboard may be cut off 3 3/4 inch by 3 3/4 in. as per plan.

TITLE XIII - RIGGING

1. Material, size and arrangement of standing and running rigging is optional, except boomkins, bowsprits, and permanent backstays are barred.
2. The standing rigging shall not extend over the deck plan including molding, unless spreaders are used, in which case the width between shrouds shall not exceed the maximum width of the hull including molding.
3. One trapeze on each side of the boat may be used, for the crew, only.

TITLE XIV - RUDDER

1. Rudder material - Any wood or fiberglass, 1 in. thick, shape as per plan.
2. Rudder fittings - Optional.
3. Kick-up Rudder - Optional, but must be of same profile as specified rudder. Must be constructed with a pin which will lock the rudder in a down position, and the rudder must be locked down while racing.
4. The rudder "checks" may be extended past the lower pintle - optional.
5. Tiller - Any wood, as per plan, but length not to exceed 5 ft.
6. Tiller Options - A thwartship pivoting tiller extension of 36 in. maximum length. Tiller cut to permit vertical lift.

TITLE XV - SAILS

1. All sails must be measured, approved, signed and dated by an official class Measurer appointed by the Commodore pursuant to Title XVII.
2. Materials - Standard cotton racing canvas, nylon, dacron or orlon may be used as per plan. All other materials including, but not limited to, silk, cellophane, kevlar or mylar are prohibited.
3. No sails other than jib and mainsail specified herein are allowed.
4. Dimensions - Sails may have any draft desired. Sails, when measured in the manner described below, must not exceed the following dimensions:

A. Jib:

- Luff - 16'
- Leech Measurement - 14', 4 3/4"
- Foot - 6', 10"
- Mid-girth Measurement - 3', 7 1/2"
- Battens - Jib battens must not be longer than 15", and are limited to three in number. Battens may be made of any material.

B. Mainsail:

- Leech Measurement - 23', 3"
- Mid-girth Measurement - 7', 3"
- Three-quarter-girth Measurement - 4', 6"
- Head Measurement - 4 3/4"
- Battens - Mainsail battens, upper to lower respectively, must not be longer than 53", 40", 40", and 40", and are limited to four in number. Mainsail battens shall be equally spaced along the leech, and parallel to each other. Battens may be made of any material.

C. Mainsail Option: for mainsails measured and approved prior to January 1, 2007, and flown pursuant to Title XI-paragraph 3b.

- Leech Measurement - 23', 5"
- Mid-girth Measurement - 7', 2"
- Three-quarter-girth Measurement - 4', 4"
- Head Measurement - 4 3/4"
- Battens - Mainsail battens, upper to lower respectively, must not be longer than 30", 40", 40", and 40", and are limited to four in number. Mainsail battens shall be equally spaced along the leech, and parallel to each other. Battens may be made of any material.

5. Measurement Procedures -

All measurements should be taken with sails pulled hand taut so as to remove wrinkles across measurement points. Sails are to be measured with the battens in.

The Leech Measurement is the straight line distance between the head and clew.

The Mid-girth Measurement is the distance from the mid-point of the leech to the point on the outside of the boltrope that yields the shortest measurement. To find this measurement, first find the leech mid-point by folding the sail in half along the leech, until the head grommet overlaps the clew grommet. Then mark the leech mid-point at the fold. Then measure from the mark at the leech mid-

point to the luff along the shortest distance to the outside of the luff boltrope.

The Three-quarter-girth Measurement is the distance from the leech at the three-quarter point to the point on the outside of the luff boltrope that yields the shortest measurement. To find this measurement, first find the three-quarter point on the leech by folding the head of the sail along the leech until the head touches the mid-point mark. Then mark the leech at the new fold. Then measure from this three-quarter mark to the luff along the shortest distance to the outside of the luff boltrope.

The main and jib girths are to be measured in the same manner and should be done hand taut, with no wrinkles.

The Head Measurement is the distance from the leech where it terminates at the head of the forward side of the luff boltrope. Measured along the top edge of the sail, no portion of the mainsail shall extend beyond 4 3/4" from the outside of the boltrope.

6. Further Limitations -

Loose footed mainsails, jib booms, clubs, and zippers for draft control are all prohibited.

Headboards, if used, are not to exceed 4" in width along the top edge of the mainsail. The mainsail shall extend no more than 3/4" from the aft termination of the headboard.

Mainsail, when hoisted, must be within the mast and boom bands described in Title XI.

No inserts of any material other than sailcloth of the type predominantly used in the sail are allowed as reinforcements at the clew, tack or head. Sailcloth reinforcement patches may not exceed seven thickness' of sailcloth.

Sails that are irregularly cut to circumvent any of these specifications will not be approved by class Measurers and are subject to disqualification at any time.

TITLE XVI - LIMITATIONS

	Allowed	
	Under	Over
1. Length overall	1/2 in.	1/2 in.
2. Half breadths - deck	1/4 in.	1/4 in.
3. Half breadths - chine	1/4 in.	1/4 in.
4. Number of frames - 13 frames side and bottom, and any number of additional intermediate frames of any wood as desired.		
5. Number of deck beams - 26 (including intermediate deck beams). Seam battens or plywood decks may be used if desired, and if either is used, deck beams shall be at least 13, (in which case such deck beams must be attached to the main frames).		
6. Contour longitudinally - 1/2 in. on stem and stern "up" and "down". 1/2 in. amidship "up" and "down".		

7. Rudder - Must conform in size, design, and position to plan tolerance of 3/16 in. plus or minus allowed on profile.
8. Centerboard position - Must be as shown on plan within 1/2 in and centerboard well must have 13/16 in. or 3/4 in. wide slot as shown on plan. Centerboard handle or pennant length must be such that, with the centerboard in the full down position, a point 1/2 in. below top edge and 1/2 in. forward of after edge of centerboard will be above the outside edge of the keel.

Width of centerboard slot through keel is optional. Keel may be chamfered up to 3/4 in. from garboard stake. Keel may be fared off in line with planking provided 1 in. thickness at center line is kept throughout keel.
9. Centerboard dimension - Profile to be as shown on plan within 1/4 in. Centerboard may have horn projecting above top edge of centerboard to receive handle. A wire or rope pennant may be used. Edges of centerboard may be square, or shaped as desired. May be painted, galvanized or finished as desired.
10. Size and location of main halyard sheave optional. Top side of deck to fitting for attachment of jib halyard fitting on mast 18 ft. 1 in., under 2 in., over 5 in.
11. Camber - 3 in., 1 in., 1/4 in.
12. Mast height overall, under 3 in., over 7 in.
13. Thickness given on planking, decking and framing shall be minimum dimensions.

TITLE XVII – MEASUREMENT CERTIFICATES

1. "Measurers" assigned by the NEC, shall verify each boat and her sails and equipment when the NEC designates the measurer to.
2. The Commodore and Chief Measurer of the Association will confirm appointment of Measurers. The fee for such measurements, if any, shall be arranged by the NEC to its own satisfaction. It is recommended that fee be kept to a minimum in keeping with the spirit of these specifications - namely, to provide a well built, smart little sloop at a minimum cost. The boats that comply in every way with these specifications shall be assigned a certificate to that effect, showing the racing number, and signed by the official measurer. The Secretary of the Hampton One Design Class Racing Association shall issue each certificate, and the certificate shall, if demanded, be shown at races.
3. A yacht under construction must be completed to a stage where the class measurer can measure and certify the boat. The National Secretary must then receive the measurement certification for this yacht before a racing number is issued to the yacht.
4. Plans available only from the Secretary of the Association.

CLASS AND RACING RULES DEFINED

Class Rules:

All rules, regulations and restrictions made by and especially governing the Hampton One Design Class.

Racing Rules:

Rules of right of way and race procedure which apply in general to all yacht racing.