

Part II Technical Specifications Amended May 3, 2015

Section A – General

A1 Language

- 1.1 The official language of the class is English and in case of dispute over translation the English text shall prevail.
- 1.2 The word “must” is mandatory and the word “may” is permissive.

A2 Abbreviations

BSA Bullseye Sailing Association
CCSB Cape Cod Shipbuilding Co.
RRS Racing Rules of Sailing
NOR Notice of Race
SI Sailing Instructions

A3 Racing Rules of Sailing

These class rules must be read in conjunction with the RRS.

A4 Class Rules Interpretation

If a question should arise concerning the Bullseye technical specification section of the Bullseye Class Rules, the question must be submitted in writing to the current Technical Committee Chair for an interpretation.

A5 Technical Experiments

If a fleet wishes to experiment with or otherwise permit a deviation from the class rules, requests shall be sent to the technical committee chairman in writing. Approval for such experiment or deviation will be sent to the requesting fleet in writing and the technical committee chairman may set certain terms, conditions and reporting requirements on any such experiment or deviation. Nothing herein shall prevent a fleet from requiring equipment in addition to the mandatory equipment required. Nothing herein shall prevent a fleet from making Bullseyes more uniform than required by the Class Rules. Purchasing sails from one sailmaker or standardizing what is optional are examples of "more uniform" practices.

Section B - Bullseye Dimensions and Equipment

B1 Standards

- 1.1 No changes or modifications are authorized if not specifically stated in the Association rules. If not stated in the rules it is to be understood it is not authorized.
- 1.2 It is the responsibility of another competitor to protest anyone who is out of compliance. The cost, if any, for a protest resolution may fall on the protestor or the protested, not the host.

B2 Boat Dimensions

LOA 15' 8 ½"

LWL 12' 6 ¾"

BEAM 5' 10"

DRAFT 2' 5"

B3 Weight

3.1 The minimum weight of the Bullseye is 1,350 Lbs

3.2 The weight must be taken including only the following items: hull, deck, keel, deadwood, floor, bulkheads, lazarette door, coamings, rubrail, toerail, all deck hardware that is permanently affixed, mast, boom, boom crutch, rudder, and tiller.

3.3 Correction weight (if required) must be divided into 2 equal amounts and installed forward of the mast step and in the lazarette. Corrected weights must be lead.

B4 Flotation

Factory installed buoyancy equipment must remain installed in the boat. Buoyancy consists of air tanks integral with the hull. Air tanks do not contain pressurized air or foam. They are simply trapped air. Air tanks should be tested for leaks and repaired on a regular basis to maintain air tight integrity. Such equipment consists of the following:

4.1 On boats built before 1962: 1 air tank was installed consisting of the floor fiberglassed to the hull

4.2 On boats built in 1962 the bilge was elongated taking away some of the volume in the floor air tank. To compensate boats built with elongated bilges were supplied with foam installed under the seats

4.3 At the end of 1962 a smaller separate bow air tank was created fiberglassed to the deck & hull. Boats with bow tanks do not need foam under the seats.

4.4 Any additional flotation may be added at the discretion of the boat owner.

B5 Portable Equipment

5.1 Mandatory Equipment

(a) A 5 lb. anchor with a holding strength of 300 lbs. or more, 6 feet of ¼ inch chain, and at least 100 feet of 3/8 inch anchor rode

(b) One U.S. Coast Guard approved life jacket of suitable size for each person on board

(c) A paddle or an oar at least 4 feet in length

(d) A horn in working order

(e) A bucket suitable for bailing. In addition, a manual pump may also be carried

(f) A navigational compass in working order

(g) Protest Flag

5.2 Optional Equipment

(a) electronic wrist watch timers

(b) electronic compasses (limited to display of time and direction)

(c) portable running lights

(d) automatic bilge pumps when a boat is lying unattended at a mooring

(e) VHF radio (see Rules for Regattas)

B6 Prohibited Equipment

6.1 Outboard engines

6.2 Electronic navigation devices/GPS

6.3 Use of hand held communication devices to access information from the internet or other parties is strictly prohibited.

B7 Spars

No change in the dimensions, location, weight, shape or materials of the spars from such dimensions, location, weight, shape and materials which are standard for the Cape Cod Bullseye is permitted. Changes which are needed for maintenance or repair due to age or damage are permitted so long as they do not change the dimensions, location, weight, shape and materials which are standard for the Cape Cod Bullseye.

7.1 Mast

(a) Each racing Bullseye mast must be made from the Zephyr #2 extrusion and be assembled by Zephyr Products, a division of Cape Cod Shipbuilding Co. The mast head sheave, taper, jib halyard hound assembly, spinnaker pole track, sail feed slot and exit boxes must be made and installed by Zephyr. With the exception of spreader brackets, these are all standard items on new masts.

(b) The mast must be stepped in the fixed aluminum mast step casting.

(c) Masts may be of clear anodized or bare aluminum. Owners may paint their masts.

(d) Optional items on the mast; these may be installed by anyone.

(1) Wind indicator

(2) Compass bracket

(3) Spinnaker pole topping lift

(4) A set brackets and of limited swing spreaders

(5) Flag halyard

(6) Spinnaker halyard cleats

(7) Spinnaker pole downhaul cleat

(8) Turning blocks for optional longer spinnaker halyard

(9) Block shackled to spinnaker pole deadeye

7.2 Boom

(a) Each racing Bullseye boom must be made from the Zephyr #1 extrusion and be assembled by Zephyr Products, a division of Cape Cod Shipbuilding Co.

(b) Routine maintenance such as hardware replacement on the boom is permitted without re-measurement

(c) Booms may be of clear anodized or bare aluminum. Owners may paint their booms.

(d) Mandatory boom equipment

- (1) Goose egg casting on aft end of extrusion
- (2) Clew outhaul fitting supplied by Zephyr Spars
- (3) Roller Reefing Gooseneck with slide & tack pin
- (4) Outhaul cleat (location may be anywhere on the boom)

(e) Optional boom equipment

- (1) Boom vang plate
- (2) A second outhaul cleat
- (3) Outhaul hook with block, or sheave for external outhaul
- (4) Cleat or block at mid boom for mainsheet
- (5) Block shackled to goose egg tang for standard mainsheet arrangement
- (6) "U" shaped bails are permitted

7.3 Spinnaker Pole

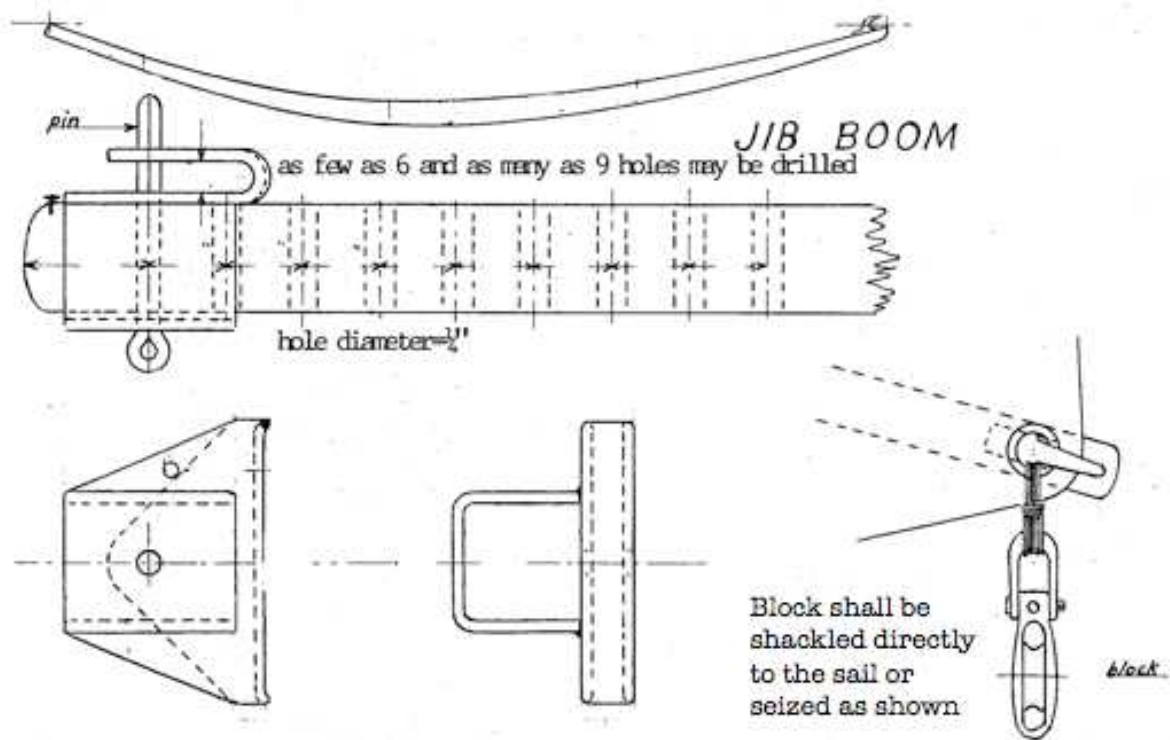
- (a) The maximum overall length of the spinnaker pole is 6'9".
- (b) The outside diameter of the aluminum tubing for the spinnaker pole is 1 1/4"
- (c) The manufacturer of the aluminum spinnaker pole is Zephyr Spars, a division of Cape Cod Shipbuilding.
- (d) Permitted surface finishes include clear anodize on aluminum spinnaker poles, and varnish or paint on wood spinnaker poles.

7.4 Whisker Pole

An aluminum or wood whisker pole, with minimum length 71 inches may be used to steady the working jib or Genoa.

7.5 Jib Boom/ Club

The jib club must be used with the working jib. The jib club must be pinned to the forestay using the provided stainless steel jib club slide. The fixed hook on the aft end of the jib club must be inserted in the clew grommet of the working jib as shown below. A single sheaved block is required at the clew end of the jib club. (See diagrams below and with B 9.7 (d).)



B8 Standing Rigging

8.1 Dimensions (standard length)

Minimum length pin to pin with Turnbuckle all the way closed:

Shroud length pin to pin 16' 7" long, 1/8" 1X19 SS wire

Forestay length pin to pin..... 16' 6.5" long, 1/8" 1X19 SS wire

8.2 The top swage fittings on the standing rigging must be a jaw, and the bottom swage fittings must be adjustable turnbuckles. The turnbuckles may be open or closed body.

8.3 An additional pair of chainplates may be installed six inches aft from the standard chainplate position. Shrouds may be moved aft six inches from the standard deck attachment positions or returned to the standard deck attachment positions before the start of any day of racing.

8.4 No change in the locations or dimensions of the standing rigging, which are standard for the Cape Cod Bullseye, is permitted except by the vote of the membership. No adjustments to any of the standing rigging are permitted to be made after the start of or during any race, except for emergency and temporary repairs. Spreaders may be utilized.

8.5 Routine maintenance such as replacement of the standing rigging is permitted without re-measurement

8.6 A spinnaker sheet catcher may be used on the forestay chain plate or forestay turnbuckle not to protrude more than 4" from the bow of the boat. This extension does not change the LOA (Length Over All) of the boat.

B9 Running Rigging

9.1 Running rigging (lines to raise & lower, pull in & out the sails) may be installed at the discretion of the owner and in conformity with individual Chartered Fleet Standards unless otherwise restricted in these BSA class rules.

9.2 Routine maintenance such as replacement of the running rigging is permitted without re-measurement

9.3 No special device, such as hiking straps, to carry weight outside the rail of the boat is permitted. No shifting ballast is permitted.

9.4 The mainsail sheet may be led, single or double part, to blocks & cleat located on the aft deck. An adjustable traveler arrangement is permitted. Moving the mainsheet cleat to a mid boom headknocker or on a floor mounted barney post is permitted.

9.5 A spinnaker pole downhaul fairlead located on the deck is optional.

9.6 The mainsail clew outhaul must be led to a clew outhaul fitting or a block attached to the clew outhaul fitting.

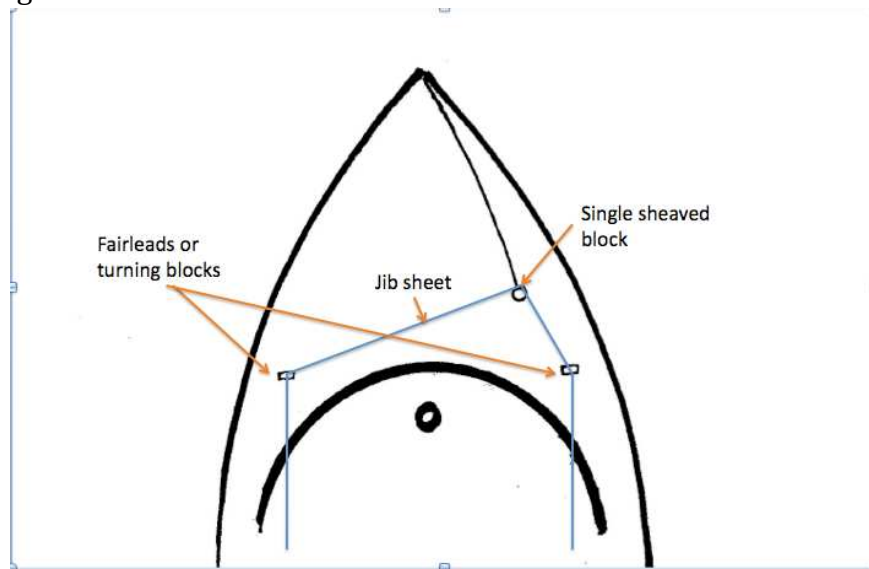
9.7 Mandatory Running Rigging

(a) Main halyard

(b) Main sheet

(c) Jib halyard

(d) Jib sheet for working jib: "free running" so that the jib sheet runs unimpeded through the port fairlead, directly through the single sheaved block on the jib club, and directly through the starboard fairlead. "Double ended" means that both ends of the jib sheet end in the cockpit and that either end can be adjusted (tightened or eased) to effect the same job. The working jib must be "self tending". (See diagram.)



- (e) Outhaul line for mainsail(f) Downhaul line for boom gooseneck

9.8 Optional Running Rigging

- (a) Mainsail Cunningham line: The use of cunninghams will be allowed, as long as they are manually adjusted. Traditional block and tackle designs are permitted.
- (b) Spinnaker halyard
- (c) Spinnaker sheet and guy
- (d) Spinnaker pole lift and downhaul
- (e) Genoa Sheet
- (f) Adjustable traveler lines
- (g) Boom Vang

Section C – Hull

C1 Modifications, Maintenance and Repair

- 1.1 Generally, hull measurements are not needed for the fiberglass Cape Cod Bullseye, since all Bullseyes must be built over and around molds owned and maintained by Cape Cod Shipbuilding Co. (“the Company”) If new molds are built, or in case of the destruction of the Bullseye molds by fire, or other cause beyond control, the company agrees to reproduce the molds, so that the one-design philosophy of the Bullseye remains unchanged.
- 1.2 No change in the dimensions, location, weight, shape or materials of any parts of the hull from such dimensions, location, weight, shape and materials which are standard for the Cape Cod Bullseye is permitted. Changes which are needed for maintenance or repair due to age or damage are permitted so long as they do not change the dimensions, location, weight, shape and materials which are standard for the Cape Cod Bullseye.
- 1.3 Holes not bigger than necessary for the installation of fittings and passage of lines are permitted in the cuddy cabin or deck.
- 1.4 Routine maintenance such as paint removal, painting and polishing is permitted without re-measurement.
- 1.5 If any hull moulding is repaired in any other way than described in C1.2-1.4 an official measurer must verify that the external shape is the same as before the repair and that no substantial stiffness, or other, advantage has been gained as a result of the repair. The official measurer must also describe the details of the repair in writing to the class officers.

C2 Parts

- 2.1 Mandatory parts
 - (a) Deck
 - (b) Air Tanks/floor (integral with the hull & deck)
 - (c) Rubrail

- (d) Toe rails
- (e) Bulkheads
- (f) Fiberglass deadwood
- (g) Seats

2.2 Optional parts

- (a) Thwarts
- (b) Lazarette door
- (c) Bulkhead covers

2.3 Builders

The hull, deck, air tanks, fiberglass seats, floor, deadwood & keel must be built and installed by Cape Cod Shipbuilding using the Bullseye molds. Wooden seats may be made by anyone.

C3 Deck

The deck must be built from fiberglass using the above described molds.

C4 Rubrail

Rubrails are required on racing Bullseyes. Rubrails are vinyl on boats built from 1956 to present and are fiberglass bumps on boats built in or before 1955.

C5 Toe Rails

Toe rails from bow to stern are required on racing Bullseyes. The toe rail measures 5/8" high by 3/4" wide.

C6 Bulkheads

Each Bullseye has a stern bulkhead which contains the lazarette door as well as 2 smaller bulkheads forward of the seats under the aft edge of the cuddy cabin.

C7 Assembled Hull/Deck

7.1 Mandatory Fittings

- (a) Mooring cleat on foredeck
- (b) Bow line chock on bow
- (c) Two jib fairleads on foredeck as installed by CCSB or two single sheaved turning blocks shackled to the fairleads.
- (d) main and jib halyard cleats

7.2 Optional Fittings

- (a) 1 or 2 Halyard winches
- (b) Jib sheet/Genoa/Spinnaker winches
- (c) Genoa tracks & blocks
- (d) Stowage clips for paddle(s), spinnaker pole, sail bags and other equipment
- (e) Draining holes in hull to drain main air tank, provided these holes are filled with threaded air tank test plug not to exceed 3/4" in diameter. The test plugs must keep the watertight integrity of the buoyancy tank and must be securely in place.

- (f) Manual Bilge pump
- (g) Cockpit cover eye straps
- (h) Handrails
- (i) One additional mainsheet stand up block for double purchase mainsheet system.
- (j) A boom vang fitting; standard location is under the fixed mast step.
- (k) 2 Spinnaker sheet and guy turning blocks, fairleads, blocks, and cleats, spinnaker guy twing fitting
- (l) One spinnaker pole downhaul fairlead
- (m) Inspection ports can be installed, but may be a source of air tanks losing their air tight integrity.

Section D – Hull Appendages

D1 Modifications, Maintenance and repair

No change in the dimensions, location, weight, shape or materials of any hull appendages from such dimensions, location, weight, shape and materials which are standard for the Cape Cod Bullseye is permitted. Changes which are needed for maintenance i.e., sanding & painting. or repair due to age or damage are permitted so long as they do not change the dimensions, location, weight, shape and materials which are standard for the Cape Cod Bullseye.

D2 Mandatory Parts

- 2.1 Lead Keel
- 2.2 Fiberglass Rudder
- 2.3 Wooden Tiller
- 2.4 Fiberglass Deadwood
- 2.5 Gudgeons

D3 Keel

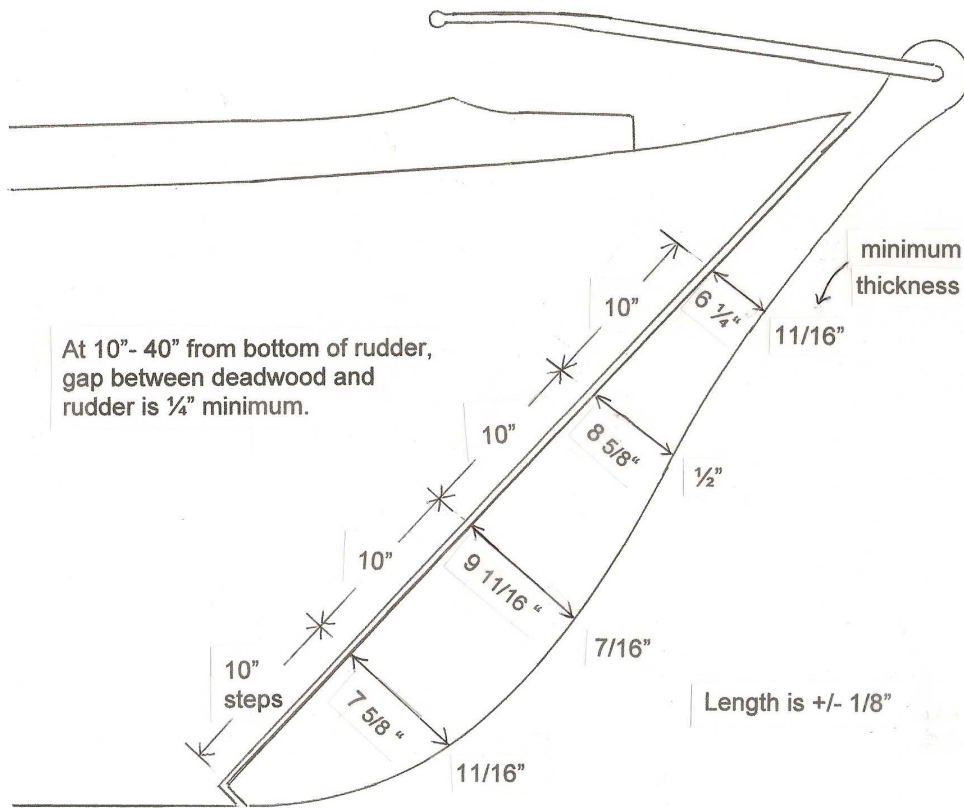
- 3.1 The keel must be made of lead and be manufactured from a mold owned and maintained by Cape Cod Shipbuilding Co.
- 3.2 For all racing Bullseyes the keel must remain external as manufactured by CCSB and must not be encapsulated in fiberglass, so as to change the configuration of the keel or hull.
- 3.3 The keel and hull bottom from the waterline down must be covered with anti-fouling bottom paint.
- 3.4 The keel must be installed with bronze or stainless steel keel bolts.
- 3.5 The minimum weight of the keel is 750 pounds.

D4 Rudder

- 4.1 The fiberglass rudder must be manufactured by Cape Cod Shipbuilding Co.

4.2 The Rudder shape, leading edge or trailing edge must not be changed from that supplied by the manufacturer.

4.3 The drawing below, published in the January 2004 Bullseye Newsletter, shows the rudder dimensions in ten inch steps from the bottom of the rudder as well as the required ¼ inch space between hull and rudder.



4.4 Mandatory Fittings

- (a) Two pintles permanently installed to the rudder
- (b) 1 cotter pin placed in the upper pintle to prevent loss of rudder
- (c) anti-fouling bottom paint is required below the waterline

D5 Tiller

- 5.1 The tiller must be wood, manufactured by Cape Cod Shipbuilding Co.
- 5.2 Tiller extensions are permitted.