

Barnegat Bay A-cat Class Rules

2007~~10~~ revision [\(based on 2007 edition\)](#)

HULL

1.1 The lines(the shape of the hull from the rubrails down, including the skeg profile) of any new boat hull must conform exactly to any single hull in use as of 2001. Existing boats may not have their basic hull shape modified in any way. (All boats currently comply as of 2007)

1.2 No exotic or untraditional materials may be used for the construction or modification of ANY part of the boat other than the following exceptions. Details of the material allowances for the centerboard, rudder, tiller, deck surface, cabin top surface, cockpit sole surface, chafe protection for spars, standing and running rigging will be detailed individually.

1.3 In other than the above mentioned exceptions, “exotic or untraditional materials” include but are not limited to:

- 1 High strength synthetic materials: such as Carbon fiber, Kevlar, Technora, Spectra, Vectran, Dyneema, Certran, fiberglass material of any kind (e-glass, s-glass), etc.
- 2 Core materials: such as Divinycell, Balsa core, Nomex, Core cell, Foam core composite panels, polyurethane expanding foams, Honeycomb type core of any kind, cork, etc.

1.4 Plywood is not to be considered an untraditional material and may be used in the construction of the hull and appendages. As a side note, plywood actually did exist (thought used mostly for paneled interior doors) in the 1920’s when the original boats were built.

1.5 No wood with an average specific weight of greater than 4 lbs. per board foot will be allowed in the construction of any part of the boat. These uncommon and exotic woods are to be considered unnecessarily heavy and since their use would only serve to make a desired area of the boat as heavy as possible within the scantling limitations, they are banned. The woods include but are not limited to Lignum Vitae, African Iron bark, Greenheart, all species of the “ironwood” family.

Common boatbuilding weights in average pounds per board foot (12" x 12" x 1")
(specs from Glen-L Marine)

Hardwoods:

Greenheart	5.0
White Ash	3.5
African Iron Bark	5.2
Lignum Vitae	6.3
African Mahogany	2.7
Honduras Mahogany	2.8
Philippine Mahogany	3.3
White Oak	3.8
Okoume (Gaboon)	2.1
Teak	3.6
Black Iron Wood	6.0

Softwoods:

Atlantic White Cedar	1.9
Alaska Cedar	2.7
Port Orford Cedar	2.5
Western Red Cedar	1.9
Bald Cypress	2.8
Douglas fir	2.8
Eastern Pine	2.3
Long Leaf Yellow Pine	3.4
Redwood	2.3

1.6 Hull framing may be steam bent, split frame, laminated, sawn, or any combination thereof.

1.7 There may be no less than 40 hull frames or "ribs" per boat. With the exception of the first seven frames aft of the stem, hull frames must be between 1 ¼ inch and 1 3/8 inch in width and between 1 inch and 1 1/8 inch in depth at any point. The dimensions of the first seven frames may be no smaller than 1 ¼ inch wide and 1 inch in depth but may be as large in section as the builder desires. (All boats currently comply as of 2007.)

1.8 The hull planking must be between 11/16 inch and 1 inch in thickness. (All boats currently comply as of 2007.)

1.9 The floor timbers must be made of single piece solid wood and be between 1 ¼ inch and 1 ¾ inch in thickness and there may be no more than one floor timber per frame. The maximum height of a floor timber from the main cabin bulkhead to a point 2 feet forward of the front edge of the centerboard trunk shall be 6 inches. The maximum height of a floor timber from the main cabin bulkhead aft may be 10 inches. (All boats currently comply as of 2007.)

1.10 The cabin sole surface must be between 3/8 inch and 1 inch in thickness at all points. The cabin sole of any boat in use as of the summer of 2007 will be grandfathered.

1.11 The cockpit sole must be between 3/8 inch and 1 inch thickness at all points. (All boats currently comply as of 2007.)

1.12 The cabin top must be between 3/8 inch and 3/4 inch in thickness at all points. (All boats currently comply as of 2007.)

1.13 The deck surface must be between $\frac{1}{2}$ inch and $\frac{3}{4}$ inch in thickness at all points. (All boats currently comply as of 2007.)

1.14 With the exception of a fiberglass type covering (if desirable), the deck, cabin top, cabin sole, cockpit floor must be built entirely of wood and glue (or bonding agent of choice). Plywood, strip planking, cold molding, single planking, etc. are all allowed. They may be covered by any fabric or synthetic reinforcement at the builder's discretion.

1.15 There may be no less than 20 deck beams per boat. There may be no more than 20 inches of separation between deck beams at any point. Any deck beams in any boat in use as of the summer of 2007 will be grandfathered. (All boats currently comply as of 2007.)

1.16 The deck beams must be no less than 1 inch wide and $2\frac{1}{2}$ inch tall at any point. (All boats currently comply as of 2007.)

1.17 The centerboard trunk may be no shorter than 29 inches and no taller than 44 inches from the inside surface of the lowest point of the hull. (All boats currently comply as of 2007.)

1.18 The main "walls" of the centerboard trunk above the bedlogs may be no thicker than $1\frac{1}{4}$ inch at any point. (All boats currently comply as of 2007.)

1.19 The each bedlog may be no taller than 14 inches from the inside surface in the hull planking at any point. (All boats currently comply as of 2007.)

1.20 The each bedlog may be no wider than 2 inches at any point. (All boats currently comply as of 2007.)

1.21 There must be a structurally functional bulkhead at the aft edge of the main cabin. The main bulkhead may be no thinner than $\frac{1}{2}$ inch and be no thicker than $1\frac{1}{4}$ inch. (not including trim). (All boats currently comply as of 2007.)

1.22 There must be a structurally functional bulkhead at the forward edge of the aft deck. (All boats currently comply as of 2007.)

1.23 The mast's shrouds must be connected to the hull by way of chainplates made of bronze and must be no less than $\frac{1}{4}$ inch in thickness and no less than $1\frac{1}{2}$ inches in width per shroud attachment point for its entire length. The chainplates must protrude a minimum of $1\frac{1}{2}$ inches above deck level and pass continuously through the deck surface and extend a minimum of 20 inches below deck and fastened securely to the hull. Any current boat not conforming to this rule will be considered grandfathered if it has been in place as of the summer of 2007. (All boats currently comply to the design rule as of 2007. All boats built since 1984 comply with the material specifications.)

1.24 The chainplates for the lower shrouds must be no less than 10 inches further aft than the centerline of the mast with the boat rigged. The lower shrouds must be attached to this chainplate. (All boats currently comply as of 2007.)

1.25 The mast's forestays must be attached to the hull in such a way that a bronze strap of some sort is utilized to carry the rigging loads down the front edge on the stem. The bronze stem band must run continuously from a minimum of 1 ½ inches above deck level to a minimum of 36 inches below deck level. (All boats currently comply as of 2007.)

1.26 The aft deck may not be less than 29 inches in depth fore and aft at any point from the outside edge of the transom inward. (All boats currently comply as of 2007.)

1.27 Side decks may not be less than 17" and no more than 20" wide measured from the outside edge of the sheer plank to the outboard edge of the cabin side/coaming. (All boats currently comply as of 2007.)

1.28 The cockpit length (from the forward edge of the back deck to the cabins after edge) may not exceed 10' 9". (All boats currently comply as of 2007.)

1.29 The cabin must be at least 6 feet 6 inches in length. (All boats currently comply as of 2007.)

1.30 The cabin front must be a minimum of 8 feet 6 inches from the stem. It must be located immediately aft of the forward main deck beam as clearly specified in the original plans. (All boats currently comply as of 2007.)

1.31 The exposed cabin side must be at least 10 inches above deck level at the main bulkhead. Any boat in use as of the summer of 2007 will be grandfathered. (All boats currently comply as of 2007.)

1.32 The exposed cabin front must be at least 6 ¾ inches above deck level at the centerline. Any boat in use as of the summer of 2007 will be grandfathered. (All boats currently comply as of 2007.)

1.33 Cabin top crown must be at least 7 ½ inches at the after edge of the cabin. (All boats currently comply as of 2007.)

1.34 The centerboard pin location must remain near the forward lower corner of the trunk within 2 inches of the original location shown on the original plans of which the boat was or is based upon. (All boats currently comply as of 2007.)

1.35 The traveler must be a bent hoop made of ¾ inch bronze and may be no longer than 50 inches. The traveler must be threaded at either end and be bolted through the aft deck. It must be no less than 4 inches and no more than 8 inches above the deck surface when installed in the boat. (It is believed that all current travelers meet the 2001 rules of a 50

inch maximum dimension as of 2007. Any traveler currently in use that has been constructed differently will be considered grandfathered.)

1.36 No lead or artificial means of ballast will be allowed outside the hull. (All boats are assumed to comply.) Any lead and (or) artificial means of ballast will only be allowed in direct accordance to the rules definition of weight placement and must be securely and mechanically fastened to the inside of the hull. (all boats are believed to comply as of 2007.)

1.37 The hull must be single carvel planked with traditional seam joints. The plank edges are not to be bonded permanently together in any way. Only a flexible type caulk will be allowed in the seams. (3M 4200, 3M 5200, Boatlife Lifecaulk, etc) (All boats currently comply as of 2007.)

1.38 Any manner of finishing of the interior of the cabin (cabinet, bunks, built in head, cushions, ceiling planks, etc.) is allowed as long as there are no obviously excessive measures to concentrate great deals of weight near the center and lower part of the hull.

1.39 All fastenings used for the construction of the hull must be of a traditional nature. Copper, bronze, stainless, brass, and monel fasteners are acceptable. Aluminum, titanium, exotic lightweight alloys, etc. are not allowed. (All boats currently comply as of 2007.)

1.40 All hand-made metal brackets and other structural hardware fixtures are to be made of bronze or brass. (All boats currently comply as of 2007.)

1.41 Each fully rigged boat with no more than all the necessary sail handling equipment, standing and running rigging including the sail, the anchor, and a 35 lb. minimum weight battery, may weigh no less than 4,700 lbs. Things that are not to be on the boat for the weigh in include all lifejackets, the throwable life saving device, the oar, any extra equipment, coolers, battle flag, centerboard push stick, extra running rigging and dock lines, sail cover, cockpit cover, etc. Basically... a boat ready to sail with everything stripped out of the interior not permanently mounted to the hull other than the one 35 lb. minimum weight battery and the anchor. Permanently mounted equipment may include an onboard battery charger (5 lb. maximum unit), a VHF radio, a stereo, bilge pumps, and any other allowable electronics equipment. The boat is to have its bilge pumped dry. The measurement must be made with the hull fully saturated and swollen (boat having been in the water for more than one week). For any boat that weighs less than 4700 lbs, the first 100 lbs is designated to be placed between the floor timbers and centered within 5 inches of a point 15 feet 4 inches aft of the extreme forward edge of the stem and any remaining weight being split into 3 equal weighted amounts and placed as follows. The first part goes alongside the original 100 lbs. The second must be placed a minimum of 7 feet 8 inches forward of the point 15 feet 4 inches aft of the stem. The third part must be placed a minimum of 7 feet 8 inches aft of the point 15 feet 4 inches aft of the stem. All weights used for ballast must be securely and mechanically fastened in place in the hull.

1.42 The established minimum allowable weight for a newly constructed or newly rebuilt A-cat in the same fully swollen and rigged for racing condition as detailed above is 4300 lbs. (2001 rule). If any boat weighs less than 4300 lbs before adding weight, the remaining weight that is needed to make the minimum 4300 lbs must be split equally in two parts. One part is to be mounted to the underside of the deck just behind the rear bulkhead aft of the cockpit. The other section is to be mounted to the underside of the deck no less than 24 inches forward of the main cabin front. For example, if a boat weighs in at 4100 lbs, 200 lbs is needed to reach the 4300 lb. minimum. Of the 200 lbs needed, 100 lbs. would be mounted under the back deck at a point 25 inches from the extreme after edge of the hull, 100 lbs. would be mounted under the front deck at a point 72 inches from the stem. Now at 4300 lbs. the remaining 400 lbs. needed would be spread out as outlined in rule 1.42 above. Any boat weighing less than 4300 lbs. (or any boat for that matter) has the option of adding weight to the boat by adding structurally beneficial materials, cabin interior details (head, built in cabinet, bunks, ceiling planks), a heavier centerboard (up to 270 lbs.), etc. as desired as long as the changes do not step outside the stated specification allowances and rules governing construction. This rule shall apply equally to existing boats that weigh less than 4300 lbs. without ballast.

1.43 If it suspected that a boat is being intentionally raced without complying with all of the weight standards, an official protest can be made by any boat owner or representative appointed by an owner. The class measurer(s) will be required to be on hand at the time of the official protest to document the amount and placement of all the required ballast. An official weighing of the boat within the same years sailing season is required. At this weigh in, the class measurer(s) will compare his(her) records with what is in the boat. If it is determined that either the boat's ballast weights have been changed or the boat weighs in at any more than 50lbs. underweight (4650 lbs. to account for a margin for error in weighing) the boat will have 15 points added to the overall BBYRA score for that season. If the weigh in for the protest is not performed during a regular fleet weigh in, the entire expense for having the protested boat officially weighed in will be the responsibility of the protested boat/owner if they are found not to be in compliance with the rules. If the boat in question is found to be within compliance of the rules the protesting boat/owner will bear the expense.

1.44 If it is suspected that a boat is not in compliance with any of the rules, a complaint may be lodged with the fleet captain. If the situation can not be resolved simply, the fleet may be asked to vote by majority what action should be taken.

1.45 The minimum gap allowed between the centerboard and the centerboard slot located at the bottom of the skeg will be 1/8 inch at all points with the board in any position up or down. Flexible gasket materials (e.g. Mylar, rubber, etc.) of any kind will not be allowed. Under no circumstances may the slot opening at the bottom of the skeg be reduced or "closed up" in any way when the centerboard is retracted completely into the slot. (All boats currently comply as of 2007.)

1.46 Any means to reduce friction between the centerboard and the centerboard trunk will be allowed.

1.47 A minimum of a 5/8 inch bronze, brass, or stainless rubrail must be installed continuously from the within 2 inches from the stem band to within 2 inches of the transom. Any boat in use as of the summer of 2007 will be grandfathered. (All boats but Spy II currently comply as of 2007.)

1.48 All bow chocks, deck cleats (unless they are made of wood) , any cleats that may be mounted on the backside of the main bulkhead (unless they are made of wood), any chafe strips (usually small sections of metal rubrail or half round stock) used on the hull, mast, or boom must be either bronze or brass in material. (All boats currently comply as of 2007.)

1.49 The centerboard trunk of any boat may not be built (new boats) or altered(existing boats) in any way that would change the centerboard's radial length or general fore and aft position in the hull. The radial length of any boat must conform to within 1 inch of the original plans design of that particular boat. (All boats currently comply as of 2007.) The Bat is the only existing boat with no publicly available surviving original plans from which it was built form. The boat's design is somewhat unique and has a centerboard radial length (8 feet 5 inches) which makes it slightly shorter than a Frances Sweisguth designed length (8 feet 10 inches) for the Wasp, Ghost, Raven, Witch, Torch, Spy II, Lightning and longer than Charles D. Mower design (7 feet 5 inches) for the Vapor, Lotus, Mary Ann, original Spy, Tamwock. It is assumed that the Bat's centerboard trunk fore and aft position, pin location, and centerboard radial length is correct to its original 1923 construction. (All boats currently comply)

CENTERBOARD

2.1 The centerboard must be between 1 inch and 1 ¾ inch in width. (All boats currently comply as of 2007.)

2.2 The centerboard and (or) rudder may not be made of metal (solid or hollow construction). (All boats currently comply as of 2007.)

2.3 The centerboard may not weigh more than 270 pounds. (All boats are assumed to comply as of 2007.)

2.4 The centerboard's core structure may be constructed of plywood, solid wood, fiberglass, or any combination there of. (All boats currently comply as of 2007)

2.5 Any manner of available exotic materials may be used for structural reinforcement, chafe protection, outer covering, etc. These include carbon fiber, Kevlar, E-glass, s-glass, biaxial mat, etc.

2.6 Any manner of "grounding protection" may be built into the lowest 12 inches of the centerboard (measured in the full board down position).

2.7 The centerboard must be weighted sufficiently as to be completely non-buoyant. That is the board must be able to drop to its full board down position by gravity alone with the boat in the water. (All boats currently comply as of 2007.)

2.8 The means to raise and lower the centerboard may not be in any way power assisted. (All boats currently comply as of 2007.)

2.9 The centerboard's leading edge (when it is in the lowered position) must be perfectly straight for no less than 85% of the radial length of the centerboard. The radial length is to be measured from the centerboard's pin to the aftermost edge of the board. Any centerboard in use as of the summer of 2007 is grandfathered. (Nearly all boats comply as of 2007.)

2.10 Other than the leading edge rule above, pin location, and width limits, the profile shape and taper of the centerboard is entirely optional.

2.11 The radial length (measured from the pin to the aftermost edge of the board) of the centerboard must be within 1 inch of the correct original plans radial length. There may be no centerboard pin locations for any boat in any location other than the "plans original" location for that particular design. (All boats currently comply as of 2007.)

RUDDER

3.1 The rudder shaft must be a solid non hollowed bronze round section shaft of between 1 ½ inches and 2 inches. (All boats currently comply as of 2007.)

3.2 The construction of the rudder's blade must be of solid plywood or solid wood and bronze. No coring or hollow sections are allowed. Any rudders in use as of the summer of 2007 are grandfathered. (All except Witch comply. Though it was within the requirements of the 2001 rules at the time it was constructed, the Witch's rudder utilized a high density structural foam for a portion of its core. Weight was added to the Witch's rudder as requested by the consensus of the fleet.)

3.3 Any manner of exotic materials may be used for structural reinforcement, chafe protection, outer covering, etc. These include carbon fiber, Kevlar, e-glass, s-glass, biaxial mat, etc.

3.4 The rudder may sit no deeper in the water than the lowest point of the hull's skeg to which it is attached. (All boats currently comply as of 2007.)

- 3.5 The rudder may be no longer than 53 inches measured from the lower forward edge to the lower trailing edge. (All boats currently comply as of 2007.)
- 3.6 The rudder post must pass through the hull through a hollow bronze tube. (All boats currently comply as of 2007.)
- 3.7 The tiller must be attached to the rudder post by way of an all bronze tiller head fixture and tiller strap fixture. (All boats currently comply as of 2007.)
- 3.8 No tiller may be wider than 8 inches at any point (“racket ball tillers”) and may be no wider than 3 inches (excluding tiller to tiller head fitting hardware) for the first 38 inches from the centerline of the rudder shaft. (All boats currently comply as of 2007.)
- 3.9 Other than the above restrictions, the tiller may be built in any type of design, length, shape, and size that the builder sees fit. Structural reinforcement of any kind with exotic materials is allowed as long as it is built primarily of wood and is fully varnished. External reinforcement must be set to be as clear as possible and may only be used for the first 24 inches from the forward end of the tiller. (All boats currently comply as of 2007.)

MAST

- 4.1 The mast’s structure is to be constructed of wood and epoxy (or other glue). Tubing, hardware, etc for internal running rigging are allowed and are not considered to be structural elements. (All boats currently comply as of 2007.)
- 4.2 With the exception of the following scantling limitations, the overall design and construction details of the mast is left to discretion of the builder.
- 4.3 The cross section of the mast must be round in section for the entire exposed area of the spar from within 3 inches of the uppermost end to within 8 inches of deck level when installed in the boat. (All boats currently comply as of 2007.)
- 4.4 The diameter of the mast may be no less than 5 ½ inches for the first 18 feet from the butt of the spar. There is no maximum dimension. (All boats currently comply as of 2007.)
- 4.5 The diameter of the mast may be no less than 3 inches measured at 48 feet from the butt of the spar. There is no maximum dimension. (All boats currently comply as of 2007.)
- 4.6 The diameter of the mast may be no less than 4 ¼ inches measured at 33 feet from the butt of the spar. There is no maximum dimension. (All boats currently comply as of 2007.)

4.7 The wall thickness may not be less than 3/4 inch at any point. (All boats are assumed to comply as of 2007.)

4.8 All forms of synthetic structural reinforcement are expressly forbidden. (All boats are assumed to comply as of 2007.)

4.9 The main mast is to be designed and constructed to have the sail track set naturally in a straight line when not under load (no pre-bent spars). (All boats currently comply as of 2007.)

4.10 The bare varnished mast (without rigging or any hardware) must weigh no less than 150 lbs. The fully rigged mast (with all standing rigging including turnbuckles, all hardware, spreaders, strut, and running rigging, ready for stepping in the boat) may weigh no less than 200 lbs. (All boats are assumed to comply as of 2007.)

4.11 The complete fully rigged mast must have a balance point of at least 18 feet from the bottom of the mast. (All boats are assumed to comply as of 2007.) The procedure for measuring the balance point is as follows. With the mast lying horizontally on a pair of saw horses (or equivalent):

- 1- Mount the spreaders and strut in position and have all rigging wire and turnbuckles in place (with the upper shrouds and forestay attached to the spreader/strut tips)
- 2- Stretch all wire rigging (from the turnbuckles) toward the butt of the mast. Lash them securely. Stretch both sets of backstays and any remaining halyard and topping lift lines same as rigging wire and lash them.
- 3- Temporarily tape the 0 end of a 20 foot tape measure to the butt end of the mast. Stretch the tape measure out to the 20 foot end and temporarily tape it to the spar 20 feet from the butt end.
- 4- Have two people position the mast so it balances on a single Sawhorse (or equivalent). The balance point will very likely be between 18 and 21 feet.

4.12 If the fully rigged mast balances at less than 18 feet from the butt of the mast and has an overall weight of LESS than 220 pounds, weight in the form of lead must be fastened to the top of the mast in an amount necessary to balance the mast to the 18 foot minimum.

4.13 If the fully rigged mast balances at less than 18 feet from the butt of the mast and has an overall weight of MORE than 220 pounds, the extra overall weight from the minimum allowable outweighs the importance of the balance point and therefore will not be penalized.

4.14 Any fully rigged mast found to weigh less than 200 lbs. is to have the required amount of weight added to the mast to bring it up to the minimum weight. The placement of the required additional weight (to either the very top of the mast or to the area below the deck) may be placed as necessary to conform to the 18 foot balance minimum. No exceptions and no grandfathering shall apply. (I believe all spars

currently in use fully conform to these minimum weight and balance point rules. Only a VERY lightweight mast and rig would come in at below 200 lbs, and it would likely take hidden internally placed lead in the bottom of the mast not to make the 18 foot balance rule)

4.15 There shall be a minimum of two and a maximum of three shrouds per side. (All boats currently comply as of 2007.)

4.16 There shall be a minimum of two and a maximum of three forestays per side. (All boats currently comply as of 2007.)

4.17 All shrouds and forestays must be made from STANDARD 1x19 (non-Dyform) type stainless rigging wire and be no less than 3/16 inch in diameter at any point. The upper end of each shroud/forestay may be attached to the mast by way of loops around the spar held in place by a shoulder cleat. If loops are used, synthetic type rope (Spectra, Vectran, etc) may be substituted for wire for the first 12 inches from the cleat or anchoring point on the mast. Shrouds and forestays may also be attached to the mast by way of metal (bronze) tangs or fittings. Any rigging in use as of the summer of 2007 is grandfathered. Any replacement of any non rules compliant rigging must be replaced with compliant rigging. (Almost all boats currently use standard 1 x 19 rigging wire as of 2007. All boats use a minimum of 3/16 rigging wire.)

4.18 All shrouds and forestays must be connected to standard open body design turnbuckles with bronze center bodies. All bronze construction turnbuckles are preferred. This is to apply to any new mast or replacement turnbuckles for an existing mast. (All boats currently comply as of 2007.)

4.19 There may be only one set of spreaders and one forestay strut per mast. (All boats currently comply as of 2007.)

4.20 Both the spreaders and strut are to be made of wood (All boats currently comply as of 2007.) and are not restricted to any size limitations.

4.21 The custom designed metal hardware made for any new mast other than the sail track must be made of bronze. All retrofitting done to existing masts must conform to the new rule. Any mast currently using hardware other than bronze will be considered grandfathered if it has been in use as of the summer of 2007. No grandfathered hardware may be replaced with non rules compliant hardware.

4.22 The sail track for the mast must be of 7/8 inch standard type commercially available design in either bronze or stainless. The sail track must run continuously from within 10 inches of the gooseneck to within 5 inches of the main halyard sheave. (All boats currently comply as of 2007.)

4.23 The boom is to be affixed to the mast with the use of the current type hardware arrangement. Two bronze bands spaced between 2 1/2 and 4 1/2 inches apart (on center)

attached to a swiveling bronze head fitting with a single vertical bolt or pin. Two vertically oriented bronze straps attached securely by some means to the boom are then attached to the head fitting with a horizontal bolt or pin. Any mast currently using hardware other than bronze for these fixtures will be considered grandfathered if it has been in use as of the summer of 2007. (All boats currently use the standard fixture arrangement as of 2007. Nearly all are using all bronze hardware.) No grandfathered hardware may be replaced with non rules compliant hardware.

4.24 The vertical position of the gooseneck may not be made to be adjustable while under sail. (All boats currently comply as of 2007.)

4.25 The Bottom of the mast must conform to the standard mast step arrangement. The mast step in the hull must have a slot with a minimum of 1 ¾ inches and a maximum of 2 inches in width. The mast step slot must be between 5 ½ inches and 10 inches long cut in the fore and aft direction and be a minimum of 1 ¾ inches deep. The mast must have a tenon cut into the bottom measuring a minimum of 1 11/16 inches and a maximum of 1 15/16 inches and extent the full width of the diameter of the mast. (All boats currently comply as of 2007.)

4.26 The mast may be built to contain internal running rigging and chase tubing for internal wiring for an anchor light, etc.

4.27 The mast head fitting and (or) halyard sheave design is entirely optional. Any metal fabrication on a new spar must use bronze as the base material. Any sheaves and blocks for running rigging may be of any type of construction and manufacture.

4.28 Fiberglass is allowed only for chafe protection and may not extend more than 24 inches down the length of the spar. Any fiberglass reinforcement must be set as to be as transparent as possible. (All boats currently comply as of 2007.)

4.29 The mast is to be finished bright (varnished). (All boats currently comply as of 2007.)

BOOM

5.1 The boom's structure is to be constructed of wood and epoxy (or other glue) only. Tubing, hardware, etc for internal running rigging are allowed and not considered as a structural elements. (All boats currently comply as of 2007.)

5.2 The sail track for the boom must be of 5/8 inch standard type commercially available design in either stainless or bronze. The sail track must run continuously from within 10 inches of the forward end of the boom to within 36 inches of the aftermost end. (All boats currently comply as of 2007.)

5.3 With the exception of the following scantling limitations, the overall design and construction of the boom is entirely at the discretion of the builder.

5.4 The following are dimension allowances for the construction of a new boom, or modifications to an existing boom. For the record, only one current boom has a bit larger proportions than the proposed maximum specs (Torch's boom) and the extra size appears not to be any particular advantage. I believe there is only one boom currently in use that is a bit smaller than the proposed minimum specs and also appears not to be any particular advantage.

1- The forward end of the boom (measured @ 12 inches aft of the forward most end of the boom) may be no taller than 6 inches (including sail track) and no wider than 4 inches. At the same point, the boom must be no shorter than 3 inches and no narrower than 2 1/2 inches. Any booms currently in use as of the 2007 season are grandfathered.

2- The middle section of the spar may be no taller than 7 1/4 inches (including sail track) and no wider than 6 inches. At the same point, the boom must be no shorter than 4 inches and no narrower than 3 1/2 inches. Any booms currently in use as of the 2007 season are grandfathered

3- The rear section of the spar (measured 6 inches forward of the after most end of the boom) may be no taller than 6 3/4 inches (not including any hardware) and no wider than 5 inches. At the same point, the boom must be no shorter than 3 inches and no narrower than 2 inches. Any booms currently in use as of the 2007 season are grandfathered.

5.5 The wall thickness may not be less than 1/2 inch at any point of the spar. (All boats are assumed to comply as of 2007.)

5.6 The bare varnished boom (with no rigging or hardware) must weigh no less than 60 pounds. No boom fully rigged for racing with all hardware and running rigging attached may weigh less than 70 pounds. There are no maximum weights. (All boats currently comply as of 2007.)

5.7 The boom may be built to contain internal running rigging.

5.8 All forms of synthetic structural reinforcement are expressly forbidden. (all boats are assumed to comply as of 2007.)

5.9 The method for attaching mainsheet related hardware (blocks, bridles, boom bales, etc) to the boom is entirely optional.

5.10 All booms (for the rearmost 12 feet) must have their sides protected as much as possible from becoming entangled in the rigging of another boat. This is strictly a safety issue and has been agreed upon and in the official rules since 2001. No exceptions and no grandfathering. (NOT all boats currently comply.)

5.11 Fiberglass is allowed only for chafe protection and is not to extent more than 24 inches down the length of the spar. Any fiberglass reinforcement must be set to be as transparent as possible. (All boats currently comply as of 2007.)

5.12 The boom must be finished bright (varnished). (All boats currently comply as of 2007.)

SAIL

6.1 The maximum sail dimensions are as follows: 44 foot luff, 28 foot foot, 47 feet 9 inch leech, and 24 inch roach. (All boats currently comply as of 2007.)

6.2 The roach must have a normal curve. A normal curve is defined as a smooth curve that deviates no more than 12 degrees from a straight line between the intersections of the angles at all 5 batten ends. (All boats currently comply as of 2007.)

6.3 The sail's head width as measured from the luff of the sail to the leech at the very top of the sail shall be no greater than 8 inches. (All boats currently comply as of 2007.)

6.4 The upper batten shall be located a minimum of 66 inches from the top back edge of the headboard down the leech to the aftermost end of the upper batten. (All boats currently comply as of 2007.)

6.5 The upper batten shall be located a minimum of 81 inches from the top edge of the headboard to the forward most end of the batten. (All boats currently comply as of 2007.)

6.6 The sail may have no more than five battens. No batten may be longer than 6 feet. (All boats currently comply as of 2007.)

6.7 The reef points may be no less than 4 feet 6 inches from the foot of the sail at any point. (All boats currently comply as of 2007.)

6.8 The entire length of the foot and luff of the sail must be attached to the boom by way of metal sail tracks and slides. (All boats currently comply as of 2007.)

6.9 The sail must be no less than 45 pounds weighted dry and without battens. (All boats currently comply as of 2007.)

6.10 The sail must be designed and constructed with a traditional type panel layout (parallel panels) (All boats currently comply as of 2007.)

6.11 There may be no less than 10 and no more than 12 main panel sections per sail. (All boats currently comply as of 2007.)

6.12 Overlapping reinforcement material may be used in the area of the head, tack, reefing tack, clew, reefing clew, Cunningham, reef points, and batten pockets. This reinforcement material must be of plain white color any may not exceed a radius of 5 feet from any of these attachment points. (All boats currently comply as of 2007.)

6.13 All stitching and all reinforcement materials will be white in color. (All boats currently comply as of 2007.)

6.14 No sail may have non-white horizontal stripes of any kind. These are generally long strips of dark colored sail tape running the length of the luff in one or two places on the sail to more easily judge the luff curve while underway. They are banned for racing but may be installed and removed for tuning purposes for any time other than an official race. (All boats currently comply as of 2007.)

6.15 The main fabric used for the construction of the sail must be of all white Dacron material (including all weaving and stitching) (All boats currently comply as of 2007.)

6.16 The main fabric used for the construction of the sail must have a minimum of a 6 ounce per square yard weight. (All boats currently comply as of 2007.)

6.17 There must be at least 6 reef points built into the sail and sail ties must be attached to them at all times when racing. (All boats currently comply as of 2007.)

6.18 Small clear windows of a maximum of 10 inches in diameter may be installed in the sail for telltale purposes. A maximum of 4 will be allowed. (All boats currently comply as of 2007.)

6.19 For the sake of safety (for the skipper to have a better view of oncoming boats when sailing to windward), clear window material may be used in the lower area of the sail wherever it is deemed useful. The maximum allowed clear window area for the entire sail (including for telltale purposes) will be 12 square feet. (All boats currently comply as of 2007.)

6.20 All the attachment points for the clew, reefing clew, tack, reefing tack, and Cunningham, must use the following Rutgerson Hardware stainless steel “press rings” as the standard hardware.

Clew-	Rutgerson 35 millimeter #1000-35
Reefing Clew-	Rutgerson 35 millimeter #1000-35
Tack-	Rutgerson 20 millimeter #1000-20 or #1000-20LD
Reefing Tack-	Rutgerson 25 millimeter #1000-25 or #1000-25LD
Cunningham-	Rutgerson 25 millimeter #1000-25 or #1000-25LD

6.20 The method of controlling the outhall and clue tie down adjustments along with the hardware required is entirely left to the discretion of the builder.

6.21 Only one sail may be purchased per year per boat. (All boats are believed to comply as of 2007)

6.22 No advertisement logos will be placed on the sail. (All boats currently comply as of 2007.)

RUNNING RIGGING

7.1 There are no material restrictions whatsoever for running rigging ropes, lines, blocks, etc.

7.2 The backstay position on the hull must be located between 14 feet and 18 feet aft of the stem and no further inboard than 24 inches from the outside edge of the rubrail. (All boats currently comply as of 2007.)

7.3 There must be two equally functional backstays per side of the mast in use. The lower backstay must be located between 14 and 30 feet from the base of the mast. The upper backstay must be located a minimum of 40 feet from the base of the mast. The material for both upper and lower backstays must be of at least 3/16 inch in diameter for synthetic and 5/32 inch for wire. The materials used for both upper and lower backstays must be the same. The upper ends of all four backstays must terminate in a structurally secure manor to the mast. No grandfathering will be allowed. (Nearly all boats comply as of 2007.)

7.4 No boom vang of any kind will be allowed. (All boats currently comply as of 2007.)

7.5 No method of shifting the position of the mast in the step while underway will be allowed. (All boats currently comply as of 2007.)

7.6 No method of adjusting or altering the natural movement or position of the mainsheet block on the traveler while underway will be allowed. (All boats currently comply as of 2007.)

7.7 No method of mechanically forcing the boom to swing forward or remain forward (downwind) will be allowed. (All boats currently comply as of 2007.)

7.8 No power assisted mechanical devices of any kind will be allowed. (All boats currently comply as of 2007.)

7.9 The mainsheet shall have a maximum effective purchase of 8:1. (All boats currently comply as of 2007.)

7.10 With the exception of the mainsheet purchase (8:1), the design and layout (including effective purchase) of the various running rigging control lines are entirely optional.

7.11 No boat shall have more than two winches on board. (All boats currently comply as of 2007.)

MISCELANEOUS

8.1 Safety equipment is as follows: Anchor with a 50 foot line, an oar with a minimum length of 5 feet, a marine radio (built in or portable), a safety life vest for all onboard, and a throwable life saving device. ~~(All boats currently comply as of 2007.)~~

8.2 The anchor must be of an unmodified commercially available type and be connected to minimum of a 50 foot line with a minimum of 3/8 inch diameter. The combined weight of anchor and line must be between 7 and 20 lbs. For the sake of safety and overall usefulness, no aluminum or equally lightweight anchor may be used. All boats must race with the anchor that they officially weighted in with or another anchor of equal or greater weight. No grandfathering. ~~(NOT all boats currently comply.)~~

8.3 There may be no less than 5 and no more than 10 persons on board during any race, unless consent is given by the fleet for exceptional circumstances. One child counts as one person.

8.4 No crew may be added or removed within 5 minute of the start of any A-cat race.

8.5 All additions and changes to the rules must be approved by a majority of the fleet. ~~As of 2007 the majority is seven. This number is based on 13 total boats. 12 are currently in sailing condition and 1 is currently under construction (Spyder).~~

8.6 Each boat has one vote.

8.7 All races are to be windward, leeward unless the majority of the fleet consents to a course change.

8.8 No races are to be started in sustained winds of 20 MPH knots (23mph) or greater. "Sustained" is defined as the average wind speed of one minute duration.

8.9 All races are to be shortened if the wind reaches a sustained 22 MPH knots (25mph).

8.10 All races are to be abandoned if the wind reaches 24 MPH knots (28mph).

8.11 The Fleet Captain will be responsible for alerting the BBYRA as to whether a mandatory reef will be required. The mandatory reef is expected to be called for if a

sustained wind of 16mph or over is determined. If a mandatory reef is called for, it must be put in place before the start of the race and be kept in until the first windward mark. Beyond the first windward mark, reefing is no longer mandatory.

8.12 For all race days that have two or more scheduled races (including BBYRA two race afternoons), the crew weight is to remain substantially the same between the races. If there is to be a change in crew from the first race to the second, the exchange must be of roughly equal weight and of the same amount of crew. All crew must be onboard by the start of the 5 minute starting sequence.

8.13 All races are to be sailed under the US Sailing rules, including the fleet's return to the 720 rule.

8.14 With the exception of wrist/stopwatches and hand held wind meters, any electronic information displaying equipment used in any boat performance capacity during the racing season will be limited to one dedicated unit. This unit must be a "stand alone" type of unit.

The following are allowed measurements:

1. Course over the ground (COG) in degrees
2. Speed over ground (SOG) in knots, miles per hour, etc.
3. Relative heading to a reference heading (wind shift measurement) in degrees
4. Stopwatch function

~~There are four allowed functions. These are compass heading, wind shift indicator, line bias, and a race timer. (For example the Tacktick t040 model that is currently being used by 5 boats would be legal, as would the Tacktick's newly released replacement for the t040, the t070)~~ No external information gathering or processing equipment may be used in conjunction with this single self contained display (no GPS equipment, no depth finder, no hull speed indicator, electric mast head mounted devices of any kind, no hand held GPS or display equipment of any kind, no cell phone derived information, etc.) Any desired equipment may be used for testing purposes during the off season. All information gathering devices or equipment that falls outside the accepted class rules ~~of 2007~~ must be removed from the boat for the time between the first scheduled race of the season to the last race of the season.

8.15 The BBYRA Ocean Gate race is to be sailed from an anchor start. The race must be at least 10 miles in length and start at 2:00 PM.

8.16 No boat is to be hauled for more than 48 consecutive hours without the consent of the fleet captain and class rules committee. No boat may be out of the water for more than 96 hours during any one month period without the consent of the fleet captain and class rules committee.

8.17 No advertisement of any kind may be displayed on any part of the boat while racing. Flags of any size may be flown at any time before or after a race if one desires. (All boats currently comply as of 2007.)

8.18 Any newly proposed rule that is agreed upon during an official A-cat meeting must be added to the official rules listed on the barnegatbayacat.com website within 4 weeks of the meeting. Until it is added to the official rules “in writing” and publicly available on the internet, it will NOT be considered an enforceable class rule.

8.19 It is impossible to foresee every conceivable innovation which may be thought of in the future or mention every suggestion that has been ruled illegal in the past. When in doubt, it must be assumed that anything in connection with the boat, sails or rigging which is not clearly covered by the official class rules and specifications or published chief measurer’s rulings is illegal and that a ruling must be obtained from the fleet. If there is a question as to whether there is a violation, the fleet will be asked to vote by majority as to whether a violation exists or not. In such a situation, a written description of the issue must be provided by a representative of the boat in question. If not written by the boat owner, this may be done by the boat builder involved or any other representative that would speak on behalf of the boat with the permission of the boat owner(s). The written description (which may include scanned drawings or digital pictures, etc) must be e-mailed to all owners or voting representatives of each A-cat. Once the written description is sent out, the fleet has one week to decide as to what action, if any, should result. Unless a minimum of 7 votes (out of 13 as of 2007) are returned by e-mail within the one week period stating that there IS a rules violation, the subject will NOT be considered a violation. The one week time period is important. Boat builders, for example, in many cases design as they build, rebuild, or repair a boat. They would generally have to “know either way” in a short amount of time as not to unnecessarily impede the progress of their work or plans.

8.20 ~~All boats are to use Interlux Micron Extra for all areas of the boat under the waterline. This includes the lower part of the centerboard that extends under the waterline when the board is in the fully raised position. (This rule was previously agreed upon by a majority vote in the fall 2002 A-cat meeting.)~~ No Boats may use ablative bottom paints.

8.21 For obvious reasons, the Bat will be grandfathered from the rules that govern the construction specifications of the bare hull only. The Bat will, however, be required to meet or exceed all other rules. These include but are not limited to: all weight requirements, all basic hull dimensions (cockpit length, cabin height and length, all appendage dimension and construction allowances, etc.), all rules pertaining to hardware, spars, standing and running rigging, sails, bottom paint, etc.

8.22 The morning BBYRA Junior races will continue unchanged.

8.23 The drop races for the BBYRA series will be 1 drop for every 5 races. (This will likely mean 3 drop races total)

8.24 The maximum overall crew weight may not exceed 1600lbs during any race. Give the nature of our fleet, this rule will not be functionally enforceable. Abiding by the rule will be the responsibility of the skipper of each boat.

