

# AMYA Infinity 54 Class Rules

## 1.0 General

The INFINITY 54 is a one-design class whose hull, deck, keel and rudder conform to the master plans built by Terry Allen and Steve Ream from the Allen-Amen plans. Hull numbers are issued to the manufacturer by the class secretary. No modifications to the hull, deck, keel or rudder are allowed. No substitutions of rigging hardware locations provided with the kit are permitted. Any attempts to violate the one design concept will disqualify the yacht from competition in this class. The race director of any given race shall have the responsibility of determining the eligibility of any yacht for that race or series of races. The intent of the INFINITY 54 class is to insure that all yachts be as alike as possible and that no yacht shall have undue advantage due to construction, construction methods, weight, sails, or RC equipment. If a race director is in doubt about a particular point of measurement, the building plans that accompany the kit and these rules shall be used for clarification. If some innovation or change is not described in the building plans or not approved by the class association by 2/3 ballot of all registered owners, it will be considered illegal. If a skipper, owner, or both are found to be involved in an obvious attempt to circumvent the one design rules or concept of the INFINITY 54 class rule or its intentions, both will be barred from competition in this class for a period of two years from the date of infraction. This is a skippers class, not a development class.

## Specifications

### Hull Length and Beam Dimensions

Hull length and beam are set by the manufacturer and shall not be modified in any way. A modification of this sort shall be construed as an obvious attempt to violate the one design concept. The deck must not be removed; no substitutions are allowed.

### Displacement

Fifteen (15) pounds plus or minus ½ pound in complete sailing weight. Measurements are to be taken on a balance beam scale if possible. A yacht that is underweight must add weight to the underside of the deck between the amidship struts that support the mast. A yacht that is overweight must make an attempt to lighten the RC equipment (the manufacturer has a plus or minus margin of 4 ounces). Any grinding or sanding of any part of the yacht other than that is required by the assembly instructions or any other addition or deletion of weight shall be construed as an obvious attempt to violate the one design concept.

### Keel

The keel shall weigh no more than 9.7 pounds or less than 9.4 pounds with all of its mounting hardware attached, including nuts, washers, and any other hardware used to hold the keel in place while sailing. The shape and weight of the keel/fin combination shall not be modified from its stock configuration other than fairing the bond joints and or painting the unit as per assembly instructions.

### Rudder

No larger than the profile of the manufacturers template and no smaller than 1/8" in any one direction. The stock rudder provided with the kit, if prepared according to instructions will easily meet these requirements. The thickness of the rudder foil shape shall not be modified from stock.

## Deck

The deck, hatch system, or overall appearance of the deck may not be changed, except for painting or necessary emergency repairs. Hardware mounted on the deck must be placed according to the building plans and/or the provided dimples on the deck for same. The exception will be that the aft shroud chainplate may be mounted 1-1/4 inches aft of the existing aft chainplate dimples (on center). This will allow the mast to be carried at the aft end of the mast step plate with reasonable alignment of the shrouds to the mast. Also, the mast step plate may be moved 3/4 inch forward from the dimple locations. The eye bolts in the deck for the jib attachment may be located as far as 1 inch further forward than the dimple in the deck. Any deviations other than those stated above will not be allowed.

## Mast

Length not to exceed 80 inches, including all hardware. Mast, sails, spars and rigging hardware as provided with the INFINITY 54 kits must fit between 2 uprights 80 inches apart. A tape measure can be used for this. Carbon fiber mast only, no larger than 3/4" or smaller than 1/4" in diameter. The pin in the bottom of the mast is excluded in measurements, yet the pin may not allow the mast to sit higher than flush with the mast step plate. The mast step plate must be fastened directly to the deck with no shims underneath to raise its position.

## Rigging

Intersection of headstay attachment to mast: 71" maximum from bottom of mast, excluding pin in bottom of mast. Shrouds required: 2 upper shrouds (one each side) and 2 lower shrouds (one each side): one backstay (attached to the after hole in the mast head fitting): and one jib stay. Gooseneck: From 2-1/2" to 3-1/2" above the bottom of the mast at center of pivot. Spreaders: 9-1/2" from side to side, plus or minus 1/4". Spreaders are to be located 37-1/2" from the mast bottom, plus or minus 1/4". Lower shrouds are to be attached at this location. Tangs (for upper shrouds) located 75" from the bottom of the mast, plus or minus 1/4". Tangs (for headstay): Located 71" from the bottom of the mast. The lower screw must be located within 1/4" of this point. Downhaul Cleat: Placement optional Jib Halyard Cleats: Placement optional Main luff attachment: captured luff system as explained in the building plans, hooks and jackwire combination allowed or loops through the luff of main and around mast. Booms{Jib and Main) :No Larger than 3/4 in diameter. Material optional. Topping lift: A jib topping lift consisting of one line and one bowsie between the jib boom and the jib upper cleat is permitted.

## Sails

Material optional. All measurements shall be made with a steel tape using sufficient tension to between points being measured to remove wrinkles. Measurements of lines dimensions shall be made using edges of sail. Measurements may be required to be made free from the mast and spars that may cause minimization of dimensions. Notches, hollows, or non-fair curves in the luff or leech of any sail at girth locations will be considered an obvious attempt to violate rules. Sleeve, slot, or double luff mainsails are not permitted.

## Mainsail and Jib Measurements

|      | Mainsails |        | Jib   |        |
|------|-----------|--------|-------|--------|
|      | MAX       | MIN    | MAX   | MIN    |
| Luff | 75.0"     | 74.75" | 60.0" | 59.25" |

|                        |        |        |        |        |
|------------------------|--------|--------|--------|--------|
| Foot                   | 15.0"  | 14.75" | 15.5"  | 15.0"  |
| Leech                  | 76.5"  | 76.0"  | 57.0"  | 56.5"  |
| ¼ Girth                | 7.0"   | 6.5"   | 6.0"   | 5.5"   |
| ½ Girth                | 11.0"  | 10.5"  | 10.5"  | 10.0"  |
| ¾ Girth                | 14.25" | 13.75" | 13.75" | 13.25" |
| Head<br>to Foot Center | 76"    | 75.5"  | 59"    | 59.5"  |

### **Battens:**

four minimum in main, 6 inch maximum length, ½ inch maximum width, evenly Spaced (plus or minus 1 inch). 3 maximum in jib, 4" maximum length, 1/2 " maximum width, evenly spaced ( plus or minus 1"). Battens to equally divide the leech regardless of the number of battens.

### **R/C Equipment**

Remote control is limited to a maximum of three functions each separately controlled: rudder, backstay and combined jib/main sheets. No jib trim, outhaul or other functions permitted either by remote or mechanical means while sailing. Inclusion of backstay is optional. Combination of other control functions (other than main and jib sheets) by any means is not permitted.

### **Certificates of Measurement**

Certificates of measurement shall be filled out and signed by yacht owners. New sails, a change in R/C equipment, additions or deletions of weight or anything that may affect the current certificate will require an new certificate to be filled out and signed by the owner.

### **Licensing of Manufacturer**

For an INFINITY 54 to be eligible to compete, the hull, deck, rudder, and keel must be manufactured by a builder licensed by the Class Association. The hull must have the class logo sticker with the hull number resined in the hull. The Class Association consists of those owners who are currently AMYA members and shall vote by a 2/3 margin to accept or delete licensed builders. Doug Hutchens 2710 Briarcliff Dr. Riverbank Ca. 95367 Ph. 209-863- 0434 Is the new licensed builder.

### **Measurement Procedures**

Displacement (total sailing weight): Weigh the yacht with all R/C equipment in place, including batteries and rigging. Maximum weight 15.5 pounds, minimum 14.5 pounds. Keel weight: Weigh the keel separately with all the mounting hardware: nuts and washers included. Maximum weight 9.7 pounds, minimum weight 9.3 pounds. Rudder: Lay the rudder on the template (available from Class Secretary) to determine that it is no larger that the template and no smaller than 1/8" in any one direction or dimension.

### **Sails:**

Use a steel tape to measure the luff, foot and leach of both sails using the edge of the sail. Determine if the sails

fall into the maximum and minimum of the measurement rules. Locations of the girth measurements are arrived at by the following procedure: use the luff and leech dimensions of each sail. Divide the luff and leech into  $\frac{1}{4}$ ,  $\frac{1}{2}$ , and  $\frac{3}{4}$ . With these dimensions, use a steel tape to arc out the leech and luff from the head of the sail and make a mark at each of these points. Now measure across the sail at each girth location, pulling the material snug between points. The foot shall be marked at the midpoint and a steel tape shall be used to measure from the head edge of the sail to the foot edge of sail for head to foot center dimension (see sail plan included in the building plans. The sailmaker may pre-mark these locations, however, these locations should be checked if there is any doubt of their accuracy).

**8.0. Bow bumpers are recommended but they may not be built to add buoyancy or affect water flow past the bow.**