

## **STAR 45 CLASS Model Yacht**

TECHNICAL COMMITTEE  
of 11/06 – 12/07

### GUIDELINE FOR RULE INTERPRETATION AND APPLICATION

#### **Clarification of the backstay attachment overhang of Star 45 Class Rule 1.2:**

##### **INTERPRETATION:**

This phrase from the Rule: "...if the chain plate is attached to the transom or overhangs the transom, it may not extend beyond the transom more than 3/8 of an inch.)" **SHALL BE INTERPRETED TO MEAN: NO PART OF ANY CHAIN PLATE, STRUT, BOOMKIN, OR OTHER MEANS, WHICH FORMS A PART OF THE BACKSTAY ASSEMBLY USED TO ATTACH THE BACKSTAY TO THE HULL, SHALL EXTEND FARTHER AFT THAN 3/8 OF AN INCH AFT OF AN IMAGINARY PLANE ALIGNED WITH THE TOP AFT EDGE OF THE TRANSOM AND PROJECTING UPWARD, PERPENDICULAR TO THE DECK SURFACE NEAR THE TRANSOM.**

##### **APPLICATION:**

Extension may be measured by locating a carpenter's try square or right triangle on the deck surface adjacent to the transom. Place the square or triangle so that an edge of the square or triangle projects upward at a right angle to the longitudinal surface of the deck and intersects the aft edge of the transom, where it joins to the deck. Do this at the longitudinal center line of the hull or wherever the means is located along the transom. The chain plate, strut, boomkin or other means shall not extend farther than 3/8 of an inch past the aforementioned edge of the try square or right triangle.

#### **Clarification of the definition of a hull in Star 45 Class Rule 1.4:**

##### **INTERPRETATION:**

This phrase from the Rule: "All hulls...and be a minimum of 16 ounces when weighed before attachment of deck and keel." **SHALL BE INTERPRETED TO MEAN: 16 ounces shall be the minimum total weight of the following parts:**

For fiberglass hulls: The hull shell, as withdrawn from the mold, plus the rail installed along the gunnels and stern for deck attachment, plus any reinforcement applied to the hull to strengthen the bottom of the hull at the keel/hull joint and at the mast post/hull joint. Nothing else is to be weighed, not the radio receiver/servo supports, nor keel box/tubes, nor mast post, nor rudder tube, nor rudder attachments, nor chain plate mounting pads, nor paint applied after withdrawing the hull from the mold, nor the deck, nor anything else.

For wood and wood/fiberglass hulls: The hull shell, as constructed, including frames, stringers, glue, waterproofing (not decorative paint) and any other internal structure that will not be removed prior to completing the construction of the boat and that is needed to strengthen and/or form the shape of the hull shell. Nothing else is to be weighed, not the radio receiver/servo supports, nor keel box/tubes, nor mast post, nor rudder tube, nor rudder attachments, nor chain plate mounting

pads, nor paint applied to the hull shell• S exterior, nor the deck, nor anything else.

These lists may be updated as needed in response to creative use of this Guideline.

**APPLICATION:**

The hull will be weighed after removal from the mold (fiberglass hull) or the building board (wood or wood/fiberglass hull) and in a state of readiness for completing the construction of the boat (fiberglass hulls are waterproof, and therefore waterproofing may be added to wood or wood/fiberglass hulls prior to weighing). Weighing shall take place before the installation of : radio control equipment or its supports; rudder; keel; deck; decorative paint; anything else. If prohibited items are installed prior to weighing, the weight of the prohibited components will be added to the minimum weight. Example: if a radio tray is added to the frames before planking the sides/bottom and the tray weighed one oz before installation, the hull shall weigh 17 oz or more with the tray installed. If it is not reasonably convenient for an AMYA star class member to witness the weighing, a photo will be acceptable for Class registration purposes, provided that the photo clearly illustrates the hull on a scale indicating a weight of more than the minimum weight.

**Clarification of the bumper thickness in Star 45 Class Rule 1.11 and 1.2**

**INTERPRETATION:**

This phrase from the Rule: " Bow Bumpers are mandatory for all class registered STAR 45 yachts. Bow bumpers are limited to three eighths of an inch (3/8") overhang... " and "...1/4 inch bow bumper if used..." SHALL BE INTERPRETED TO MEAN: All Star 45's shall have a bow bumper, and the bumper shall not protrude in any direction from the hull more than 3/8". On a boat with a cut- out for the bow bumper, an insert of non-resilient material will be considered part of the hull and not part of the bumper. Rule 1.11 shall be the governing rule for the bumper, and the 1/4" specification from Rule 1.2 shall be disregarded.

**APPLICATION:**

The distance that a bumper protrudes from the hull shall be checked with a ruler with graduations of no less than 1/16" . Alternatively, a sharp object may be employed that penetrates the bumper material, but not the hull. In either case the measurement of protrusion of the outer surface of the bumper from the hull shall be no more than 3/8".

**Clarification of the permanent mast bend Star 45 Class Rule 3.1**

**INTERPRETATION:**

This phrase from the Rule: "Swing rigs, rotating and permanently bent masts are prohibited." SHALL BE INTERPRETED TO MEAN: The Star 45 mast, standing free, without deflecting forces applied to it from any direction, may be curved or bent, but the deflection of the mast from its longitudinal axis, at any point along its length, shall not exceed one inch. This does not prevent a sailor from bending the mast with the standing rigging, to any extent, when the mast is installed on the boat. A bend at the mast head to extend the crane is not allowed.

#### **APPLICATION:**

With the mast removed from the boat, or with standing rigging disconnected, sight along the longitudinal axis of the mast. If the mast is straight, no further measurement needs to be made.

If the mast appears to be curved or bent, a string or elastic is run from the mast foot to the mast head, with no deflection of the line by the mast. The distance from the string or elastic surface to the mast surface shall not exceed one inch at any point along the length of the mast. If the mast has an S curve the measurer should situate the ends of the string or elastic aligned with the centerlines of the mast's head and foot. A side of the mast may have to be chosen which offers a unobstructed path from foot to head. The mast's centerline may not deviate from the string or elastic's centerline by more than one inch when measured at any location along the mast.. So if the line is placed on the aft edge of the head and foot of the mast, the aft edge of the whole mast must remain within 1" of the line from top to bottom. This is to be checked with a ruler with minimum graduations of 1/16".

#### **Clarification of rudder shape Star 45 Class Rule 6.1**

##### **INTERPRETATION:**

This phrase from the Rule: " The exact shape is not specified, but they may not exceed 4 1/2 inches at the hull (fore and aft) 3 inches at the bottom, (fore and aft); and may not project more than 7 inches below the hull when measured at the post."

**SHALL BE INTERPRETED TO MEAN:** The top of the Star 45 rudder shall be no more than 4 1/2" wide, measured fore and aft along an imaginary line located 1/8" below the bottom of the boat at the rudder post and parallel to the hull. The bottom of the Star 45 rudder shall be no more than 3" wide, measured as follows: for a straight bottom the bottom of the rudder shall be measured; for a curved bottom, the bottom shall be measured along an imaginary line located 1/4" above the lowest point of the rudder and parallel to the waterline. The shape of the rudder between its top and bottom is not regulated by this rule, and any shape may be employed. The thickness of the rudder is not regulated. The height of the rudder shall not exceed 7', measured between the lower most point of the rudder and the top of the rudder at the rudder post.

Please note that the rudder shown by the plan is effective and is a recommended design.

##### **APPLICATION:**

With the rudder on the boat, the maximum depth is measured at the post, not to exceed 7". The width of the rudder is measured with the measuring device oriented parallel to the hull and held 1/8" below the hull. The width of the rudder along the measuring device must not exceed 4 1/2". If the bottom of the rudder is straight then the width of the bottom of the rudder shall be measured along its bottom and shall not exceed 3". If the bottom is curved the width of the bottom of the rudder shall be measured with the measuring device oriented parallel to the waterline and held 1/4" above the lowest point of the rudder. The width along the measuring device shall not exceed 3". This can also be checked with a "go/no go" gage shaped like a U 1/4" deep and 3" wide.

## **Clarification of Sail Numbers Star 45 Class Rule 9.1**

### **INTERPRETATION:**

This phrase from the Rule: "Registration numbers shall be at least 3 inches in height and at least 3/8 inch thick. Both star and registration numbers will be placed on the upper half of the mainsail on both port and starboard sides of the mainsail and shall be positioned so as to be easily read from either side. "

### **SHALL BE INTERPRETED TO MEAN:**

A Star 45 shall display its registration number on the main sail, in a font no less than 3" tall and have a width of the dark portion of the numbers to be no less than 3/8". The numbers shall be in the upper half of the main with starboard over port. If numbers are displayed on the jib they shall be of the same size as the main and starboard over port. The registration number should be the hull number that was provided by the class secretary, but can be different than the hull number.

Due to the difficulty in reading sail numbers in large regattas it is recommended to add the registration number to the jib as well. The numbers on the jib should be displayed in the bottom half of the jib with starboard over port.

If a country designation is displayed it should be in the bottom half of the main and starboard over port.

### **APPLICATION:**

Numbers may be measured with the sails on or off the boat or rig with a ruler with a minimum dimension of 1/16".

## **Clarification of Sail Numbers Star 45 Class Rule 1.7**

### **INTERPRETATION:**

This phrase from the Rule: " All fiberglass and wood hulls will have a name plate permanently attached to the inside of the hull so as to be seen when the hatch cover is removed. "

### **SHALL BE INTERPRETED TO MEAN:**

A Star 45 shall have at a minimum the following information permanently attached to the hull: Star 45 Class, AMYA Registration number \_\_\_\_, hull weight \_\_\_\_, date \_\_\_\_, builder \_\_\_\_. The registration number should be the hull number provided by the class secretary when the boat is registered. More information can be included, but is not required.

### **APPLICATION:**

This is to be checked by removing the hatch and looking for the above information. The recommended way to do this is to print the information on a pc of paper, then attach it to the hull with epoxy so it can not be removed or damaged.

### **Clarification of rudder post location Star 45 Class Rule 1.3**

#### **INTERPRETATION:**

When the following phrase " In the event of a builder choosing to scratch or hand build a Star 45 Yacht, the builder must adhere to the class approved reference and construction drawings, as obtained from the AMYA Ships Store, as in the builders ability" from rule 1.3 is applied to the rudder post location, as measured on the measurement form and shown on the plans, this phrase.

#### **SHALL BE INTERPRETED TO MEAN:**

That the rudder shaft or post shall pass through a point located on the centerline of the bottom of the hull 6" forward of the point where the center of the transom meets the center of the bottom of the hull.

A rudder shaft or post larger in diameter than the thickness of the rudder is prohibited.

#### **APPLICATION:**

The rudder post location can be measured with the rudder on or off the hull. A ruler or tape measure shall have the origin located where the transom and hull bottom meet at the centerline of the bottom of the hull. The 6" point shall be located within the rudder post as it exits the hull. If the rudder location is measured with the rudder off the hull, the 6" point shall be located within the rudder tube.