



NEWSLETTER



for July 2006

of the

2006 Star 45 NATIONAL CHAMPIONSHIP REGATTA (NCR)

Official Sponsor:



ê **NCR Preparations Update** ê

Good progress is being made on preparations for the **2006 Star 45 National Championship Regatta (NCR)**.

Here are some of the accomplishments since publication of last month's report:

- Race Director Brad Lauterbach, assisted by Webmaster Bruce Huckaba, has prepared Sailing Instructions, and the latest, possibly not the final, version is shown in the Announcements section, below.
- The NCR Website, www.star45houston.com, is in full swing and is getting rave reviews. Sailing Instructions will be posted there, along with all other pertinent information, such as Notice of Race, venue information, registration form and instructions, registrants, etc.
- Organizing Committee Chairman Don Keeney continues to receive information from registered Star 45 skippers whose contact information in the AMYA Membership database is out of date. Don's new Master List of registered skippers will ensure that all receive updated information on the NCR. This will enable participation by all interested skippers. Readers: please notify Don at 1keyknee@281.com with your current address if you did not receive a card or email message regarding the database update. Also, if you have recently tried to register with AMYA, please be patient, because the Membership Secretary's office is going through a relocation, and processing of registrations is delayed. There is plenty of time.
- Word is getting around, and lots of new chat and information exchange are taking place. Several new scratch-built boats are being built for the NCR! See the Star 45 Forum section, below.
Dave (pioneer Star 45 designer and builder) Mainwaring's new blog, <http://star-45.blogspot.com/>, is developing into a very valuable resource, where tons of great ideas and know-how for scratch-building a competitive Star 45 can be found. Contact Dave at mainwaring@rcn.com to contribute to this growing fountain of knowledge.
- Solicitation for raffle items for the NCR has begun, and David Ramos, proprietor of Chesapeake Performance Models, has offered to provide a new boat and a number of rudder servos!!! See David's work and products at www.rcyachts.com.
- This month's **Featured Article**, [The Pioneers and the Early Rapid Growth of the Star 45 Class](#), the second installment of a brief history of the Star 45, is included below. We hope you enjoy it! Please send any comments and any additional historical information you may have to Phil at

philgeren@aol.com. The Featured Article of the June Newsletter, the first installment of the history, is repeated below with corrections in a number of places in response to comments from readers.

The Committee and Advisory Board are dedicated to prepare what will be history's highest quality and best attended Star 45 National Championship Regatta!!

ê **Featured Article** ê [\(New Writing is found in Sections 1.B through 1.D, below\)](#)

The Star 45 Through Time

A Brief History of the Star 45 Model Yacht

Compiled, from information provided by enthusiasts in the building and sailing of Star 45s,
by Phil Geren, 23 June 2006

Part 1 – Early Years

1.A Early Boat Design and Production

1.A.1 The Beginning

The International Star Class racing yacht, mother of the Star 45 model yacht, was designed and first built in the winter of 1910-1911. It is an open cockpit, fin-keel sloop, having an overall length of 22.8 feet. It has a fast, high aspect ratio hull, incorporating a compound curve in the bottom, with a skeg forward of the rudder. It carries a big-footed mainsail and lots of canvas. Roughly 8,000 full-size Stars have been built.

In the early 1960s Jay Brandon, proprietor of Dumas Products, Tuscon, AZ, designed and built a scale model of the International Star based on the 1945 edition of the International Star Class Yacht Racing Association's (ISCYRA's) official plans, at 1/6 scale, or 2 inches on the model being equivalent to 12 inches on the full-scale boat. At that scale, the model was roughly 45.6 inches long, and, *voila!* the Star 45 model yacht was born.

The model was originally designed for free-sailing, not radio control. However, lightweight, World War II surplus, low-voltage, electric servo mechanisms eventually became plentifully available. Those servos, adaptable to radio control in sailboat models, were the first to be available economically, and they were instrumental in the phenomenal early growth which took place in the Star 45 model yacht fleet.

Early Jibsails were loose-footed and overlapped the Main, so that individual mechanisms were required for control of the Mainsail and Jibsail sheets. Elaborate worm gears were used to pull the sheets. To accommodate these bulky mechanisms, Jay raised the model yacht's freeboard by three quarters of an inch (which would have been equivalent to almost 5 inches on the full-size boat!) The worm gears were two threaded rods which ran longitudinally under the deck, each driven by a Pittman motor. "Travelers" moved forward and aft on the threaded rods and pulled or loosed the sheets. Wet nickel-cadmium batteries provided power.

In the July 1966 edition of Radio Control Modeler Magazine, Dumas Boats advertised a Star kit: *"New from Dumas Boats, 45" radio-controlled Star Class Sailboat. All the thrills and skills of sailing big boats! 1/8" birch plywood hull with die-cut frames, mahogany deck, 64" high mast, ready made sails, instructions for building boat, sailing boat, installing RC equipment, and forms for making your own ballast. A Star Sailboat for racing – slightly modified for R.C. \$45.00. The "hot ones" designed for "go" ... ideal for show."*

[The first Star 45 to be registered with the AMYA, sail number 1, was reported in the second issue of Model Yachting \(Winter '70-'71\). \(Rod Carr.\)](#)

The Dumas hull's bottom was made of two pieces of one-eighth inch thick plywood, without the compound curve present in the full-size Star. The hull and controls weighed about fourteen pounds. Don

Prough would later license Dumas Products to produce the smaller "Probar" arm winch, however the increased freeboard was maintained in the Dumas design. Three thousand wood kits were sold between 1966 and 1995.

1.A.2 More Designers/Builders Join In

Other talented designers and builders of models began working in parallel with Dumas. Beginning with the Dumas design, the early practice was to cut the high freeboard down, to cause the hull to more closely resemble the appearance of the International Star, and to lighten the hull. This had the effect of shortening the hull's overall length.

The beam of the hull varied from builder to builder. Sails in the early days mainly came from Rod Carr's model racing sail loft in Springfield, VA. Dave Mainwaring, in Needham, Mass., used an old, abandoned street sign for the material to fashion a keel of a design he found pleasing, being significantly narrower than the Dumas original and having a slight aftward rake, from top to bottom, in the aft edge (the Dumas keel's aft edge was vertical.) Dave also designed a semi-balanced spade rudder, abandoning the International Star's skeg. Dave drew sketches for his Star 45 design, having lines scaled from the 1946 edition and then from the 1976 revision of the ISCYRA's official plans. Dave's friend Jack Sullivan, a design draftsman, rendered the sketches on mylar, and both Dave's and Dumas' keel designs were shown. These drawings have undergone three revisions. Revision 3, the current official version which governs the dimensions of Star 45 boats built from scratch, signed by John W. Mayers, clearly shows the profiles of the Mainwaring and Dumas keels.

The idea of using fiberglass reinforced plastic for hull construction was inside many a cranium by the mid 1970s. In January of 1976 Dave Mainwaring borrowed a wooden hull from Dave Holmes and made what is probably the first female mold for making fiberglass Star 45 hulls. By July 1976 Dave had advertised for sale his "Sirius 45, Star 45 Class model radio control sailboat" – the short kit consisted of fiberglass hull, fiberglass deck, fiberglass aerodynamic keel shells, sail plan, construction drawing, and model builders guide, all for \$65.00. [\(This paragraph has been revised per comments provided by Dave Mainwaring.\)](#)

Sure enough, the rumor was true, and in 1976 Dumas also began making its hull design in fiberglass. The Mainwaring mold was then passed to John Reynolds in Orlando, FL, and John made many fiberglass hulls. His wife Mary became a highly-reputed maker of precision-built Star 45 sails.

Jerre Maxson, a tank mechanic during the Korean War with prodigious mechanical skills, built 27 wooden Star 45 hulls for others. He also built the fiberglass mold which was eventually passed to Skid-Do Industries, Clayton, Ohio, and was used to make 50 hulls by 1995.

In 1978 the Mainwaring/Sullivan drawing was approved by the AMYA as conforming to the Star 45 official specifications, during Bill Weiss' tenure as Class Secretary. That legalized all the hulls manufactured by John Reynolds.

In 1982 the AMYA membership approved Dave Mainwarings recommendations to legalize all pre-existing Star 45 model yachts and to reduce the minimum weight from 14 pounds to 12 pounds.

By 1984 deck designs were standardized with a straight king plank, resulting in a straight line from stem to stern along the longitudinal centerline of the deck. This reduced sheer and made it possible to make the deck from one piece of wood or fiberglass. John Mayers made such a plug, based upon 1/6 scale, from the 1976 ISCYRA plans and sent it to Ray Ozmun of Ozmun Products for use in making a hull mold. Ozmun made many hulls for new enthusiasts.

1.A.3 The Rest of the Early Design/Production Story

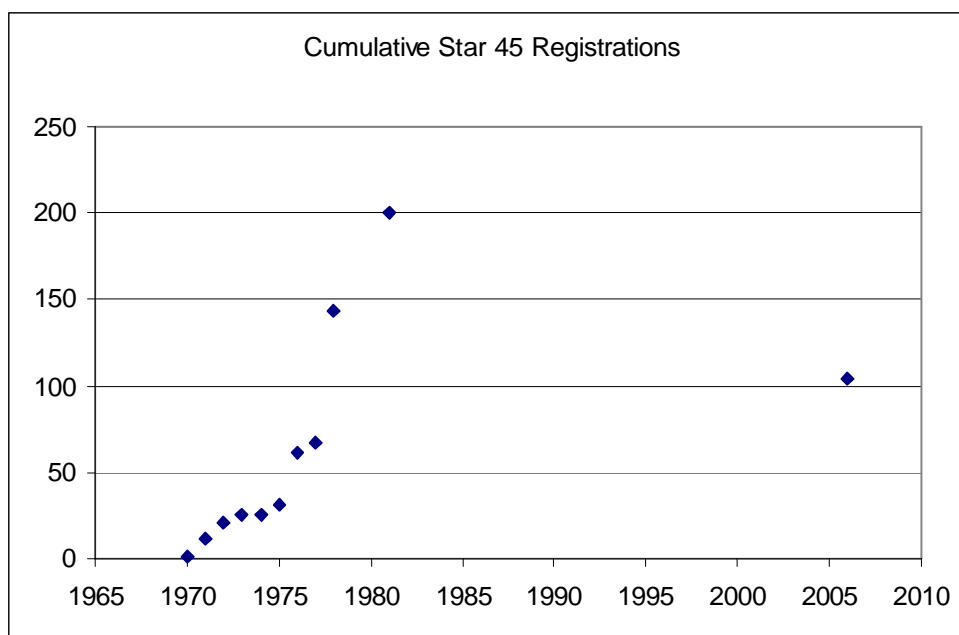
This writing is incomplete in many respects, but most importantly due to the lack of information about the designs and leadership of others such as Bob Blackwell, Ray Ozmun, and Paul Galloway. Many Blackwell, Ozmun, and Skid-Do hulls are competing valiantly and winning races. Time was not available to obtain this information, however, as this is a work in progress, information will be sought. Also needed is information about sailmakers and rig design, for a later article.

Readers, please bear with me as I continue to put flesh on the bones of this initial effort.

Your contributions of information would be welcome and highly appreciated. Please write to me at philgeren@aol.com, or Phil Geren, 1044 Chimney Rock Road, Houston, TX 77056, and share your invaluable experiences and memories about these missing pieces, especially for the period from 1966 to 1995.

THIS MONTH'S FEATURE ARTICLE STARTS HERE:

1.B The Pioneers and the Rapid Early Growth of the Star 45 Class



From preceding sections, you are familiar with the names Jay Brandon, Don Prough, Dave Mainwaring, Jack Sullivan, John Mayers, Dave Holmes, John and Mary Reynolds, Jerre Maxson, and Rod Carr and of their many contributions to the development of the Star 45 Class Model Yacht. Now, let's look at other important pioneers and at how the Class has developed over the years.

In the period from 1970, when Star 45 Number 001 was registered, to 1981, the rate of growth in registrations of Star 45 model yachts averaged 18 boats per year. That is a hefty growth rate, especially when compared to the average since 1981, which shows a decline, in other words attrition exceeded new registrations by almost 4 boats/year. One of the objectives driving the writing of this Newsletter is to get the Star 45 Class growing again. Notice that these data are for registered boats, not active skippers, which is a much harder statistic to derive.

Rod Carr, sailmaker, builder, and champion sailor has chronicled the scene from 1970 to 1978, and the following paragraphs are excerpted from his writings.

"Early policy decisions of the AMYA Board guided the skippers of radio controlled yachts to register their boats with the organization and to have written class Rules and a class secretary, as requirements for establishing a class of boats for AMYA sanction. At least 20 registered boats are required for AMYA sanction of a class.

"In winter of 1970-71, the AMYA President designated Ralph Newman of Clarence, NY to head up the effort for the Star 45. By spring 1971, the position was transferred to H. Whitney (Pete) Cutler of Brookside, NJ.

"Model Yachting Magazine Issue #5 (Fall 1971) featured the first technical contribution in an article titled "Improving the Dumas Star 45" authored by Ben Hogensen. Ben suggested improving maneuverability of the boat by enlarging the rudder, or even removing the skeg and providing a balanced rudder like found on the Vortex Model Engineering Santa Barbara and Soling 50. He advocated a stern-down longitudinal hull trim to counteract the tendency of the bow to be pressed down when driven hard to weather, and finally suggested the simultaneous sheeting of main and jib, eliminating the heavy and slow independent sheeting provided by the original worm-gear Dumas winch.

"The Stars had risen to 12 boats registered, and Francis Smith, Prospect Park, PA and proprietor of a hobby shop was designated the first class secretary, though the 20 boat minimum had yet to be reached.

"From AMYA Model Yachting #7 (Spring 1972) through AMYA Model Yachting #17 (Winter 1974) the class underwent fairly consistent growth with the 20 boat minimum reported as being reached in Fall of 1972, and class size varying between 15 and 33 boats until Fall of 1974. During this period there was one event held by the Mid-Ohio Stormbirds in which a Star 45 was reported as sailed. No other events for Star boats were announced in Model Yachting, and no Class Column appeared in Model Yachting, which undoubtedly contributed to the lack of organized competition, and the lackadaisical growth pattern over the period."

In Model Yachting #18 (Winter 1974), AMYA's Bob Harris appointed Rod Carr as Class Secretary, and Rod immediately scheduled the first Divisional Class Championship Regatta (DCCR) and first Annual Class Championship Regatta (ACCR) for the 1975 sailing season. A Star 45 Column also began to appear regularly in Model Yachting.

"Model Yachting #19 (Spring 1975) reported 24 Star 45's registered with the class, and announced the formation of a Class Technical Committee, the first class technical committee in AMYA, with membership of:

James Frye, Oregon, Ohio
Dave Holmes, Pleasantville, NY, future Star 45 Class Secretary
Tom Johnson, Savannah, GA
Jay Brandon, Tucson, AZ.

"With momentum building, Dave Holmes was nominated for Class Secretary, as it was deemed important that the class have an opportunity to vote for its chief officer, all others having been appointed by AMYA management.

"By the summer of 1975, the emphasis placed on class publicity was beginning to pay off. The Eastern Divisional Championship was held in Savannah and reported in Model Yachting. This was quickly followed by the report in Model Yachting #21 (Fall 1975) of a total registered class population of 37 boats. The Star definitely lagged other classes such as the EC-12 and Santa Barbara, which had been carrying on aggressive publicity and were each approaching an active class boat population of 150.

"The 1975 ACCR was competed for by a 7 boat fleet in Springfield, Virginia. It was a single day event that dealt with some pretty foul weather. When everyone finally crawled under their umbrellas, the results were as follows:

First	13 points	Rod Carr
Second	14 ¼	Forest Godby
Third	18 ¼	Bob Harris
Fourth	34	Pat Degroodt
Fifth	46	John Hemmalin
Sixth	47	Bill Weiss
Seventh	55	David Holmes

"Class population had grown to 44 boats by spring of 1975, and the 1976 ACCR was scheduled for July 18, 1976 at Lake Alcyon, Pitman, New Jersey, under the stewardship of the TriState Model Yacht Club. Several Star 45 events were held at the site over the next few years, and eyebrows were certainly raised when it was discovered that the lake and associated park were built over a landfill that was ultimately designated as a Superfund hazardous waste site requiring major and expensive environmental restoration.

"After his year as Class Secretary, David Holmes turned the reins over to Al Hemmalin of Middletown, RI. By fall of 1976 Model Yachting #25 reported 66 Stars registered, and a successful completion of the 1976

ACCR at Lake Alcyon. The fleet was made up of returning skippers as well as new skippers who were drawn to the rapid growth of the class.”

To continue the encouragement of new skippers, Rod Carr donated an engraved, spun aluminum dog dish trophy entitled “Spot’s Dish”, named for Rod’s Star 45 which had won the first three Annual Class Championship Regattas. More information about this remarkable boat is found later in this chapter. The Dish was to be awarded each year to the highest finishing ACCR Rookie Skipper. The 1976 fleet consisted of ten skippers who finished as follows:

First	15 points	Rod Carr
Second	16	David Holmes
Third	20 $\frac{3}{4}$	Forest Godby
Fourth	28 $\frac{3}{4}$	Al Hemmalin
Fifth	35 $\frac{1}{2}$	Pat DeGroot
Sixth		John Krick
Seventh		Bill Weiss
Eighth		John Oxley III
Ninth		John Hemmalin
Tenth		David Hulsburg.

Upon completion of the event, Lake Alcyon on July 24th was chosen as the site of the 1977 ACCR since it was well situated in the mid-Atlantic area where most of the Stars had been registered.

“By the end of 1977 AMYA had ceased publishing Class Population statistics, partly because the manual record system made it difficult, and partly because some thought that showing small class numbers somehow would reflect poorly on classes that weren’t growing. Whether true or not, the practice makes it difficult to follow the growth of the class in the pages of Model Yachting and it is not until Model Yachting #31 (Spring 1978) that Class Secretary Bill Weiss reports that the 143rd Star was registered. The number of active skippers in the class was not reported however.”

The 1977 ACCR was held at Lake Alcyon, with a somewhat smaller fleet than hoped for. This event had an unusual occurrence when a port/starboard infraction of the racing rules about three quarters of the way through the event resulted in the a hole being punched in the side of John Krick’s boat. The perpetrator of this dastardly deed, our Rod Carr, made amends by turning SPOT over to Mr. Krick, repairing Krick’s boat with a substantial piece of duct tape, and continuing the racing. Since one design class racing assigns finishing points to the skipper, the racing was finished with a minimum of scoring fuss. This occurrence was recalled over and over by the participants and was mentioned often even 20 years later when the two protagonists lived on opposite sides of the country. The results were:

First	15 $\frac{3}{4}$	Rod Carr
Second	35	John Krick
Third	37	Bill Weiss
Fourth	37	Al Hemmalin
Fifth	53	John Hemmalin
Sixth	57	Vince Santoriella

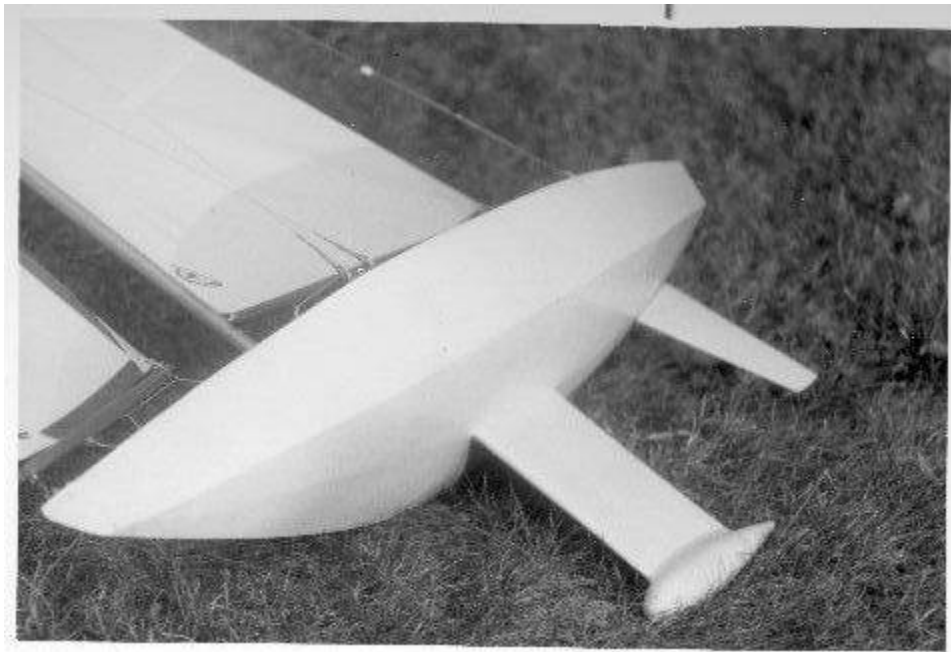
“The 1978 ACCR was held at Lake Alcyon with 5 participants, and moved the following year to be held in Georgia by the Atlanta Model Yacht Club.

“Published class records are sketchy until Model Yachting #41 (Fall 1980) reports a 9 boat ACCR won by Bill Rader who was to become Class Secretary a year later. In Model Yachting #44 (Fall 1981) the Class Secretary reported that 200 Stars had been registered since 1970, but the number of current active skippers on the AMYA roles was not given.”

[Additional interesting and important personalities will be detailed in the next Newsletter, as this writing continues. Readers are encouraged to write to Phil at \[philgeren@aol.com\]\(mailto:philgeren@aol.com\) with information which should be included in this writing to make it as complete and informative as possible.](#)

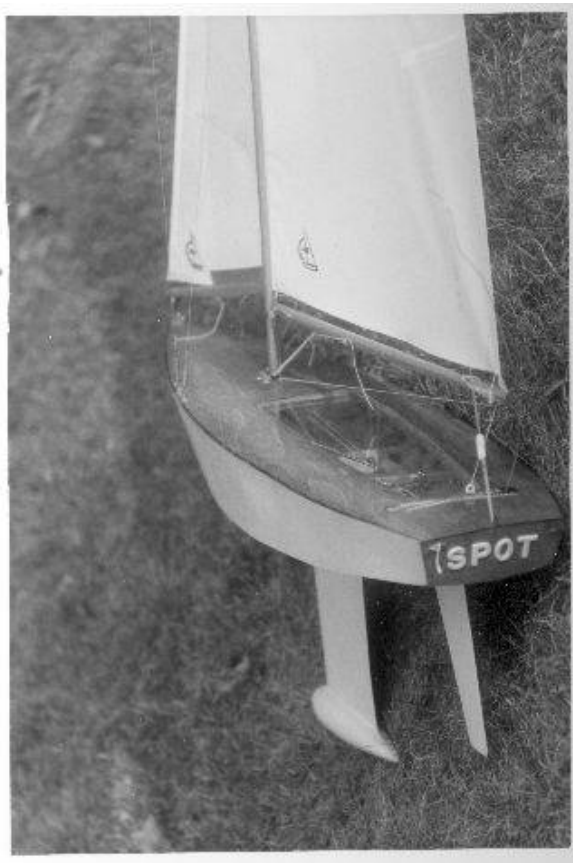
1.C Early Champions

As you have read, Rod Carr won the first three National Championship Regattas with his Star 45 number 002, “Spot”, and we want to memorialize that boat.

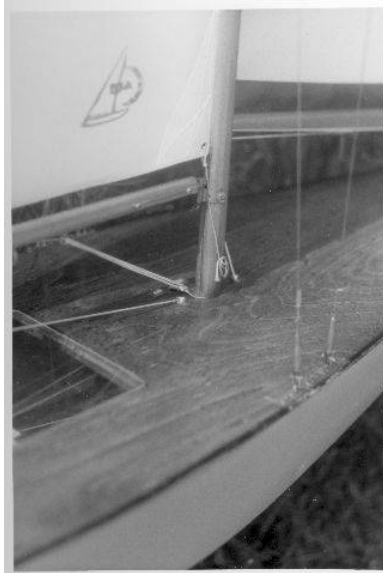


From Rod Carr:

"The hull was made of 3/32" aircraft ply over 1/8" frames copied from Dumas kit parts with the 3/4" of extra freeboard removed (Figure 1 at the end of this Newsletter). A balanced Vortex aluminum rudder was fitted as was the fiberglass keel and bulb from a Model Masters Yankee 50/800 model. Molten lead was

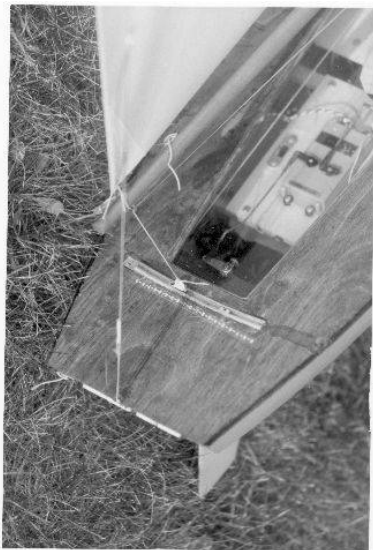


poured down the fin into the bulb, and the fin length adjusted to match the draft of the kit boat (Figure 2). Decking was 1/16" aircraft plywood with a very large hatch (Figure 3).



mainsail roach.

"The standing rigging was typical EC-12 configuration with one set of spreaders, jumpers, and upper and lower shrouds. No topping lift was fitted. Early testing showed that boat balance could be well controlled by mainsail set and trim, so a single mounting hole for the pegged-base mast was provided in the deck. The mast sat upon an aluminum plate which provided the bottom mounting point for the mainsail boom vang (Figure 4). This arrangement coupled with loose standing rigging tensions in light air, encouraged the mast to rotate a bit on each tack giving some aerodynamic advantage over a fixed arrangement. The masthead crane was extended substantially to allow the backstay to clear the



"Running rigging consisted of a mainsheet which began on a cleat on the boat transom just to port of the "S" in Spot (Figure 5). It went forward to a double purchase blocking system on the single arm Harris L'il Herc bang-bang winch, and then out the sheet exit guide aft of the mast step to the main boom and down to a manually adjusted traveler (Figure 6). The traveler was a curved piece of curtain track with a well greased plastic slide as a traveler car. This item was well worth the effort in construction and adjustment as it provided the control necessary to keep mainsail twist under very fine control from the transmitter, even though proportional servo response was yet to become common. If the skipper kept his wits about him, it was rare for the boat to fail to be first at the weather mark.

"Sails were of 2 oz dacron, and featured what was termed California Cut in honor of some early experiments carried out in the Golden State where broadseams were placed in the luff area of the sails extending back only about half way to the leech (Figure 7). The result was a quite nicely cambered sail that had a smooth leech. The result was quite remarkable acceleration which paid off, given the relatively low displacement of the hull.

"With no Star fleet nearby, Spot was sailed as much as possible with the Potomac MYC EC-12 fleet. She held her own in light air as having essentially the same sail area and less wetted surface she generally did well, out-accelerating the heavier full-keeled boats. But in medium to heavy air she really came into her own. Pressed to weather, the leeward bow of the hull did a good job of encouraging the boat to round up, and she routinely out pointed the 12s, much to the dismay of the locals. Her hydrodynamically shaped keel fin assisted in windward performance, especially when facing kit boats that were using the flat plate fin. Her downwind performance in light air was not sparkling, but if trimmed bow up, she was quite a sight in heavier air, almost planing in gusts. No doubt that the experience gained in racing in the competitive EC-12 Fleet was a strong contributor to the boat's success in '75 - '76 - '77.

"The boat's configuration was retained without changes except for a repainting from the original blue topsides and white bottom in 1975 to an all yellow hull, keel, rudder for the '76 and '77 season. Declining winning margins showed that, as a benchmark, she was being rapidly overtaken by the developing construction and sailing skills of the rest of the class. So she was gracefully retired after her third win."

Full size images can be viewed at www.star45houston.com/spot.htm.

[Additional early champions will be profiled as content becomes available.](#)

Model yachts can be things of beauty, to be cherished forever. Could there be a better way to recognize that than to have an annual award for craftsmanship?



1.D The Julie Ayres National Craftsmanship Award

We are grateful to Steve Pratt for providing this valuable information concerning the Star 45 National Craftsmanship Award.

"The Julie Ayres Trophy is awarded each year at the Star 45 National Championship Regatta. The winner is picked by the competing skippers for the beauty and craftsmanship of a competing model yacht.

The idea for this award stems from a comment by Julie Ayers, wife of a competing skipper, made to other wives and spectators at a National Championship held at Sassafra Point, Indian Lake, Ohio. Mrs. Ayers, a nationally recognized artist, noted that there were many works of beauty and demonstrated craftsmanship in the model yachts on the water and lying on the ground surrounding the sailing site. From this comment and discussions in the Sassafra Star Sailing Society, a trophy was suggested to the then Class Secretary (Steve Pratt.)

Jerre Maxson, a master craftsman, took it upon himself to design and build the trophy we have awarded, beginning in 1995. It consists of a half model of a Star 45 built with many different woods which highlight the many parts of a boat."

Here is a photo of Brad Lauterbach, eleventh winner of the Julie Ayres Award (2005) with the trophy and his beautiful boat, which is based on a vintage hull built by Bob Blackwell.



Future writing:

Part 2 *Modern Times*

2.A Latest Designs

2.B Today's Star 45 Class

2.C Latter Day Champion Sailors

Part 3 *The Future*

Announcements

Here are the Sailing Instructions for 2006's NCR. If there are future amendments, they will be announced here.



2006 Star 45 US National Championship Regatta

**Organized by The Austin Model Sailing Club and
The Houston Keelhaulers Model Yacht Club
Hosted by The Clearpoint Model Yacht Club
October 20 - 22, 2006
Pasadena, Texas**

Sailing Instructions

1. RULES

The regatta will be governed by the *rules* as defined in The 2005-2008 Racing Rules of Sailing (RRS) and the American Model Yachting Association (AMYA) Star 45 class rules.

2. ENTRY

Only AMYA Star 45 class boats may enter. Entrants must be members in good standing of the American Model Yachting Association and must have completed registration and paid the fee with the Regatta Organizing Authority before becoming official competitors.

3. NOTICES TO COMPETITORS

Notices to competitors will be posted on the Official Regatta Notice Board located at the venue.

4. CHANGES IN SAILING INSTRUCTIONS

The Race Committee must approve any changes to these sailing instructions. Approved changes will be posted no later than 0930 hours on the day they will take effect or during

any lunch break, except that any change in the *Schedule of Championship Races* will be posted prior to 1830 hours the day before the change is to take effect.

5. SCHEDULE OF CHAMPIONSHIP RACES

Saturday October 21, 2006: The first warning signal will be given as close to 1000 hours as possible but not before 1000 hours. Additional races will follow. No warning signal for the next race will be given after 1630 hours.

Sunday October 22, 2006: The first warning signal will be given as close to 1000 hours as possible but not before 1000 hours. Additional races will follow. No warning signal for the next race will be given after 1430 hours.

On both days there may be a break for lunch. The starting time and duration of this break will be determined by the Race Committee and announced at the venue

6. THE COURSES

The courses will be a windward/leeward configuration. Attachment "A" diagrams the courses, including the approximate angles between legs, the order in which marks are to be rounded, and the side on which each rounding Mark is to be left. The start/finish line shall share the same marks. An Offset Mark (Mark 1A) will be used in conjunction with Mark 1. The Offset Mark will be placed at approximately right angles to the weather leg and approximately 15 feet (4 B/L's) from Mark 1. Mark 2 (2P/2S) will be a gate. Boats must pass through the gate in the direction from the previous Mark and then round 2P to Starboard or 2S to Port. The distance between 2P and 2S will be approximately 30 feet. The Race Director shall announce which course is to be sailed before the warning signal of each heat.

7. MARKS

The Marks will be buoys and/or floating shapes.

8. THE START

The starting line will be located between the leeward gate and weather mark (see Attachment "A"). A 2-minute start tape/CD will be used to signal the start sequence in accordance with RRS E3.5. A boat starting later than 5 minutes after the starting signal will be scored "did not start" (DNS). This modifies Rule A4.1.

9. STARTING PENALTIES

Rule 30.1 "Round-an-End-Rule" will be in effect for all starts of the Regatta. The Race Director before each individual heat will announce any additional starting penalties.

10. RECALLS

Individual and General Recalls will be signaled according to rules E3.8 and E3.9.

The following shall not be grounds for redress:

- (a) Failure to hear the recall hail.
- (b) A boat's position in the sequence of hailed numbers.
- (c) The promptness of the hail.

11. THE FINISH

The finish line will be located between the leeward gate and weather mark (see Attachment "A"). After a boat *finishes* she shall sail clear of the finish area and not cross the Finish Line again. If she does, she may be scored in the place of the second crossing. This shall not be grounds for redress.

12. TIME LIMIT

If the leading boat does not finish within 20 minutes, the heat shall be abandoned. Boats still racing 10 minutes after the first boat finishes and not thereafter retiring, being penalized or given redress will be scored TLE (time limit expired) and scored points equal to the number of boats in the heat finishing within the time limit plus 1 (one) point. This modifies rules 35, A3, A4.1, and A4.2.

13. 5 MINUTE HOLDS

Each skipper may call one five-minute hold each day. A hold may not be called after the Preparatory Signal (the one minute mark in the start sequence). A competitor may not call a hold for another competitor. Two holds may not be called consecutively.

14. SCORING

Twenty-four (24) races are scheduled. Ten (10) scored races shall constitute a completed Championship. There will be 1 discard for every 8 races scored. The Race Committee may use the Odd/Even scoring system if deemed appropriate by the Race Committee.

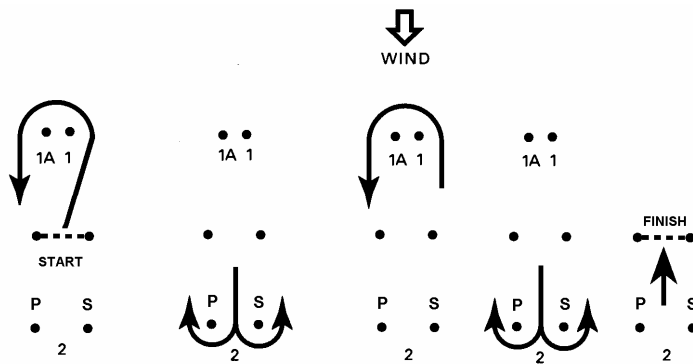
15. PROTESTS

Protests need not be in writing. This modifies rule 61.2. The Protest Committee will hear protests in approximately the order of receipt.

16. AWARDS

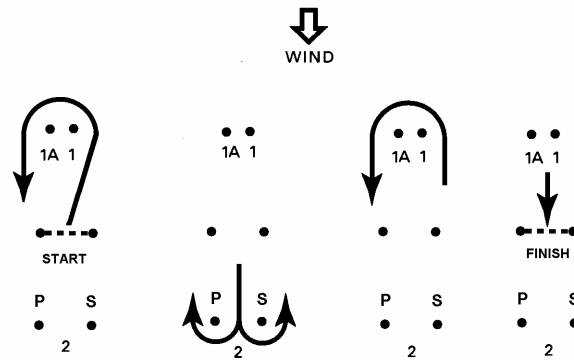
An awards ceremony will be held lakeside after the final scores are tabulated. Prizes will be awarded to the top five (5) skippers in the Regatta. Certificates of Award will be presented to all skippers finishing in 6th and later places.

ATTACHMENT "A"



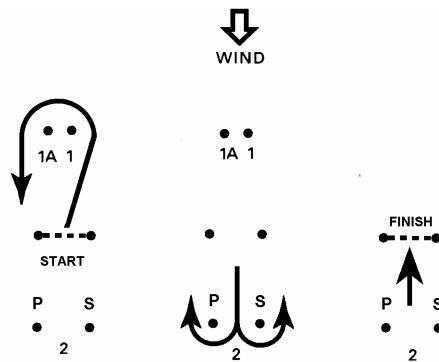
Course 1

Start – 1 – 1A – 2P/2S – 1 – 1A – 2P/2S – Finish



Course 2

Start – 1 – 1A – 2P/2S – 1 – 1A – Finish



Course 3

Start – 1 – 1A – 2P/2S – Finish

ê **NCR Registrants** ê

The list of Registrants will be provided here when the Registration process opens. Watch for the Registration announcement here!

ê **Star 45 Forum** ê

This is something new. Have a comment? Have an NCR-oriented question? Have a suggestion?

Let us have it, and we will post it here. This is intended to be a place where enthusiasts of the Star 45 can exchange information relating to this year's NCR.

Send it to philgeren@aol.com.

The Latest Class News Through the Eyes of Don Keeney

As far as I can tell, the Star 45 owners updated data is complete. With the assistance of Class Secretary, Robert Japikse, Nelda and I sent out 346 letters requesting the Star 45 owners listed in the Data Base of the Class Secretary to update their information. We also posted the request on the Star 45 Yahoo forum and the Star 45 web site. We included a post card with the information we wanted updated. The results are: 80 post cards or e-mails returned with updated information, 73 letters returned with no longer valid addresses, 193 just disappeared into the great unknown. If you have a Star 45 and would like to have your information updated just send it to me Ikeyknee@281.com.

The Star 45 Yahoo forum (<http://groups.yahoo.com/group/Star45/>) has been very active with some very interesting threads being posted. There seems to be quite an interest in scratch building Star 45's. One of the class members has made some shadows from the AMYA plans plus he even has a source to have them laser cut! They are on a downloadable format in the files section of the yahoo site. Dave Mainwaring has opened a blog (<http://star-45.blogspot.com/>) on building a Star 45. Tons of good information in there.

The Star 45 web site is up and running (<http://www.star45houston.com/>) Don't let the "Houston" part scare you. It's for all Star 45 owners/skippers. At the moment it is mainly for posting information about the upcoming Star 45 National Championship to be held the 21st and 22nd of October in Pasadena, Texas. Our illustrious web master is working on the details to turn the site into a Nation-wide web site after the National Championship is completed.

If you have a comment or a question and don't know where to send it. Send it to me and I'll post it on the various sites for you!

*Don Keeney
Star 45 734 and 548*

Gatorboard

Dave Mainwaring and others have recently written (Yahoo Group Star 45) to describe a very light and strong new material to consider using for decking and for hull planking, Gatorboard. It is available in various thicknesses from Art Supply houses and other places providing poster board material. It is plastic foam sheet, covered on both sides with a layer of long wood fibers laid up like paper. It is very stiff, light, and strong and looks like wood on the outside. I saw some at Texas Art Supply, and if I can find it in $\leq 1/8$ " thick it will be on my shopping list.

Phil Geren

Boat Construction Techniques from New Zealand

Bryn Heveldt, a graphic designer, 470 sailor, and model boat master craftsman in New Zealand, has created the most beautiful RC model yacht boat construction manual I have ever seen, [Build Your Own Radio Controlled Yacht](#), copyright 2006, FYIpublishing, ISBN: 978-0-473-11066-6. It uses 3D illustration, is very clear and easy to understand, and is a work of art. The designs are specific to the New Zealand "Racing Sparrow" class, not recognized by the AMYA. However, the construction techniques are universal. I found Bryn's instructions on casting lead ballast bulbs to be particularly valuable.

Contact Bryn@racingsparrow.co.nz for more information.

Well, we hope you have enjoyed this second NCR Newsletter. Please help us to improve it.

Hope to see you at the NCR this year! I attended my first NCR in 2005, and it was a revelation to me. I am a beginner in model yachting, and I was delighted with the way world-class sailors took time to help me and to unselfishly share information about the boats and racing techniques. I obtained a huge amount of valuable information and made cherished new friendships.

Join us! You will never forget it!

Kindest regards,

[Phil Geren](#)

NCR Newsletter Editor