

AMYA 50/800 Rule Timeline

1970 #1

According to Bob Suding, the 50-800 class committee will be coming up with their measurement rules soon.

1970-71 #2

50/800 Class - Sec'y Robert Suding... The class rules are out but there has been a change. The part that is on the jib stay can be deleted. This is the result of a request by myself and Scottie Shroff about the 1st of November. Our request was for no limit in the forestay height and felt that some experimenting with large fore triangles and masthead rigs could help the development of the class, and also of some other classes that would allow the change. Assuming that the class becomes official soon, Bob says that the class championship is being planned for the Denver area next summer.

1971 Spring #3

(4) It is requested that the class rating rules for the 50-800 Class be modified as follows: "The length of the boat be fifty (50) inches plus or minus one inch instead of plus or minus one-quarter inch." The reason for this motion is to allow designers in this open experimental competition class broader tolerances in construction of the boats. The present one-quarter inch in 50 inches is only 0.5%. This does not allow for much error in building a plug, or for shrinkage in the fibreglass for the molds and final hulls. The one inch is a tolerance of only 2.0% which is still pretty small. Although class rules are essential, I believe excessively rigid tolerances in this class are detrimental to encouraging members to design a better boat. (by Eugene L. Larson & Scottie L. Shroff)

THE 50-800 CLASS

In 1925 the Marblehead Model Yacht Club of Marblehead, Mass. established a class of boats which were 30" maximum length over all and were limited to 600 sq. in. of sail area. It turned out to be quite popular, but some of the members thought that this was just a bit small for them.

In 1930 Roy Clough designed a boat which was 50" long and had 800 sq. in. of sail area. The length was 50" since this would fit comfortably in the back seat of a car. The sail area was made 800 sq. in. as he felt that would be the size required to give good speed to the boat. A 1" garboard rule was also established so that the boats would have an appearance similar to the keels of large yachts.

1" garboard was for appearance

The new class was extremely popular due to its lack of precise details on its lines which ordinarily would need a naval architect to understand. The vane-sailors' organization recognized the class in 1932 as a second national class. By 1939 hundreds were sailing.

The rule limiting the height of the jibstay was brought in quite a while later to reflect the prevalent sail design, and this dismayed many experimentally minded yachtsmen.

Jib hoist restriction reduces innovation

At the time of its founding in 1930, Roy Clough's 50-800 represented the predominate ideas on what a fast model yacht should look like. The hull was patterned after the usual ocean racer with internal keel weight. The sails were constructed with a main to jib ratio of 3:1, with the jib mounted about 65% of the height of the mast.

Jibs seem to be progressively becoming bigger with respect to the main. By 1955 the leading 50-800 designers were putting in a main to jib ratio of about 2:1. In the articles written about 1965 and later the ratio had become 1.6:1, which means about 308 sq. in. in the jib and 492 sq. in. in the main. After 2½ years of experimentation and observation, I believe that 1.4:1 would be more desirable for a R/C 50-800, especially in high wind conditions. This translates to 333 sq. in. in the jib and 467 sq. in. in the main.

Main to jib ratio evolve from 2:1 to 1.4 to 1

The hulls have gone through all kinds and shapes, but most have been a displacement type hull; that is, they just sit in the water and drive their way through it. In the early 60's a number of designs emerged which had an external bulb or torpedo shaped weight at the very bottom of the keel. This eventually developed into a long, narrow fin or daggerboard. This concentrated the center of the ballast weight further into the water allowing less weight for the same amount of balance. The weight saved would mean less displacement, less wetted area, less drag, --and a faster boat.

T-keels emerge

In the mid-60's a number of designs came out which were patterned after the small planing sailboats that race on inland lakes, only with a fixed keel and bulb ballast at the bottom. The theory behind this design was that as the boat moved along in the water, the wide shallow hull will lift the boat and have very low drag as a result skim across the surface at a high speed. Many of the modern 50-800 designs are of the planing hull type.

Planing scow hulls evolve in 60's

While I do preface all of the following ideas as being only my own opinion, I would like to say that they have proven out in races. The displacement hull versus the planing hull is the hottest controversy at the present time. Ray Hottinger, who I sail with, and I have opposite opinions on the matter; but I feel the evolution is more that justified by the results. The displacement hull is a very strong competitor in light winds, because the planing hull is too beamy having more wetted area and drag when the wind conditions do not permit it to get up speed and plane. The displacement hull, with a more circular section midships, represents considerably less drag under these conditions. However, in a strong breeze the planing hull rises up on a reach or run and can cover half-again as much water as the displacement hull. On a boat the boats are a bit more even.

Design for prevailing conditions

Some of the planing hulls presently being run are open to a bit of criticism. Some have the lines of a scow, which is a fast boat in its own special wind, but it will push a gigantic bow wave if it is unable to have sufficient wind to climb over and on top of the water. I've run a displacement hull that would make about two laps to a scow's one in a light wind. Most of the current planing hulls have the fully allowable 50" on the water, and are essentially a curved-flat bottom from about 12" from the bow to the stern. This appears to be the fatal flaw in their design. They are flat well forward to promote easy planing in a light breeze, but if conditions are too light to support any planing, they push the water instead of cutting through. To overcome this problem I have extended the forward lines to almost 15" from the bow so that the boat will cut cleanly through the water in low winds; there is a slight degrading of planing ability. I have reduced the weight to 13 lbs. complete, as compared to the 18-20 lbs. of the average displacement hull. To do this, I've designed my own proportional sheeting winch which has about 15 lbs. of pull yet only weighs 6 oz. (See below for construction details). The hull itself consists of 3/16" balsa planked over 1/4" stringers.

As for future plans, the 50-800 class members are asked if we should eliminate the maximum jibstay height rule so that further sail experimentation might proceed. I will be building a sail in the next month which will have the jib extending as high as the main so that I might learn the results. I also feel that the rudder and keel that I am using are not thick enough, and should be about 3/8" thick about half-way back, tapering fore and aft with a blunt front and a sharp rear edge. My friend Ray swears by waxing the hull, but I don't know. Wonder what you think about this. Well... that's sailboat racing.

Remove jib
height
restriction?

... Robert Suding, AMYA Director and 50-800 Class Secretary

1971 Summer #4

IN DEFENSE OF THE DISPLACEMENT HULLED 50/800 DESIGN

In the spring newsletter, Mr. Bob Suding, of Denver, and the Class Sec'y for the 50/800 class, told of the history and some of his opinions and comments on this class.

As Bob said, he and I have sailed a great many times and have our differences on hull design and have carried on the planing hull versus the displacement hull argument for the past three years. It is true what he says about the planing hull going fast, but there are other things involved with this type of boat.

Mr. Suding is a worthy oponent on the water and he got that way by constantly sailing, reading, building, and modifying his boats. Let there be no mistake, Bob can put down the best with his boat knowledge and the right wind conditions. The two former conditions are things that the skipper can do something about, and all it takes is work. The wind condition thing is something that none of us can do anything about.

Argument
against
planing
hulls

Bob gives a strong argument for the planing type of hull, but without the knowledge that he has, I've seen some other pretty good skippers get lost someplace between the starting line and the finish.

My argument is that the boat I design and build must first look like a sailing yacht; second, must sail well under all conditions, without drastic changes; and third, must be open to design changes and revisions without going overboard. In other words, you can class me as a square and conservative.

Bob has won a lot of races with his boat, but he also has lost a lot.

The planing hull in light air will glue itself to the water and stay put, on the other hand, when the wind gets strong the heeling tendency puts the hull in a position that prevents planing and the only way to follow is to layoff the wind and let her go, or shorten sail. When you layoff the wind you have much farther to travel and if you shorten sail you eventually underpower the boat. Neither one is conducive to the best performance.

The picture on the front page of the AMYA Spring newsletter shows Bob with his shortened rig for sailing on a not too nice of a day. The wind was 25 to 30 MPH and he had a hard time staying upright with the large sail plan. The displacement hull I used that day had no trouble winning and staying upright. There were other days when conditions were right and Bob ran off and left me. The picture on this cover is one showing my Phoenix and some trophies. Not all of the awards were won by the Phoenix, but all were won by displacement hulls.

Most of the 50/800 designs are old and the ideas are from the 20's and 30's.

When I designed the Phoenix, I tried to incorporate all of the new ideas, and so far, it looks like a good combination. To this date I haven't seen another displacement hull that could beat the Phoenix in the 50/800 class.

When I design, I keep in mind a thing I have come to believe over the years of running boats. I believe that a combination of hull design, displacement to keel ratio and the proper sail plan for that hull are the important things. If you have to hold too much weather helm in heavy wind to keep the boat on course you must change the sail plan to correct the situation. If the design is so poor that these

adjustments can't be done it is best to change hull or sail plan. This was what I kept in mind as I worked on this boat. Also, when it comes to information on sailing vessels, the displacement hull is what it's all written about. There is another thing that I have learned in the past six years. A good man and a good boat is a hard combination to beat. A good man can make a bad boat go. A bad sailor can't make a good boat go. And here is the most important thing I found out: The man that makes the fewest mistakes in each race will win the regatta.

The up and coming thing in sailing may or may not be the planing hulls. This is something that remains to be seen, but will we still call them yachts?

...Ray Hottinger, Director

4) Height of main - In the last century Eifel (of Eifel Tower fame) did a considerable amount of monumental studying about the effects of the wind on iron plates of varying shapes and angles to the wind. For instance, he found that at an angle of 38 degrees to the wind, there is more force on a square plate than at 90 degrees. Manfred Curry and Junkers (of German bomber fame) did further testing on aspect ratios (height to breadth) of wings and sails, concluding many interesting things applicable to R/C sailboats. They found that sail efficiency increases very rapidly up to a ratio of 3:1 (3 times as high as wide) and then increases slower as the ratio increases. In the 50/800 class this would mean a sail with a luff about 54" and a 18" foot. However other factors enter the picture at this point. Ever see telltales fluttering at the top of the mast while the rest of the sail and the boat just sat there? Well, the wind blows at a much higher velocity further above the water than near the water's surface. Curry found that wind velocity is often 3 times higher 15' above the water than 5' above. A conflicting factor, though, is that more heeling effect will be given from the longer movement arm of a high aspect ratio sail. Translation: I have a gale sail (15-40 MPH winds) with an aspect ratio of 2:1. My normal sail has a 4:1 aspect ratio. A calm weather sail could go to 7:1 or more.

Height to
breadth 2:1
heavy air to 7:1

5) Main to jib ratio - As I mentioned in the Spring AMYA quarterly, 50/800 evolution over the forty years of its existence has gone from an original main:jib ratio of 3:1 to 1.6:1. However, I feel that improved sailing results from 1.4:1, which is the current ratio I use. The greatest advantage lies in much less weather helm and better balance in heavy wind conditions. In the classes running 1130 sq. in. total, it would mean a 660 sq. in. main and a 470 sq. in. jib. For this main to have a 4:1 aspect ratio it would have a 72" luff with a 18" foot.

Main to jib ratio
optimal to be
1.4:1

6) Jib height - At the request of Ray Hottinger, the 50/800 class committee decided that to further jib experimentation, the old 80% rule for maximum height of the jibstay should be eliminated. Early this Spring I designed a number of masthead jibs for 50/800 boats around Denver. The storm design was a sail with an aspect ratio of 2:1 and a main to jib ratio of 1.4:1. Dimensions are as follows: main - 467 sq. in., luff - 43.2", foot - 21.6", leach - 48.3"; jib - 333 sq. in., luff - 45.8", foot - 15.4, leach - 43.2". The sails were run on a displacement, semi-planing, and planing hull. The sails were used in 15-25 MPH winds. The three of us were very pleased with how the boats handled. Control in even high wind gusts was very good. The planing and semi-planing hulls broke into a plane very fast. In calmer weather the low aspect sail was rather tame, though, compared to the 4:1 sails we usually run. I also made a mast head jib for my old 4:1 main, but the results were rather discouraging compared to my usual 75% height jib. From certain books I've read, I get the impression that the mast head jib should work better on the high aspect main, but apparently more experimentation is needed. But, in a storm--what a pleasure to run that low aspect masthead jib.

Jib height
experimentation

7) Jib shape - The easiest jib to design is a right triangle jib, with the right triangle at the junction of the foot and leach. Unfortunately, it seems to perform poorly on a reach, and falls off of a "wing on wing" easily. By increasing the included angle to around 100 degrees, the club footed jib's performance drastically improves.

Jib foot to leach
angle about 100
degrees

8) Draft - Now here is a real hot topic for personal opinion! I prefer a formed sail which I build panel by panel over a full sized plywood form. The point of maximum main draft is one-third up and half-way back. I use zero draft for storm sails, 9% for average sails, and 14% for calm weather sails. The point of maximum jib draft is one-third up and one-third back from the luff. The shape from the one-third back point to the leach is a straight line to minimize backwinding effect of the jib on the main.

Sail draft
suggestions

...Robert Suding, Director & 50/800 Class Sec'y

1971 Fall #5

** New business:

* 50/800 Class - Several different forms (rule variations) of this boat exist. Robert Suding suggested that AMYA adhere to standard form (IMYRU) for these boats.

Use IMYRU rule
suggested

50/800 ACCR, by Don Prough...

The 50/800 ACCR was held on August 14th and 15th at Rocky Mountain Lake near downtown Denver, Colorado. A total of eight boats participated in six rounds of racing. Member Joe Vella, of Denver, filled in as Regatta Director for Robert Suding, the 50/800 Class Secretary, who had recently moved to Tallahassee, Florida.

Weather conditions for the regatta were very pleasant. The winds were variable, but adequate for providing a true test of the boats and their skipper's skill.

The most popular design of 50/800 competing in the championship was the "Phoenix" produced by Scottie Shroff's budding boatworks. First place, however, went to Don Prough who brought with him a season's wealth of experience from participating in the California regatta circuit and a 50" miniature of the full-scale Soling--this combination made the difference. The "Soling" is the prototype of a kit being contemplated for production by Vortex Model Eng. It seems that the scratch-builders of the 50/800 Class will have to really come up with something special in order to threaten these stockboats.

Soling 50
dominance
starts

1971 Winter #6

all works out. Editor.) I have been asked about various things on the 50/800 class rules. The rules are exactly as given by the sheet in the constitution with the exception of the maximum height of jibstay rule which has been eliminated. Some have also inquired about the class insignia. It is: $\overline{M}$.

No jib height
restriction?

1972 Spring #7

Motion #20 (as a modification to the 50/800 Class meas. specs.): I propose that the AMYA adopt the International Model Yacht Racing Union's modifications to the 50/800 (ii) Class. These changes include the elimination of any prohibitions on metal fin keels and prognathous keels; that the rule pertaining to garboards be deleted; that the maximum height of any rig, measured from the deck to the lower edge of the headboard or eye, be 85"; that the max. height of the spinnaker hoist (if used), measured from the deck shall not exceed 80% of the height of that rig; and that the number of alternative sails shall not exceed three in number. By William Caldwell, W.W. MacLaughlin seconding. Reason: This motion is made in the interest of maintaining our rules for the class to be identical with

Motion to adopt
IMYRU rule

those in use by other countries. We anticipate that someday the 50/800 Class might be chosen and used in international competition, and when that happens we want our rules to be up to date.

1972 Summer #8

by Robert Suding, Class Secretary
50/800 CLASS NEWS

As the present 50/800 Class Secretary, I would like to make some rather pointed comments with regard to the proposed motion to ammend the 50/800 class rules.

I feel that the proposal is very ill considered. To take up the proposal point by point, the elimination of prohibitions on metal fin keels and prognathous keels is a rather superfluous point to vote on, there is no such prohibition in the 50/800 AMYA rules.

The garboard rule was made to prevent "thingies" from being entered as boats, but the new planing hulls are evident of the inevitable evolution, so the garboard rule is no longer of any use, so this could be eliminated with no great loss. At the time of the founding of the AMYA, I talked with a number of the then active 50/800 sailors with regard to not having a garboard rule at that time,

but the preponderant attitude at that time was supportive of the "garboard tradition".

The maximum height of 85" might be included for sake of conformity, but it is really getting a bit small and gnat picking, since from my own experimenting, I find a rig that high to be a rather poor choice in a race, assuming that you have the capability of getting it to the race.

Argument against adopting IMYRU free-sailing rule in favor of developing an IMYRU RC rule.

The rule regarding the max height of the spinnaker is particularly obnoxious to me. This puts additional strain on the designer who may come up with a workable R/C spinnaker design. The 80% spinnaker rule obviously assumes that an 80% jib rule also exists. This rule was not included in the original AMYA 50/800 rules precisely because we had no intention of being imitators of the "free sailors", we wanted to form a similar class, which would become optimized for R/C sailing. I noted in 1969 that Ray Hottinger, the father of the AMYA, was utilizing a jib attached almost to the top of the mast. The following year, I tried some masthead jibs, and what do you know, the boat became very manageable even in high winds, and the planing hull was pulled on a plane much faster. For this reason, I strongly resent being forced to accept rules which were decided by a committee of "free sailors", with no representation whatsoever of the R/C segment, merely for the sake of external conformity. When the time comes for international 50/800 R/C competition, the rules governing must be R/C international rules!

The three alternative sails max is poorly worded, to say the least. Does this mean that I can only have a spare jib or main, plus the sails on the boat? Ambiguous rules can cause too much grief! I assume that what is meant is three sets of sails. This might be OK, if the intention were to make the hobby less costly, but the sails are a very small percentage of the total cost of a 50/800 R/C boat, and the only effect becomes one of placing the serious designer at a disadvantage, the very thing that the 50/800 supposedly is trying to avoid.

In summary, may I suggest as an alternative, that the AMYA take the leadership in promoting International R/C rules, not just be "free sailor" imitators.

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Fall 1972 #9

REPORT ON A NEW PRODUCT FOR R/C SKIPPERS from Carr's Boatyard

For the experienced skipper and builder, Carr's Boatyard unveils its new 50/800 Class "Flying Eagle". Special arrangements with Lockland Boats of Watch Hill, R.I. allow Carr's Boatyard to produce this miniature of a Skip Etchells design to the AMYA 50/800 Class rule. Available as a bare hull only, deliveries begin November, 1972.

An all-up light weight of $10\frac{1}{2}$ to 12 pounds and with a full 800 square inches of sail area the "Eagle" planes on all points of sail. This model yacht can be trimmed out to sail leaving virtually no wake. Prototypes have been launched late in this sailing season, and have proven the design to be a top-notch contender.

Construction details provided are mini-

MEMPHIS SEES "SOLINGS" ROMP 50/800 CLASS CHAMPIONSHIP by Bill Caldwell, Class Sec'y

The second AMYA 50/800 ACCR was held the week-end of August 26-27, 1972 at Medal of Honor Lake in Memphis, Tenn. The weather and winds were typical of this time of year - hot and humid with light winds (occasionally no wind at all).

This regatta actually turned out to be a "Soling" race from start to finish. Out of the 10 boats entered six were "Solings". And, as it turned out, the "Solings" proved unbeatable. One of the bright spots of the regatta was to have witnessed Laurie Converse's reaction at the end of the 11th heat. It was a close race, and when Laurie finished about one-half a boat length ahead of her husband, John, she did everything but turn cartwheels. There were a number of really good individual races, but the outcome was in little doubt all along - that bunch of 50/800 skippers from the West Coast is double tough. If you didn't already know it, let it be said that when you put a "Soling" in the hands of an experienced skipper from Ca. you have a winner.

At the end of Saturday's racing the top five were 1) John Converse, 2) Don Prough, 3) Ed Shipe, 4) Laurie Converse, and 5) Robert Suding.

The winds Sunday were somewhat better, occasionally gusting to a breeze. Your Class Sec'y decided to rally and go for broke - and it did. I forgot to put my antenna up. It was two races later when I discovered that it wasn't my batteries causing me trouble.

The regatta ended with John Converse as the 50/800 ACCR Champion for '72. Newly elected AMYA Pres., Don Prough, finished second, Laurie Converse and Ed Shipe tied for third (duplicate plaques were awarded), Robert Suding was fourth, and Clark Wisner was fifth. The award winners were all Californians, Robert is from Florida, and Clark from New York. In all, 10 boats entered.

The members of the Delta Mod Yacht R/C Club here in Memphis, Tenn. want it to be known that we enjoyed sponsoring this class championship. And, I want to thank each of those that came such long distances to attend. It's unfortunate that Howard Hole who we were expecting to attend had to cut his trip short and return to Honolulu - see you next time, Howard!

It will be interesting to see if a different design will be launched sometime soon that will challenge the "Soling"s domination of the class.

Soling 50
dominates
nationals

1973 Spring #11

50/800 CLASS NEWS

by Bill Caldwell, Jr., Class Sec'y

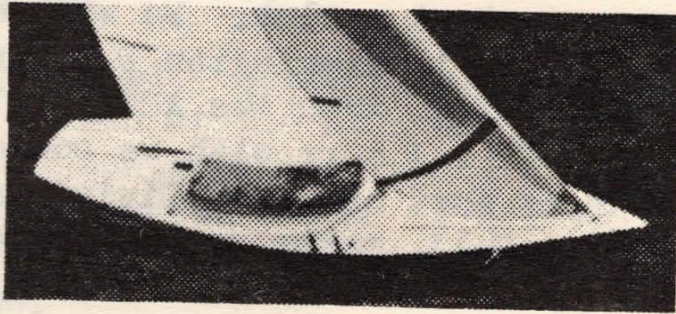
The March AMYA Secretary's Report, circulated to the association officers, had some interesting facts in it. First and foremost is the fact that the 50/800 Class is now the AMYA's largest with 142 yachts registered. Not only that, we probably have the best distribution across the country. However, we compared the list of class members with last October's roster and discovered that a number have not renewed their 1973 memberships. If you know of someone that has not yet renewed, please remind him to do so.

M's are largest
class and best
national distribution

I have received some letters and at least one long distance phone call concerning the legality of jib used on the Vortex "Soling". The question being: "Is the fiberglass reinforcement on the jib a jib club (spar, boom, etc.) or is it a batten?". It is my opinion that it is not a club (spar, boom, etc.) by any definition I have been able to find. It is not attached at the toe and heel of the sail (only at the heel). It does not have its pivot point at the toe of the jib. It does not run along the foot of the sail. It is therefore my opinion that this fiberglass reinforcement of the jib is not, then, a jib club but rather a form of batten. As I see it, therefore, the sail in question is not legal because our rules clearly state that you may not have more than three battens, no more than 2" in length. I personally like this form of sail, but a change needs to be made with either the sail or the rule.

Soling 50 jib
"batten" or thingy
might be illegal

We are rather gratified in reading the Regatta Schedule about the number of 50/800 regattas being planned across the country. Pay special note to our major championships: The Annual Class Championship Regatta in San Diego, CA, on August 18 & 19; the Mid West Divisional Championship in Sandusky, Ohio on July 7 & 8; and the Southern Divisional Championship in Memphis on June 16 & 17. We are hoping that either the Legg Lake Helmsmen will host the Far West Divisional or a club in the North East will sponsor an Eastern Divisional.



TROUBLE MAKER?

EDITOR'S NOTE... John Converse, current 50/800 Class Champ and Pres. of Vortex Model Eng. (manufacturer of the "Soling"), differs with Class Secretary Bill Caldwell's definition of "batten".

Says John: "I'm not sure that an issue exists. Granted that our fiberglass jib whatzit may not be a "jib club" - class rules don't require one. If it's a batten, it sure is a funny one, with that jib sheet attached to it! Nor does the AMYA Blue Booklet define "battens" anywhere."

Since the matter is one of interpreting definition, Bill has stated in a phone conversation with me that his decision is not final. He invites 50/800 Class Members to participate in the discussion. Those class members that would like to offer their ideas on the issue should write to: Bill Caldwell, Jr., 3189 Southern Ave., Memphis, Tenn. 38111. The newsletter welcomes the opportunity to publish letters concerning this matter, if this meets with no objections on the part of individuals sending in their comments.

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Vortex disagrees the "whatzit" is not a batten since a batten is not defined in the rule

Call for member comments

1973 Summer #12

EXECUTIVE BOARD CALLS FOR 50/800 CLASS REFERENDUM TO DECIDE ON SOLING JIB

On July 7, while attending the 50/800 Mid-U.S. Divisional Championship in Sandusky, Ohio, AMYA Directors Harris, Eason, and Matt had the opportunity to discuss the matter concerning the legality or illegality of the Vortex 50/800 "Soling" jib sheeting system. They believed that it was important to see the matter settled as soon as possible because of the large and increasing number of AMYA members who have invested in the Soling. The basic question about how the fiberglass strip used in the Soling jib should be classified: whether as a batten or as a jib club, needs to be decided because class measurement specifications do not provide a determining answer (or, anyway, the same definitive answer to all class members).

As was announced in the last issue of the AMYA Quarterly Newsletter (Spring - #11) the AMYA Executive Board was to decide on the advisability of holding a special referendum for the 50/800 Class Members. And, as part of the newsletter announcement it was requested that class members who had opinions on the fiberglass strip matter should write to the Class Secretary by a certain date, April 21. Within a few weeks after the newsletter was sent out AMYA Pres. Don Prough had the approval from a voting majority of the Executive Board to authorize the referendum. Now, the concern of the Directors is that no communications have been received since the time of the last newsletter from the 50/800 Class Secretary that would assist in going ahead with the proposed referendum or, for that matter, reaffirm that a referendum is needed.

Most important, the Directors gathering in Sandusky felt very strongly that in the interest of the 50/800 Class's well-being that any question or action concerning the Soling jib not be allowed to interfere with this year's competition season. A plan of action was decided on and later approved in telephone conversations with Director Hein and Pres. Don Prough. It provides:

- 1) The final solution to this question is a matter for the 50/800 Class and Class Secretary. This would be in keeping with the amendment to the AMYA Constitution passed last year that insures class autonomy. Since the question was not raised in time to be included in this year's balloting procedures, but should be decided before next year's competition season, a referendum of class members is appropriate. Once the 1973 racing season is complete the Class Secretary should poll the class membership including with each ballot copies of all written and signed material that has been submitted on this question so that class members should be fully informed. The referendum should state a required date by which ballots should be returned (this per the referendum procedure outlined in the AMYA Constitution). A majority of the ballots returned will be sufficient to settle the question (again, per specified referendum procedure).

- 2) Director Dennis Eason is requested in his capacity as AMYA Director in charge of Inter-Organization Relations and International Model Yacht Racing Union R/C Secretary for all countries other than Europe should contact the IMYRU with a view to determining its views on the acceptability of the Soling jib for the class on an international basis. Director Eason is asked to do what he can to provide the Class Secretary with information concerning international acceptability in time for it to be included with the referendum.

- 3) Since the referendum mailing is to be delayed until near the end of the current competition season, the deadline for 50/800 Class Members to send in opinions and comments on the fiberglass strip is extended. A new deadline date will be announced in the Fall Issue of the newsletter.

Extended deadline
for referendum on
Soling jib, but
decide prior to next
season

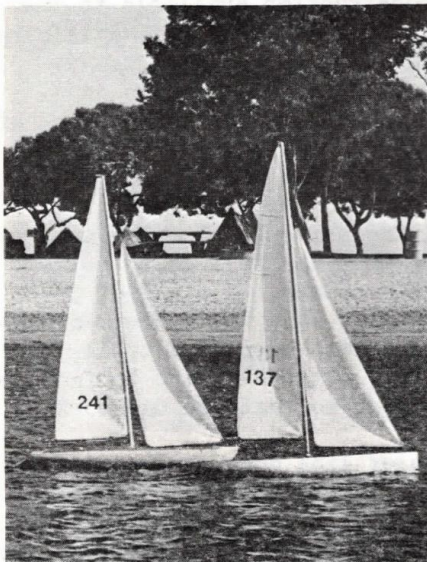


Photo by Matt Jacobson
#241 BOOMER & #137 BOOMERANG

"BOOMERANG" THE 1973 50/800 NATIONAL CHAMPION
by Andy Littlejohn, Sr.

Our new 50/800 Class Sec'y, Ron Schoder, suggested I write a description of my Boomerang, with the idea that it might help those who like to design their own boats. I am in full accord with him, as I mentioned to AMYA Pres. Don Prough at the time he handed me the big first place trophy, I felt the victory was one for those who design their own, and for the "open design concept".

The original Boomer was a marvelous performer and an easy boat to sail, so I used the same hull shape, but continued the water line out to the full fifty inch class maximum. This gave her a plumb bow, whereas the original boomer was curved. There is nothing like a long waterline to produce speed. The most noticeable performance difference between the two hulls is in the wave pattern. The long waterline produces a very flat smooth wave with an easier penetration through the water in evidence.

The mid-ship section is quite flat bilged with a hard turning chine and some tumblehome. This flows back to a broad stern. Foreward to the bow, the keel line is very straight with no apparent rocker. The bow stem is as mentioned, plumb, with the waterline $3/4$ inch above the keel line. This long bow gives the model easy penetration and since all weights are centered over the center of buoyancy, there is no evidence of pitch-poling. Full beam is aft of the mid-ship point, but with full rounded cheek sections foreward of the mast, the hull then does not drop her bow down when the hull is heeled. This hull is nothing but powerful, and she stands up well in a strong wind.

The keel was made with a plywood fin shaped rather sharp foreward (for easy penetration). A ten pound lead keel was dowelled to this and all double layered with fiberglass. The hull was planked balsa fiberglassed inside and outside to produce a strong balsa core hull. There are no bulkheads. A thin plywood deck finished the hull. The boat looked so good that I could not bring myself to paint her, so I just varnished over the resin and that's the way she sails.

Now the real working part of this boat is the sail plan. I used a big jib, probably the biggest ever used on a model. The jib carries 60% of the sail area, so a tall narrow mainsail results. I have learned to like big jibs for the flexibility that the sail plan affords the skipper. On real windy days, the mainsail may be eased out so that only the after area of the sail works. The foreward area of the sail will be "bubbling" or "floating" with most if its high heeling moment dissipated. The jib will be full and the large area has enough power, or drive, to power the boat up wind. And, if the skipper watches the heeling angle of his boat, she can be sailed well up into the wind with the hull flat so that the keel will be fully exposed to the side pressures exerted upon it for less leeway. This all takes a lot of eyeball training but is well worth the effort, and when one gets his thumbs on the radio switches to cooperate too, well, that's how to win trophies.

Boomerang did not become a winner overnight. We sailed against some stiff competition to tune her and get the right cut of sails on her, but they are the original ones made here at home. It takes time to get things right. One adjustment at a time, so one will be able to test it to see if it is right and this all takes plenty of patience. So, I'll keep right on fiddling some more, as I know my competition will never rest 'till they knock Boomerang out of the top spot. I'd hate to see it otherwise.

Wow, the jib carries 60% of the sail area so it must attach at the top of the mast.

50/800 CLASS NEWS

by Ron Schoder, Class Sec'y

The past three years have seen the 50/800 Class grow from the fourth largest AMYA class to the largest with well over 250 registered yachts. I'm very proud to have been elected the class sec'y and wish to offer my assistance and encouragement in any possible manner to all 50/800 owners and potential owners.

I would like to see us resolve the question of the legality or illegality of the Vortex 50/800 Soling jib as soon as possible. The question not only affects present Soling owners, but those who are considering purchasing one; even those of us who have a 50/800 on our drawing boards. Our class measurement specs. must be fixed for '74. To deliberate and delay any longer would be unfair to our own membership.

Our past secretary, Bill Caldwell, described the question of the acceptability of the Soling jib in last Spring's newsletter (#11) and John Converse of Vortex gave an answer in the same issue. The Summer newsletter (#12) defined the AMYA's Directors' wishes as to the proper course of action for a referendum ballot and again asked for class member's opinions and comments. All the letters received are published verbatim (minus a couple swear words) and should give a good cross section of all the possible views on this matter. The ballot and a return envelope are enclosed with copies of this newsletter to all 50/800 Class Members. Mark the ballot "Yes" for legalizing the Soling jib or "No" for declaring the jib illegal and return them within thirty days in the return envelope. The results will be announced in the Winter issue of the newsletter.

For the benefit of new members and those who may have forgotten the details of the issue, there it is:

The Vortex Soling, in lieu of a jib club (boom) hanging beneath the sail, uses a one-piece fiberglass strip beginning at the clew (lower aft corner) of the jib and running diagonally across the jib to the leading edge of the sail. The strip lives at about a forty degree angle to the foot of the jib. The jib sheet line is attached to this strip at the clew.

Class rules do not require the use of a jib club or boom. The fiberglass strip can only be questioned when one believes that it is, in reality, a batten. The AMYA 50/800 Class measurement specs state: "Jib battens: Maximum three in jib, two inches maximum length."

I believe it to be an unquestionable fact that the fiberglass strip replaces a jib club. It prevents the jib from folding over on itself when running downwind.

The strip does resemble a batten in as much as it is located in a pocket sewn in the sail.

So that's it. Is the strip legal or illegal? Class rules do not provide the same definitive answer to all members, obviously, and I ask that you consider it your obligation to vote on this matter.

I think it must be mentioned that a good many of our 50/800's are Vortex Solings. We will lose a large number of registered yachts and, no doubt, our position of largest AMYA class if we insist that all Soling owners remove the fiberglass strip, fabricate a jib boom, and re-rig their sheeting systems.

Vortex engineering will not be swayed by our decision. They have stated that there are "compelling economic, engineering and aesthetic reasons" for the use of the fiberglass strip. They wish to offer the more modern loose-footed jib and, in fact, will soon adopt it on their one-design Santa Barbara. They will not be able to recall Soling sails if we find the jib illegal.

At this writing we do not have an opinion from the International Model Yacht Racing Union (IMYRU) on the legality of the jib. Since we are not a member association of IMYRU, we can not necessarily expect to receive an official ruling on the matter. We might hope that if we legalize it, they will accept it on R/C yachts in the interest of promoting international competition. The letter reprinted further below from IMYRU R/C Sec'y for Europe, Norman Hatfield, to Dennis Eason, IMYRU Sec'y for the Rest of the World, could be interpreted as an indication of how the IMYRU might eventually decide the issue.

Don't forget to mark your ballot and return it within thirty days.

Opinions and call
to vote on Soling
50 jib thing.

THE LETTERS RECEIVED...

** I have received some letters and at least one long distance phone call concerning the legality of the jib of the Vortex Soling. The question in point seems to be: Is the fiberglass reinforcement on the jib a jib club (spar, boom etc.) or is it a batten? It is my opinion that it is not a club (spar, boom etc.) by any definition I have been able to find. It is not attached at the toe and heel of the sail (only at the heel of the sail). It does not have its pivot point at the toe of the jib. It does not run along the foot of the sail. It is therefore my opinion that this fiberglass reinforcement of the jib is not a jib club (boom, spar etc.) but rather a form of batten. Therefore the sail in question is not legal because our rules clearly state that you may not have more than 3 battens, no more than 2 inches in length. I personally like this form of sail but it is clearly in violation of our rules. from Bill Caldwell

** That "thingie" is quite obviously functioning as a full length batten, and is thereby illegal.

When a number of us (chiefly Bill MacLaughlin of Memphis, Joe Vella of Denver, and myself) were forming the 50/800 rules at the beginning of AMYA, the question of the full length battens came up. It was unanimously vetoed, particularly with regard to maintaining the traditional "M" class rules, and out of a belief that full length batten sails were inherently considerably more efficient, and would therefore reduce the competitive nature of alternative hull designs. At AMYA founding outlawed full length battens.

I have not bothered to respond to the "Vortex problem" since past occurrences, such as the Vortex garboard elimination, have clearly illustrated AMYA top officials' policy of prostituting principles to please manufacturers, especially Vortex. There is no doubt in my mind that the final solution to the "thingie" will be exactly the same as the garboard rule. Those with legal boats will be outvoted by the more numerous Soling owners, and that's that. One very strong indication of AMYA's continuing "Happy Hooker" status is how smoothly the protest against a very obviously illegal boat has been deferred to permit the Solings to sail blissfully on. Form Soling 50 one-design?

The only way that I would accept any decision would be to see AMYA sanctioned statistics showing that the "thingie" is not functioning as a full length batten. Let Vortex produce a tuned legal jib Soling and a tuned "thingie" Soling; and sail them side by side on various pointings and wind conditions, carefully tabulating the differences. Statistically reduce the data for relevance, then prove that there is no difference. You can bet they (Vortex) won't do that, because they know the "thingie" is illegal. The only other alternative is to form the Soling as a one-design class, and bar it from AMYA sanctioned 50/800 racing. Major conflict will be the Internat. races if an illegal jib by international rules is allowed by AMYA. from Robert Suding

** I have been actively free sailing "M"s for over ten years and have been club measurer for ten years in the MYRAA. I believe the rule now used by the AMYA was derived from the IMYRU and the old MYRAA rule. Unfortunately in simplifying the rule several important restrictions were left out.

In the case of the Soling jib with the full length fiberglass batten, the old rule clearly defines the use of the batten illegal. The part of the rule which applies is the Headsticks or Heaboards ruling. The ruling states "No material other than sailcloth may be used for tablins in the head, tack or clew of any sail." The batten in order to be effective must be extended to the jibsheet attachment point and therefore is in the area of the clew. If the use of the batten is allowed, its shape at the clew can be altered to allow one to bring the 2" roach and 1" foot roach right to the tack. Also under Batten Limits you will note that they are required to divide the leech into approximately equal parts.

I am sending you a copy of the old MYRAA rule for your perusal. It was forged in a period of class development when many attempts were made to beat the rule. It is a

MYRAA rule prohibited anything but sail cloth at head, tack and clew so Soling 50 jib thing not legal.

reasonably good rule and has reasonably stood the test of time. I am sending you a copy of the rule with some of the changes in it made. I would suggest you also get a copy of the present IMYRU "M" class rules and use both rules for a basis of updating the AMYA rules. (I must warn you that the last changes included some poorly thought out revisions that were railroaded through in the 1971 IMYRU meeting.) The version of the MYRAA rule is not completely up to date.

Being an experienced "M" class designer I recognize several areas where the AMYA 50/800 class rule can be exploited. I would like to see us plug these holes before the event instead of doing it after. from Stanley H. Goodwin

** I can see where eyebrows could be raised at the fiberglass strip in the jib if you considered it as a batten because it would indeed be over the maximum length as prescribed in the rules.

However, if you consider the whole jib arrangement as a new variation of the lateen rig, the jib stay becomes the spar and the fiberglass the mast. However, this would indeed be stretching the point a bit! But, the arrangement is basically similar!

One point however, when you dig into the rules for the class a bit, you will find that the intent of the rules to keep the class as an experimental class is not consistent. For instance, full length battens are not permitted and there is a restriction on the amount of roach! There are other restrictions that should not be in the rules if it is to be an experimental class. from Ben A. Hogensen

Rules not consistent with experimental class

** As a new, proud owner of a Soling, I am certainly concerned about the possibility of it being barred from 50/800 competition. I also feel that Vortex just might have introduced one of the most innovative changes in model boat sail design that has been seen in the past fifty years. As John Converse stated, why do we need that ugly jib boom anyway? If the Vortex approach has not advanced sail performance, it sure has improved the aesthetic appearance of model yachts. from Dick Hein

Supportive of jib thingy

** The Marblehead class is intended to be a designer's class. I personally would like to see the rules relaxed to the point of being similar to the 36/600 rating. This however would make too many boats out of date too quickly - mainly through the removal of the 80% jib hoist restriction. As a gradual change and one which would not upset things too much, could consideration be given to a rewording of the batten rule to something like, "The mainsail shall have no more than four battens whose combined length shall not exceed sixteen inches; the jib shall have no more than three battens whose combined length shall not exceed more than six inches. A boat with a single sail shall have no more than five battens with a combined length no more than twenty-five inches."

A change along these lines would not affect present boats, and would permit some experimentation with long single battens in the foot of the sail. It would also permit varying the location of the battens to suit the varying aerofoil shape of the sail.

Exploring battens a bit further, it seems to me that battens as specified under the present rule may not be so useful as they are thought. Battens are normally installed perpendicular to the leach. The airflow over the sail is perpendicular to the luff. Thus the batten produces a "disturbance" to the airflow which is in proportion to the length of the batten and the aspect ratio of the sail. As model yacht sails tend to be of very high aspect ratio, as compared with full size practice, I suspect the presence of a batten to be a hindrance to sail performance as long as the cloth is stiff enough to hold its correct shape.

As for the Soling batten, I don't really know - I haven't seen one. From the photos I have seen, I would call it a batten. My reaction would be to change the rules to allow it although this would make the AMYA different from the IMYRU, but so be it. When international competition occurs, the governing body of the host country should legislate.

from Grant Slinn

Suggests change batten definition to allow, but issues with IYMRU

** According to my interpretation of the class rule: 1) The battens in the jib are set as to length and number. 2) According to this rule the Vortex "batten" is illegal! I therefore strongly recommend that it not be allowed. from Fred Johnson

Illegal batten

** As an owner of a Vortex Soling #58, I am interested in the final decision as to the legality of the stiffner in the Soling jib.

My son also has a Vortex Soling #76 equipped with a jib club and we have not been able to detect much difference in performance. Our feeling is that the jib club gives slightly better performance but it is a very small difference.

Therefore it would not make any appreciable difference in performance to require removal of the stiffner.

Back to definitions (a) a batten is used to stiffen the trailing edge of a sail to provide a smoother path for the air movement.

The Vortex stiffner does not affect the air leaving the trailing edge of the sail.

(b) A batten is a stiffner that is used parallel to the movement of air across the sail. The Vortex stiffner is not parallel to the movement of air.

(c) The Vortex stiffner is attached to the jib sheet and acts as a jib boom. It provides a means of preventing the jib from rising when running - just as a jib club would.

Our interpretation is that the Vortex stiffner is an enclosed jib boom (at an angle) but is not a batten.

This is an official judgement made by the officers of the Hawaiian Miniature Yachting Association. We have declared the Vortex stiffner legal for all HMYA sanctioned regattas.

from Howard Hole

It is an internal jib boom, so it is legal

** As a new arrival to the AMYA after 30 years vane sailing with the MYRAA, I feel some comments are in order regarding the "Jib club batten" controversy. I have two ex vane "M"s that are being converted to R/C and expect my daughter and I will campaign them this year at least locally. First, I think those interested in 50/800 M class boats should bear one thing in mind, the "M" class is an open development class operating under very simple rules. It has always been this and never in its history was it considered a one design class. Therefore every effort should be made to preserve the experimentation aspects of this class. Certainly, because someone comes up with an idea that may or may not be good he should not be prevented from using it and exhausting its possibilities. Certainly there is nothing in the rules covering this problem. If you consider this a batten then what do you call stick on sail numbers which also stiffen the sail? I frankly feel that development classes should be left wide open. Certainly the fewer the rules the better. I was quite impressed when the IMYRU deleted the garboard restriction on prognathous keel and metal fin keels these all were in my opinion a hinderance to experimentations and then in the same breath used their infinite wisdom to limit the headboard height of the tallest rig. Certainly a step backward as far as experimentation is concerned. I happen to be a believer that rig height is self limiting. A year or so ago, I experimented with a 100" luff rig headboard 105" off the deck. Other than the fact that it ripped my roof liner in my car very nicely, I could see no advantage over an 85 or 90" rig which I was sailing against. from Lester C. Conner, Jr.

Developmental class, leave open

** As the owner of Soling #106 I hope we are going to keep the jib batten AS IS. In my opinion it is an improvement on a jib boom by quite a bit. All it takes to make it legal is the elimination of 2" as the maximum length of jib battens. Who cares how long they are anyhow with the possible exception of some "Sea Lawyer". from Bert Lott

Allow it

** My personal opinion is that the fiberglass reinforcement in the Soling jib constitutes a batten and is therefore illegal.

Illegal batten, follow IMYRU rules

I am of the general opinion that the AMYA should not deviate from international "M" rules. Therefore, I do not believe that the AMYA should approve the jib, by referendum

or otherwise, if it violates these rules. The legality should be established on "M" rules.

In the interim and regardless of the ruling, the AMYA should permit use of the jib for the remainder of 1973. This will allow ample time for Soling owners and the Vortex people to make changes should the ruling be that the jib is illegal. If a notice to this effect can be sent out immediately, there would be no disruption of racing plans and time to come to a firm decision. from Chet Purdy

** AMYA effort should be directed toward keeping the Soling in the 50/800 Class, not getting it out. Our leverage in international discussions will be in direct proportion to our count in the world's "M" Class population.

I will vote against any measure to expel or illegalize the Soling in 1973. Beyond this, I can be convinced by good argument. from Bob

More M boats for IMYRU influence, keep

** The fiberglass strip used in the Soling jib does resemble a batten in that it is inserted in a pocket made of sailcloth, and it is flexible as is the typical batten.

But, wait a minute. Not only can we define this thing on the basis of what it looks like, but we can also define it on the basis of what it does.

It must be considered that the normal useage for a batten is to provide stiffness along the roach of the sail in order to prevent flag like flutter along the trailing edge. You won't find battens in the lower third of a sail, especially running from the clew as with the Soling's fiberglass strip. The fiberglass strip is not there to prevent fluttering. The strain of the jib sheet will by itself prevent any fluttering in the lower area of the jib. Battens are not needed this low. Full scale or model boat, I have yet to see a batten in the lower third of a jib.

On the other hand, the normal useage for a jib club is something entirely different than that of a batten. And, it's my contention that the reason behind the being of the Soling's fiberglass strip is the same as that of the antiquated wooden jib club. The reason: to give a degree of stiffness to the jib so that it can be "wung out" when sailing downwind. R/C sailboats do not need a jib club or a fiberglass strip when sailing to weather or reaching. But, turn the boat downwind without a jib club or the fiberglass strip, the jib with eased sheets will belly forward and collapse into itself against the forestay. Flutter control is not the motive - "Jib club effect" is its purpose. There is noway the Soling's fiberglass strip is a batten-batten! The rule concerning battens does therefore not apply.

Internal boom for downwind performance

There is another good reason for approving the use of a fiberglass strip in lieu of a jib club: aesthetics. Just as the Soling hull design is a departure from the long-time traditional plumb ended 50/800, the replacement of the non-scale clumpy looking jib club with an inconspicuous fiberglass strip can be considered as progress to those who enjoy owning and sailing good looking boats. Let's pass approval of the fiberglass strip so that everyone can use the idea and then have a scale appearing model.

Better aesthetics

The Soling does have a remarkable racing record. If anyone believes that its successes are the result of the fiberglass jib strip, I would like to suggest that they are on the wrong tack. The fiberglass strip does less for boat speed performance than does a jib club. The typical jib club, properly fitted with an outhaul, does provide the ability to adjust the shape of the jib foot. The fiberglass strip provides no facility for adjustment. If you take your racing seriously, you will agree that it is nice to be able to bag out the foot and increase sail draft in light air and to be able to flatten the sail for heavy weather sailing - something that cannot be done with the fiberglass strip. Also, the fiberglass strip makes it near impossible to rig up a "jib twitcher" without having an overhang forward of the jib tack fitting. In the same respect, without having a set-back jib tack fitting there is no jib boom vang effect available to keep the jib roach from falling off to leeward. Performance-wise, the fiberglass strip has more disadvantages than advantages.

Performance more disadvantage than advantage

IMYRU won't recognize AMYA, the largest RC org in the world

No doubt, reference will be made to "M" Class rules of IMYRU. Let's be rational about this. Because of its illogical (and what will eventually prove to be its own self-defeating) policy that prohibits it from recognizing more than one model yachting association per country, the IMYRU does not recognize us - the world's largest model yachting association. To state it simply: We are not privileged to approach IMYRU with our problem of the Soling's jib. The AMYA with at least 90% of the world's total R/C "M" population has nothing to say! That's ironic (nuts) as all heck. The AMYA, on the basis of its membership size, growth rate, and track record of progressiveness is in the position to make its own decision. Those that still want to quote the IMYRU rulebook should do as I did and read it again. Granted, there is nothing written that permits the use of the Soling's fiberglass strip, but there's nothing in their rules that permits a wooden jib club either!

IMYRU does not specifically permits or requires a jib clubs either!

Semantics, affects on performance, and the rules of other organizations are issues, yes. The whole thing is all very argumentative. But, let's not overlook something absolutely fundamental: the status of a bunch of Soling owners and the welfare in general of the AMYA 50/800 Class. If the Soling jib stiffener were to be declared illegal, it would be no surprise for the disgruntled Soling owners to start their own one-design class. That's something we do not need - another class and a depleted 50/800 Class.

Avoid one-design

Not to be ignored either are the reactions to all this by Vortex. After a gross of Solings are delivered, after two AMYA ACCR's and after a couple dozen other sundry 50/800 regattas, then somebody points the finger. How's this for a neat case of "after the fact"? Vortex believed nothing was amiss with the fiberglass strip when the design was first produced. And, for two years afterward no one else did either! Vortex was very careful to insure that the Soling design was not in any violation of AMYA or IMYRU rules. They even delayed marketing the boat until after the IMYRU rule concerning garboard radius was deleted by that association. Vortex has always supported and cooperated with the AMYA. Every member, whether Vortex customer or not, has benefited from their loyalty. I do not want to see anything happen that might sever this relationship. There are all sorts of ramifications to this subject all covered, if anyone wants to hear it. In my special sermon entitled: "Crass Commercialism and Fifty New Members Per Month".

Too late. make it legal

I have no reservations about voting in favor of making the fiberglass strip legal. I am hopeful that the overwhelming majority of the class members agree. from Rich Matt

** The question of the Soling jib has been answered. It was put to the MYA (England) at a recent Council Meeting as the request of Bob Jeffries. Their answer was put this way: "We consider the Soling jib is legal within the "M" Class rules provided it is used without a boom." I believe the question is now clearly settled in England, although other member countries of the IMYRU may take a different point of view. from Dennis Eason

UK says its OK

** It seems to me that before any decision can be made as to the legality of the device in question, there must be some agreement on how the term "batten" is to be defined. I have talked to a number of sailors, sailmakers, and measurers about this, and so far none of them could specifically define the term.

I have been sailing full size boats for about 24 years, and have never seen a piece of gear such as is used on the Soling jib. Therefore, I am at a loss as to what to call it, but I personally feel that it should not be referred to as a batten in the generally accepted sense of the term.

I have found two definitions of the word "batten" which may prove helpful in resolving the issue. The first may be found on page 891 of Knight's Modern Seamanship 1945 edition. The second definition may be found on page 440x of Chapman's Piloting, Seamanship, and Small Boat Handling 1966-67 edition.

Battens - Thin strips of wood fitten into the leech of a fore-and-aft sail for stiffening the leach.

Battens - Battens are often used on a yacht, on the leech of a mainsail to make it set flat.

It seems to me that the key word here is "leech". The apparatus in question does not attach to the leech but to the clew of the sail. Its purpose is not to stiffen the leech of the sail, but rather to perform the function of a jib club. Therefore, I feel that it can not be classed as a batten, either by definition or by generally accepted use of the term. from Bob Kerr

Not a batten, so OK

** The fiberglass strip clearly does not fit into the normal definition of boom, spar, or batten, so I approached the problem from another angle. Can this re-inforcement have any effect upon the shape (camber) of the sail? Could it be used to control the shape of the sail? Could it be construed to affect the shape of the sail? If the answer to any of these questions is "yes", then the re-inforcement has, or could have the effect of a batten. Therefore this jib should be considered ILLEGAL.

However, the matter does not end there. for there are several other points arising from this issue. Defer to IMYRU, suggest only sail restriction is 800 sq in

I feel that as the 50/800 (Marblehead) Class is international, a ruling should be sought from IMYRU rather than holding a referendum. It is possible that this matter, or a similar one, may have arisen before, and possibly have been "protested". I suggest then, that we defer the matter to IMYRU, for the purpose of continuity in the rules, and their interpretation. If this course is adopted, and it turns out that the jib is ILLEGAL, we could then make a local ruling to allow the present jib on all boats registered up to the end of a) 1973; b) up to a specified Vortex hull number (this arrangement to expire by end of 1976 for example, by which time all jibs must be legal; 3) I am in favor, in cooperation with IMYRU, of freeing up the sail rules on 50/800's to allow unrestricted use of battens, together with removal of all other sail form restrictions, except that the true sail area be measured (as in the Ten-Rater Class). from John Ball

** At a recent meeting of the Delaware Valley Model Yacht Club, the subject of the Soling's jib reinforcement came up for discussion. There are three members of our club who are now proud owners of Solings. There was no difference of opinion between Soling owners and non-owners. We all agree that this "issue" is nothing but nonsense.

It appears that some people are having a tough time competing with the Soling and therefore want to find a way to cut it down to size. They have used the jib reinforcement as a starting place.

The rules as we understand them, do not refer to this reinforcement in any manner. Logically then, what rule are they going to change? Why then, change the boat, when it does not conflict with the rules?

Our understanding of the rules of the 50/800 Class have led us to believe that it is primarily an experimental class with only a few restrictions. Is this nonsense going to take place every time someone comes along with a new idea? You might as well make the 50/800 class a one design which tolerates little experimentation. In that case, which boat are you going to use? What are you going to do with the rest of the boats that are now running in the class? Are you going to say that any boat now in production will only run against similar boats? This will call for many, many classes, as there are many boats on the market. What do we do with all of the boats that are new being scratch built?

Nonsense, experimental allow jib thingy

I hope that one or these days we can get down to the basic fact that this is supposed to be a Hobby, and settle down for some real honest to goodness fun sailing, with a little competition thrown in every once in a while just to liven it up. After all, isn't that what a hobby is supposed to be all about? from Jim McGrath

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1974 Winter #14

Class notes by Ron Schoder - 50/800 Class Secretary

4 to 1 voted to approve jib thingy

No doubt everyone is wondering what is the outcome of our recent referendum. Well, by almost a four to one ratio (93 to 26) class members voted to legalize the Vortex Soling jib. This means that the fiberglass strip is legal when used in lieu of a jib club for all 50/800's. From the number of letters we received and then from the large number of ballots returned, it's obvious that this was a very important issue to many of our members.

Soling skippers should take note of another item: Earlier Vortex instruction manuals specified a jibstay height dimension of 48" instead of 47 3/4" as does the current manual. The 48" measurement exceeds our 80% jibstay rule, so if your's is up that high be sure to move it down 1/4". A simple method of correcting this was described in the July/August Vortex Newsletter. Write me if you might have the problem and want a copy of Vortex's article.



THE 50/800 WARRIOR II, by Chuck Black

The Warrior II is a previous vane sailing national championship design by Stanley Goodwin of Marblehead, Mass. This yacht was designed as a heavy, extremely stable model, 20.2 pounds, with a high lift keel. It is obviously a plumb bow model with a full waterline, which through the years has proven to be the most consistent type winner. In addition, the sails to drive this type of hull must be of a high aspect ratio and carefully shaped. Experience has shown that the sails must be much fuller than would be expected. Although it may not be evident, it also possesses the attractive feature of a generally constant wetted surface as the yacht heels to various wind conditions.

The Warrior II is fast to windward in all wind conditions, and I believe it outpoints other 50/800's sailed against thus far. Off the wind she holds her own, however accelerates slowly and tends to lose a little under puffy wind conditions. In 20 MPH winds she planes. To windward the balance of the model changes little with wind speed. The key to the top notch performance of Warrior II is the sails.

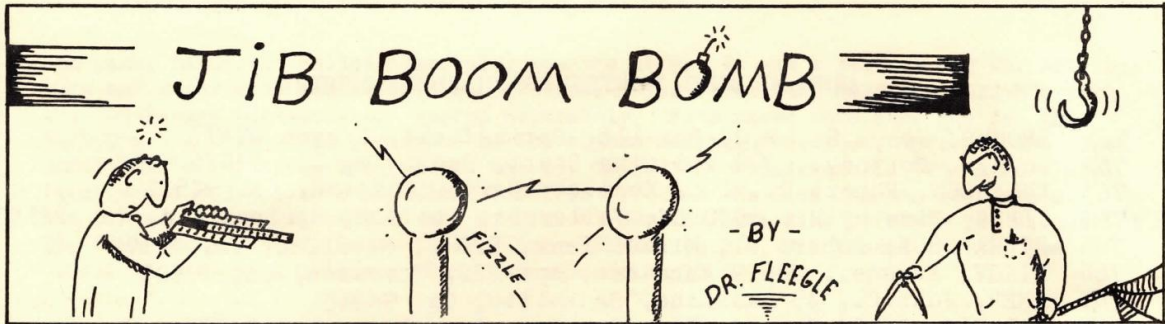
The design demands a tall rig. The 85" mast works well in conditions from 3 to 12 MPH and is acceptable to 15 MPH. These are conditions generally experienced during the summer sailing season on the east coast, but out west the prevailing winds are higher, therefore I have used a 72" rig. Since sails for tall masts are extremely hard to make, a poor suit gives atrocious performance. An excellent suit of sails should be sought after and cared for, they will be unbeatable.

Another consideration is the mast. To ensure maximum stability, the rigging must be as light as possible. The mast must be of minimum sections and carefully stayed to maintain sail shape. It has been found that a good rig weight with mast, sails, shrouds and turnbuckles is around 12 ounces. Some of the west coast skippers have dropped the jib club and main boom very close to the deck to reduce the heeling moment. This, of course, requires a vertically rigid gooseneck that rotates freely in the horizontal plane.

In real high wind conditions, I doubt if anything will touch the Warrior II. She planes from broad reach to wing and wing, points exceptionally well, and doesn't develop an unruly weather helm. She also comes about easily when other boats have a hard time tacking.

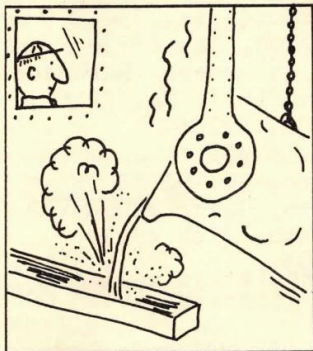
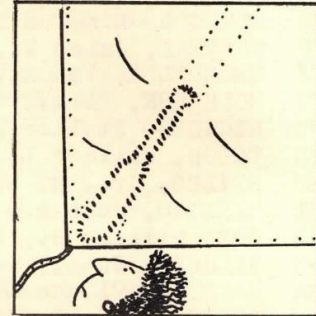
In summary, the Warrior II looks a bit ugly, but since it sails so extremely well, in time you sort of learn to love her lines.

A good sense of humor



From the desk of: J. FENSTER FLEEGLE, F.A.S., P.H.D., B.V.D., P.U., B.S.

I was immensely pleased that you called upon me to render my judgment in the matter of the so called Jib Boom Bomb. I did spend quite a lot of time and money in the research project which resulted from the question you posed. I should remind you that my qualifications in this area of endeavor are unsurpassed. Not since Ford Motor Company and the Edsel program have I quite so completely become involved in theory and postulate. Let me for a moment indicate to you that this device which is inserted into the jib so as to act as a boom or batten is really neither. The device which you are talking about is more scientifically described as a "Nerny Flogger". The first recorded use of the Nerny was the Aborigine natives of Borneo, who found that the membrane sails they were using could double as a place to store their paddles for periods of calm. The idea was short lived however, when the sail was hoisted the paddle fell out of the bottom of the sail and was lost overboard. I will not force upon you the details regarding the evolution to this date, but needless to say the idea still holds intrigue, and with the new materials available in today's technological world there could have been a possibility of the revival of the Nerny. I have come to the conclusion however that the inherent problems of this device outweigh any advantages gained. As you are aware, it is very difficult to determine the significant variations of using the Nerny, or a regular jib boom on a small model boat. The only way to really investigate this was to blow up from plans, holding all variables to exact scale and then test the full size rig. My design rig was not used on a Soling hull, as the cost of manufacturing an eighty foot Soling was beyond belief, and Vortex was unable to commit to a delivery date. I instead used for my test hull the "Columbia" which as you are aware is a 12-Meter here in Newport. Mr. Cunningham was cooperative, and Mr. Mosbacher proved to be a very capable skipper for the project. The sail material was provided by Mssrs. Howe & Bainbridge, also of Newport Beach. The first



Fiberglass Nernie was provided by Dow Corning, who used the fluted foam injection and radial interlace wrap method of casting. The Nernie was shipped in three sections via flat car from Zippo, Ohio, the Dow Experimental Casting Facility and final assembly took place at the Seal Beach Facility of N.A.S.A. where tolerances could be kept in check. As I mentioned, this was the first of our test Nernies, and it was unfortunately too heavy ($22\frac{1}{2}$ tons) to be inserted in the sail. Our second Nernie was cast by the Special Metals Section of Harvy Aluminum, Inc. with the cooperation of Air Research, and the honeycomb laminar Titanium zipper method was used. This Nernie was perfect, and considering the problems of scaling from a fiberglass Nernie of little more than



six inches to our final test unit of forty-one feet we held the properties of both were identical. The problems with getting true scale sail cloth were fantastic, but we finally settled on eighty-six pound Dacron with stainless steel Rip Stop at eight inch intervals. The actual test was conducted at sea between July 10 and August 18, 1973. Testing was absolutely conclusive. We sailed a triangle course from Pt. Fermin to Anacapa Light and the Blue Beat. Our first run was with the standard 12-Meter rigging and in light wind and moderate swells. We made it to the Blue Beat in sixteen hours flat. We then stood by for the second test for thirty-eight days waiting for wind and sea to be exactly the same as before. The second run with the Nernie took

eleven weeks over the same course. The handicap was obvious, the Nernie doesn't work well at all. In fact we had some real problems steering the yacht, as the added weight of the Nernie and sail caused the stern to lift out of the water and the rudder was not working when not submerged. I recommend that you forget about the Nernie, Fred. The final problem we discovered was that the Nernie will not fit into any known sail bag. Thanks for the inquiry, and I am enclosing plans for my newest hull design, the Pentamaran, which with any luck I will be marketing shortly. The low wetted surface of the five hulls is the secret.



From the desk of: R. Schoder, A.M.Y.A. 50/800 C.S.

Your ballot and much appreciated design analysis of the Vortex "Thingie", or "Nernie" arrived yesterday and caused quite a stir in the local sailing fraternity.

Dr. Fleegle's analysis does tend to verify the results of the work performed by our own Mr. Jonathon Furback III, who also concluded that the Nernie was useless. Mr. Furback owns Sandusky's only outdoor pizza cafe and as the winds of controversy began to rage, The Third (as we call him) began to insert soda straws as battens in the sixteen inch pepperonis. On the last "flip" the reinforced pizzas invariably folded at the batten and the project was discontinued.

With the Nernie laid to rest, a thought occurs: The mainstay, chief designer and portable W.C. handler for Sandusky MYC has in the past few months developed a problem. He cheats on his "Old Lady" a lot for one thing, and for another, he has failed to place higher than last in the past few inter-club regattas. It seems the only possible explanation is that the bottle of Cold Duck which he hides in the bilge of his S/B is detrimental to boat speed. We have tried to convince him to remove it for racing events, but he insists that his "Chicky" must have it chilled and that if it speeds her up, it should do the same for his S/B.

Would it be unreasonable to ask Dr. Fleegle to embark on a program to determine the deleterious effect of using a hull as an ice bucket?

A reasonable scale up of a concave bottom wine bottle could be built. Gallonage probably would work out to about 7,000 based on the 12-Meter length of "Columbia". Muscatel could be substituted for the Cold Duck for economic reasons. A screw cap should be fabricated in lieu of a cork, because as Lester says: "That Chicky really likes the cheap stuff, anyway."

Sea tests should convince Lester of the error in his ways, and possibly next summer we will find him again back at the pond in his dinghy beating the nasty seaweed eighteen inches below water level.

1974 Spring #15

Proposal, 1 1/2" mast diameter, no thingy restriction, back to experimentation, allows all old designs

Motion #10 - (as a replacement for the entire 50/800 Class Measurement Specifications):
LOA - 50", plus or minus 1/4". Sail Area - 800 sq. in. (using AMYA formula to determine). Spinnaker area unlimited, spinnaker pole 18" max. Mono-hulls only. Mast diameter - 1 1/2" max. Sail Roaches - max. leach 2", max. foot 1". Headboards - max. 3/4" x 3/4". No restrictions on battens. Comments: These revisions are intended to open the class rules to allow more experimentation with mast head jibs and sail shape controls. It seems unlikely that older boats will be hampered by the new rules. We have over 300 registered 50/800's in the hands of dues paying members, and it seems a shame to be limited to older vane sailing class rules. This change will in no way eliminate boats designed to the previous rule, and it will allow the use of more modern designs in rigging and construction. By: Don Frough. Second by: Chuck Black.

It's probably more rumor than anything else, but it seems that a few of our members are interested in having the Vortex Soling set up as a one-design and raced only against other Vortex Solings. I have yet to receive one letter on the subject, but the question has come up in conversations. The whole idea seems a little strange when you consider that the design was originally intended and specified as a 50/800 and the recent jib referendum indicated that it has overwhelming support to stay in the 50/800 Class. From my point of view I can see no advantage to the membership's Soling owners in creating a new class. That boat is a terrific performer in the 50/800 Class, and it looks as if it will always be. In some parts of the country there would not be enough Solings to actively support the new class. Getting more people to participate in AMYA regattas is what we are all trying to do. Starting yet another class would only exclude those who had all along expected to be part of the activities. Certainly the 50/800 Class would suffer. If you have some ideas, please write, but at the moment I think we need more regattas, not more classes.

Rumors of one-design Soling, bad for M class!

INTRODUCTION TO MODEL YACHT DESIGN TECHNIQUES (PART 2) by Mario Singleton

Before we can sit down with paper and pencil to design the ultimate boat there are a few items to consider. The designer must totally familiarize himself with the class. This information is available in the AMYA class rules so we will not consider the various rules in this article. In addition, we must be conversant with the designs that are performing successfully within the class. There are numerous sources of information concerning design trends which the successful designer studies constantly. The best designers maintain files and scrapbooks of designs published in magazines. Several sources of information are listed below in the bibliography. Files such as these are perhaps the single most important tool the designer has to work with. Most beginning designers, including this one, start by going all out and producing that totally "new and revolutionary" hull. They are always disappointed with the results and frequently that is both the beginning and ending to their designing career. All consistently winning boats are compromises in terms of pointing, driving, running, ease of planing, etc. They were created by making small improvements to previous designs and ideas. Successful designers change one thing at a time since if numerous changes are made there is no way to determine what was an improvement or detriment.

To illustrate the types of notes you should keep, let us examine a page from my notes:

50/800 Class

Design/ Designer	Harvey/ D. Prough	Tie-Tac-Toe/ S. Sansom	Warrior II/ S. Goodwin	E-22/ C. Black	FD/ D. Black	Soling/ Vortex
LOA	50.0"	50.0"	50.25"	50.0"	50.0"	50.0"
LWL	50.0"	46.0"	49.5"	44.1"	48.4"	45.2"
Beam			9.5"	10.3"	12.4"	12.4"
Bw		10.5"	8.7"	10.7"	10.4"	11.2"
Draft		2"	3.4"	3.2"	0.8"	3.5"
Disp(lb)	22	20	20.7	19.8		
SA(in. ²)	800	800	800	800	800	800
LWL Bw		4.38	5.69	4.12	4.66	
LWL Draft		23.0	14.56	13.79	6.05	
$\frac{\Delta}{(LWL)^3}$ (100)	152	178	144	205		

m-7822

1974 Summer #16

Once again, alternative motion to adopt IMYRU rule

Re. Motion #10: As an alternative motion to Motion #10 I propose the AMYA adopt the International Model Yacht Racing Union (IMYRU) rating rules for "M" Class (Marblehead 50/800) in their entirety. The only modifications I suggest is elimination of references the IMYRU makes to measurement certificates as AMYA does not use them. Also, I would suggest retaining the present AMYA sail number format.

This amended proposal is submitted as the IMYRU rules are about four typewritten pages and understandably too lengthy to print in the newsletter. However, I would be pleased to send copies to anyone who will drop me a card requesting same. (Lester C. Connor).

The above alternative motion to Motion #10 has been properly seconded by William Full. If Motion #10 were to have been on the ballot alone, it would automatically infer that members were to choose between accepting a change or leaving the rules as they exist on the books. Now, with an alternative to the motion, it is necessary to provide on the ballot a provision for members to vote on all three options: Motion #10, the alternative motion, and leaving the rules as is.

Re. Motion #10: The amendment to change the 50/800 Class rule would be detrimental to the AMYA. The "M" Class is an International Class with very similar rules in all countries. Our 50/800 rule while simplified, does not deviate from the basic "M" rule. Conversion to the proposed rule would eliminate any international competition. For instance, no boat taking full advantage of the proposed rule could attend the international races to be held in Gosport, England, in August 1975. These races are to be sailed using IMYRU rules.

If the AMYA is to become a member of the IMYRU, we would inevitably have to bring our rule back in line. Why change the rule only to have to bring it back in a few years?

Looking at the effect of the rule change on the U.S., I see a major change in the local boats. These proposed changes would result in a 90 sq. in. increase in average sail area for a normal rig. An enterprising builder could achieve a 150 sq. in. increase in sail area. The methods used to gain the increased sail area would inevitably lead to many arguments and probably result in future rule changes to control freakish tendencies.

The statement made by the framers of the proposed rule change regarding obsoleting old boats is incorrect. The proposed AMYA 50/800 Class rule has no provision for bumpers. A number of east coast boats are converted vane sailing hulls. These boats have built-in bumpers and cannot be easily modified. For those interested in the 1975 Gosport races, it should be noted the the IMYRU rule requires bumpers for all yachts.

Our present rule is adequate. (Standley H. Goodwin)

Don't change, move toward IMYRU

Re. Motion #10: I feel that we should vote down this motion. Let's leave the rule as is. With the number of boats registered to date and the current status of our relations to international rules I don't feel we need any changes at this time. The current rule does not impose any hardships that I can see and with the number of boats that we have apparently not too many of our average sailors do either. (Paul Meskill)

Don't change, move toward IMYRU

Re. Motion #10: The 50/800 Class was developed in Marblehead, Mass., recognized in the U.S. in 1932 and internationally in 1937 and is now the most popular model yacht in the world by far and for good reason. Over the years it has been developed by generations of skippers into a highly sophisticated racing machine. Motion #10 by departing still further from the international rule would take all AMYA 50/800's out of the only international class originated in the U.S. and leave us with a bastard class of our own which nobody else in the world races. I agree with Dennis Eason that we need to get our rule back in line with the international rule and not go in the other direction. Those who want to experiment with mast head rigs and fully battened sails, like me, have ample latitude to do so in the marvelous Ten-Rater Class which deserves more attention in the AMYA. (Larry Goodrich)

Move toward IMYRU rule

Re. Motion #10: The 50/800 Class has been in existence now for over 40 years, and I and my fellow skippers have been sailing these boats for a good portion of that time, and quite frankly see very little need for alterations in the rules governing the boat. It is my firm conviction that we should adhere to the present rules, especially those set forth by the IMYRU. It is the intention of a number of us to continue building and sailing to these rules so that we may be competitive with European yachts if and when we go there.

It is certainly not my intention to sound like an "old crank", but I find very little in the current rules of the IMYRU that is in need of any change. If memory serves, the AMYA has changed the rules on this class before, and not once have the rules been stated clearly and completely. (The current motion, for instance, doesn't mention bumpers.) I would suggest that if it is felt there is need for experiment, do not lightly destroy the established continuity of the best all-around class of model sailing today, bar none, but rather establish an experimental class, perhaps 50" in length, and write your own ticket, thus enabling those who wish to experiment the opportunity to try anything they wish.

Move toward IMYRU rule

I very sincerely urge you to drop Motion #10 in its entirety and suggest instead that the AMYA adopt and adhere to the rules for this class set forth by the IMYRU. (Wm. Full)

Re. Motion #10: If your club was sailing a full-size sailboat, (say a Finn, or a tempest or a "C" Class Catermaran), and your club did not have representation to the body controlling the rule for that class; would you make wholesale changes to that rule? I doubt it very much. Because someday, some of you are going to want to race against other clubs who do have representation and are bound to follow those rules. It will make life far easier in the future if we stay with the existing rules, and if those AMYA members who want the rule changed addressed their energy and talents to gaining international recognition for AMYA and gain the ability to affect the international rule, then by all means propose the motion again to the controlling international body.

There is nothing preventing those members who wish to experiment to hold informal races to evaluate alternate rigs, such as mast head jibs. In fact there is at least one class in AMYA that permits such rigs, i.e., the Ten-Rater. For instance, there is nothing to prevent an AMYA member from building another rig for an S/B and registering it as a Ten-Rater.

Move toward IMYRU rule

This motion completely ignores the history, development and refinements that have led to the rule in its present form. It is not perfect, it is constantly being challenged, reviewed and updated, but a little at a time, please. (John Ball)

Re. Motion #10: Plans for a 1975 international regatta to include 50/800's are being formalized. Adoption of Motion #10 may discourage further international regatta planning and the possible international growth of the class.

If it is necessary for boat builders and designers to change the rules in order to develop boats competitive with existing designs, that are within current rules, then our class may be subject to yearly rule changes. (Andrew S. Littlejohn Jr.)

No change

Re. Motion #10: Personally, I want to see no changes made to the 50/800 Class Rules. The rules we have are easy to sail with, and the 50/800 Class is big, too big to have any drastic changes. Like the majority, I like sailing kept simple, and that includes the rules. (Wolfgang Schulze)

No change

Re. Motion #10: Motion #10, as stated, would create mass confusion, dissention, and division among the ranks of those AMYA members sailing the 50/800 Class boat. Truly this motion is far more devisive and destructive than the constructive nature professed by its proposers. There are very wide boundries for experimentation within the counter-proposed 50/800 rules, which are internationally recognized and from which the AMYA bastardized its present 50/800 rules.

Motion #10, as stated, smacks of a not-invented-here attitude on the part of the proposers. NIH is a common term and philosophy used by not too successful organizations in the aerospace industry and it reflects upon the state of mind wherein if an idea or method of conduct was not conceived locally, it is no damned good and should be thrown out regardless of its merits. In the case of the proposed rules revision by you it is stated that "...it seems a shame to be limited to older vane sailing class rules.". Your proposal contends that just because the rules pre-date the AMYA and have been generated prior to the advent of R/C sailing that they are not worth using within the AMYA framework. We feel quite to the contrary, and that the IMYRU "M" rules are the result of decades of experimentation and finding out what rules constitute sufficient controls as to provide a flexible but fair set of rules for the 50/800 class of sailboat. (Richard M. Jansson).

Don't change, move toward IMYRU rule

Re. Motion #10: Who the hell needs it? After four years the 50/800 is our largest class. The present rules have obviously proven quite useable to new and old boats and to new and old members. Those that I have talked to say "Leave 'em be.". (Rob Preston)

Re. Motion #10: I must register my hearty disapproval of the proposed rule change. I see nothing wrong with the rule as it is presently written, and I would like to see any "thingies" kept out of the 50/800 Class. (Ken Bergman)

No change

Re. Motion #10: Simplification of the rules, as proposed by the recent amendment, may be innocent enough in substance, but represents a radical departure from rules that have been skillfully generated over many decades by other model sailing organizations. Although R/C sailing may be less sensitive to the extensive rules that have been developed in the past, any decision to substantially change these rules at this time may be a bit premature. I suggest that this amendment be tabled for at least one year to give the Class Sec'y opportunity to evaluate experimentally the impact of these rule changes. I suggest that such experimentation be conducted by a committee of competent R/C sailors as appointed by the 50/800 Class Sec'y.

Obviously, there is an international impact lurking in the background of this rule change. My stated opinion is against any international affiliation (including IMYRU) as long as they fail to provide a one-boat-one-vote voting structure. However, a radical change from IMYRU class rules might just alienate some of our members who are convinced that IMYRU has the only set of rules that is worth meeting. (And who knows, they might just be right!) (Dick Hein)

Test motion first, careful to alienate IMYRU leaning members.

Re. Motion #10: I would suggest that the proposal known as Motion #10 be set aside for at least one year. Also, the members of the class should be interviewed in person, or by mail, by the Class Sec'y on this matter and the results of this be reported to the membership in the next three Quarterlies.

It is my understanding that the present Class Sec'y did not receive any formal notification that a proposal was to be presented and that he received only general information concerning this proposal for the first time, from myself, only about two weeks before he received the quarterly. This, in my opinion, is not in accordance with the normal operating procedure of any organization that I know of at this time. I recommend that the policy, in the future, on matters that pertain primarily to a particular class must be first reviewed by the Class Sec'y, and that he must present the matter for publication, with or without his comments and/or concurrence, in the next quarterly.

I strongly suggest that each member of the AMYA sit down and write the secretary(ies) of the class(es) that he sails within to either tell of the class activities in his area, or, comment on an aspect of the class. The Secretaries need this information to run the class. (Francis M. "Mike" Flinsch)

Defer at least a year to follow proper process



50/800 CLASS NEWS

by Ron Schoder, Class Sec'y

50/800 class members rejoice!

On August 10th a new and energetic 50/800 Class Sec'y will take office

and enjoy his duties, I'm sure, as much as I have. It's been a great year

My last, and probably most important duty, is to ask you to give careful and intelligent thought to Motion #10 as stated on the ballot. This motion asks that we replace our existing 50/800 Class Rating Rules with an abbreviated version that essentially would allow experimentation and development of high-efficiency sails. The additional hull speed to be gained by using such sails is, at the moment, not known, but I seriously doubt that there will be an appreciable performance increase on any yacht so equipped.

Motion #10 does have one dramatic effect. It infers a complete disregard for the International Model Yacht Racing Union and that we have no desire for international affiliation. We have, however, a number of members that look forward to international competition. AMYA's Director, Dennis Eason, has worked long and well in promoting international relations. Later this month he will be going to England for the IMYRU Annual Meeting. It seems a shame that we should create any complications for him.

Are the existing 50/800 rules all that bad? I don't think so. Most of us could, using the present rules, find plenty of room to experiment and improve our boats. We now have 400 registered 50/800's, and our class growth rate is terrific. What more could we wish? The existing rules have proven to be useful, workable, and certainly no deterrent to the class. In the interest of giving this motion further study and allowing the international situation to be settled, I must personally vote "No" to any change of our 50/800 Class rules.

I suggest that the new 50/800 Class Sec'y immediately form a 50/800 technical committee to experiment within the class rule as stated in Motion #10. The committee would then report to the class members describing what changes they feel would be beneficial or necessary, if any, to make an existing 50/800 any better under the loose rules. The committee could provide the membership with an accurate prospectus of development if Motion #10 is resubmitted another year.

Like I said, I'm happy with the existing 50/800 rules. The AMYA officers and class members having an impromptu meeting at the Belmont Regatta on June 23rd voted a unanimous "No" on Motion #10. They also expressed a bit of concern about accepting the IMYRU "M" (50/800) Class Rule verbatim until the political matters are settled. As it stands right now it appears that most all of AMYA registered 50/800's would meet the International "M" rule, except for a required bow bumper.

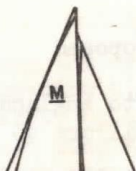
No to motion 10

1974 Fall #17

Motion #10 - 105 Members of the 50/800 Class voted to leave the class rating rules as is. 32 Members voted in favor of adopting the IMYRU rating rules for the "M" Class. And, 8 members voted to replace the 50/800 rules with a simplified version. Therefore, the 50/800 Class measurement specifications will remain as they are published.

John Ball takes over as M class Secretary

Motion #10 failed, leave rule as is. Adopt IMYRU rule failed



50/800 CLASS NEWS

John Ball, Class Sec'y

Well, it's all over including the shouting!

After the smoke cleared away, we found a new class champion, a new class sec'y, Canadian R/C yachting came of age, and the 50/800 class rules survived unchanged.

The elections are over, the votes are counted and the results are carried elsewhere in this issue. The 50/800 rule remains unchanged. But for how long?

There are many pressures on the rule as it now stands, some want the rule made freer, some want the wording clarified, some want to tighten up the rule, moving more toward the IMYRU version.

Following the success of the technical committee of the EC12-M Class, and upon the advice of the AMYA Directors, I have decided to form a technical committee of 3-4 knowledgeable 50/800 sailors. These men will be from all parts of the U.S. and Canada, and business will be conducted by mail. Their terms of reference: 1) to study the existing rule; 2) to collect ideas and suggestions from class members, evaluate them, and thereby suggest improvements to the rule (These suggestions will be published in this column for all to comment.); 3) to advise the class secretary upon interpretation of the rule, to answer specific questions, raised by members; 4) to standardize interpretation of the rule throughout AMYA; and 5) anything else that comes along.

Who will these doughty men be? Well that is partly up to you. I will be pleased to receive nominations for the committee, but please help me by only nominating suitable candidates who will be prepared to work. It would also help selection if a brief description of the background experience (Yes, a reference,) were provided.

I think it is very important that we do not have any surprise motions for 50/800 rule changes at an AMYA Annual Meeting. To provide for an orderly and logical develop-

Form M rule technical committee

ment of our 50/800 rule, let's use this column to sound out and discuss any proposed changes.

Elsewhere in this issue is a report from Dennis Eason regarding his trip to England and especially the IMYRU Annual Meeting. There is important news for 50/800 sailors so read carefully and take note.

Finally, who is this John Ball your new Class Sec'y? Well--my name you know. I am 27 years old, was born in England and have lived in Canada for the last 6½ years. I have been involved in R/C sailing for the last four years as a member of the Metro Marine Modellers of Toronto.

I am a sailor rather than a builder, and I have been active in both the Ten Rater and 50/800 classes. My current 50/800 raised a few eyebrows at the ACCR. It is an English design (Pterodactyl) by Chris Dicks (1973 IMYRU Marblehead championship winner). However, I have put a cat rig on it--no jib, just an 800 sq. in. mainsail. It points like crazy and loves light wind--up to 8 knots, but was overpowered at the ACCR. I was the only one there praying for the wind to drop!

My job is to run the class affairs in the best interest of the majority of members. It's up to you to let me know what you want.

Before I close this issue, let me, on behalf of all the 50/800 sailors thank Ron Schoder for his outstanding contribution to our class.



50/800 CLASS NEWS

John Ball, Class Sec'y

The 50/800 Class Technical Committee has now been formed. Its members include Grant Slinn, a mechanical engineer and the present Ten-Rater Class Champion; Stan Goodwin, an aeronautical engineer and the present 50/800 Class Champion; and Sandy Littlejohn, builder and "sailor extraordinaire". I feel very fortunate to have such a talented group to evaluate the present 50/800 rule.

The technical committee exists to serve all of you with registered 50/800's. They can, and will recommend changes to the present rule based upon their experience, however it is up to you to let them know how you want the rule changed (or left alone). There are several problem areas which already have been referred to the committee, e.g., 1) the question of moveable--or removeable ballast, 2) the wording of the 80% jib stay height rule, and 3) a comparison between the AMYA 50/800 rule and the TMYRII Marblehead (M) Class rule.

Technical committee formed. 3 issues to address

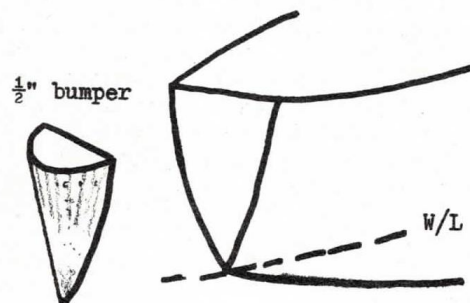
If you would like to comment on these problems or any other, mail them to me (50 Benlight Crescent, Scarborough, Ontario, Canada), and I will pass them along.

I hope that the technical committee will act as a clearing house, gathering together your ideas and suggestions, evaluate them, and pass them forward as motions for you to vote on at the Annual Meeting.

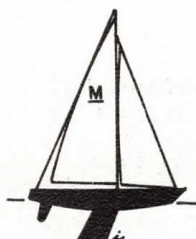
A word of re-assurance to all the kit manufacturers who must dread any proposed alterations to the rules which might make their product suddenly illegal, and thereby affect its marketability. There are no dramatic changes envisaged, rather a clarification of some of the wording. A good example would be the 80% rule. If this were changed (and without interfering with the committee) it might say: "an extension of the jibstay, where it intersects the foreside of the mast"; or the committee might recommend that the 80% section be deleted altogether. They would not, I'm sure, recommend lowering it to 70%. The basic concept of the rule will remain.

One question that I have been asked frequently, particularly by Soling owners, is "What about the $\frac{1}{2}$ " bumper?" "Is it compulsory?" The present interpretation is that the bumper is optional--having a bumper is a courtesy to other skippers. Some modern designs use the bumper to advantage in gaining additional sailing length and displacement in the bow. The front of the hull at the 50" mark is a Vee shape. The $\frac{1}{2}$ " bumper, usually made of cork, is rounded off as an integral part of the bow and parts the waves, giving a dynamic sailing length of 50 $\frac{3}{4}$ ". The important point is that the bumper must be clear of the water when the boat is static in the measuring tank.

The coming season should be a very active one for the 50/800 Class. Altogether, I received requests from nine clubs to host the 1975 ACCR and Divisional Championships. Following last year's precedent, I have sanctioned an extra Divisional. Our class is large and can support all this activity. My sincere thanks to all the clubs for offering their help.



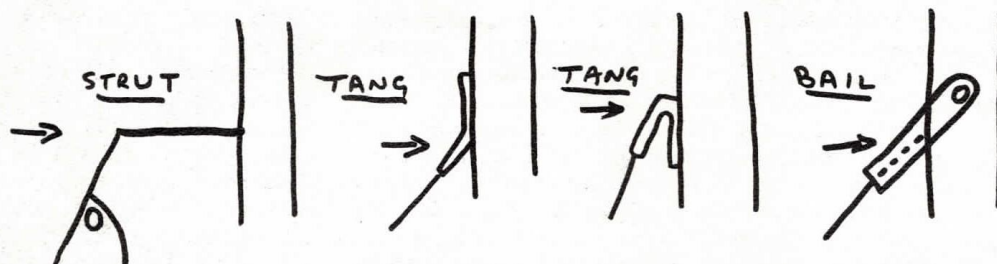
1975 Spring #19



50/800 CLASS NEWS
John Ball, Class Sec'y

To assist regatta directors in measuring boats during the 1975 season under the present 50/800 rule, I have prepared some comments and interpretations which should guide you in deciding upon the legality of a 50/800.

1) Movable ballast. Radio gear including batteries may not be relocated in the hull to meet differing trim requirements. 2) Alternate keels are not allowed as they represent an integral part of the hull even if they are removable to assist transportation. The possession of an alternate keel at the regatta site constitutes grounds for a protest. 3) Interchangeable hulls under the same rig are not allowed. Although we refer to a sail number, the number in reality applies to the hull and is merely displayed upon the sail. 4) Wing masts and wing sails are not covered in our present rule. Therefore in fairness to all skippers, I am ruling that the area of a wing mast or wing sail be computed and added into the sail area. 5) The 80% jib stay rule is subject to liberal interpretation. Refer to the drawings below, and measure to arrow for 80% calculation...



Elsewhere in this issue you will find the proposal for the new 50/800 class rule as prepared by the technical committee. The committee was composed of Grant Slinn, chairman, with Stan Goodwin and Ralph Kelley. Sandy Littlejohn asked to be excused as he is involved in building boats commercially, and nominated Ralph in his place. Ralph has been involved in full-size sailing and was a member of the Thistle Class Technical Committee.

If voted into being, this rule would become effective for the 1976 season.

Read the rule carefully, and compare it to the present one. The ideas behind the new rule were: 1) to produce normal looking boats with no one being able to gain unfair advantage through freakish development; 2) to remain reasonably close to the present rule so that the majority of existing boats would be legal without major revision; 3) to remain reasonably

For 1975, no alternative keels, wing mast part of sails, 80% jib hoist

Possible new rule for 1976 season

close to the international version, to permit boats to qualify without major revision; and 4) to maintain control of our own rule.

The major changes are listed below, together with a few notes explaining the reasoning behind them: 1) Change of name - In recognition of the origin of the class, the name be changed to "Marblehead 50/800", and the sail mark be the international "M". The origin of the class should be remembered and that to create a new logo or sail mark would be tedious and unnecessary, 50/800 as a sail mark is unweildy and some degree of international conformity is useful. 2) Change of intent from experimental to open. There are two experimental classes, 36/600 and Ten-Rater. The Ten-Rater, for example, has no restrictions but measures true sail area, the rule mainly indicating how to measure. Our class has specific restrictions, eg. the 80% rule, which to be contradicts the word "experimental". 3) An important change is the removal of reference to the AMYA standard formula for figuring sail area. This brings sail measurement where it belongs, in our rule under our control. 4) Tidying up the sundry statements relating to eyelets, by measuring to the edge of the cloth. 5) Interchangeable keels are prohibited. The present rule allows you to change the rig, or the hull, or the fin. "When is a yacht the yacht?", or perhaps, "How much of the yacht is the yacht?". 6) The limit of 3 sails (It should have been "rigs", anyway.) is removed. We do not have measurement certificates so this section was unenforceable. 7) The 80% rule is clearly (I hope,) defined. This is a simple statement, easily understood. It does not require a structural engineer to work it out or require that your mast be cut in half to see that your jib stay would fall down. It means that however you rig your boat, the maximum size of the jib you can carry will be the same as everyone else's. 8) The spar limit plugs an obvious, but as yet, unexploited loop hole. I am not against wing masts, however, they are allowed and measured in other classes. They do tend to be difficult to handle and transport so again fairness to all let us keep in line with international precedent. This rule does not prohibit a wing sail, but that is another story. 9) Batten placement - This is to eliminate unusually large roaches gained by placing the top and bottom battens at the extreme ends of the sail. 10) Head board limit re-written. 11) Class sail markings - None were specified. 12) The diagrams have been included to assist readability and interpretation.

The skippers most likely to have problems with the new version are those with struts supporting the jib stay. Another area to check on is the sail area measured to the edge of the sail instead of the eyelet. However, to balance this, for example, the 80% rule makes a whole group of marginal Solings suddenly quite legal. Any major rule revision is bound to cause a few casualties. If you are one, please don't let the broader view be over shadowed by your feeling due to a bit of minor adjustment. If you sincerely believe that the proposal is a better rule than the present version, please vote for it. I will.

Motion #11 (as a modification to the 50/800 Class Rules):

Replace the present class rule with all of the following...

The intent of this class of R/C sailboat is that it shall be an open class. The rules are merely to keep boats similar in size.

Hull - 50" LOA, plus or minus $\frac{1}{4}$ ", plus an optional $\frac{1}{2}$ " max. bumper which must be above the waterline.

Prohibited- Movable keels and centerboards, leeboards and bilgeboards, bowsprits and overhanging rudders, pontoons, tunnel hulls, multiple hulls, movable ballast, interchangeable fins, keels, or ballast.

No Limits - on LWL, weight, beam, freeboard, draft, or tumblehome.

Sail Area - Not to exceed 800 sq. in. (excepting spinnakers)

Rigs - Any style. Alternate rigs are allowed provided that the max. area of each rig does not exceed 800 sq. in. When alternate rigs are used, they must be presented for measurement. The maximum height of any rig, measured from the deck to the underside of the headboard or top edge of the sail (where there is no headboard) shall not exceed 85". The intersection of the extension of the jib stay, with the foreside of the mast, shall not exceed 80% of the height of the mainsail of that rig.

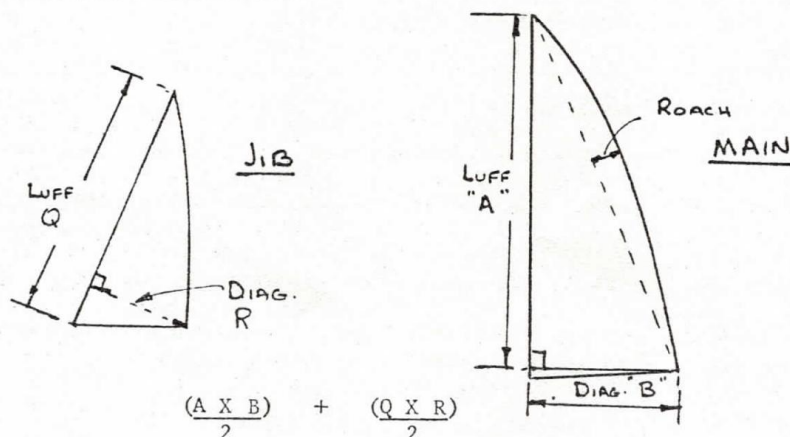
Spars - The max. dimensions of any spar must not exceed 1". Spars are not included in sail area measurement.

Triangular Sail Area Measurement - All measurements are to be taken to the nearest 0.1" When rounding off 0.05", take to nearest even number, i.e., .15 to .2, .25 to .2 All measurements are to be taken from edge to edge with the sail set on its spar and sufficient stretch to remove wrinkles. Headboards are not included. Double (or pocket) luff sails are measured to their leading edge. Cord luff or jackline sails are measured to the trailing edge of the spar. The diagonal is measured from the after edge (clew)

Motion #11: Optional bumper, interchangeable fins, 85" hoist, 80% jib hoist, spars max 1" diameter, unique sail measurement method

to the nearest point on the luff. Any sail plan not conforming to conventional practice should be broken down into basic squares and triangles, etc., as appropriate and the area calculated accordingly.

Calculation of Sail Area



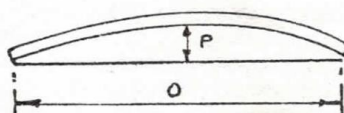
Roach of Sails - Measured from a straight line between clew and top outer corner at head of sail, to the leach. Roach is not included in sail area calculation, but is limited as follows: jib roach not to exceed 2", main roach not to exceed 2", foot roach of loose footed sail not to exceed 1".

Battens - Mainsail no more than 4 battens, and not exceeding 4" in length. Headsail no more than 3 battens, and not exceeding 2" in length. Battens must divide the leach into approximately equal parts.

Headboards - The head of the sail cannot extend more than 3/4" behind the spar or stay, whether a headboard or eyelette is used.

Bent Spars - Any additional area gained due to bent spars or stays is to be measured and added to the sail area. The base O shall be multiplied by 2/3'rds of the perpendicular.

$$\frac{(O \times P \times 2)}{3}$$



Spinnakers - Allowed and unmeasured. The spinnaker hoist shall not exceed the max. height of the jibstay of that rig. Max. length of spinnaker pole not to exceed 15", measured from the center line of the mast to the end of the pole.

Sail Markings - Class mark: Letter "M", min. height 1", thickness 1/4". Registration Numbers: Min. height 2 1/2", width 1 3/4", thickness 3/8", spaced 1/2" between figures.

Location of Sail Markings - Starboard over port. No overlap. National letter(s) will precede registration number. Manufacturers logo optional but must not interfere with readability of required markings. Bar dividing class mark and number 1/8", e.g., M US 100. Boats registered prior to August, '75 (#) are exempt from the section relating to distinguishing marks until January 1, '77.

NOTE: Included with this motion is one page showing eight sketches. Your editor is withholding the page of sketches in the interest of economy. Four of the sketches show the procedure for measuring the width of the mainsail headboard's base (limited to 3/4"), and four of the sketches show the method of measuring the height of the jibstay for purposes of the 80% rule (All four show that this measuring point is determined by a straight line extension of the jib stay and where that line intersects the forward edge of the mast, regardless of tang, strut or other hardware. (...Editor)

Mr. Roy Clough, father of the Marblehead 50/800 Class, passed on at the age of 84. His idea conceived over forty years ago for a length/sail-area class to replace the sail area restricted class then sailed in Marblehead, MA was an instant success. The class spread rapidly and has become a popular international class.

Although Mr. Clough did not sail actively in his later years, he remained interested in the 50/800 Class. He usually appeared at the pond each Sunday to view sailing activities. He viewed with special interest the conversion of the class he founded to R/C. Mr. Clough was an honorary AMYA member. ...from Standley H. Goodwin

As you are aware there are motions on the ballot affecting the 50/800 rule. Please read them carefully as printed in the Spring Newsletter and make your vote. Three options are presented: one is a motion to tighten the existing rule; one is a major re-write incorporating sail area measurement into our own rule for the first time (Presently we accept the reference to the AMYA sail measurement formula for all classes, which is subject to change by the vote of all AMYA members possibly based on requirements of other classes; and the option to leave the existing rule unchanged.

The form that the rule re-write has taken, was the work of Grant Slinn and myself. It was scrutinized by eight respected members of AMYA, who offered many suggestions and improvements. It became apparent very quickly, however, that the technical committee as constituted, would not be able to agree on a draft due to widely varied opinions. I say this, not to claim credit if the proposal is voted in, but rather to allow the members of the technical committee "off the hook" should the motion be rejected. The motion for the re-write is my election platform.

I have enjoyed the past year serving as Class Sec'y. I hope I have been of service to the benefit of the class as a whole, and I look forward to being able to serve you for the coming year.

Corrections to Motion #11 (Due to delays caused by a mail strike in Canada an early draft of the proposal to alter the 50/800 class rules was printed in the Spring Newsletter containing several items which were later modified. Note that these are not amendments, but rather corrections to the motion which appeared in the Spring Newsletter.)

Numbering "Motion #11" as line #1...

Line 16 - Replace "jib stay" with "jib luff".

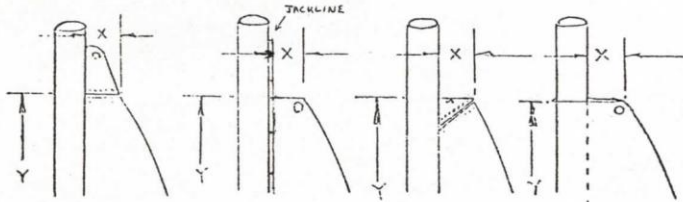
Line 18 - Replace "dimension" with "diameter".

Line 23 - Replace "sufficient stretch to remove wrinkles" with "fully extended".

Line 24 - Delete the words "or jackline".

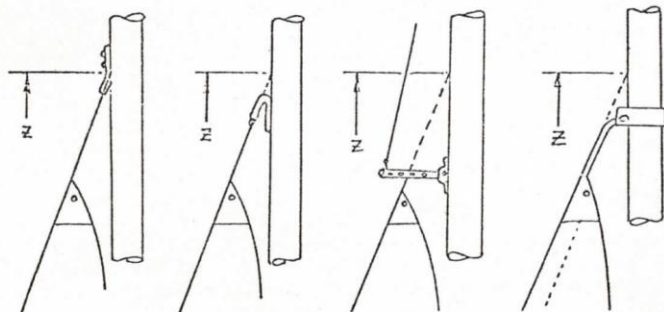
Line 37 - Headboards should read "The head of the sail may not exceed $3/4$ " measured from edge to edge, (at the point where it attaches to the headboard, if fitted). The head of double (pocket) luff sails not to extend more than $3/4$ " behind the spar or stay."

Line 46 - Should read "Location of Sail Markings - Starboard over port. No overlap. National letter(s) are optional. Bar dividing class mark and number $1/8$ ", e.g. M 100. Boats registered prior to Aug. 75 (from #) are exempt from the section US100 relating to distinguishing marks until Jan. 1, 1977.



Headboard & Height of Rig

In all cases - Dimension X equal to or less than $3/4$ ".
Dimension Y is rig height, not to exceed 85"



Jib Hoist Restriction

Dimension Z equal to .8 times Dimension Y maximum.



Note: These explanatory drawings are intended to accompany the AMYA 50/800 rule as proposed by J. Ball and Grant Slinn.



SOME OBSERVATIONS OF WEST COAST 50/800 TRENDS - By Tom Protheroe, AMYA Dir.

I had the opportunity to attend the 1975 Western U.S. Div. Championship for the 50/800's in San Francisco. While there it occurred to me that perhaps it would be a good idea to make up a report for the newsletter telling about the various new yacht designs.

The LJ-50's and Warriors dominated the kit or manufactured hulls, and it was evident that some skippers made modifications to the "standard" sail rigs. Even though there were few Solings entered, Jim Gale had his going very well. He was always threatening and placed high in the final standings.

Prototype boat construction was pretty well split down the middle between wood covered with thin glass cloth and all fiberglass hulls. Design trend is toward the Warrior type hull with beam measurements of around 10 to 11 inches. Mast heights for the most part are over 72" with a few skippers using short rigs as an alternate when the wind picked up.

The most radical yacht was an interesting design by Les Harlander. It sported a maximum beam of 5½" and carried this at the waterline. At the deck the beam measured only 4½". The sail rig was of conventional proportions, and the hull had a torpedo keel weight at a 13" draft. Sailing weight was 14½ lbs. The boat has good performance in winds up to 10 knots, and was always with the leaders. When the wind picked up its downwind performance was unconventional, but somewhat spectacular. There were times when it would shoot out ahead in a gust with the hull apparently submerged. It would rise to the surface in a thrilling plane throwing water all over nearby competitors. But then at other times it would bury its bow too far, showing the last quarter of its length and all of its rudder. About this time you would hear an audible "Chomp!"--It was Les biting off the end of his cigar.

To single out one design as being superior to the others would be impossible. If a person wants to win in this class, I would suggest he doesn't neglect his sailing, tuning and gear maintenance.

1975 Fall #21



50/800 CLASS NEWS John Ball Class Sec'y

The balloting resulted in the class rule remaining unchanged for the second year in a row, by a very close margin. It is important to note

that the total votes for amendments exceeds the "leave it alone" vote by two to one. This splitting of the vote has occurred twice now, and while it is the prerogative of each 50/800 owner to make motions relating to the rule, this may not serve the best interest of the class. We should not

develop any special system within the 50/800 Class to cover this situation (note that it is partly covered in the successful motion allowing the AMYA Executive Board to edit and incorporate similar motions); however, we may need to consider how motions are made, relating to class issues. This approach should be AMYA-wide to maintain continuity in all classes, and as such, I hope will be addressed by the AMYA Directors. A related subject should be the status of the Technical Committee for each class, i.e., its terms of reference, make up (appointive or elective) and powers.

Motion #11 defeated but by a close margin, rule remains unchanged, but three options split votes