

AMYA Classic VM – Timeline

1991 – 1994

Winter 1991

Jon Emilah wins nationals with a perfect score using a swing-rig and bent mast.

The regatta schedule for next year is still a little thin. I am hoping that it is only a case of the sailing clubs getting their 1991 regatta schedules in late to the regatta coordinator, as my club did this year. I would like to see more activity in the class as far as Divisional regattas are concerned. There will be a Western Divisional and of course there is to be Race Week in San Diego where the Argonauts will have our ACCR along with several other classes in August, 1991. The Argonauts are also hosting a Santa Barbara regatta in the Spring and Fall of 1991. There will also be Santa Barbara O/D regattas hosted by the Helmsmen of Long Beach, CA, and The Red Witch R/C Yacht Club of Kewanee, IL. Maybe the next Model Yachting schedule update will give us more regattas for this upcoming year.

So far I have only received one opinion on my last class news discussion about the validity of adjustable backstays and will not form any conclusions until there has been more time pass for mail to get to me. However, we are still talking at the pond while sailing and there are some strong ideas about what should constitute a one design class. I'm waiting to hear from the class skipper.

Best of sailing in fair winds—

M CLASS NEWS

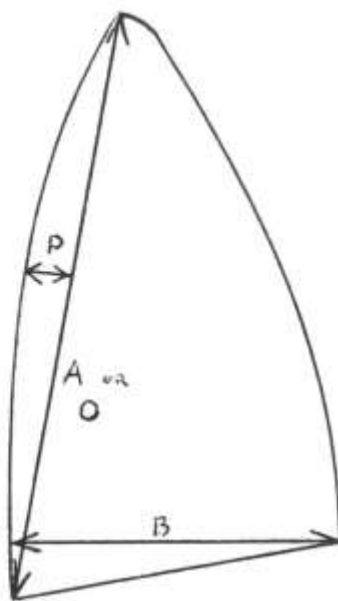
by Standley Goodwin, Class Secretary

As most class members have already heard, this year's ACCR was dominated by Jon Elmaleh and his PINTER II. He won every heat and ended up with a perfect score. No one else was even close. Jon was fast on every leg, especially down wind.

What makes the Pinter II especially interesting is that it carries a bent mast swing rig. The bend is adjustable with a stay to the boom. Whether Jon's speed was due to the swing rig or the hull design is under debate. However, I expect a lot of class members will try the bent mast swing rig.

The bent mast with adjustable bend presents problems under our present rule. This difficulty was highlighted by a protest of the sail area of Jon's rig at the ACCR. Jon had thought of the problems and had left adequate margin, easily passing the re-measurement. Less knowledgeable class members may not do as well.

Measurement of a bent mast mainsail is done as follows: First the measurer must adjust the bend of the mast to the amount he believes fits the sail. (A different measurer may select a slightly different bend). Next measure the luff "A" as defined in the figures and 8.1. Measure the diagonal B as defined in section 8.2. Calculate sail area as specified in section 10.1. Stretch a string from the forward edge of the head to the tack. Measure the maximum bow from the string to the luff of the sail. Calculate the additional area as specified in section 14.2. Add the two areas to obtain the measured area of the main sail.



The bent mast swing rig area measurement is not handled well by our present rule. Estimating the proper mast bend depends on the judgment of the measurer. For some sails the rule measures the same sail area in both the triangular and bow areas. Effectively a portion of the area is measured twice, resulting in a larger measured sail area than actual.

FEATURE II

FEATURE II

FEATURE II

MORE ON SWING RIGS

AN "RM" SWING RIG FOR THE USA

By Neil Goodrich, AMYA #1055

By now, many of you have heard of the swing rig, many you have sailed against one, and a few of you have even won with one by now; however, for those of you who are still wondering just what is going on, well, I'd say that it is nothing short of a design revolution! It is a design revolution that has 90% of the top British and Continental racers already using them. My aim here is to share some of my insights from a year and a half of designing and developing a U.S. version with Jon Elmaleh.

Let's start with a description. A tapered carbon fiber mast is bent aft under jackline tension. The *jackline* runs from the end of the vangless main boom to the top of the mast. The mast does not have the conventional side stays with which most of us are familiar. Instead, it is held firmly in a *mast trunk* below the deck, and rotates on bearing surfaces located within the trunk. The main boom extends in front of the mast. I call this forward extension the *jib sprit*. The jib's *pivot tiedown* (the pivot point for the jib boom) is attached to the forward end of the *jib sprit*. A jib sheet runs from the jib boom to a tiedown point on the sprit near the mast. Thus, the jib is set in a fixed relationship to the mainsail and only the main sheet is connected to the winch. Finally, the *jib sprit* can exist in one of two different configurations: (1) The jib sprit and the main boom can be one piece (the European style), or (2) the jib sprit and the main boom can be jointed so that the jib sprit can fall off to leeward a few de-

grees, out of line with the main boom (the breakback style).

Some advantages of the swing rig are obvious and some are subtle. The few disadvantages are well camouflaged. Of this, however, you can be sure. If you ever find yourself sailing downwind in light air with your conventional rig's jib not really pulling, the sight of a swing rig bearing down on you from astern can be very demoralizing. With the mainsail to leeward and the jib held out to windward by the jib sprit, the swing rig *always* has *both* sails pulling. This balance between the jib and the main is the key to unleashing the swing rig's potential. This balance helps to prevent broaching in windy or puffy conditions (by bringing the center of effort inboard), and it helps with off wind maneuverability as well. Since the swing rig jib is no longer fastened to the bow sections, it allows the jib to exert lateral leverage against the "normal" predisposition for turning up into the wind. Furthermore, the swing rig can be depowered much more easily than a conventional rig because of the way its balance acts to "weathercock" itself, slowing the boat very quickly--a real advantage if you're early at the start.

I try to avoid *running* downwind. I am in favor of *tacking* downwind, but it is on the reaches that I feel that the swing rig is of most advantage. The swing rig is extremely efficient because of the way it carries the finely tuned, high lift relationship of the jib and main (from the upwind setting), on all points of sail. If one plays the rig just right (on anything from a beat to a broad reach) they will experience what Jon and I refer to as "the swing rig

scoot;" the boat just seems to "scoot" forward effortlessly--faster than you ever thought it could go. "Scoots" are momentary, though. The boat goes so fast that it overruns its apparent wind and slows back down again. In extreme cases, one can hit a wind wall by overrunning the apparent wind *and* by getting headed, simultaneously

Because of the swing rig's balance, both sails can fill backwards and stop the boat dead in its tracks, with little or no steerage. The only way to avoid this is to anticipate it. One must be looking ahead at the wind and at how the other boats are behaving--all at the same time. I have found, however, that the swing rig does give me more feedback information than I ever got from a conventional rig. As a result, I am able to get a better picture of the conditions that exist around my boat and of what corrections I need to make. These feedback signals are very different from those of a conventional rig and will take some time to get used to. Although I am probably only a third of the way up the swing rig learning curve, I have found that the necessary mental adjustments are painless and that the results have been satisfying. For me, another part of the satisfaction came from working with Jon to solve this technical challenge and to push swing rig technology to where it is today.

In the late 1970s I had experimented with a stayless "*unirig*" similar to that on a *Finn Class* dinghy, and other skippers in the *Central Park Model Yacht Club* had tried cantilevered unirigs and swing rigs. These efforts were plagued with structural failures and were abandoned in favor of the

tried and true, stayed, sloop rig. So, at the close of the 1989 season, when Jon returned from the European Championship race, adamant about having a swing rig, part of me thought, "Well, here we go again." Of course, with the arrival of carbon fiber, the structural weaknesses of the past were no longer an issue. We could design parts tough enough to take the heavy loading involved and still beat the weight of metal.

From the outset Jon and I both wanted a new kind of mast—one designed to bend. The masts in use on conventionally rigged boats were made to be as stiff as possible; any flexing would change the strains on the stays and alter the rig's set. The swing rig is stayless—free of the spreaders and rigging wire that make the standard conventional rig such a labor to set up.

A bendable mast is desirable for many reasons. Theoretically, (1) if the mast is swept back, taking on a more elliptical profile, (2) the drag at the top of the sail is reduced, making it more efficient, while (3) raising the center of effort further off the water into stronger wind. More importantly, a bendable mast gives the skipper greater control over mainsail shape. The mainsail's camber can be adjusted fore or aft and its *lead angle* can be controlled for different conditions. This is adjusted by the amount of bend in the mast and the amount of downhaul tension.

Developing a new mast is an expensive proposition. Once Jon and I had worked out our "ideal proportions" for the mast, we commissioned a "form" to be made and had it sent to Jon's mast fabricators. We sampled several construction prototypes with varied moduli and wall thicknesses and found one to be a "standout." From drawing to "mast-in-hand," it took a little over four months. In that time, Jon pushed ahead on a European style one-piece main-boom/jib-strut system.

Although appealing in its simplicity and lack of moving parts, I had, from the start, misgivings about this type of system. Here is why. Picture from above, if you will, two boats. The first is a conventionally rigged boat and the second is a European style swing rigged boat. Each has its sails sheeted for upwind work. The conventional boat has its sails sheeted to 7 degrees leeward of the centerline. However, on the European style swing rigged boat, the main boom and the jib sprit are all one piece. If the main boom is sheeted to 7 degrees leeward of the centerline, the jib sprit and its attached jib pivot will be "swung" that same 7 degrees, but in the opposite direction—to *windward*. For both sail rigs to have the same angle of attack to the wind, the boat with the swing rig would have to sail a course 7 degrees lower than the conventional boat's course. I have never been willing to sacrifice closewindedness for offwind speed, so after a few weeks of trials, the one piece swing rig was abandoned.

What Jon and I came up with was a hybrid system. We combined the conventional boat's pointing ability with the offwind advantages of a swing rig by using a *breakback*. Simply put, we added a joint (with adjustable stops) in the jib sprit near the mast. Now, when the main boom is sheeted in for beating, the jib sprit "breaks back" to the centerline (or even slightly leeward of center). Our hybrid *breakback* system surpassed our expectations and surprised more than a few pondside skeptics. But, as always, the proof is in the doing. Jon and I both demonstrated the *breakback* swing rig's potential in the 1990 M Class ACCR. Jon had a "perfect race" and I came in with a solid second.

In addition to being an excellent performer, the swing is just plain user friendly. Since it is stayless, all the skipper has to do to remove the rig from the boat is to unfasten the main sheet and pull the rig out of its trunk. Sail changes are a snap, too. They take less than a minute, but since the whole

rig comes off as a single unit, one does not lose those finely tuned settings from one change to the next (or from one week to the next). The swing rig can even be tuned while it's disconnected from the boat! I used this feature to great advantage in the ACCR. While my frequency mates were racing, I leisurely took all the time I needed to make careful rig adjustments, doing things that would have been impossible on a conventionally rigged boat without turning on the radio.

The last point that I would like to make is about controls. When I sailed a sloop rig with an adjustable backstay and/or a jib twitcher, I found that it was easy to get confused and even easier, yet, to blame my equipment for bad finishes. Despite this, I felt that it would be foolish to give up the small performance edge that it offered. The swing rig requires only two channels: one for the winch and one for the rudder. Everything else is preset. By freeing myself of those "other" controls, I've been able to focus more of my attention on the race, itself, and, as a result, my scores have improved steadily.

The *breakback* swing rig that I've described here is being distributed by *Elmaleh Yachts*. Jon will have his hands full this year helping to coordinate the 1992 RM World Championship Races here in the New York area, and I will be trying a few variations on the *breakback* system. I will also be developing a new "M" design, which will be a departure from the HEX3 of 1990. If I come up with anything worth reporting, I'll let you know. Until then, best wishes for a new season of racing.



CLASS SPECIFICATIONS:

M - CS - 1

Marblehead

It is moved that the AMYA International "M" Class (Marblehead) rule now in effect be replaced with the International RC Marblehead rules modified for AMYA use. (The complete rule is printed in the centerfold.)

By: Standley Goodwin AMYA #334 Seconded: John Amen AMYA #767

Comment:

(Goodwin) Our present M Class Rule was written in the mid 1930's and although modified many times is out of date. Problems encountered with the new materials and processes have generally been handled by rule interpretations causing great trouble for the sailor using it. The proposed rule was written with today's materials and processes in mind and requires little interpretation. Adoption of this rule will have little effect on existing equipment, but will bring AMYA in step with the rest of the world.

THE CLASS SECRETARY

M CLASS NEWS

By Standley Goodwin, Class Secretary

AMYA through the Central Park Model Yacht Club has been awarded "The IYRU/MYRD 8th World Championship R/C Marblehead Class." The championship will be sailed at Flushing Meadows on Long Island in September 1992. Award of this prestigious championship to AMYA is significant honor for our organization.

To help prepare for this championship, CPMYC is hosting the 1991 M Class Eastern Division Championship at the Flushing Meadows site on June 15 and 16. Interested class members are encouraged to attend.

Lately your class secretary has received a number of calls requesting registration numbers over the phone. I do not have the class registration records and therefore cannot help you. Calling just wastes a phone call. Instead send your registration requests to John Snow, 76 Woodbine Avenue, Concord, N.H. 03301. Do not send your request to me. I just re-mail them to John.

Your class secretary and John Amen have submitted a motion to replace the present M Class rule with a new rule. The proposed rule is a slightly modified version of the international rule meant to serve the average AMYA member.

Our present rule was adopted by AMYA in the early 1980s and was the international rule in effect at that time. The core of this rule can be traced back to the mid 1930s. Although it has been amended many times it still is basically a rule for wooden boats with cotton sails.

The revolution in materials and techniques that has taken place over the last twenty years has put quite a strain on our present rule. Situations the original rule framers could not conceive of have had to be dealt with. The normal way of dealing with a problem was to issue a rule interpretation published in the newsletter. To really use our present rule, you must have access to the interpretations in addition to the rule.

At this moment our present rule faces another difficulty. Using present rule interpretations, the bent mast swing rig cannot be accurately and repeatedly measured. A modification that can solve the bent mast situation without affecting existing rigs will be needed. A

modification of this type is likely to be extensive, and probably would incorporate several features of the proposed rule.

When most skippers see an extensive rule change, their first question is 'How will this affect my present boat?' For most sailors the answer is 'Not at all.' A grandfather clause covers existing rigs and sails, allowing them to be used without change. The vast majority of hulls will pass the overall length measurement without difficulty. A small number of skippers with a minimum length hull and a skimpy bumper may fail the minimum length requirement. They will have to install a thicker bumper.

The benefits of adopting the proposed rule are many. It is designed to deal with today's materials and techniques without interpretations. It accurately measures sails and rigs including the bent mast swing rig, solving our present difficulty. It preserves the class in its present basic form while solving many measurement problems of the old rule. As a side benefit, it brings AMYA in line with the rest of the world. It is a good rule which I hope class members will support and vote for in this year's ballot.

NEWPORT 12 METER CLASS NEWS

By Phil Millett, Class Secretary

I'm very happy to report that the Newport 12 Meter Class is growing again and showing renewed signs of life. On February 16 and 17, the class took part in a combined 12 Meter and Santa Barbara event in conjunction with the Southern California Yachting Association's Sixty-Second Annual Mid-Winter Regatta.

As announced in the last quarterly, the 1991 Western Divisionals will be held on April 14, 1991, at El Dorado Park, Long Beach, California, and hosted by The Helmsmen. The 1991 ACCRs will be on November 10, 1991, at the same location and also hosted by The Helmsmen. We hope by then we have resurrected a lot more Newports and have a great turnout.

Again, I urge all owners to make sure they indicate on their membership renewals that they still own a Newport and to please drop me a line at 17008 Jeanette Ave., Cerritos, CA 90701 with your hull number to help me get the class register up to date.

M-CLASS NEWS

by Standley Goodwin, Class Secretary

The most important issue facing the M class this year is the M class rule change proposed by your class secretary and John Amen. The proposed rule change in motion M-CS-1 is a version of the new international rule modified to meet the needs of the average sailor in AMYA. The rule has been in use internationally for three years with few problems. It is a sound rule that should serve AMYA well for a good number of years.

The proposed rule was drafted with today's materials and techniques in mind. It effectively deals with many problems our present rule has difficulty with. It is particularly effective in dealing with sail measurement, especially the pesky roach area that has caused so much trouble in the past. While effectively dealing with problem areas it maintains the class in its present form. Existing M class boats and sails will remain legal and usable.

Some will ask what is wrong with our present rule, as it has served us well over the last ten years. Our present rule has its roots in the late 1930s in the era of wooden boats and cotton sails. Over the past fifty years it has been modified and interpreted to death. In my opinion it is near the end of its usable life. Our present problem in measuring bent mast swing rigs has no easy solution. In the next few years our present rule must either be replaced or heavily modified.

I encourage class members to vote for motion M-CS-1 replacing our present outdated rule with a modern rule. Regardless of your opinion, I strongly encourage all class members to vote. This is an important issue which deserves the attention and vote of all members. Your voice is heard only if you vote.

The 1992 World Championship's being on Long Island somewhat complicates the arrangements for the 1992 ACCR. I would like to have a month spacing between the ACCR and the World Championship in September. This would allow AMYA sailors to participate in both. The area for the 1992 ACCR is the Midwest. If the bid comes from the northern area I would suggest a July date; if from the southern area, a June or October date. At the moment I have received no inquiries about the 1992 ACCR. I would greatly appreciate a bid from a Midwest club as soon as possible.

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Seconded: John Amen AMYA #767

Comment:

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Comment:

(Dick Wischer AMYA #1977) This proposal came before the membership once before, not too long ago. We are changing the M boat rules for the few that race internationally. This is an AMERICAN designed and thought up yacht class. The other countries take our boat, and try to enforce their rules on us. For the two or three skippers that want to sail internationally, let them modify their yacht to the proposed complicated ones.

1991 Autumn #85

AFFECTING THE CLASS SPECIFICATIONS:

M-CS-1 Marblehead Int'l Rules	FAIL (54%)	YES-42	NO-35
M-CS-2 New EC-12 Sail Specs	PASS (83%)	YES-45	NO-9

M-CLASS NEWS

by Standley Goodwin, Class Secretary

The motion to replace our present M class rule received a majority of votes cast but failed to receive the two thirds required for passage. Since my policy is that the present rule is outdated and needs replacement, the majority vote convinced me to be a candidate for another term as M class secretary. If elected, I will devote much of my effort to replacing our present rule.

Those of you who think that there is no problem with our present rule should understand that they are at the mercy of the M class secretary. Change the rule interpretation and a lot of existing equipment will have to be modified.

The worst problem area today is mast bend. Today's interpretation is that a rig which looks like a normal "straight mast" rig is measured by the AMYA method; i.e., with no mast bend correction. This is true even if the rig is sailed with some mast bend. A bent mast swing rig is measured with the bend the measurer thinks it may be sailed with. To be safe most tend to take the amount of bend a bit toward the maximum. Some bent mast owners complain that the measurement methods do not treat them fairly. They are probably right, but the alternate is to include a bent mast correction for "normal rigs." If this were done, a fair percentage of existing rigs would be out and require modification. A change in interpretation could effect a substantial number of class members.

The need for rule interpretation with our present rule places an awful lot of power in the hands of the class secretary--more than I think is prudent for any class. The alternative is to make a major rewrite of our present rule and eliminate the need for interpretation. The danger of a major rewrite is that a loophole may be created in the process. Given the AMYA voting process, a skipper would have two seasons to exploit it before it can be corrected. My experience in the aerospace business is that major rewrites of documents seldom come out right the first time.

It turns out that IYRU/MYRD did a major rewrite of the rule in the mid-1980s and has used it for three sailing seasons. It has worked out well and no major loopholes have surfaced. The new rule contains the features we in AMYA need. Most importantly, it can be used

without interpretations. They took the risk and proved out the rule. Now we in the AMYA "M" class should take advantage of the work done for us.

A modified version of this rule was proposed in 1991, received the majority of the votes, but failed to receive the required two thirds majority. Since the problems in our present rule are not about to go away, I intend to again propose the rule change for the 1992 ballot. I hope more class members will vote for it, permitting its adoption.

Normally the 1993 ACCR would be on the East Coast. Historically the East Coast ACCR has been hosted by the New York clubs. They are involved in the IYRU/MRD World M Class championship and I doubt seriously they will be ready to commit to the 1993 ACCR next August. I would like other East Coast clubs and West Coast clubs to consider hosting the 1993 ACCR. I am making this request because I have found it very difficult to find hosts for the "M" ACCR.

Remember to send boat registration requests to John Snow, 86 Woodbine Avenue, Concord, NH 03301.

SANTA BARBARA CLASS NEWS

by Jerry Dolis, Class Secretary

The status of the class at the end of the year 1991 remains approximately the same with a current active registration of 145 yachts in the custody of 112 skippers. This is a small drop from last year, but not alarming as long as it is not the start of a trend in the class.

The final copy of the updated Santa Barbara OD Specification has been submitted along with a motion to place it on the 1992 Annual Ballot for voting by the class membership. It may not have been submitted nearly enough for inclusion in the Winter edition of MODEL YACHTING. I wish to thank the Technical Team for their efforts in putting the document together in its final form.

The 1992 ACCR has not been awarded as yet because there have been no requests to host it as yet. San Diego had it during Race Week last year so in all fairness it should go to some club in Chicago, Detroit, Buffalo, or Toronto in 1992 and 1993. To those clubs who may not be in

Sincerely,

Robert C. Gentzler #6139, 124 Lehman Dr.,
York, PA 17403
Stars #338, 350, 401,437

International "M" Rule

Dear Gene,

I must start this letter off with a disclaimer. I am currently a member of the IYRU/MYRD Technical Committee. I am currently the Secretary/Treasurer of the CMYA. I am also a manufacturer of R/C Yachts. The opinions in this letter do not reflect any of the above positions. However, before I was any of the above, I was a member of the AMYA, and still am (#1701). As such, I cannot remain silent.

I am very concerned and upset that the AMYA has turned down the new International Marblehead Rules. I will not defend either the new rules or the old ones, under which the AMYA currently operates. However, in my opinion, the AMYA has created for itself a big problem.

By turning down the new International Marblehead Rules, has not the AMYA taken the position that the International Marblehead Class is not sailed in the United States of America? Certainly it has clearly decided that the Marblehead Class in the U.S.A. will continue to use the old rules. Since AMYA does not recognize a class until it has at least 20 members, and to my knowledge no class for skippers of International Marbleheads exists in the AMYA, and since the AMYA is the National Authority for the U.S.A., how is it possible for anyone who wants to represent the U.S.A. at an International Marblehead event to do so? They have no Class Association. They have no Class Secretary. They have no approved measurer. I see no process in place to provide the above services.

At the present time, I see no possibility for any American skipper to qualify for any International event in the Marblehead Class. The class simply doesn't exist officially in the U.S.A. This situation is even more ludicrous when you realize that the 1992 World Championship is scheduled in NEW YORK. Is the plan to host an event at which American skippers can only spectate? I have read uninformed comments in MODEL

YACHTING where skippers have said, "Why should I change my boat so a few can race Internationally? They can always change their own boat, and leave me alone." By voting down the International rules, these individuals may have denied their fellow Americans the right to compete at such events.

The AMYA is a Member of the IYRU/MYRD, and as such has a responsibility to support the democratic process of that organization. The WORLD has decided that the Marblehead Rules have changed, like it or not. For the AMYA to turn its back on the democratic process, and deny its own members the right to compete Internationally must surely be at odds with its position as National Authority for the U.S.A.

Sincerely,

R.B. (Bob) Sterne
3785 Edinburgh St.,
Burnaby, B.C.,
Canada V5C 1R4

Editor's Note: The problem to which you refer, Bob, is, correctly so, a real problem (Also See: "M" Class News report). There are a lot of us who are very frustrated with the "ugly American," isolationist attitude that seems to abound in certain quarters. I wish there was an easy solution, but until the general membership finally gets it into their heads that they are raiding their own game, I do not see much hope of anything happening. At this point in time I have become privy to personal reports of at least one skipper who, out of this isolationist-induced frustration, has dumped the "50/800" class and two more skippers who, for the same reason, have dumped AMYA, altogether. Although I do not yet seem to see any real run on mass defections, this is more than a little unsettling, to say the least. AMYA, if it is ever to survive, has a lot of house cleaning to do. I remember a certain major regatta which took place a number of years ago (I won't say which one) that had the minimum number of entrants necessary for it to take place. One individual, from the very outset, identified himself as one who did not want to cooperate. The more the regatta progressed, the more arrogant he became, until in one heat he boldly and defiantly rammed and seriously damaged a competitor's hull. The wronged skipper said absolutely nothing. He simply pulled his boat out of the water and went home. And that was the end of the regatta. The old saying states that those who do not learn from history are doomed to repeat it. I just hope we can begin

A subsequent conversation with Bob DeBow, a builder and skipper who I have tremendous respect for (after all, Bob's AMYA number has only two digits). I asked Bob what a skipper can do with an existing boat to improve its speed. Bob's reply was "Sail! You can't put a Pinto engine in a Porsche and expect it to go fast." Top rate sails and the reduction of weight aloft. That means a carbon fiber mast and spars. Bob also feels that any vibration or twist in the keel fin must be eliminated. A strong, light keel fin is necessary for a competitive boat. If your boat has a bolt-on plywood keel fin you can possibly increase your boat's speed by using an aluminum or carbon fiber keel fin. This is a major modification for older boats but could be well worth the effort. Bob suggests that anything you can do to reduce weight will certainly have a positive effect on its speed. One weight-saving measure is to sacrifice the aesthetics of a wood deck for one of fabric.

SOLING O/D CLASS NEWS

by Howard Brown, Class Secretary

The 1992 Soling ACCR will be held at Cottonwood Lake in San Jose on August 22 and 23. Skippers should have current measurement certificates to give to the RD before racing starts on August 22. Entry fee is \$10.00, and includes lunch both days. Entry blanks may be obtained from the Class Secretary, Howard Brown, 130 Bayview Ave., Vallejo, CA 94590 (707)642-9166. All entrants must be AMYA members for 1992.

Two members from Barbados have stated they intend to come and compete. The ACCR winner for 1991 is from Canada, and has also stated that he will attend and bring the permanent trophy with him so it looks like a good bit of competition this year. Entries should be in by no later than August 1 to the class secretary.

M CLASS NEWS

by Standley Goodwin, Class Secretary

We are again heading into an active sailing season. The premier M class event for the U.S. will be the ACCR being held by the Chicago Model R/C Yacht Club on August 15 and 16. The ACCR will be followed by the IYRU MYRD North American Championship. For the active M class sailor, this

should make for four superb days of sailing. I encourage interested class members to attend.

On the international scene, preparations for the "IYRU-MYRD 8th World Championship R/C Marblehead Class" are proceeding well. Eleven U.S. sailors have submitted applications for an entry position. They are, in alphabetical order: John Amen, Jon Elmaleh, Neil Goodrich, Standley Goodwin, Pete Jefferson, Roy Langbord, Kelly Martin, Ralph McCafferty, Wick Smith, Robert Twombly, Jr., and Steven Van Ness. The ranking committee has assigned a ranking position to each applicant. As of this moment the U.S. has been assigned six entry positions. The first six rankings have been notified and sent entry information.

It's again time for my annual comment on boat registration. John Snow, 76 Woodbine Ave., Concord, NH 03301, is helping me by handling M class boat registrations. Registrations are handled only by mail. Don't phone your class secretary asking for a number. I don't have the master file and can't issue you a number. Since models don't spring out of the ground fully formed the day before a regatta, this shouldn't be a big problem. If you are building a boat, send for your number. Don't wait until you are sailing. The most common mistake made in filling out the form is omitting your AMYA number. A registration cannot be issued without an AMYA number. Obtaining the number usually delays issuing the registration several weeks.

I have resubmitted the motion to replace our present rule with a modified version of the International M class rule. In last year's vote, the majority felt the new rule should be adopted but the two-thirds requirement was not met.

In this issue I thought I would comment on a couple of the negative complaints I have heard about this motion.

"The rule isn't an American AMYA rule like our present rule." The proposed rule was written by an international committee and included AMYA input. It was designed to fix many of the problems of the previous rule without materially altering the class. Most interestingly, the rule we use today is not an American AMYA rule. We replaced the AMYA rule with the previous international rule in 1980. The rule we use today is precisely the one the proposed rule was designed to fix.

"The proposed rule deletes some options for class development." Possible options for development that I have never seen used were removed from the

rule. Development is a two-edged sword. A limited amount keeps the class healthy and active. A major development breakthrough obsoletes existing equipment requiring every member who wants to remain competitive to buy new equipment. Once everyone has re-equipped, the class is again stable. About all that has been accomplished is to make everyone's pocketbook lighter. The proposed rule permits evolutionary development but restricts expensive revolutionary developments.

Now that my newsletter article is finished, it's back to getting the boat ready to sail. I am writing this article in late February and the pond is covered with ice.

MARBLEHEAD 50/800 CLASS

M - CS - 5

It is moved that our present International M Class Marblehead Rule be replaced with the International Marblehead Class Rule modified for AMYA use. Printed as pages 9 through 14 of this section, Handbook pages V-M-1-1992 through V-M-6-1992.

By: Standley Goodwin AMYA #334

Second: John Amen AMYA #767

Comment: Goodwin: - Our present M Class rule was written in the Mid 1930's and although modified many times is out of date. Problems encountered with new materials and processes have generally been handled by rule interpretations causing great trouble for the sailor using it. The proposed rule was written with today's materials and processes in mind and required little interpretation. Adoption of this rule will have little effect on existing equipment, but will bring AMYA in step with the rest of the world.

Amen: - The proposed rule handles the difficult problem of bent mast swing rig measurement by introducing girth measurements. Girth measurements measure the width of the sail at defined points. I consulted the major sailmakers at SCRS4 and found that all agreed that girth measurements were preferable to our present technique. One said he strongly preferred the change because today's technique is variable. He makes sails he believes are legal only to find some measurers who disagree. The change to girth measurements produces a definitive measurement which is not arguable.

M CLASS NEWS

by Standley Goodwin

I have submitted motion M-CS-5 to replace our present rule with the International Marblehead Class Rule modified for AMYA use. This is an important issue for the future health of the M Class. I encourage class members to vote for this motion.

Over the past several years I have commented on the deficiency of our present rule and pointed out how they are corrected by the proposed rule. At this time there is little to add. The proposed rule is a superior rule and should be adopted by AMYA.

Each class member should carefully review the rule and the comments on it, make a decision, and VOTE.

Last year's vote on this issue wasn't very clear. Less than a quarter of the class members voted. Of those voting fifty-five percent were in favor of the rule change; a majority, but not the two-thirds required for passage. Not a very impressive response for an organization that prides itself on its democratic tradition. M class members, let's do better this year--VOTE.

Personally, I do not intend to propose this rule change motion again. It's time for a clear message from the M class membership.

Locally I have found that AMYA members are not filling out the YACHT REGISTRATION RENEWAL section of their membership renewal form. If you didn't, you are no longer an "M" class member, and are not eligible to vote on the rule change motion. If you are one who forgot to re-register your "M", I suggest you enclose the re-registration form along with your ballot.

On the international scene, preparation for the "IYRU-MYRD 8th World Championship Marblehead Class" are proceeding well. The US has received seven entry positions to date. They have been filled by John Amen, Jon Elmaleh, Neil Goodrich, Standley Goodwin, Pete Jefferson, Roy Langbord, and Wick Smith.

It's time to prepare for 1993 sailing season. In particular a bid for the M class ACCR is needed. Preferably the site should be in the eastern US. If your club is interested please contact me as soon as possible. Don't forget to bid for Divisional regattas; they are the highest level of sailing the average sailor participates in.

Remember to send your M class registration requests to John Snow, 76 Woodbine Ave., Concord, NH

MARBLEHEAD 50/800 CLASS

M - CS - 5

It is moved that our present International M Class Marblehead Rule be replaced with the International Marblehead Class Rule modified for AMYA use. Full text appears on pages 37 through 42 of the Spring issue (pages 9 through 14 of the Ballot Section.

By: Standley Goodwin AMYA #334

Second: John Amen AMYA #767

Comment: (Goodwin) Our present M Class rule was written in the Mid 1930's and although modified many times is out of date. Problems encountered with new materials and processes have generally been handled by rule interpretations causing great trouble for the sailor using it. The proposed rule was written with today's materials and processes in mind and required little interpretation. Adoption of this rule will have little effect on existing equipment, but will bring AMYA in step with the rest of the world.

Comment: (Amen) The proposed rule handles the difficult problem of bent mast swing rig measurement by introducing girth measurements. Girth measurements measure the width of the sail at defined points. I consulted the major sailmakers at SCRS4 and found that all agreed that girth measurements were preferable to our present technique. One said he strongly preferred the change because today's technique is variable. He makes sails he believe are legal only to find some measurers who disagree. The change to girth measurements produces a definitive measurement which is not arguable.

Comment: - We are asked to change the Marblehead class rules for the few that race internationally. Our Class Secretary tells us only 11 submitted applications to sail in the IYRU 8th World Championship R/C Marblehead Class competition at Eisenhower, NY USA 1992. Only six were assigned. Why change our class rule for the few who want to sail internationally, let them modify their yachts to the proposed complicated ones printed in pages 39 through 42 of the Spring issue of Model Yachting. (There have been further changes in the rules in the interim.) Our club members have no difficulty in making sails with the existing rules. Our club measurer Morris Nepo measured the bent mast sail with no problem at the Marblehead ACCR in 1990. Standley Goodwin was there, ask him. Within the Heckscher MYC we voted that this rule not replace the existing rule. We vote a BIG NO. - Dick Wischer, AMYA #1977, Secretary Heckscher MYC.

American Model Yachting Association

INTERNATIONAL "M" CLASS (Marblehead)

1.0 GENERAL

The Marblehead Class is a development (Remote Control) racing class of monohull yachts with the following basic restrictions: The overall length of the hull shall be a minimum of 50.24 inches and a maximum of 50.75 inches, and the measured sail area shall not exceed 800 square inches. The original rules were devised by Roy L. Clough in 1932.

1.1 AMYA RULE

The following rule is a slightly modified version of the international rule meant to serve the average AMYA member. The main changes are the conversion from metric to English units for measurements. Measurement certificates for AMYA regattas will be in English units. AMYA members attending International regattas should consult the basic rule and obtain measurement certificates in metric units.

2.0 ADMINISTRATION

2.1 LANGUAGE

The official language of the class is English and the English text shall prevail in the event of a dispute over translation. In translating and interpreting these rules, it shall be understood that the word "shall" is mandatory and the words "can" and "may" are permissive.

3.0 CONSTRUCTION AND MEASUREMENT RULES

3.1 GENERAL

The Yacht shall be measured in accordance with the current IYRU Measurement Instruction, except where varied herein.

3.2 HULL

3.2.1 The hull shall be a monohull and the overall length, including the bow bumper shall be a minimum of 50.24 inches and a maximum of 50.75 inches.

3.2.2 The bow bumper shall be made of resilient material and shall project approximately 0.5 inch forward of the foremost part of the hull shell.

3.2.3 Tunnel hulls are prohibited. On no section of the hull below the maximum width, shall any point be more than 0.12 inches below any point closer to the centerline.

3.2.4 The deck shall not be artificially raised in the region of the mast.

3.3 FINS/KEELS AND BALLAST

3.3.1 Fins/keels that can be moved in any direction or by rotation are prohibited. A fin/keel that can be removed and refitted in only one position is permitted.

3.3.2 Centerboards, leeboards and bilge boards are prohibited.

3.3.3 Ballast material shall not have a higher density than lead (0.410 lb/cubic inch).

3.4 RUDDERS

No part of a rudder shall extend beyond the limits of the hull overall length measurement.

3.5 RIGS AND SAIL PLANS

3.5.1 The sail plan shall not consist of more than one jib and one main and all sails shall be basically triangular.

3.5.2 The dimensions of not more than three rigs may be recorded on the certificate. These recorded rigs shall be designated "A", "B" and "C".

3.5.3 Smaller rigs are permitted if they do not exceed the dimensions of the recorded rig and comply with other restrictions.

3.5.4 The height of the sail plan "H" shall not exceed 85.0 inches measured from the deck at the mast to the lower edge of the upper mast band.

3.5.5 The jib hoist "I" shall not exceed 80% of "H", measured from the deck at the mast to the lower edge of the middle mast band. A line taken through the jib tack and head, shall not cut the forward edge of the mast higher than the lower edge of the "I" measurement mast band when the jib is held on the centerline of the hull.

- 3.5.6 No part of a rig shall extend beyond the limits of the hull overall length measurement when the sails are held on the centerline of the hull.
- 3.6 SPARS
- 3.6.1 General
- (a) No spar shall exceed 0.75 inch in cross section.
 - (b) Measurement bands on spars shall be of a color which contrasts with the color of the spar and shall be not less than 0.12 inches wide.
- 3.6.2 Masts
- Three measurement bands shall be placed on each mast to conform with the measurement diagram. The upper and middle bands may be excluded on masts of smaller rigs if the length of the mast makes it impossible to exceed the recorded "H" and "I" measurements. The lower band shall not be placed lower on the masts of smaller rigs than on the recorded rig.
- 3.6.3 Booms
- (a) A sail is set on a boom when the foot is attached to the boom along part or all of its length.
 - (b) When a mainsail is set on a boom, the "B" measurement shall be taken as the length of the foot and a measurement band shall be placed on the boom to limit this measurement with the inner edge. If the boom is adjustable fore and aft, the band shall be placed with the boom in the fully aft position.
 - (c) When a jib is set on a boom, two bands shall be placed on the boom to limit the length of the foot with the inner edges.
 - (d) When a sail is set on a boom, any curvature of the upper edge of the boom, achieved by a permanent set or mechanical means other than sheet and kicking strap, shall be measured as shown on the measurement diagrams.
- 3.7 SAILS
- 3.7.1 General
- (a) Sails shall be constructed and measured according to the current IYRU Sail Measurement Instructions, except where varied herein.
 - (b) Sails shall be capable of being rolled without permanent damage. Sails may be made of non-woven material and sizes of reinforcements are not restricted. Battens shall not be removed when measuring.
 - (c) Battens shall not exceed 4.02 inches in length and 0.75 inches in width. Battens shall be so placed that their centerlines divide the leech into parts where the maximum inequality does not exceed 0.98 inches.
 - (d) The foot round on a loose-footed sail shall not exceed 0.98 inches measured to a line from tack to clew. The round shall be an approximately fair even curve so that when tack and clew are folded to an arbitrary point on the foot and with the foot as flat as possible, the edges shall nowhere be more than 0.12 inches apart.
 - (e) All sails shall be clearly marked at the clew with the designated rig letter. Sails of one rig may be used with another if they are marked accordingly and comply with the recorded rig measurements.
 - (f) The class insignia shall be the letter "M" of the following minimum dimensions: Height and width 1.05 inches and thickness of 0.25 inches.
 - (g) The national letter(s) and sail number shall be not less than the following dimensions: Height 2.5 inches, width 1.625 inches (except number "1" and letter "I"), thickness 0.375 inches. Minimum space between adjoining letters and numbers shall be 0.375 inches.
 - (h) The Registered Numbers may be preceded by the distinguishing National Letters (US for United States) of identical dimensions, either above or to the left of the numbers. Skippers are encouraged to use the National Letters, however they are mandatory only for international events. Starboard side numbers should be placed higher whenever possible.
- 3.7.2 Mainsails
- (a) Mainsails shall comply with the measurement diagram.
 - (b) There shall be not more than 4 battens, which shall comply with rule 3.7.1(c).
- 3.7.3 Jibs
- (a) Jibs shall comply with the measurement diagram.
 - (b) There shall be not more than 3 battens, which shall comply with rules 3.7.1(c).

3.7.4 Sail Area

- (a) The measured sail area shall not exceed 800 square inches and shall be calculated with three decimals and rounded to two.
- (b) The measured sail area shall consist of the sum of the triangular areas of the mainsail and the jib and any additional areas.

4.0 ADDITIONAL RULES WHICH APPLY WHEN RACING

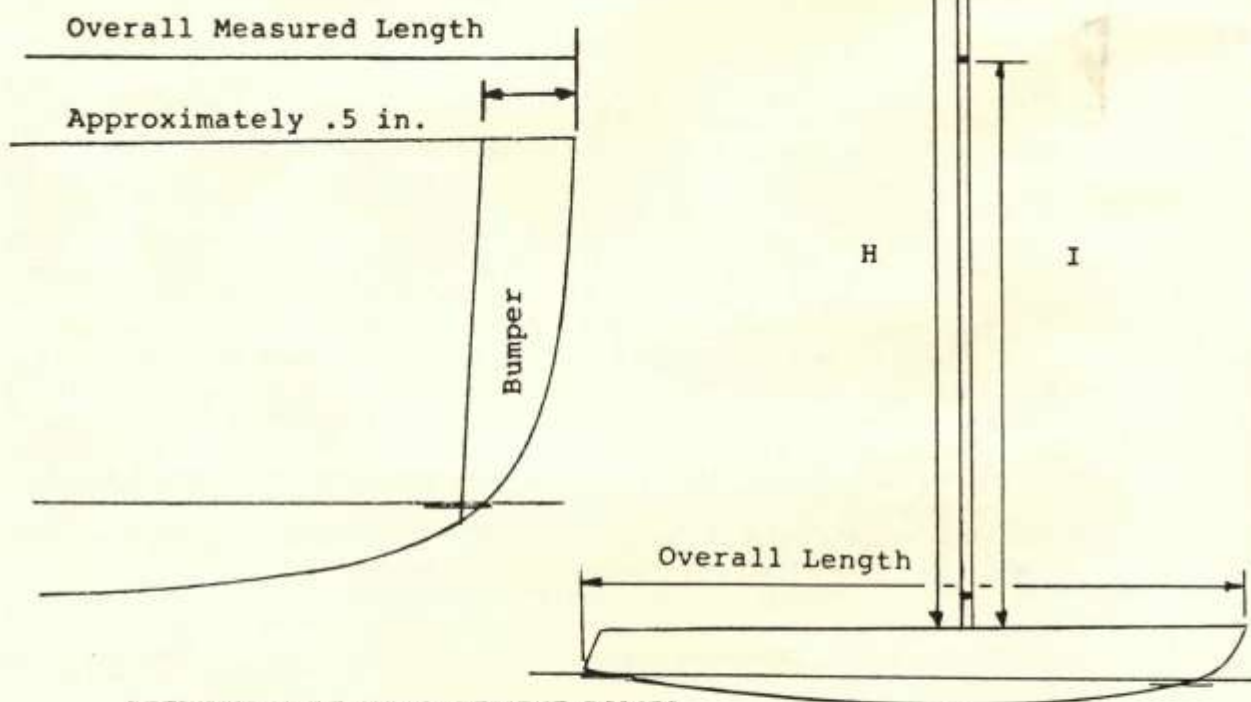
4.1 EQUIPMENT

- 4.1.1 Only 3 rigs, one of each designated rig letter, and one set of fin/keel and ballast and rudder shall be used during a race or series of races, except in cases of authentic damage or loss. All replacements shall be authorized by the race committee. Only one rig shall be used at any one time.
- 4.1.2 Self steering devices or electronic equipment for automatic steering or rig trimming are prohibited.

5.0 EFFECTIVITY

- 5.1 This edition effective from January 1, 1993.
- 5.2 Sails made before January 1, 1993 may be measured using the previous AMYA International M Class Rule.
- 5.3 Rigs built for sails made before January 1, 1993 may be measured using the previous AMYA International Class Rule.

MEASUREMENT DIAGRAMS



DEFINITIONS OF MEASUREMENT POINTS

Clew: The intersection of the leech and the foot.

Tack: The intersection of the foot and the luff.

Head: The highest point of the sail projected perpendicular to the luff or its extension.

Aft point of the head: The intersection of the leech and a line through the head perpendicular to the luff or its extension.

MEASUREMENT BANDS:

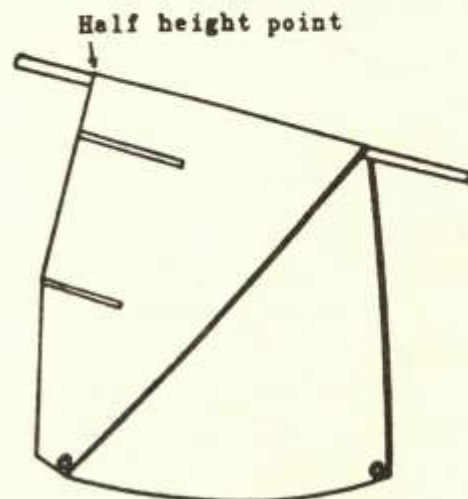
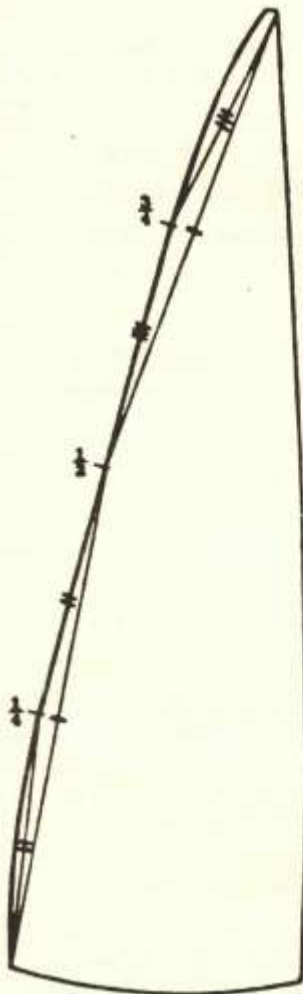
When measurements are taken to measurement bands, the sail shall not be set with the corresponding measurement point beyond the inner edge of such band.

CROSS WIDTH MEASUREMENT POINTS

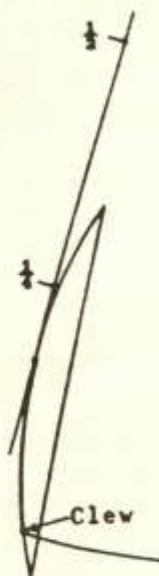
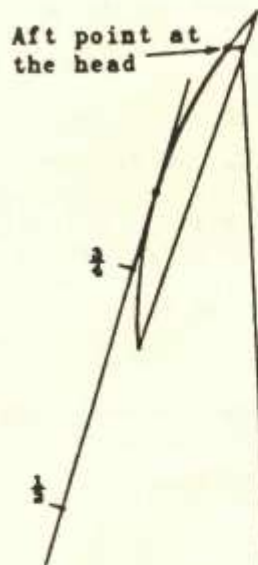
If a sail is permanently attached to the spars, the cross width measurement points on the leech can be found by measuring equal distances as shown to the left.

Any hollows in the leech and the luff shall be bridged when measuring the cross widths.

If the cross width measurement points are determined by folding the sail, as prescribed in the IYRU Sail Measurement Instructions, this can be done over a rod to avoid creases.



CONTROL OF THE UPPER AND LOWER PART OF THE LEECH



A pattern consisting of a circle segment of 35.5in radius shall be used for this purpose.

At the head, the pattern shall be placed to touch the aft point at the head and a straight line through the two nearest cross width measurement points.

At the clew, the pattern shall be placed to touch the clew and a straight line through the two nearest cross width measurement points.

If a cross width measurement point, and/or a point where the centreline of a batten intersects the leech, falls outside the pattern between the positioning points, the pattern shall be repositioned to either point so that no point appears outside the pattern.

When the pattern is positioned according to the instructions above, the leech shall not project outside the pattern between the points of positioning.

EXCESSES IN CROSS WIDTHS

Any excesses in cross widths shall be entered in one of the following formulas and the resulting additional sail area shall be added to the triangular sail area.

Mainsails: $\frac{A(2x + y + 2z)}{6}$

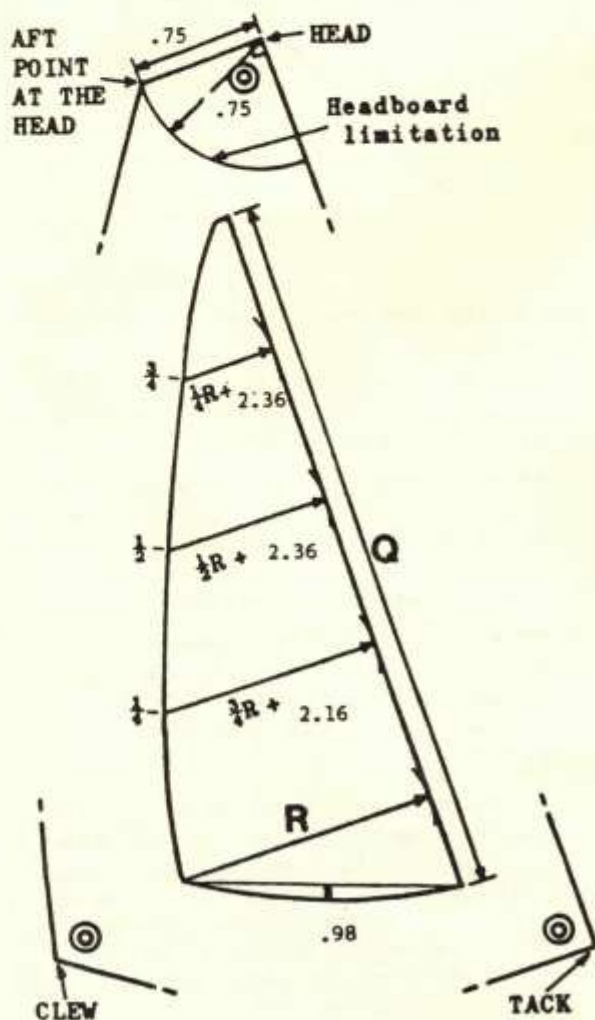
Jibs: $\frac{Q(2x + y + 2z)}{6}$

Where: x is the excess at $\frac{1}{4}$ -height
 y is the excess at $\frac{1}{2}$ -height
 z is the excess at $\frac{3}{4}$ -height

WIRE SUPPORTING THE TOP OF A SAIL

Parts of a wire supporting the top of a sail, which are not more than 2mm in diameter and not covered with sail material, shall not be taken as parts of the sail.

JIBS



All measurements in inches
 and maximum permitted.

TRIANGULAR SAIL AREA

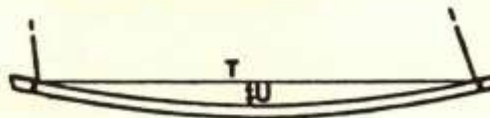
$$\frac{Q \times R}{2}$$

SAIL SET ON A LUFF SPAR

If the sail is set on a luff spar (headfoil), the R measurement and the cross widths shall be taken to the fore edge of the luff spar and the width at the head to the aft edge of the spar.

SAILS SET ON A BOOM

T shall be taken as the distance between the inner edges of the boom bands and U shall be taken as any curvature of the upper edge of the boom according to rule 3.6.3.



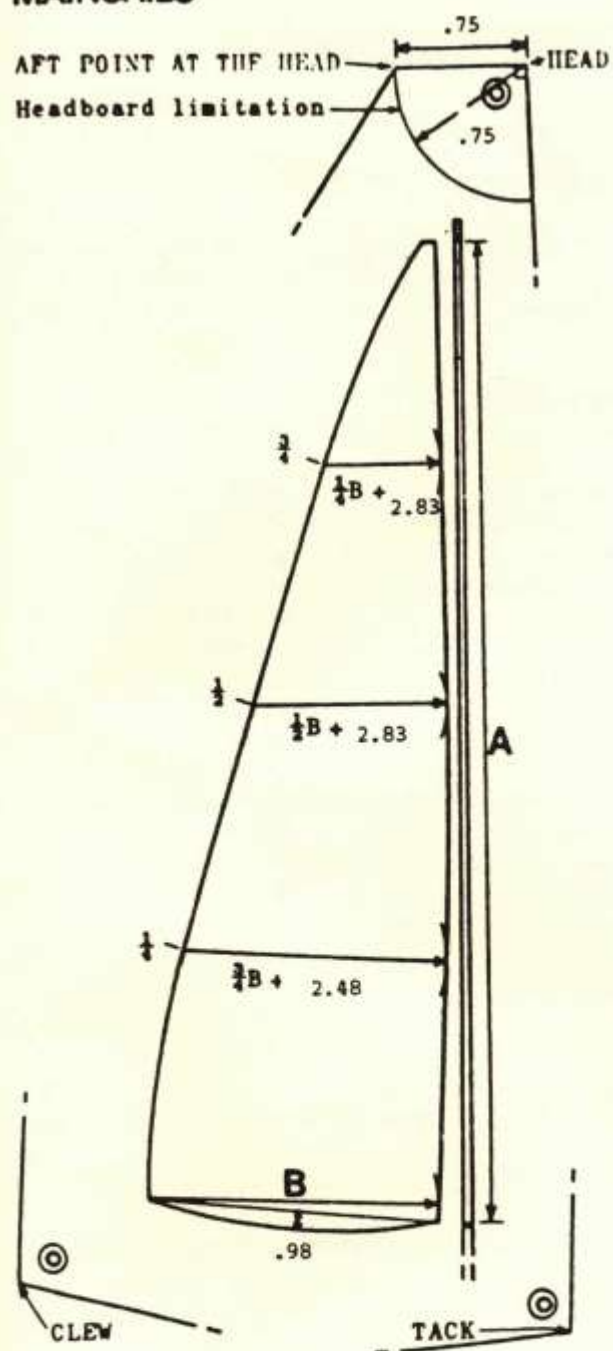
Additional sail area:

$$\frac{2(T \times U)}{3}$$

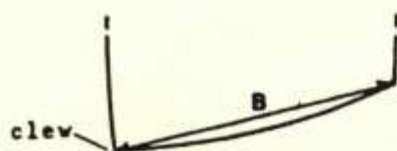
CROSS WIDTHS

Cross widths to be measured
 as for mainsails.

MAINSAILS



DROPPED FOOT ON A LOOSE-FOOTED SAIL

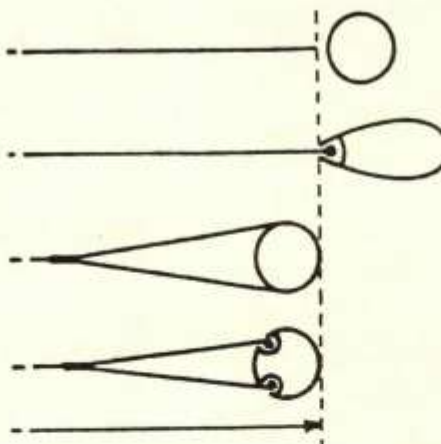


All measurements in inches
and maximum permitted.

TRIANGULAR SAIL AREA

$$\frac{A \times B}{2}$$

MEASUREMENT POINTS ON THE LUFF



If the luff is set in a luff groove, the width at the head, the B measurement and the cross widths, shall be taken to the aft edge of the mast.

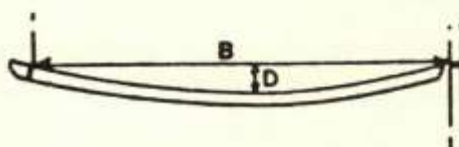
If the sail is double-luffed, the B measurement and the cross widths shall be taken to the fore edge of the mast and the width at the head shall be taken to the aft edge of the mast.

MAINSAIL SET ON A BOOM

The B measurement shall be taken as the length of the foot.

Additional sail area:

$$\frac{2(B \times D)}{3}$$



D is any curvature according to rule 3.6.3.

cations for the 30-inch class required the hull to be not over 30 inches long, 8 inches wide and 13 inches deep from the deck to the keel. The sail area of this model was restricted to 600 square inches. The 26-inch class rules were even simpler, a 26 inch hull length with a sail area of 450 square inches.

The Origins of the Marblehead 50-800 Design

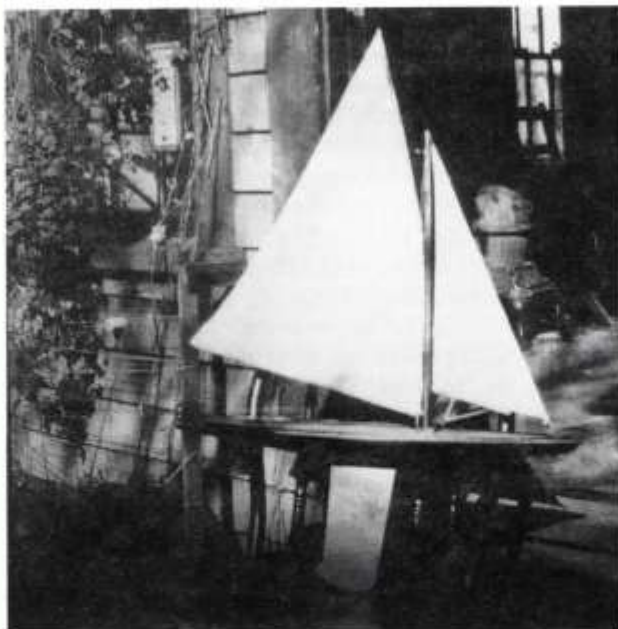
In 1927, L. Francis Herreshoff, the noted naval architect, joined the M.M.Y.C. Mr. Herreshoff had designed a variety of large racing craft, ranging from dinghies to America's Cup "J" boats, before becoming active in model yacht design. Also, at this time, a class of full size yachts had been

developed with restricted sail areas but almost unlimited length of hulls. With this in mind, Mr Herreshoff proposed a class of model yachts with only one restriction, namely, 450 square inches of sail.

This design adopted by the club became known as the 450 Sail Area Class. Hulls of this racing class ranged up to 45 inches in length and were built in a variety of forms; bows could be either pointed, round or square shaped, while the stern sections had a canoe shape or squared off profile, some as wide as the hull. The keels were also a variety of sizes, with their lead ballast ranging from 3 to 6 pounds. Obviously, this new class allowed for the development of a large number of original club designs.

Given the popularity in the late 1920s of the "450" Class and the innovative nature of many of the club's members, it was not too long before a club model design was to emerge that

displayed more optimum sailing qualities. Late in 1930, Mr Roy Clough, a charter club member, conceived the idea for a new class of model yachts with a greater overall length and proportionately-scaled sail area. Although there is no record of the exact origins of Mr. Clough's



Marconi Rigged Model

design, it is thought that his ideas for the new yacht were rooted in the simple and flexible design rules of the "450" Class. A key consideration had to be the physical size and weight for a model that would be ideal for both sailing and ease of transporting.

Mr. Clough's original yacht design, [See photos of original "M" and Mr. Clough with one of his 1930s models] was 50 inches long with 800 square inches of sail, hence the name "Marblehead 50-800". Even today, these are still the principal design measures that govern development of modern "M" boat designs. In the early 1930s, the typical dimensions of Mr. Clough's model yacht would have been:

- * An overall length of 50 inches
- * A waterline length of 40 inches
- * A draft of 7 inches
- * A keel ballast of 9 pounds

- * A jib sail area of 150 square inches
- * A mainsail area of 650 square inches
- * A sail plan height of 60 inches

With these basic characteristics, this model design soon proved to be what most model yachtsmen of that time desired.

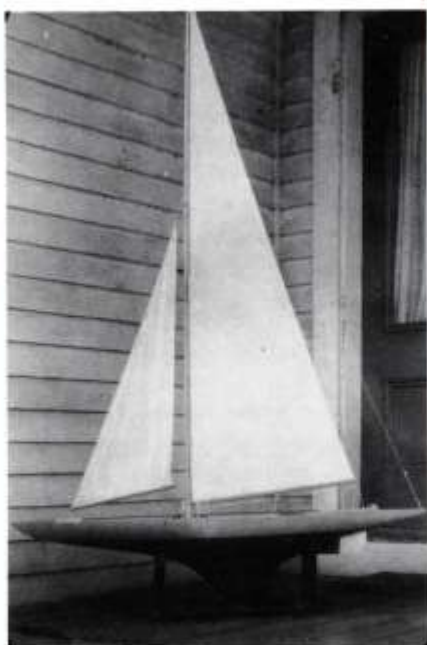
The Establishment of the "M" Class as an International Design

When this design was introduced in the 1931 sailing season at Redd's Pond, it quickly became not only the club's favored racing model, but one widely recognized as "the right boat for the times," given its inherently sound sailing capabilities. This rapid, widespread acceptance of the "M" Class was due in no small part to the M.M.Y.C. and its subsequent promotion of this "home grown" design in club, interclub, regional and national sailing events of this era. When the club was incorporated in 1933, the membership felt so strongly about its affiliation with the Marblehead 50-800 that it adopted as its club burgee the international code flag representing number one. This action was

meant to signify that this model yachting organization was the first club to sponsor the "M" Class.

Coupled with the simple set of "M" design rules, this quickly led to the adoption of the design by the Model Yacht Racing Association of America (MYRAA) as an official class in 1932; followed in 1937 by the International Model Yacht Racing Union's (IMYRU) recognition of the design as an international class. It is important to note, at this juncture, that a M.M.Y.C. member influential in national and international model yachting affairs and an ardent supporter of the "M" design, Mr. John Black, was elected IMYRU president in 1937, at the same meeting that the "M" Class was adopted by IMYRU. Mr. Black had won the "M" Class World Championship the previous year in Germany. (See photo of Mr. Black and his World Champion "Cheerio" model). Also, Mr. Black later authored

in 1939 what was then considered the definitive book on the "M" 50-800,



Clear evidence of developing design

Yachting With Models - How to Build a Champion "M" Class Model Yacht.

Thus, Roy Clough's original model yacht design, (named for the Town of Marblehead), became the world standard known today as the Marblehead 50-800 or, more simply, the "M" Class.

Continuing the Legacy

For the next 40 years, through the 1930s and into the 1970s, the basic "M" model design matured at both the local and national levels, (i.e., development of full waterline hulls, torpedo keels, balanced rudders, improved steering [vane gear], tall sail rigs, and use of molded hull material and alternative sail fabrics). Typical of the M.M.Y.C.'s initial developmental role, this maturation period also saw club members introduce several important designs and ideas that gained widespread acceptance. Noteworthy ones were:

The "Cheerio" "M" yachts by John Black (1930s), which won regional, national and world "M" Class championships;

The local "Broom" series of "M" boats

designed by J. Selmar Larsen (1930s through 1950s);

The "self-tacking" vane gear steering control by Bill Full (1940s);

The ultra-high sail rig and "Warrior" series of "M" yachts by Standley Goodwin (1960s and 1970s).

The ultra-high sail rig is used universally today within the "M" Class, while "self-tacking" vane steering was only supplanted by the advent of radio-controlled model yachts in the 1970s.

Continuing the legacy of these earlier model yachting activities in Marblehead, the present group of M.M.Y.C. members have closely involved themselves in the sailing and development of the "M" boat. The club commodore serves as the "M" Class Secretary for AMYA, while club members still principally sail the "M" 50-800 and have recently

adopted a fairly radical sail rig, the free-standing, pivoting liswing "rig, as the standard for their "M" boats. (See photo of the modern "M" design ["Pinter"], with "swing" rig at Redd's Pond)

Also, the Town of Marblehead still has a business that solely supports model yachtsmen both locally and world-wide, (Worth Marine), which builds "M" Class yachts, such as the "Pinter" model, and sells various other model boat kits, fittings and accessories to those interested in the sport.

In summary, the following figure depicts the key design features of the

wide variety of model yachts sailed at Redd's Pond, Marblehead, from the 1890s to the present. Apparent from this design summary, both the liberal design rules of experimental-type model yacht classes and the natural evolution of state-of-the-art building materials have provided the means to develop unique model design ideas. Given this conducive design environment, this article is just one historical perspective on, and tribute to, those forward-thinking organizers, designers, builders and skippers involved in American model yachting these past 100 years.

Insert —Summary of Key Features of Model Yacht Designs in Marblehead From 1890s to 1990s]

The 100th Anniversary Regatta

In tribute to the many model yachtsmen, both young and old, who have sailed in Marblehead the last 100 years, 1894 to 1994, the Marblehead Model Yacht Club is sponsoring a special regatta to honor this occasion. This sailing event, "The 100th Anniversary Regatta", will be held in conjunction with the AMYA "M" Class Northern Divisional, on Saturday and



John Black and his "Cheerio"

FIGURE - SUMMARY OF KEY FEATURES OF MODEL YACHT DESIGNS IN MARBLEHEAD FROM 1890s TO 1990s

<u>Marblehead 50-800 Era</u>			
Key Design Features	1890s- 1920s*	1930s-1960s	1970s-1990s
<u>Hull:</u>			
Length	18-45 inches	50 inches	50 inches
Displacement	4-12 lbs	14-24 lbs	9-15 lbs
Material	Wood	Wood,Fiberglass	Composites**
Construction	Bread & Butter, Buttocks, Solid	Bread & Butter, Buttocks, Planked, Molded	Molded
<u>RIG</u>			
Design	Gaff, Marconi	Marconi	Marconi, Swing
Height	Up to 48 inches	60-80 inches	80-88 inches
Material (Mast)	Wood	Wood, Aluminum	Aluminum, Carbon Fiber
<u>Sails:</u>			
Aspect Ratio	Low	Medium-High	High
Jib/Mainsail Areas ***	Variable by Class	150/650-300/500	200/600-350/450
Material	Cloth	Egyptian Cotton, Oiled Cloth, Cambric, Nylon, Dacron	Dacron, Mylar
<u>Controls:</u>			
Sheeting	Bowsers & Travelers	Bowsers & Travelers	Bowsers & Radio
Steering	Marblehead, (Clyde Type), Gear	Marblehead, Braine, Vane Gear	Radio

*Various model yacht classes

**Composite material such as fiberglass, carbon fiber, Kevlar

***Jib/mainsail areas noted by square inches of area

1994 Summer #96

M CLASS NEWS by Standley Goodwin

The Marblehead Model Yacht Club held the M Class Northern Division Championship in conjunction with its 100th Anniversary. In addition, a display of classic model yachts going back as far as the turn of the century was

held. This display consisted mainly of wooden M Class models. Several of these models were raced using the old free sailing controls in a four race series.

The interest generated by the classic M Class models surprised me. Possibly the time has come for establishment of a classic division within the M Class. One group from New Jersey has gone as far as building fiberglass models of a 1930's design. A regatta and display for classic models is being considered for next year by the Marblehead club. I intend to watch developments and see if the interest is long term and warrants further action.

Returning to our modern M Class, the international rule was revised after the motion AMYA adopted was submitted. Most of the changes were clarification, however, two changes are significant and should be incorporated in our rule. The most important change is recognition of the swing-rig fitting that goes around the mast. The rule statement recognizes that this fitting is generally substantial and places some limit on its size.

The other change is in sail numbering. A much larger set of numbers (four inch) is used. The last two digits of the boat's registration number are used and a one added if there is conflict. The numbers are easily read from considerable distance and have solved the problem of boat identification in large international regattas.

Most skippers sailing in local races do not require the sail numbering change, because everyone is familiar with the boats sailing. However, there are some skippers who would like to go to the new sail numbering system. Therefore I will propose it as an alternate to our present system.

I expect to have a motion to update the "M" Class rule ready for the 1995 ballot.