·CR 914 NEWS·

Volume 1 Issue 5 MARCH - APRIL 1997

NEW RACE RULES FOR 1997

The International Sailing Federation (ISAF) has approved new racing rules effective April 1, 1997. These new rules are the most significant changes to be made in forty years. They will be in effect for the next four years. They are available on the Net at: "http://sailing.org/newrules/97rules/default.html".

I have downloaded them and read them through a couple times."Sailing World", Jan 97, had an article which I have also read. There will be many more articles, books and videos as time goes on.

The AMYA has not yet issued their version which should agree with what is given below.

From the above references, some observations can be made:

- For models, the penalty turn is a 360, even though for full scale boats it's 720 ? Local sailing instructions can modify this. My opinion is that models can be turned so quickly that the 720 should be used for important regattas. It will be interesting to see what AMYA decides. As a class we can decide what we want use.
- There is no "mast abeam" or "mast to stem" in the new rules. The windward boat must be clear ahead. Thus a bad guy to leeward of you can luff you as long and as far as he wants unless you can get clear ahead. Then he must resume a proper course.
- The above also applies before the start until after the start signal.
- That same bad guy cannot luff

(Continued on page 2)

THE START **at Red's Pond**

Bowser, bowsie, what? That was the first term that puzzled me when I started sailing models. The dictionary says:

bouse \'bauz\ *archaic var. of* BOOZE
bouse *or* **bowse** \'bauz\ *vb.* -ED/-ING/-S [origin unknown] *vt, naut :* to pull or haul by means of a tackle; *also :* to haul well taut and belay (as a purchase) - usu. used with *taut ~ vi, naut :* to bouse something usu. used with *taut ~ n, naut : a bowser*

Well, there really is such a word.

Ed.

Inside This Issue

Class News

This month there are 147 boats registered vs. 134 in February. Fifty-eight owners have subscribed to the NEWS compared to forty-four last issue. That is pretty healthy growth.

The Last CR 914 NEWS
For some of you this will be the last NEWS that will be mailed to you. In order to promote the class, the NEWS has been sent to most 914 owners of record whether or not they had subscribed. We have also sent copies to non-owners where we thought the exposure would benefit the class. Distribution has been about 130 issues until now. The only problem with that is we can't afford it any more and still continue the NEWS for a full year to the paying subscribers. Worth Marine has agreed to support the NEWS to a certain extent, though ideally it should stand on its own.

CR 914 Region 1 Regatta (see page 9)
Plan to come to this regatta at Redd's Pond in Marblehead, MA. Those visitors

(Continued on page 3)

Rules

(Continued from page 1)

suddenly and hit you, forcing you to do a penalty turn (360 or 720). He must luff in such a way as to allow you to keep clear. That is really different and I like it!

- If you establish an overlap to leeward of a boat you have over taken, you must not sail above your proper course while the overlap exists.
- The new rules make it much more difficult for a port tack boat to round the weather mark in the presence of starboard tack boats.
- A windward boat with bouy room rights at a mark need only be given barely enough room to round the mark. He cannot demand enough room to make a "tactical" rounding.
- Slam dunks are different because there is no "mast to stem" anymore.
- A right-of-way boat can be disqualified if she hits another boat she did not give opportunity to keep clear. This is an important change.
- A third party can protest when she sees other boats make contact, but only the boat in the wrong will get disqualified.
- A boat moving backwards must keep clear. This applies before the start. (Who would back down after the start?)
- Low point scoring system uses 1 pt. for 1st, not ¾ pt. Again, local rule can change this. There should be some discussion on this from you owners.

This has been just a quick summary of the changes. As the season progresses we all will all learn a lot more about the details of application of them.

There are many 914 owners who are more knowledgeable and experienced about the rules than most of us. Please share what you learn with all of us either through the Web Forum or directly to me.

Chuck Winder

WATERLINES

There was considerable e-mail on the subject of how best to put a good waterline on a CR 914. The initial discussion was on where the water line should be located. Some folks said to float the boat in water and proposed various ways to mark the hull. Greg Worth and Howie McMichael put it all in perspective with the same approach.

Howie wrote: "Having built several boats [*CR 914's*] I find that **the boats float too low in the water** to put an attractive line on them by floating them. (*Greg Worth agrees.*) Most waterlines are only seen when the boat is out of the water on its stand. Therefore, I put a waterline on as if it were a full size boat. It will be below the water when floating, but who can see that anyway unless you are at water level with a diving mask!"

Greg Worth describes how to do it:
- Choose an attractive location for the waterline. Mark it at bow & stern with a pencil.
- Place the boat deck down on a flat surface.
- Raise the stern so that the bow and stern marks are at the same height off the table.
-Use a small block of wood to shim up the stern to that correct height.
-Check to assure that the hull is level from side to side.
-Make up a scribe tool. A chunk of foam will work, say 3"x 3" x 7" high with a flat bottom. Use a new pencil.
-Stand the foam on its flat 3"x3" base. Stab the pencil through the foam on an angle with the tip down.
-Push the pencil down through the foam until the tip of the pencil lines up with bow and stern marks on the hull
-Slowly and carefully run the scribe around the hull.
-Try to make only one line (not three attempts close together).
-Use 1" 3M Fine Line tape. Tape to get the bow and mid-ships line straight.
-Use only one piece of tape for the entire line. Or at least one piece per

(Continued on page 5)

FLEET NEWS

Duke City Model Yacht Club, #213, has a fleet of seven boats and 10 members. The fleet has been active for five years even though the club was sanctioned in 1996

Joe Frasier, #13, et al, had been sailing 914's for some time in Albuquerque when I became Class Secretary. It surprised me when I heard that the DCMYC was recently formed. Joe was asked to explain.

It all started in late 1992. At that time the only local club, Albuquerque Model Marine Association, (AMMA), had a few sailboats mixed in with mostly tugs, speed boats, and other power boats. AMMA was never interested in AMYA sanctioning. All of the boats were different.

Joe wanted to get sail racing started and spent the winter of 1992-93 searching for a boat that would be inexpensive, simple to build and had good performance. His choice was the CR 914.

In Spring and Summer of 1993, Joe built a 914 to a near-scale version of the 1992 IACC boats. This meant cutting away the hatch area to create a full length cockpit as in the full scale boats.. That left only 1 ½ inches of clearance for the radio gear. He had to make the grinders as well as all the other deck and cockpit fittings. Since the main sheet had to be run from the clew end of the boom to the traveler, there was a lot of under deck rigging to design and build. Different spreaders were required as well as a simulated hydraulic vang.

Joe's boat went into the water in mid-summer and attracted enough interest that Jim Scheibner, #99, and Vic Rotolo, #21,

(Continued on page 9)

THREE INCH SAIL NUMBERS

The larger sail numbers are required for regattas. The problem is that the old smaller numbers may be difficult to remove without damage to the sail. In any event, the 3 inch high numbers are required even if this means two sets of numbers on the sail.

Class Secretary

Class News continued

(Continued from page 1)
who make early reservations can stay at the Boston Yacht Club with rooms having a view of the harbor. BYC is in "Old Town", convenient to Redd's and shopping.

Marblehead skippers took eight of the top nine places at the 1996 nationals. You will be testing yourself against the best.

Newsletter via E-mail
There were no NEWS sent by e-mail last month. This is something that I plan to drop for now. The time is not right.

AMYA WEB SITE
Ric Naff has loaded the 914 pages with the new Class Rules including the sail plan and the sail emblem. They are beautifully done. Go take a look (http://www.netcharts.com/amya). Also let us know if you see any areas of improvement or errors.

Ric spent a lot of effort modifying the sail plan text so that it can be easily read. Everything in the pages can be quickly downloaded and printed, even the sail plan. The AMYA site is linked to our 914 site.

CR 914 WEB SITE
Ric has now added a Forum to the site (http://www.agcr-914.com). There are several categories available to focus owners comments. When you visit you will see that usage of the Forum has started to build with good questions and answers being recorded. Try it, you'll like it. It is an extremely efficient way to get answers and share your own experience.

Initially I was a little intimidated by the Forum. To me it appeared difficult to use. But it is not. Ric has provided an extremely friendly HELP facility which answers all questions. And once you have "broken the ice", the Forum use becomes intuitive.

WEB FORUM in the NEWS
A lot of information has already been posted at the Forum. There will always be too much to be repeated in the NEWS. What I will do is choose what I think is of most use to the most people. It will then appear in the NEWS as written or edited to briefly give the intended message.

E-Mail Communication
This month there are 38 owners who use e-mail compared to 31 last month. There is still no way for me to know how many of the 146 registered boats are active. My guess is that more than half of the active owners are online.

1997 ACCR Planning
Plan to attend the ACCR Saturday and Sunday, September 27, 28. The regatta will be held at "Shawnee Park just north of downtown Xenia. Xenia is about 15 miles southeast of Dayton, Ohio.

Don Peacock tells us that the skipper's meeting will be at 9 am each morning. Entry fee will be $20, which will include lunch both days. An information/registration package is being prepared.

BEST BOAT AWARD
At the 1996 CR 914 ACCR, there were some boats that stood out above all others in beauty and workmanship. I propose a "Best Boat" award at the 1997 ACCR. The boat could be chosen by a committee that I could appoint. Another way would be to have a secret ballot by all the skippers attending. Give me any ideas you have on this.

Sail Emblems
Over the years some of you have not received sail emblems. For a long period they were not available. They are now required for sanctioned regattas.

I now have them in stock purchased

(Continued on page 9)

A SCENE FROM THE 1996 NATIONALS
Tony Johnson (left), 1995 National Champion, graciously accepts the prestigious "In the Tank" award from regatta hosts Charlie Berry (center) and (?). This award was created by Curt Wright, Stowe MYC, in recognition of the most unfortunate performance by a former champion.

NEW MEMBERS

James Appel, #69
Stanley Bell, #386
Philip K.Griswold, #61
Brian Martin, #63 (and #579?)
Robert McLaughlin, #411
Bill Petynia, #90 (second boat)
Randy Phillips, #81
J. Michael Shields, #710
Robby G. Smith, #271
Charlotte Tucker, #2 (transfer)
Tim Twombly, #54
Will Wendell, #84 (third boat!)
Don Wild, #67

BATTERY MANAGEMENT

Because of the continuing interest in this subject on the Internet and from problems observed at the pond, the NEWS will offer battery management articles in most issues.

The goal of these articles is to see the day when one never hears at the pond the words: "I'm out of control. My batteries are dead", or "I need to have all of you wait around while I change my batteries again".

SIMPLE BATTERY CHARGERS

by Chuck Winder

There was e-mail dialogue on the subject of battery charging in the last month or so which I thought would interest some of you.

An owner asked for suggestions for a simple boat battery charging system. His group was using the Worth Marine dual charger that handles four receiver (Rx) packs and two transmitter (Tx) packs. The chargers were located at the club house. They worked well but some owners wanted a system to use at home.

For less than $40 plus battery connectors, you can have an automatic system that you can set and forget....

Here is one of the systems I use for charging batteries. It works for me:

Parts

1) a Radio Shack 9.6 volt charger, Cat. No.23-240, $9.99; 2) a Radio Shack 4.8 volt charger, Cat. No. 23-244, $9.99; 3)an appliance timer, Radio Shack Cat. No.63-862, $7.99. The Radio Shack items are simply examples. Hardware and hobby shops also carry these simple chargers and appliance timers. You may even have a timer at home.

Thus for less than $40 plus battery connectors, you can have an automatic system that you can set and forget. It will charge and trickle charge one radio set.

Setup

Replace the connectors on the chargers with compatible battery connectors (Worth Marine has them). Connect the chargers to the timer using a multiple outlet plug. Set the timer to fully charge the batteries.

The timer can also be set to charge for about an hour each day after the initial charge. This is a poor man's trickle charge. The movable pins on the timer are used to set this up. To make it simple, paste a new face on the timer to show how long a charge you are setting.

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HOW LONG SHOULD BATTERIES BE CHARGED?

The industry says to calculate charge time for **fully discharged** NiCds using the following equation:
Time in hours = 1.4 x battery capacity, mAhrs / Charge rate of charger, mA.

Batteries usually state the capacity on the label. Typical values range from 500 to 850 mAhrs. Typical simple chargers have a charge rate of 50 to 60 mAhrs.

Therefore: Charge time = 1.4 x 600/60 = 14 hours, for the 600 mAhr batteries. It's 19 hours for 800 batteries.

However, my gurus tell me that to assure a maximum charge, use 20% more time or 17 and 23 hrs., respectively.

They also tell me that at a charge rate of only 60 mAhr, the batteries can be left on charge indefinitely with no harm. I am uncomfortable with that so I use a timer to do a poor man's trickle charge.

Bottom Line

There is no magic about how long to charge batteries. Read the labels and figure it out.

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RAYOVAC© RENEWAL®

Reusable alkaline batteries

by Chuck Winder

An owner wrote: "My transmitter uses "Renewals" and while they switch to yellow rather soon, they last for the hour or more we sail each Saturday without ever getting into the red".

New Renewal transmitter batteries that are fully charged should last 4 hours. But after each use they will give a little less life.

RENEWALs are a completely different animal from rechargeable NiCd batteries. They are specially designed alkaline batteries. **For Renewals, the specially designed Rayovac charger must be used.** One must not use the type of charger which works for Nickel-Cadmium (NiCd) and Nickel-Metal Hydride (NiMH) batteries.

The Renewal charger has a micro chip which charges each battery for a fraction of a second and then stops and measures the voltage. It does this continuously until it detects a no load voltage indicating a full charge (1.65 volts per cell) has been achieved. It then turns itself off automatically.

A new Renewal should give you 4 to 4 ½ hours battery life when used in the hitec Ranger II transmitter .

The technical literature I have from Rayovac states that a full charge is assured in 6 hours for a fully discharged battery. The chargers have a light which is off when the batteries are fully charged.

The chargers also charge each individual cell, not the whole pack as is done with NiCd and NiMH batteries. This is an advantage since differences in individual cell charge behavior are accommodated.
The Ranger II transmitter (Tx) has a

(Continued on page 5)

BATTERIES

(Continued from page 4)

constant current drain of 265 mA (.265 Amps). (Note: A Futaba transmitter uses 160 mA.) A new Renewal should give you 4 to 4 ½ hours life (close to 7 hours for the Futaba). (A new 600 mAhr NiCd would give about 2 ½ hours, and an 800 mAhr gives about 3 1/3 hours.)

But, unlike the other rechargeables, the Renewals lose capacity with every recharge cycle. After 25 full discharge cycles you may get only 2 1/3 hours. At 50 cycles expect less than 2 hours.

However, there is another characteristic of Renewals. If they are not fully discharged each cycle, they will lose less capacity per each cycle and their useful life will be longer.

And there is more. The usable capacity of Renewals depends on the current load. At a load of 300 mA the capacity of a new battery is 1100 mAhr and lasts 3.7 hours. At a 100 mA load the capacity is 1600 mAhr and will last 16 hours.

My guess is that the boat receiver average load is less than 200 mA (~60 mA for the receiver and ~140 mA for servo loads), therefore Renewal receiver batteries will last longer than than the transmitter batteries.

With non-rechargeable alkalines, the transmitter works fine for at least an hour AFTER the Ranger II light goes into red. Renewals should do the same.

When boat control is lost, the transmitter should be turned off for as long as possible. When the transmitter is turned back on control should be regained. Course and sail trim corrections should quickly be made. It is often possible to finish the race by repeating the on-off cycle.

When a battery is unloaded by turning off the transmitter, its voltage recovers quite a bit. So when you turn the transmitter back on, it will work normally for a short time.

Though alkalines and Renewals are forgiving at the end of their life, NiCds are not. When NiCd's go into red, there is very little time before your transmitter can't control the boat.

Owners who have used Renewal batteries are asked to report their experiences.

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BATTERIES COMPARED

The table below was compiled using information from several sources. It may be interesting to those of you considering the issue of what batteries to use.

If cost is a primary concern, note that actual cycle life of the Renewal may be significantly longer than 25 charge cycles, possibly 50+ cycles, if the batteries are not fully discharged on each use.

Note also that NiCd and NiMH batteries have poor charge shelf life and should be on trickle charge, or recharged before use, to prevent disappointment at the pond.

Owners who have used NiMH batteries are asked to tell us all what their experience has been.

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Waterline

(Continued from page 2)

side.Every break in the tape is a spot that is going to bleed through.

-Start taping at the bow and run the tape as far aft as possible. Where the waterline curves around the stern, the tape needs to be cut to ~1/8" width with a razor knife to make the bend, still using one continuous piece from the bow to stern.

-Its also a good idea to paper and mask off the boat completely **before** putting the last piece of tape around the waterline.

-When the paint is still tacky you can peel the waterline tape off.

Good luck.

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The Class Secretary's Boat
before Sail Emblems were available

Comparison of AA Cell Characteristics	Alkaline	RENEWAL®	NiCd	NiMH
Nominal Capacity, mAh (Renewal varies with load)	1200	1400 (initially)	600-850	1200
Usable Cycles (Renewal varies with load)	One	~25 +	200 +	300+
Peak Output Current, amps	?	1.0	>10	>10
Shelf Life (Charge remaining after one month)	~99.7%	~99.7%	~75%	~30%
Weight , oz. (4 cell pack)	~3.2	~3.2	~3.2	3.4
Retail Cost, (4-cell pack)	less than $1.50	$5.50 (Sears)	~$10-25	~$25
Cost per Cycle w/o charger costs, (4-cell pack)	less than $1.50	$0.22	$0.05-0.125	$0.08

STANDING RIGGING

Editor's Comment: The rule which permits low-stretch standing rigging line was a significant change to the original rule. To assist the reader, the entire rule and the rationale for it are repeated here. The rule was approved by 21 of the 28 owners voting. It was not unanimous and deserves further discussion and thought.

10 STANDING RIGGING:
10.1 Standing rigging line shall be braided non-metallic fiber (such as nylon, polyester, Spectra, Kevlar, etc.) and shall have a minimum thickness of 0.018 inches. Line thickness shall be measured at one location with the line under 2.0 lbs. tension. (If the one thickness measurement is less than the specification, the thickness shall be determined as the average of ten measurements spaced at 2 inches along the line.)

Rationale: This change permits low stretch rigging line. The minimum thickness limit is required to prevent the use of very thin, low drag line that might be too fragile and/or not hold in bowsers. (See the December "NEWS".)

The cost is negligible. Line thickness is easily measured on the boat. Most boats are kit boats and, therefore, the owners are capable of easily re-rigging with the low stretch line if they choose.

<u>Recommendation</u>: As your Class Secretary, I recommended approval of this change. Cost is less than $4 (Kite string, fishing line, etc.). Low stretch line will improve performance of our boat, especially in higher wind strengths. Low stretch headstay, backstay and jumpers give the largest improvement.

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Ed.: The following thoughtful article by Rick Martin was taken from the 914 Web Forum and reproduced here. The Forum has served its purpose because Rick has written me on this issue and I have not fully responded. Now you all get the chance to consider what he proposes.

Standing Rigging Line

From: Rick Martin
Date: 11 Apr 1997
Time: 15:38:58

Six weeks ago the following was forwarded to CR 914 e-mail users of record in hopes of stimulating some discussion. As that has yet to develop I am reposting this for the groups consideration on the subject of standing rigging line. Specifically, is rule 10.1 which restricts the size of standing rigging to 0.018" minimum thickness really necessary or does it simply create a measurer's nightmare?

Ed.: The dial caliper used to collect line data will be at the ACCR. A few minutes per boat should be sufficient to inspect rigging line thickness.

Now that the class has adopted low stretch lines I think most would agree that standing rigging with the lowest stretch and the smallest size will produce the best performance, but you can't have it both ways.

A rough calculation shows that a 0.014 inch diameter solid wire has the same stretch as the 0.020 inch thick, 70 lb. braided Kevlar.

Smaller line will provide less drag at the expense of more stretch and a larger line produces less stretch but adds drag. Each owner has to decide which is more important to them low stretch or low drag. Because you can't get both I feel that there will be a natural tendency to optimize to some tradeoff point without any need for dial micrometers or calipers (guaranteed accurate to the nearest 1/1000 inch).

Ed.: Accuracy to 0.001 (1/1000) inch is easily achieved and demonstrated. The 70 lb. Kevlar chosen as the benchmark low stretch line has a thickness of 0.020 in and holds well using stock bowsers. The rule minimum limit is 0.018 in., which gives a comfortable 0.002 in. margin. That is my reasoning.

The Sag and Drag article in the December CR 914 News provides a lot of data and was good as far as it went. But I feel it was somewhat misleading because the line comparisons were limited to differences between lines and did not consider the differences as a function of the total performance of the boat.

Mathematically it may be reasonable to argue that a reduction in line size of 0.005" equates to a 20% drag reduction of the standing rigging lines but what is it in relation to the total drag we're dealing with? In this latter context I doubt that a reduction in line size sufficient to create a quantifiable difference in total drag performance would offer acceptable stretch performance. Certainly not enough to produce an unfair advantage.

Ed.: If at the next national championships four out of the top five finishers use rigging that is 0.010 inches thick, will we all be convinced that to be competitive we all must switch to the same line? I now that I will be convinced. How about 0.007 inches? Would that be even better? Would we have to find bowsers that work on smaller line?

Other questions that come to mind. What about CR 914 owners or fleets without dial micrometers or calipers; can they dare assume that all 50# Spectra or 70# Kevlar lines will meet the class specs? Why was 0.0180 chosen as the minimum when 0.0157 would have permitted the use of 0.4 mm lines which are commonly available overseas?

Ed.: My excellent dial calipers cost ~$35. They are useful for many things around the house as well as in the model shop.

How 0.018 in. was chosen was explained earlier. Setting the minimum line size to

(Continued on page 7)

Standing Rigging

(Continued from page 6)

accommodate line available in Europe was not my goal. ***I strongly believe there must be a minimum line thickness for a one design class.***

Why don't any of the other AMYA classes restrict their standing rigging sizes?

Ed.: Most AMYA classes are development classes and, therefore, have very few restrictions. The M-Class has no standing rigging at all when a cantilevered carbon fiber mast is used.

The AMYA "one-design" classes are one-design in name only, in my opinion. Scrutiny of the rules and practices of these one design classes shows considerable latitude in design, even hull shape.

The CR 914 is the tightest controlled one-design class in the AMYA, and that is good for the owners in my opinion.

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I don't mean to beat this to death but I'd still like to know if I'm the only person who sees it this way. If so fine, please show me what point(s) I'm missing. If not, I propose that rule 10.1 be revised to read along the lines: "The standing rigging line provided in the kit may be replaced or substituted at the owners option with non-metallic braided fiber (such as nylon, polyester, Spectra, Kevlar, etc.)"
I look forward to your comments and discussion.

Rick Martin, #567

Ed.: Rick placed 3rd at the 1996 nationals using a 50 lb. test kite string called "Mightyline" for his standing rigging. He used it because it had a silver-gray color, but found that it didn't hold well in bowsers. The store told him it was low stretch polyester

Based on stretch data he reported to me, the line was not Kevlar or Spectra. There was too much stretch, thus the the line is probably polyester as the store told him.

He had trouble measuring the thickness, but thinks it is between 0.015 and 0.020 inches.

Rick, The AMYA states that if an owner proposes a rule change and it is seconded by another owner, there must be a vote.

Chuck

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Naff on Standing Rigging Line

From: Ric Naff
Date: 12 Apr 1997
Time: 12:22:09

Ed.: Ric responded to Rick Martin using his excellent Web Forum. In the interests of preserving space in this NEWS, I have edited Ric's comments. (Ric, if you feel that I have distorted your message, tell me and I will print a correction in the next NEWS). For those who want to see the full text, go to the Rules on the 914 Web Forum.

Ric's edited rely:
Rick Martin,
The CR 914 is a one design class.

Shouldn't rigging thickness be considered as we do sails, keel, rudder, and competition weight? We specify tolerances to eliminate unfair advantages.

I do think there should be a minimum shroud thickness. We specify a minimum boat weight. We specify tolerances on other components. However, I really have no preference on the absolute value of the minimum.

Calipers? We use scales to assure minimum boat weight is met. [Ed.: *How many own suitable scales?*]. We could revert back to the "use only the manufacturer's supplied line" approach and eliminate the calipers.

Ric Naff

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SAIL NUMBERS

Three inch sail numbers are now required for all sanctioned regattas. The rules also define the proportions of the numbers (Rule 13.12). [Note: In the February issue of the NEWS, some rules were incorrectly numbered.]

If you send me an SASE, I will return to you a print of your sail number. It will be simply an example of numbers which have good visibility at distance. They are from MS Word called Arial Rounded MT Bold.

Many owners use permanent "magic Marker" to do the numbers. To make it easy, tape the print of the your number to a flat surface. Tape the sail over the number after correctly positioning it.

Use a fine tip laundry marker (such as a Sanford "Sharpie")to outline the numbers (and emblems, if you choose). Then fill in with a wider permanent marker.

My experience is that the stock polyester sails do not have a "bleed" problem when numbers are traced. If you choose to cut a stencil, be sure the edges of the stencil are raised above the cloth or bleeding will occur.

Vinyl numbers are available from hobby shops,etc, but some owners think that 3 inch vinyl numbers will adversely effect sail shape? The same with the sail emblem. They are thin but so is the sail material. It's your decision.

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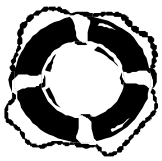

CR 914 PARTS PRICE LIST

MAJOR COMPONENTS	
Hull	$100.00
Keel	40.00
Rudder	25.00
Sails - Main and Jib	49.95
Mast & Boom	19.95
Ballast	25.00

STANDING RIGGING	
Braided Dacron - Blue	$2.00
Braided Dacron - Green/White	2.00
Braided Kevlar	4.00

MISCELLANEOUS ITEMS	price/each
Decal Sheet	$5.00
Mast Joiner	3.00
Sail Battens - four	2.00
Vinyl Tube (jib luff slides)	1.00
Hatch Cover	3.00
Keel Shaft Pipe	3.00
Rudder Shaft Pipe	2.00
Rudder Linkage w/ball joints	4.00
Keel Nut	3.00
Screws, extra large	0.50
Screws, all others	0.25
Main Sheet Ring	1.00
Rudder Horn	3.00
Sail rings, Boom springs, Snaps	0.25

WHITE PLASTIC TREE

Part description	Part No.*	Price/
Entire Tree	-----	$23.00
Rudder Hole Plate	3	1.00
Rudder Linkage Plate	4	1.00
Hatch Retainer Slide	5	3.00
Steering Wheel Mount	7	2.00
Chain Plate	8	2.50
Backstay Chain Plate	9	1.50
Jib Fairlead	9	1.50
Toe Rails	10	2.00
Sheet servo arm block	11,12,13	3.00
Sheet exit turning block	11,12,13	3.00
Aft Deck	14	5.00
Sheet Servo Arm	33	3.00

*** Refer to pg. 2 of the CR 914 Assembly Instructions**

BLACK PLASTIC TREE

Parts Description	Part No.*	Price/each
Entire Black Tree	-------	$23.00
Winch	15	2.00
Cleat	16	1.00
Winch	17,18	1.00
Mast Step	19	1.50
Masthead Crane	20	2.00
Jumper Ring	21	1.00
Jumper Struts	22	2.00
Spreaders	23,24	2.00
Gooseneck Ass'y	25, etc.	5.00
Vang Ring-mast	28	1.00
Boom Slide Rings	29	1.00
Boom End Caps	30	1.00
Steering Wheels	31	2.00
Bowsers	32	0.50

*** Refer to pg. 2 of the CR 914 Assembly Instructions**

WORTH UPGRADE KIT

Component Description	Price/each
Servo Mounting Board/cross pieces	$5.00
Mast Compression Post	0.50
Velcro	1.00
CA Glue	4.00
West© Epoxy pack	5.00
Screws	0.25
Sail Corner Reinforcement patches	0.50
Antenna Tube Ass'y	0.50
Sail dots (12)	1.00

Postage and Handling

Up to $10.00 order $1.00
Over $10.00 order $10%

WORTH MARINE MARBLEHEAD

80 Washington St., Marblehead, MA 01945
617 639 1835
worth@shore.net

Class News

(Continued from page 3)

from the AMYA Chandlery. The sail emblem (without the hard-to-read AMYA Chandlery sail numbers) can only be obtained through class secretaries. They are thin self -adhering black vinyl and are the correct 2 ½ inches high.

Send me a SASE if you want a set. There is no charge, but I still have to buy them. The last order was $1.30 a set, but the price will be higher for the next order. If you are so inclined, a contribution will help defray our class expenses.

If you are concerned that the thin vinyl emblem will adversely effect sail shape, use "Magic Marker" to trace the full scale sail emblem given on page 12

Worth Marine sold ~300 boats in 1996-97 boat show season. Larry estimates that Worth Marine has sold a total of ~1200 boats since 1993. Our job is get more of them to register and race with us!

******

Chuck Winder
19 Robert Road
Marblehead, MA 01945
(617)631 6727
chuckw88@msn.com

Fleet News

(Continued from page 2)

decided to buy and build race versions. By November 1993 there were three boats racing. The next Spring three more boats were purchased. One boat was raced only once and the other two were never built.

Joe attended the Marblehead (MA) Model YC Centennial Celebration in May of 1994. The M Boat Regional Regatta was held the same weekend. Budd Conner and Worth Marine had two or three 914's at the regatta for demonstration.. The goal was to get the 914 recognized as an AMYA class. That had been tried unsuccessfully the previous winter by a San Diego banker.

Budd and Worth Marine at that time had 17 boats owned by AMYA members. Three more were needed to achieve the 20 boats required for the AMYA to recognize the class. Joe registered his boat and convinced Jim Scheibner and Vic Rotolo to join AMYA and register their boats. During that summer Budd was asked and agreed to be the class secretary. With the last three required boats from Albuquerque, the CR 914 became an official AMYA class in August of 1994.

By the Winter of 1995-6 the powerboat members in AMMA, who had always had an objection to sailboats and especially sailboat racing, were making life so unpleasant that the 914 skippers decided to quit en masse and form their own club. The DCMYC was formed in May 1996 with six members. Today there are 10 members and seven 914's and they publish their own newsletter.

Larchmont Model Yacht Club continues to have active racing off of the LYC club float. They are still the only group sailing in the NE cold season. It is not clear if they will be able to race when the full scale boat season starts and will be using the float.. The first LMYC Spring Regatta was planned for April 5 and 6.

Country Place Yacht Club, Pearland, TX, planned their Second Annual Saint Patrick's Day Regatta on Sunday March 16. They have a fleet of 23 CR 914s. No regatta results have been received. The directory shows only one registered owner, Ray Harrison, # 51. He has subscribed to the NEWS. My information is that the club sails on a lake in their golf community.

Marblehead MYC had its first race of the season on March 23, two days after the ice was out of our Redd's Pond. It was a beautiful sunny day. The crystal clear ice which formed on the shrouds was beautiful in the sun. Four boats raced with Rick Myers, #30, winning.
Since then there have been seven races of ten heats. Wednesday night races started April 9 with the start of Daylight Savings Time. Turnout is typically eight boats at these cold early season races.

******

Was The Racing Good For You, Too?

One of our 914 skippers had gone to the pond for the Sunday race which consisted of ten individual heats. He arrived home about three hours late for dinner. His wife was extremely angry with him. She had waited and waited and finally ate dinner without him. Dinner had gotten grossly overcooked as she tried to keep it warm for his arrival, and the bad meal had made her even more angry..

Husband: "Honey, I'm sorry I'm so late, let me explain why. We had twelve boats show up today and the racing was great. Afterwards JR and I went to the Sail Loft for a drink. He left so I started talking to a girl at the bar and decided to have another drink with her. Time just sort of slipped by and after awhile, we went to her place for another drink. Well, I hate to have to tell you this, but we started kissing and before long we were in bed. I'm really, really sorry and promise it won't happen again."

Wife: "Don't give me that crap, you lying SOB! You raced another ten heats, didn't you."

Anonymous

MARBLEHEAD MODEL YACHT CLUB

1997 CR 914 REGION 1 REGATTA

May 31 and June 1 (Saturday and Sunday)

You are cordially invited to the Regatta at Redd's Pond, Marblehead, MA. Racing will begin after the Skippers meetings at 9:00 a.m. each morning.

REGATTA AGENDA

Friday,	May 30	
	1 - 5 p.m.	Practice with start tape
	7:00 p.m.	Dinner(Dutch) at (TBD)
Saturday,	May 31	
	9:00 a.m.	Skippers meeting at Redd's Pond
	12:30 p.m.	Lunch at the pond (included
	3:00 p.m.	Last race
	5:00 p.m.	Happy Hour (Dutch)
	6: 30 p.m.	Dinner at (TBD)
Sunday,	June 1	
	9:00 a.m.	Skippers Meeting at Redd's Pond
	12 :00 p.m.	Lunch at the pond (included)
	~ 2:00 p.m.	Last race
	3:00 p.m.	Awards Ceremony

Marblehead is a small town of about 20,000 with a large beautiful harbor filled with a few thousand full scale yachts. The attractive "Old Town" is interesting with narrow winding streets and old houses set "cheek-by-jowl". The town is a popular tourist destination and you should make reservations early.

The Marblehead MYC CR 914 fleet has had impressive growth. There are currently ~46 local boats.We usually have 10 to 15 boats at the starting line. The fleet has many experienced skippers, some from the local Marblehead Class fleet and several who race ocean yachts in addition to the 914's. This makes for very challenging racing. With so many boats in each race, we have found it important to strictly apply the Racing Rules. The Race Rule knowledge of the big boat sailors has made this easier. The steadily improving use of the Race Rules has added to our enjoyment of the racing.

Accommodations are available in Marblehead at the Boston Yacht Club at (617) 631-3100. When you call in your reservation state that your sponsor is Joel White. Call as early as you can because BYC has only 19 rooms, 10 with private bath. Many rooms have views of the harbor.
Other accommodations are listed below .
Brief of the Sailing Instructions

LODGING

Brimblecomb Hill B&B
33 Mechanic St.,
631-3172
The Golden Cod B&B
26 Pond St., 631-1846
Harbor Light Inn B&B
58 Washington St.,
631-2186
Harborside House B&B
23 Gregory St.,
631-1032
Hawthorne Hotel
On the Common, Salem
508-744-4080
Lindsey's Garret B&B
38 High St.,
631-2433/800-882-3891
The Nesting Place B&B
16 Village St., 631-6655
Pleasant Manor Inn B&B
264 Pleasant St., 631-5843
Seagull Inn B&B
106 Harbor Ave., 631-1893
Spray Cliff Inn B&B
25 Spray Ave.,
631-6789/800-626-1530
Stillpoint B&B
27 Gregory St.,
631-1667/800-882-3891

- ISAF 1997 Race Rules - 360 penalty turn
- Scoring - Place points: 1 for 1st, 2 for 2nd, etc.

dnf points = boats entered+1, dns = boats +2, dsq = boats+4

Note: Bring warm clothes and rain gear. The May onshore off the cold ocean ca n make it chilly at the pond

Call Chuck Winder with any questions or help with reservations or directions. (617)631 6727 or

ENTRY FORM 1996 CR 914 REGION 1 CHAMPIONSHIPS *(1997 AMYA membership required and can be obtained at the pond)*

Please enter the regatta as early as possible to allow for our planning.

NAME_____ AMYA NO. _____
ADDRESS_____

CITY_____ STATE_____ ZIP_____PHONE (_____)_____

SAIL NUMBER _____ CHANNEL/FREQUENCY - Primary_____ Alternates _____

ENTRY FEE $15.00. Includes beverages, lunch Sat. and Sun., and awards.
Enclose check payable to:

C huck Winder
19 Robert Road
Marblehead, MA 01945

SUBSCRIPTION to the CR 914 NEWS

YES, I want to subscribe. (Note: Yacht Registration is only $3 with a subscription to the **NEWS.**)

Chuck Winder
19 Robert Road
Marblehead, MA 01945
617 631 6727

Send $10.00 ($13 if with a registration) check payable to "914 News/C. Winder"

CR 914 YACHT REGISTRATION is **$5, ($3** when combined with a subscription to the **CR 914 NEWS)**

NAME _____ **PHONE** _____

If this is a transfer it was purchased from: _____

ADDRESS _____**EMAIL** _____

CITY, STATE, ZIP_____ **Preferred sail No.** _____

AMYA NO. _____ **CLUB AFFILIATION** _____

Send check for $5 ($3 if with a subscription)
to Chuck Winder payable to AMYA

Chuck Winder
19 Robert Road
Marblehead, MA 01945
617 631 6727

Note: Annual dues are payable in advance by December 31 each year.

AMERICAN MODEL YACHTING ASSOCIATION

_____APPLICATION _____ RENEWAL for 1997

Memberships are: Family - $27.50; Adult - $25.00 ; Junior - 12.50
(Canadian members, please add $2 for postage.)

Name _____

Address _____

City, State, ZIP _____

Telephone _____ **email**_____

AMYA Number (If known) _____

Club Affiliation _____

Send to: Harry Robertson
2793 Shellwick Drive
Columbus, OH 43235

A courtesy of the *CR 914 NEWS*

Chuck Winder, Editor
19 Robert Road
Marblehead, MA 01945

CR 914 SAIL EMBLEM
Full Scale

START YOUR OWN MODEL YACHT CLUB

There are probably some owners who would like to race but don't have a local club. Start your own by getting three AMYA members together. That's all it takes! (Though it helps to have a place to sail such as a pond.) Ask me for a "NEW FLEET' package if this interests you.

Future articles in the CR 914 NEWS

The following is a list of articles that are planned for future 914 News. What will actually appear depends on input from you owners in the form of contributed material and requests for particular information.

-History of the class
-Battery management - continuing
-Battery charging systems - continuing
-Surviving salt water - continuing
-Skipper conduct at races
-Class measurement certificate
-Race rule topics
-An in-depth report on the 1996 Championship boat.
-An analysis of the results, skippers and boats at the 1996 Championships
-Technical assessment of Rayovac "Renewals" for use in the 914
-Recommendations about sail numbers
-Sail arm pulleys - Strengthen