
❖ CR 914 NEWS ❖

Issue 26

SEPTEMBER-OCTOBER 2000

CR-914 Region 5 Championships

By Steve Lang

It was an ambitious project for a one-year-old club in the high country of Colorado. But the club management and its 50 new CR-914 owner's decided to give it a shot.

The date was set in the fall so visitors to the 7200-foot high sailing venue of the Thin Air Model Yacht Club of Colorado could enjoy one of the best seasons in the Rocky Mountains in the small mountain town of Evergreen.

SATURDAY

The 14th of October finally arrived and 23 registrations were in hand. At 9 am the TAMYC crew was hard at work setting out a course of 8 rounding marks and 3 starting gates. On shore, a tent was erected and the sound system was checked. The scorers were preparing their score cards and checking the computer. A dock was installed; a canoe was placed at stand-by. Other members were decorating the barn for the Saturday night party, affectionately called the "Bash in the Barn".

The weather was cool, in the 40's, but a bright sun found some sailors arriving in shorts. A nice easterly breeze flowed across a small mountain lake in a sharp valley. The club mascot dog strolled the water's edge hoping for some movement in the grasses.

At 10 am registration began and skippers started arriving with chairs, ground mats, boats, toolboxes, jackets and hats. Soon the water was rippling with a rainbow of colors as everyone was doing last minute tuning. As each skipper registered, they received a nametag that helped everyone get to know each other and the chatter increased as the crowd grew.

(Continued on page 4)



GOLD FLEET
All Eleven Boats
Approach the Start Line

Elaine Rainey Photo

On the Cover

Elaine Rainey, Terry Rainey's bride, was the photographer. The 4 x 6 inch color print was scanned on a Hewlett-Packard ScanJet 6300C at ~300 dpi. It was cropped and converted to black-and-white with some changes in contrast and brightness.

The Rainey's drove to the regatta from the new rapidly growing fleet in Tulsa, OK.

NATIONAL CHAMPIONSHIP REGATTA RESULTS

There will be a full report in the next NEWS. Editor

CBMRA hosted an excellent regatta at Annapolis, November 11 and 12, 2000.

Dave VanCleaf was the champion with 29 points. Dave Ramos and Tim Mangus were 2nd and 3rd with 32 and 37 points, respectively. All three were from the host fleet.

In fact, 11 of the 15 boats in the championship fleet on Sunday were from Annapolis.

Of note was Greg LaLiberte in 4th. Greg, from Boulder, CO, is one of the newest owners having registered his boat in November 1999. His was a remarkable achievement in this talented fleet.

Some Definitions from Ann Landers

Clock: a device to wake up people who have no children.

Cynic: someone who smells the flowers and looks for the casket.

Experience: what you get when you don't get what you want.

Federal law: 10,000 books explaining the Ten Commandments.

Marriage: getting used to a lot of things you least expected.

Inside This Issue

Region 5 Regatta Report	1
Nationals- Prelim Results	2
Class Rule Interpretations	2
Class Secretary's Report	3
Bow Bumper Gage	3
New Registrations	3
Battery Management	6
Improved Bow Bumper	7
Mast Head Crane Fix	7
Rudder Arm Fix	8
Needle Threader for Rigging Line	8

Join the AMYA

Now is the time to join:

1. The winter issue of the AMYA magazine will feature the CR 914 including a color cover photo.
2. By joining after October 1, 2000, your membership will be effective through December 31, 2001. And you will receive all four issues of *MODEL YACHTING*.

Use the AMYA application form bottom of page 11. Or call Michelle at 888-237-9524. Make sure you tell her that you have a CR 914 and the sail number.

CLASS RULE INTERPRETATIONS

The CR 914 Advisory Committee addressed the following issues and made these determinations. They are in effect until a rule vote confirms or denies these decisions.

DRUM SAIL SERVO WINCHES

"Only arm type sail servos are permitted in Regional and National regattas."

The AdCom voted 4 to 1 in favor of the above interpretation. The objective is to maintain the fact and image of our strict one-design class philosophy. The next vote on class rules will propose this as a rule change.

STANDING RIGGING

"Shrouds (meaning the lower, middle and upper shrouds) may be connected to any of the three holes in the chain plates." (Chain plates are identified as "Eyelet plate, part 8" in the AG Assembly Instructions.)

This interpretation was made because

some owners choose to connect the shrouds differently from what is shown on page 11 at the top in the AG Assembly Instructions.

Locating the lower shroud in the aft most hole (as defined in the Instructions) does give more control of mast bend. The AdCom consensus is that is the best arrangement.

STORM SAILS

An owner may choose to reduce sail area as permitted by Class Rule 13.

The class rules permit reducing the area of the stock sails for heavy winds. However, that smaller area shall be used for the entire regatta or series of races.

Additionally, if a sail is reefed, the same limitation is in effect. The reef shall be used for the entire regatta.

Class Secretary's Report

BEHAVIOR AT THE NATIONALS

Most, I hope all, skippers at the Nationals were disappointed by the poor behavior during racing. Swearing, shouting, anger, loud arguments were rampant. In the NEWS there have been articles on reliability, battery management, building tips, etc.

In future there will have be articles on controlling behavior in our racing fleets.

Greg LaLiberte proposed that the following be called the CR 914 Class "statement of mission".

"A noble objective is for the Class to develop a culture that assures fair competition in a friendly enjoyable atmosphere."

All skippers who attended the Nationals have been asked to contribute their thoughts on the subject. All owners should share their thoughts with me on this important issue. Out of these should emerge a viable approach to meeting the above goal.

NEWS Copy

I am always looking for articles from you, the owners and subscribers.

ALWAYS LOOKING FOR GOOD PHOTOS.

Does this sound familiar?

Registrations

This month there are ~715 boats registered and ~240 subscribe to the NEWS. Last issue there were ~270 subscribers. About 50 subscriptions expired with that issue and the owners received warning notices.

We are always open to suggestions about what will make the NEWS better serve the owners. Please send me your ideas.

Good sailing,

Chuck Winder

NEWLY REGISTERED

	First Name	Last Name	City	State	Sail No.
1	Andrew	Acton	Annapolis	MD	694
2	Mike	Brazao	Nashua	NH	436
3	Robert P.	Clagett	Cenreville	MD	887
4	John	Crimaldi	Boulder	CO	460
5	Pat	DiFelice	Everett	MA	573
6	Thomas G.	Donlan	Falls Church	VA	438
7	Richard	Hall, Jr.	Boulder	CO	847
8	Denny	Hanson	Boulder	CO	943
9	George E	Harris, IV	Stevensville	MD	526
10	Aaron	Housten	Chicago	IL	480
11	John	Leasure	Washington	NC	365
12	Matt	Manlove	Attleboro	MA	827
13	Pedro J.	Perez	Arlington	VA	437
14	David S.	Quick	Kingwood	TX	764
15	Andreas	Vietor	Evergreen	CO	472
16	Jeff	Weigant	Alpharetta	GA	745
17	John	White	San Diego	CA	728
18	Peter	Wyckoff	Boulder	CO	709

BOW BUMPER GAGE

By Class Secretary

The gage is shown in the photo.

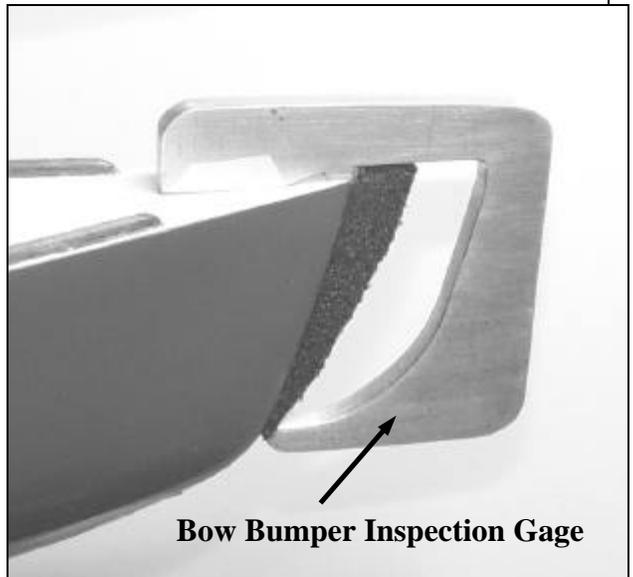
The bow bumper recently voted as a requirement in national and regional regattas probably effects boat performance. It is in the water at higher boat speeds and certainly alters water flow at the bow.

This is a one-design class. To assure that all boats have the same boat speed, all bumpers should be as nearly the same as possible. The rule states that the official bumper be installed without alteration at a certain location.

A gage was produced of 1/4" aluminum to allow easy measurement of the location of the lower edge of the bumper relative to the deck. Bumper rule 8.5 requires that dimension to be 2 1/16" minimum.

The gage was used at the 2000 National Championships.

See page 7 to for more info on the bow bumper.



Bow Bumper Inspection Gage

(Continued from page 1)

It was exciting having TAMYC members from Boulder, Denver, Colorado Springs, and Evergreen present, but the most fun was welcoming skippers that drove all the way from Minnesota and Oklahoma.

Promptly at noon, Steve Lang, TAMYC commodore, called the Skipper's meeting and proceeded through the details of the local sailing instructions. This would be a two-day regatta. The scoring on Saturday would seed the divisions for the finals on Sunday.

TAMYC had tested the tricky Heat Management System for scoring at an earlier regatta and had decided to use it for Saturday's races. TAMYC calls it the Ripple 4 program because of the movement of boats from one heat to the other.

[Note: Details of the Heat Management System was supplied by Larry Robinson, Chairman of the AMYA Racing Rules Committee. This system is sometimes called the "Promotion/Relegation System". Ed.]

Promptly at 12:30 pm, the first heat hit the water. The first couple of races, consisting of two heats sailing 11 or 12 boats, were a bit of a scramble. But shortly, the scoring committee gained control and set



A MEGA Start- 17 of a 21 Boat Fleet in the "Fun Race"

the tempo for the rest of the day.

The racing was intense, but laughter filled the air as war stories were embellished between heats. And there was lots of cheering for skippers on the water – which made spectating almost as much fun as sailing.

The wind was light and shifty, which kept everyone on their toes. As the afternoon wore on light clouds blocked the sun and it got chilly. We sailed on. The goal was to get in as many races as we could before the cut-off time of 4:30 pm.

By 4 pm however, the wind had become so erratic that it was no longer a test of skill and the sailing was called off for the day. Sixteen heats were sailed, making up 8 races. With a 20% throw out, 6 races were counted for the day's standings.

BASH IN THE BARN

As everyone jumped in their cars to head for the "Bash in the Barn" supper party, our computer operator handed over the results to be announced later.

The "Bash in the Barn" was terrific. It was sailing clothes only and brats and chicken on an open grill. Sally Backstrom fixed some terrific "starters" which we all wolfed down while swigging October fest beer and wine served in plastic cups. The more we drank and ate, the louder the talk got, the more gesturing and laughing was enjoyed. Finally the cook brought the main course to the serving table and all filled their plates and sat down for dinner.

The atmosphere was definitely mountain sailing. Sitting in a converted barn, with signal flags strung on the cross beams, CR-914s sitting around on tables, and everyone in casual sailing clothes – it was a bash!



The Fleet Going for the Weather Mark

SUNDAY

Sunday morning was perfectly clear with little breeze. All the skippers were positioned in two 11-boat divisions, Gold and Silver, based on their rank in Saturday's racing. It was decided to race three races in each division before switching to the other division. The racing started promptly at 10 am but after only one rotation (6 races) it was decided to stop for lunch and wait for the wind.

Lunch was served box style right at the lake. Everyone grabbed a drink and sat down in a group to eat and enjoy the perfect weather. Just as everyone finished, the breeze settled in and the racing continued. By the 3 pm cut-off, each division had sailed 12 races.

A Twenty-One Boat Race

To top off the regatta, owners were invited to put their boats in one final fun race. When the gun blew, 21 boats crashed the starting line in one of the most horrific raft-ups you have ever seen. It was a great "unwind" race with some of the most inter-

esting protests, and spectacular mark roundings ever witnessed. We could write a book on this one race alone!

AWARDS

Within 20 minutes the scoring was complete and the Awards were presented. Each competitor received a framed certificate with an amusing tribute to their sailing skill and their actual place in their division. In addition, the top five in each division received a 12" Silver engraved plate with medallion – plus a stand to display it on.

RACE RESULTS

Final standings are shown in the tables. The most amazing competition took place at the top of the Gold Division. With 10 races counting in the final series, there were only 10 points separating the top five skippers. It doesn't get any better than that.

IN SUMMARY

By all accounts, everyone had a ball. The ones that won were proud of their sailing, and the ones that didn't win are

looking forward to next year – when they will be faster and smarter. No one could have hoped for better weather, a greater sailing venue, a more casual and fun social time together, or a smoother more trouble free regatta.

TAMYC thanks everyone that participated and especially those that worked so hard behind the scenes to make it all come together. It was an honor holding this regatta, and we look forward to building on this great success.

Editorial Comment:

Steve Lang has done remarkable things with this fleet. At 23 boats, it is the biggest Regional Regatta our class has ever had. His fast growing club is the first to have multiple divisions. There is the original division in Evergreen and the Boulder division led by regional champion Greg La-Liberte, who also took 4th at the 2000 Nationals. There will probably be more at the rate the fleet is growing.

Gold Division

	Sail No.	Race 1	Race 2	Race 3	Race 4	Race 5	Race 6	Race 7	Race 8	Race 9	Race 10	Race 11	Race 12	Sub Total	Throw Out	Final Total	
1	Laliberte, Greg	296	1	1	2	3	4	5	1	1	6	4	9	5	42	15	27
2	Crimaldi, Jon	692	7	5	3	10	1	1	3	4	1	6	5	1	47	17	30
3	Britton, Terry	294	3	2	1	6	3	9	6	8	4	1	3	4	50	17	33
4	Johnson, Tony	77	5	3	6	1	2	2	8	5	7	3	1	7	50	15	35
5	Lang, Steve	530	2	10	4	8	5	4	2	2	3	5	8	2	55	18	37
6	Backstrom, Doug	989	4	6	11	4	7	7	9	3	2	9	4	8	74	20	54
7	Vietor, Andreas	472	6	7	9	5	9	3	7	6	5	10	2	6	75	19	56
8	Weatherly, Don	522	10	4	7	2	10	10	4	10	9	2	10	10	88	20	68
9	Holzinger, Peter	767	8	8	5	7	6	8	10	7	8	7	6	9	89	19	70
10	Mansfield, Bill	527	11	9	8	9	8	6	5	8	10	8	7	3	92	21	71
11	Nason, Randy	639	9	11	10	11	11	11	11	11	11	11	11	11	118	22	96

Silver Division

	Sail No.	Race 1	Race 2	Race 3	Race 4	Race 5	Race 6	Race 7	Race 8	Race 9	Race 10	Race 11	Race 12	Sub Total	Throw Out	Final Total	
1	Rainey, Terry	897	3	3	2	1	2	1	1	1	3	1	1	20	6	14	
2	Elkon, Aryeh	829	1	2	1	2	1	7	5	2	1	5	7	36	14	22	
3	Wyckoff, Peter	809	4	4	5	4	3	2	2	6	2	4	8	48	14	34	
4	Lawrence, Robert	456	5	5	4	5	5	5	3	5	5	3	3	53	10	43	
5	Boyle, Craig	331	2	1	3	8	6	9	9	7	4	7	2	64	18	46	
6	Kirkland, Bruce	354	8	8	7	6	7	3	4	3	7	2	5	63	16	47	
7	McDougal, Thayer	713	6	6	8	7	4	6	6	4	8	6	4	8	73	16	57
8	Lauter, Phil	449	7	7	6	3	8	4	7	8	6	8	6	77	16	61	
9	Fisher, John	544	9	9	9	9	9	9	9	9	9	9	9	108	18	DNQ	
10	Pease, Warren	995	9	9	9	9	9	9	9	9	9	9	9	108	18	DNQ	

BATTERY MANAGEMENT

CHARGING FIVE-CELL BATTERIES

by CR 914 Staff Engineer

The ordinary ~\$20 charger labeled as a four-cell charger will charge a five-cell battery pack; it just takes longer.

(Steve Lang and new owner John Crimaldi, both of the fast growing Colorado fleet, prompted this article. They asked if a simple four cell charger would charge five cells.)

Why Use Five Cells

Using five AA cells in the boat will increase the stock sail servo strength by ~20%. Some owners feel it important to have a stronger sail servo even though many top skippers use the stock *hitec* HS 700 servo with four cells.

There are two problems using five cells: charging them and finding a battery box.

Charging a Five-Cell Battery

The basic ~\$20 chargers we have recommended in the past state they are for 4.8 volts (for the Rx) and 9.6 volts (for the Tx). The 4.8 v. rating seems to imply it is designed only for four-cell Rx packs.

The **CR 914 Lab** tested the recommended Futaba Model FBC-8B(4) charger, which is rated at 50 mA at 4.8 volts when charging a four-cell pack. The charge rate into five cells was ~36 mA!

Therefore, when charging five cells, it will take ~40% longer than charging four cells ($50/36 = 1.39$). Example: A fully discharged 1200 mAh NiMH four pack will take ~36 hours to fully charge. A five-pack will take ~50 hours.

Another recommended charger is the *hitec* Model CG 25A rated at 55 mA. This charger is part of a package (charger, batteries, switch, etc.) that Steve Lang offers.

It was not tested but will probably behave

the same as the tested Futaba charger. They are similar in appearance, cost and rating, but it is not known if the circuitry is the same. It is possible, though improbable, that the "hitec" has a circuitry that won't charge a five-cell pack.

Of course there are many more expensive battery chargers that will charge almost any combination of cells, but for our purposes the above two chargers work well.

Battery Box

Five-cell battery boxes are available, though they are harder to find. The boat kit has a "square" four-cell battery box for AA cells. "Flat" four-cell boxes are available, too. A flat box is a little easier to get into the boat through the small space behind the servo board.

Battery Packs

Of course one can avoid the battery box issue entirely by buying or making soldered and shrink-wrapped battery packs. Soldered battery packs will always give superior reliability, too.

"Power Pack Supreme"

Steve Lang's *Power Pack Supreme* appears to be an attractive package offered at his web site:

<http://ModelSailboatRacing.com>

The package is fully described and explained. It's objective is to streamline the boat power supply and radio charging system.

A Word of Caution

The write-up suggests that there is never a need to open the hatch after a day of sailing with the *Power Pack Supreme* installed. This is not a good practice.

The reality is that the boat will always leak some water.

After a day of racing it should be drained using the drain hole. Always store the boat in a warm dry place with the main hatch open to thoroughly dry the inside and the electronics.

In Saltwater

If the boat is used in saltwater more preventative measures are recommended. After the boat is drained, freshwater should be flushed over the servo board and into the boat to rinse off residual saltwater. Swish the water around by rocking and rolling the boat. Drain it again and then open it up to dry in a warm dry place.

In the above it is assumed that the prudent owner has prepared his electronics to be as waterproof as possible. There has been much written on the subject in past NEWS issues.

It must be remembered that all boat electronics were developed for use in dry model airplanes, not wet model sailboats.

Steve and I have talked about this and we agree on the need to open the boat after every sail to assure it is well dried. He plans to edit the write-up at this website.

Pertinent Web Sites

AMYA Web Site,

<http://www.amya.org>

Add "cr914.html" to go directly to the CR 914 page.

Worth Marine,

<http://www.worthmarine.com>

Chesapeake Performance Model Yachts,

Dave Ramos, Annapolis, MD,

<http://www.rcyachts.com>

Thin Air Model YC

Steve Lang, Evergreen, CO,

<http://ModelSailboatRacing.com>

BOW BUMPER UPDATE

By Chuck Winder

Great News

Dave Ramos has produce a beautiful bow bumper of cast Silicon rubber. He made enough for all boats at the nationals. It is the same size and design as the current bumper, which is made of an open foam material used for pipe insulation.

He made a mold using the bow of the boat and the outside dimensions of the existing bumper. The liquid Silicon is poured in and allowed to cure. The result is a bumper that exactly fits the boat and has a pleasing smooth exterior. The rubber is soft enough to offer excellent protection.

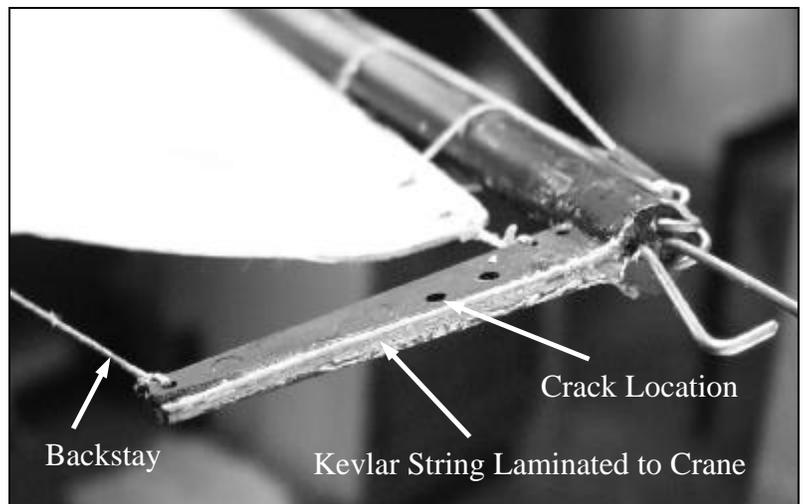
We don't know what his plans are or what the cost will be, but it is a superior product. He still has to determine the best way to attach the bumper to the boat since some adhesives he has tried don't adhere to the Silicon. He has used Silicon rubber adhesive with good success.

BUMPER HISTORY

The original bumper was introduced in Larchmont at the 1999 Nationals. Where that bumper has been used there have been no hull cracking or puncturing.

At the 2000 Nationals both the new and original designs were used. Despite very heavy winds on Saturday and many collisions, there was no hull damage.

Bottom Line is that the bow bumpers work. The new design is more durable and certainly more attractive.



MASTHEAD CRANE FAILURE

By CR 914 Engineer

Masthead cranes are often broken from being bumped against ceilings or door openings as the boat is being carried. Cracks mostly initiate at the weak spot caused by the hole indicated above.

A collision with a dock or another boat can also break the crane. Such collisions often sharply increase backstay tension. The backstay bends the crane downward, stretching the top surface of the crane. The weak spot is at the hole.

An effective repair is often as simple as using CA to reattach the broken end. A stronger more reliable repair is shown in the photo.

Additional strength is added using two or three strands of Kevlar string laminated to the top surface of the crane. The black plastic is first cleaned and sanded to assure a good bond. If one end of the string is first tacked to the crane with CA glue, the rest of the string can be pulled straight and tight while it is glued to the crane.

The low stretch of Kevlar is a good choice for this application, but Spectra and even polyester (Dacron) string would be effective.

The crane in the photo had not broken. An inspection had revealed a crack from the top surface through into the hole. The string lamination was used to prevent a final failure.



Dave Ramos installing one of his excellent new bumpers on Walter Harris' boat, #607, at the 2000 Nationals

THE BOATYARD

Rudder Arm Failures



CR 914 Lab Photo

By Chuck Winder

Cracks can occur in the white plastic material of the rudder arm that mounts on the rudderpost. (This thing is named "Rudder horn" in the AG Assembly Instructions.) They can cause loss of steering control, which can adversely effect how a boat places in a race. ☺

Cause

It appears that the white plastic (Nylon or Delrin?) shrinks with time. Since the plastic is molded around a brass insert that does not shrink, it is put under stress that finally causes cracks.

Shrinkage may be caused by the original material being unstable and simply shrinks as it ages. Exposure to sunlight is damaging to most plastics and that may be the culprit in this case.

Prevention

If the cause is simply shrinkage with age, there is no way to prevent the cracking, unless this fix is used when the boat is first built.

If the rudder arm were painted before installation, it would be protected from sunlight damage. However, there is no data that this would solve the problem.

A Fix

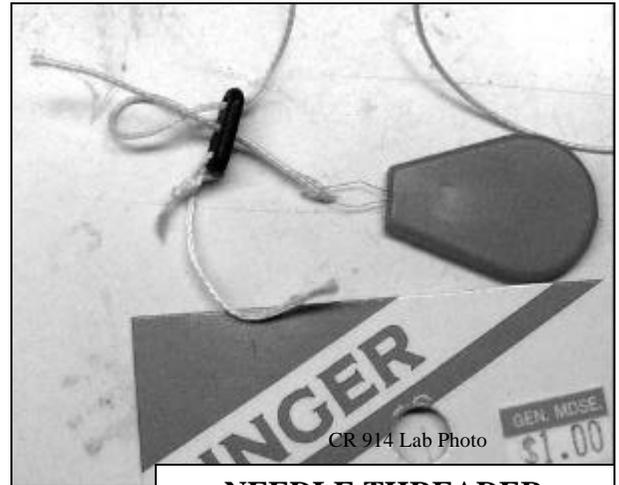
If the arm fails it can be replaced with a new one; but if it fails during a regatta and no spare is in hand, here is one way to deal

with it.

The usual location of the crack is at the screw hole as shown in the photo above left.

1. Using pliers pinch the plastic to close the crack and use thin CA glue in the crack and the space between the brass ring and white plastic. Let it cure thoroughly or spray it with an accelerator.
2. Tightly wrap the screw embossment with a strong string. Kevlar is good but any string will do. Finish with a square knot. It is best to locate the knot on the bottom of the embossment so the stiff string ends won't snag sheets.
3. Saturate the string with thin CA glue. Let cure or use an accelerator.

The photo shows a vice used to clamp the rudder arm crack closed and hold it for wrapping the string. In absence of a vice, a third helping hand using pliers or a pair of vice-grips will do the job.



CR 914 Lab Photo

NEEDLE THREADER

Biff Martin, #644, Marblehead, MA, uses a needle threader to assist in rigging his boat. The photo shows it pulling string through the center hole of a bowser. It is handy when the part with a hole is thin enough. At three for a dollar, the price is right.

Some of the CR 914 rigging parts are too thick and the fine wire diamond does not open enough to easily get the string through.

Greg Worth still favors the tried-and-true use of CA glue to make a "needle" of a string end. He makes two-at-a-time by applying glue to the string where he plans to cut. After the string is cut at an angle, there are two ends prepped and ready to install.



CR 914 Lab Photo



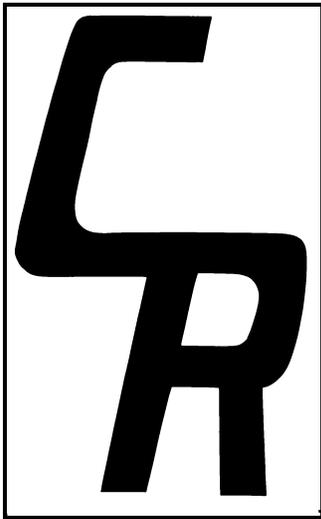
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WORTH'S BOAT SHOW SCHEDULE

Cleveland, OH	Jan. 12-21
Atlantic City, NJ	Jan. 18-21
Chicago, IL	Feb. 1-4



CR 914 SAIL EMBLEM
Full Scale

Articles in the CR 914 NEWS

The following is a list of articles 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.

- Regatta results
- Fleet news
- Battery management - continuing
- Surviving salt water - continuing
- Racing rules of sailing topics
- Why do radios "glitch"?
- Class Rules Interpretation - continuing
- Maintenance and repair of radio components
- Building and maintenance - continuing
- Scoring systems
- Boat switches
- Conduct of a model race
- Etc.

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.