

❖ CR 914 NEWS ❖

Issue 16

JANUARY - FEBRUARY 1999



1999 NATIONALS VENUE - LARCHMONT YACHT CLUB

Larchmont Model Yacht Club announces the 1999 CR-914 Nationals will be held at the Larchmont Yacht Club (NY) on October 29, 30 and 31.

With the facilities of one of the country's most beautiful yacht clubs as the venue, and being equidistant between the active Marblehead and Annapolis fleets, LYMC is expecting a tremendous turnout for this event. As such, the regatta will be limited to 52 boats. Racers will be divided into four divisions of 13 boats with two racing at all times. In this way we can insure quality racing given restrictions of available channels

For those who race 914's in ponds, the Nationals will be a new experience. The plan is to moor two separate docks in the

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Class Secretary's Report

RENEW YOUR NEWS SUBSCRIPTION IF THERE IS A WARNING LABEL ABOVE. (See page 5.)

LOOKING FOR GOOD PHOTOS. If you have good action shots of 914's, send them to me. Use e-mail or US Mail.

Registrations
This month there are ~450 boats registered. Of these, 214 subscribe to the NEWS. (See page 5.)

Thirty-one new owners are listed on page 9.

Registration Package
The newest addition to the registration
(Continued on page 7)

CR 914 CLASS HISTORY

1983 through February 1999

The CR 914 is a high performance 36 inch long radio-controlled sailing model of the modern International America's Cup Class boat (IACC). CR stands for Cup Racer and 914 is the length in millimeters. The sophisticated hull design, deep fin keel, spade rudder and fractional rig are carefully integrated to result in a well balanced boat that is easy to sail in a wide range of wind and waves.

The strong class organization controls the boat as a strict one-design. An owner carefully building his boat from the kit will have a boat capable of winning at the highest level of competition. To win requires an owner to learn how to maintain, tune and steer his boat to victory, a challenge in this very competitive fleet.

Growth of the class has been remarkable. There are more than 2500 boats sold and close to 500 registered with the class. Active racing fleets exist in many places around the country and more are starting all the time. Regional and National championship regattas are conducted every year. There are fleets in Bermuda, the Bahamas, St. Martins, Puerto Rico, Mexico, Canada, the Virgin Islands and South America.

Most boats are built from the kit though completed boats can be obtained. The kit includes everything needed to build and sail the boat except sandpaper and batteries. The integral hull and deck is a one piece white ABS plastic molding which can be sanded and polished to a high gloss. Or the hull can be painted. Installation of deck hardware, electronics and rigging of the mast are all straightforward, though instructions must be followed. The final result is a strong, reliable boat.

The Beginning

The CR 914 concept originated in 1983 in

Osaka, Japan. It was proposed to have a "Mini America's Cup Regatta" using models of the modern 12M Class which were then in use for the America's Cup. A 500 mm (~19 1/2 inch) boat was designed for this regatta. In this time period Japan had initiated a challenge for the America's Cup and that endeavor has



continued.

In 1986, Mr. Kazuo Takei, a naval architect in Osaka, Japan, designed a 24 inch boat called the CR 610. It was patterned after the early IACC boats. Three months later Takei designed a similar 36 inch boat which is the CR 914 of today. He has designed boats of 1000 and 1200 mm length but none have been as successful as the 914.

These boat designs were supported by Mr. Kawata, President of AG Ajikawa Corporation (AG Industry), located in

Osaka, Japan. Mr. Kawata is also President of AG Industries, Inc., Redmond, WA. One of his greatest loves is sailing.

It was important to Mr. Kawata that his companies offer a quality racing model sail boat.

In September 1990, AGI Redmond received a pre-production CR 914. In April 1991 they received the first CR 914 shipment from Japan. At the time Greg MacCarthy was Production Manager.

Nelson Goodsell, AGI Redmond General Manager, promoted the CR 914 to hobby shops across the USA, but sales were disappointing.

Second Super Mini America's Cup

As part of the promotion of the boat, President Kawata had AG Industries sponsor a Super Mini America's Cup Regatta to be held prior to the actual America's Cup. It was held in November 1991 in the Model Yacht Pond in San Diego.

In order to have the best international field possible, AGI shipped 60 boats to various organizations around the world.

Twenty-one international RC challengers came from England, Sweden, Germany, Japan, Philippines and the United States.

AGI took care of transportation and hotel and hosted a reception, a dinner and the award presentation.

The Defenders from Canada were Blair Atwell, Bob Sterne, and Baird McLean. Bob Sterne defeated Blair Atwell in the Defender Finals.

In the Challenger Finals Graham Bantock,

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London, England, triumphed over Kelly Martin, Seattle, WA (USA).

The racing was close, but Graham Bantock defeated Bob Sterne and won the 2nd Super Mini America's Cup.

The America's Cup trials were being held in San Diego at the same time. America's Cup skippers and crew were invited to participate in a Media vs. America's Cup Crew regatta using the CR 914. The action at the pond was entertaining for all.

Both of these successful events were managed by Bob Debow and Dick Davis of the San Diego Argonauts.

But Sales Were Lagging

Sales to hobby shops were still disappointingly slow. The suggested retail price of \$350.00, without remote control, was not successful in the hobby store market.

In an attempt to increase sales, AGI offered the boat at the wholesale price of \$175.00 without electronics. Fifty were sold to the Seattle Yacht Club in 1992. The discounted pricing was continued for a short period but the campaign became extremely time consuming for AGI. To support the sales, they were expected to give expert advice about model boats, which they could not do.

Sales averaged fifteen boats a month. AGI could not continue the boat business with these kind of sales figures. They either had to farm it out or stop importing the boat.

About AG Industries

The AG Industries core product in the US since 1982 has been sales and promotion of Whitewings Paper Airplanes. According to Greg MacCarthy, the current General Manager: "These gliders are considered the Ferrari of paper gliders. They hold the world record for time aloft of over 10 minutes in the air....". Booths at the International Toy Fair and New York Gift Show each year promote their

new products.

However, AGI Redmond had no experience in model boats.

Meanwhile at Worth Marine

In 1991, Greg Worth had conducted a survey. He was attempting to identify a product that would sell to people unwilling to spend the amount required for the high tech Marblehead Class. He wanted a product that would sell in larger quantities than the custom boats that had been his specialty. This would create a larger customer base for future sales at the high end of his product line.

Twenty CR 914's rounding the wing mark at Larchmont YC.



Photo by Jim Dolan

The survey indicated that what was wanted was a high performance, inexpensive one-design kit model that was easy to build and pretty. Greg likes pretty.

Greg considered a design of his own to satisfy the market that seemed to be there based on the survey. It became clear, however, that tooling and start up costs for a Worth Marine design were prohibitive.

In November 1992, Joel White returned home to Marblehead with a CR 914 after participating in the successful America's Cup defense in San Diego. Joel was a member of Bill Koch's legendary "America Cubed" syndicate. Joel used sail number US 23 on his 914, the same sail number as America Cubed. He took the boat to Greg for repairs. (Joel ultimately sold this pivotal boat to Steve Cruse who took third at the 1998

Nationals.)

After repairs, Greg test sailed Joel's boat at Redd's Pond. He decided it had promise of meeting the requirements of the boat he wanted to introduce. Greg bought his own CR 914 in early 1993 and made several design improvements. The boat now performed beautifully and Greg decided the CR 914 was the boat for which he had been searching.

Worth Marine started carrying the boat in stock in the summer of 1993.

In late summer of 1993, Worth Marine took the 914 to a boat show in Wilmington, MA. They sold five boats at the show and another 45-50 out of the shop in Marblehead. At "Sail Expo" in Atlantic City, in February 1994, they sold 25 more. They knew they had something

good.

Worth called AG Industries the morning they returned to Marblehead from Sail Expo. Greg MacCarthy, now General Manager of AGI Redmond, was in New York at a toy trade show. Worth drove to New York that day and proposed to market the CR 914 for AG. This offer was refused.

However, in Summer of 1994 AGI offered to make Worth Marine the sole CR 914 distributor in the USA. In return Worth Marine agreed to: 1) sell a certain minimum number of boats each year, 2) make the boat a recognized AMYA class and, 3) handle all upgrade and warranty work. The last item became a very large task.

Shop visits and phone calls from owners needing help with building or operating their boats consumes many man hours. This was the task that AGI could not do.

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Greg MacCarthy writes: "Worth Marine's objective was to offer the finest production kit boat available. The expertise that Worth Marine brought to the CR 914 prompted them to request production improvements. Worth Marine wanted these changes made quickly. AGI explained that these changes might come, but would take some time. Worth Marine also provided the expert ear that a boat builder could talk to about problems with assembly and operation of the boat".

The CR 914 was not yet an AMYA class. Some of the officers had seen and sailed the boat and liked it, but were not sure the AMYA needed another class. Worth believed that for the CR 914 to be a success, it had to be a recognized AMYA class. Worth worked with existing owners and new owners to find the twenty AMYA member owners required by the AMYA to approve a new class. Budd Conner, who owned two 914's, agreed to be the class secretary.

Several owners created the Class Rules. They included Greg Worth, Budd Conner, Joe Frasier and a few others. The first class rules were issued effective August 24, 1994.

The CR 914 Class was born!

Worth Marine designed a marketing program that has met with great success. In the winter, Worth takes a huge amount of gear to display at the major full-scale boat shows. Show attendees are able to sail and race the CR 914. Many 914 buyers come to the shows to look at boats costing \$100,000 and more. Buying a \$400 boat that is great fun is often an easy decision.

Worth Marine first offered the upgraded kit in 1994. The kit now included the electronics. The price was soon set at \$450 (often only \$400 at the boat shows) and included significant improvements over the original stock kit. That price remains in effect today in 1998. There are fleet discounts starting at six boats.

The CR 914 kit, as now offered by Worth Marine, is the most complete model boat

History of the NATIONAL CHAMPIONSHIPS

Year	Location	Champion	Hometown
1995	Minneapolis, MN	Tony Johnson, #77	Excelsior, MN
1996	Stowe, VT	Greg Worth, #181	Marblehead, MA
1997	Xenia, OH	Kevin Dooley, #97	Marblehead, MA
1998	Marblehead, MA	Kevin Dooley, #97	Marblehead, MA
1999	Larchmont, NY	TBD	
2000	Annapolis, MD	TBD	

kit sold anywhere. The boat can be built from the kit with no added expense. When completed only batteries are required to go sailing.

Improvements by Worth Marine to the original kit include:

1. Worth successfully negotiated with AG to thicken the ABS hull.
2. The Worth Marine Upgrade Instructions were written.
3. An improved radio was incorporated.
4. A stronger sail servo was made standard.
5. The original inadequate rudder control linkage system was re-engineered.
6. The arrangement of the internally mounted electronics was completely redesigned.
7. Details of how to build the mast and rigging improved strength and reliability.
8. A mast compression post was added.
9. The servo boards and mounting beams are precut to size with servo openings finished.
10. Velcro was added to secure batteries
11. An epoxy bonding and CA glue package was included.
12. A kit to strengthen the sails was made standard.

Worth continues to improve the boat. His contact with the owners in the shop, through phone calls and at the pond reveal to him areas that can be improved. When practicable they are incorporated in the kit.

CLASS ORGANIZATION

The office of CR 914 Class Secretary has had tumultuous times. About a year after Budd Conner agreed to be the first class secretary in the summer of 1994, he had a serious brain aneurysm. He underwent brain surgery. He was not expected to recover and if he did, was expected to be significantly handicapped.

Ralph Peter, Minneapolis, MN, stepped in and did an outstanding job including managing the first National Championships in 1995. As the year progressed, Ralph, too, was unable to continue.

By this time Budd Conner felt he had recovered sufficiently and re-volunteered for the job in late 1995. He remained in the job until he appointed Chuck Winder to the office October 1, 1996.

Chuck brought the advantages of the computer to management of the Class. A class newsletter, the CR 914 NEWS, was started with the financial assistance of the owners at the 1996 Nationals and Worth Marine. The first issue was November, 1996, and this history appears in the 16th issue.

The class is healthy. The growth rate continues to increase principally due to Worth's competent promotion and, partially, due to the strong class organization.

Summary of the Class Rules

The class rules open with: "The **CR 914** is a One-Design class. The Class objective is that the sailing skills of the skipper shall determine who wins races. These rules control yacht performance, cost and simplicity."

The class owners voted on rule changes in 1997 and 1998. They clearly support a strict one design philosophy. Changes to the rules illustrate that philosophy:

- The boat must, for the most part, be built only from what is supplied in the kit.
- Minimum weight was raised to 6 lb.-4 oz. so that a boat built from the kit requires no extreme measures to reduce weight.

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- Only kit sails are permitted to avoid the expense of buying the "sails du jour" so common in many classes. All sails are white which reinforces the one-design image.
- The rules encourage the boats to look alike.
- Stock hardware from the kit is required except where experience has shown a stronger fitting to be desirable. Mast and booms must be from the kit to avoid the expense of more exotic material such as thin wall aluminum, carbon fiber, etc.

The organization will remain vigilant so that the rules assure all boats have the same performance with minimum cost and hassle..

The Future

The CR 914 has filled a niche in the market place of remote control model racing boats. It appeals to young professionals already involved racing full scale boats. Worth's promotion at major boat shows makes the boat visible to a market segment of enthusiasts who also have the disposable income to join the class.

For most owners it is the first RC model boat they have ever owned. It appeals to a wide spectrum of people who enjoy racing model boats. There are many women owners.

The 1998 Nationals was won by a 17 year old with a 67 year old in second place.

The class should continue to prosper for many years.

Chuck Winder, CR 914 Class Secretary

Credits

The history could not have been written without the generous support of the following:

1. Greg Worth, Worth Marine
2. Greg MacCarthy, General Manager, AG Industries, Redmond, WA
3. Mr. Araki, Vice President, AG Industries, Osaka, Japan
4. Rick Martin, our foreign correspondent, a CR 914 owner who works in Japan for Boeing Aircraft

Nationals

(Continued from page 1)

middle of Larchmont Harbor with 360 degree circles of marks set around both docks to accommodate any wind direction. LYC launches will carry sailors and boats to and from the race docks. Two divisions will be assigned to each dock and sail three races and then return to shore while the other division races three. Once on shore again, the "off watch" can recharge batteries, make repairs, take advantage of creature comforts, etc. Then it's back out to the docks for the next three heats.

As in past, LMYC's National Regatta will have on-the-water judges, proactively calling infractions, indicating penalties and eliminating the need for on-shore protest meetings. This has proven to maximize racing and minimize "sea-lawyering."

The schedule calls for practice racing Friday afternoon followed by a cook-out. Saturday morning and afternoon qualification races will be followed by a formal dinner at the Larchmont Yacht Club. Sunday's racing will finish about noon followed by awards.

LMYC has repeatedly proven its ability to stage exceptional regattas for boats of all sizes. If you are interested in sailing at the Nationals, contact LMYC Commodore Buttons Padin, erpadin@aol.com or (212) 252 6773 daytime, with your intentions so the Club can get a handle on interest.

*"Buttons" Padin
Commodore LMYC*

Attention Owners:

Several members of the Marblehead MYC traveled to Larchmont for their 1998 CR 914 SPRING REGATTA. The experience was excellent! Outstanding hospitality and a professionally organized affair. Do not miss this opportunity for a memorable good time.

The Editor

JOIN or RENEW YOUR AMYA MEMBERSHIP

Visit AMYA's Website
<http://www.intellisys.net/AMYA>

AMYA membership expires on December 31. Join or renew now before you forget. You may now phone in a membership using a credit card.

(See bottom of page 11.)

NEWS Subscription Story

Of the 261 subscribers for the November-December 1998 issue, 93 were notified that their subscriptions had expired. As this issue goes to press, 84 of those have not renewed.

(Note that 77 of the above 84 automatically received a subscription when they bought their boat under the short-lived *Worth Marine Bonus* program. They may never have had an interest in the *NEWS*.)

For many who do not renew, the reason is lack of interest. For others it is simply forgetfulness or procrastination. Bottom line: They will not get a *NEWS* this month.

With this issue there are 214 subscribers. Of these, 102 subscribers will be notified that their subscriptions have expired.

The next few months will be interesting as it is established how many owners choose to subscribe to the *NEWS*.

FLEET NEWS

Chesapeake Bay Model Racing Association

Annapolis, MD

CBMRA has changed the venue of the Iceberg Series from the Charthouse to the Eastport Yacht Club in Annapolis. The lack of buildings and trees gives cleaner air for better sailing.

The top four skippers after three races in the Iceberg Series I:

1. Dave Ramos
2. Tim Mangus
3. Craig MacGibbon
4. Jim Sagerholm

CBMRA also races on the Reflecting Pool in DC every third Saturday of the month (when there is no ice).

Visit the new CBMRA Website: www.clark.net/pub/sandyg/cbmra.

Tagg Zurmuhlen
mjz@bellatlantic.net
(202) 483-9177

Larchmont Model Y C

Larchmont, NY

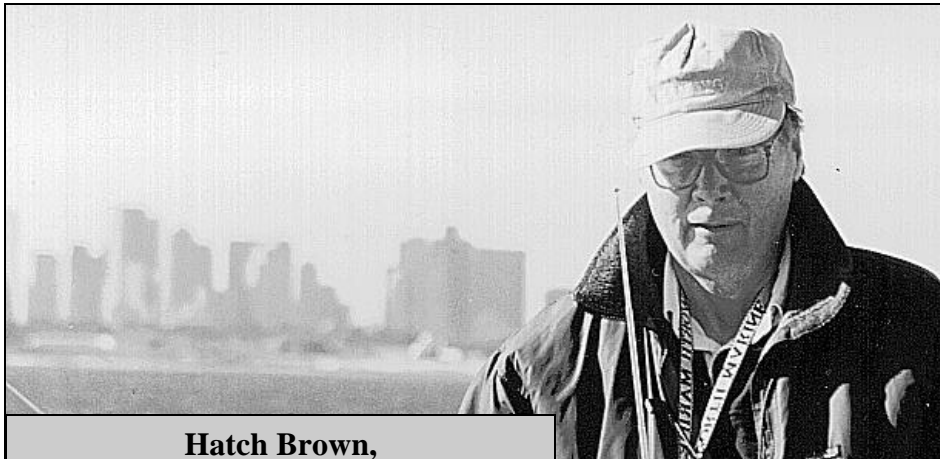
The New Years Day regatta had 20 boats, 20 degrees and very strong NW winds from over the clubhouse. There were lots of crash and burns but no holes and the boats worked. Except when people missed and ran into the dock, which caused one dismasting.

A new condition was noted. With the temperature 20 F and the wind above 20, the sail servo was often slow in the lulls. It was determined that the wet sheets were freezing. Salt water has the advantage of having a "soft freeze". Freshwater water might stop the boat.

Does anybody have any solutions to this problem?

February 5 was Boat Yard Day at LMYC. Fellow sailors knowledgeable in fixing holes, electronics and other problems were on hand to help those with inoperable boats but too busy to get the parts together and fix their boats. LMYC has ~45 boats

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Hatch Brown,

From Cottage Park YC deck with Boston skyline

Cottage Park Yacht Club Winthrop, MA

Hatch Brown is what every boating club must have. An individual who gives the skills and time needed to make it happen for everyone else. Every Sunday morning Hatch arrives early at the club to launch an inflatable boat to set the racing marks. He races with the 914's from 10 until noon.

In the afternoon he is Race Director for the large frostbite fleet of Inter Club dinghies and Laser's. Then back to the club to hoist out the dinghy and calculate the scores in the club bar.

Hatch Brown coached the MIT sailing team for 29 years. He brings his wealth of experience to the benefit of the sailors.

Cottage Park YC is indeed fortunate.



Hatch's 914 at the windward mark

Privateer Yacht Club Chattanooga, Tennessee

Our fleet was founded in December with an initial purchase of six boats and quickly grew to sixteen. There are ten boats completed.

Sunday afternoon practice sessions have produced exciting racing. John Hearn and Rob Fowler are the "Top Guns". Hearn is an experienced RC airplane pilot and Fowler could sail a log and beat most people. The retired sailors are sneaking in practice session during the week and are improving rapidly.

Our first official practice session February 7 had all ten completed boats on the water plus two one-meter boats. Because of high wind and chop on the lake, the course was set up in the harbor area of the club.

Spectator interest was so high the main walkway was almost awash. Two people from the local model boat club had a great time watching the fun and were given the opportunity to sail the 914's.

They were impressed. Their current interest is in electric race boats and scale modeling. It won't be long before we pick up several electric skippers for our fleet.

Bill Denes
bdenes@mindspring.com
(423) 877-7630

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enrolled. Boat Yard Day was conceived to help those who have not raced regularly because of malfunctioning boats.

Though there was no racing, it was planned to have some of the quicker boats in the water to tune up against. Tony from *Tony's Hobby Shop* was in attendance with parts and advice.

The next big event is the Spring Regatta, April 17 and 18.

Howie McMichael and Buttons Padin
 erpadin@aol.com

Marblehead MYC

Marblehead, MA

Frostbite racing is at Boston YC in Marblehead Harbor every Saturday from 1 to 3 PM. Sailing has been good with four to six boats.

For the remainder of the frostbite season, races will not be scored. The objective will be to concentrate on training and tuning without the pressure of competition.

Chuck Winder
 chuckw88@msn.com
 (781)631 6727

Atlanta America's Cup Club

Atlanta, GA

The first regatta for the New Year brought a new winner – Ray Davis. Scott Tylor's lock on the number one spot was finally brought to an end!

Four skippers raced a windward leeward course set on Lake LANIER. Scott Tylor's father was the race committee. He arbitrated some sticky race start entanglements.

Davis managed to read the wind shifts and stay on the correct side of the course. Tylor challenged numerous times on the downwind leg, but Davis was able to cover.

Randy Phillips came close to a second place for the regatta, but experienced

several boat tuning problems before and during the race.

Mike Krantz has retired his TT Victoria and will return to the fray with a new CR 914.

The Atlanta fleet plans a regional regatta in the spring with the Chattanooga fleet.

Randy Phillips
 jrphillips@mindspring.com
 Office - (770) 962-4460

CLEVELAND, OH

A group in Mentor Harbor, a suburb of Cleveland, sailed every Sunday until just before Christmas. They would get together about 1 pm and sail for 2 1/2 to 3 hours. The group usually consisted of 2 or 3 CR 914's, 9-11 Lasers, and two Santa Barbaras. Santa Barbaras are 70 inches and 28 pounds and therefore usually won.

In the mostly light air, the 914 had a significant advantage over the Lasers. Rich Rupp (#929) and Brian Lui (#555) showed up on a regular basis. The two 914's were usually in the top four or five. Lui won a fair share of the races by a large margin.

The 914's fast sail servo and quick acceleration gave it an advantage over the Lasers. Even with a bad start, the 914's out-sailed the Lasers and finished respectably.

Despite three different classes, everyone enjoyed the racing. The group was always laughing, having an occasional collision and complaining that the "light-air flyers" (CR 914's) should have a handicap.

Brian Lui
 Luipk@stratos.net

Class Secretary's Report

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package described last issue is the "SET UP YOUR BOAT TO WIN" article that appeared in the Nov. - Dec. 1997 issue. Many owners have asked for the article and it was thought it would be useful to a new owner.

Please send me NEWS Copy as an email attachment in Word 97 or older format. It is much more convenient to edit. If you use US Mail any form is fine, even handwriting.

NEWS Subscription Scheme

Starting with 1999, a subscription will be for seven issues of the *NEWS*, not for six issues and one year. The reason for the change is cost. Our costs permit us to add one more issue for the \$10 fee. The choice was to reduce the price and keep the subscription at six issues for one year, or to keep the same price and add an issue. The decision is to add an issue.

The plan allows the editor the flexibility to change the timing of the *NEWS*. Normally, it is mailed every two months. If warranted, an issue could be sent on a shorter interval. Or, if the editor can not prepare an issue in two months, each subscriber will still get seven issues.

Therefore, each year subscriptions may expire in a different month than the prior year. This could confuse some people because conventional subscriptions expire in the same month each year.

To avoid that, the last issue of a subscription will have a warning label that **gives each subscriber a one-time notice that the subscription has expired.**

Chuck Winder

Worth Marine Web Page

<http://www.worthmarine.com>

Many owners have questions about how to build the CR 914. Some things are difficult to describe in words. Those of you who are either building or modifying boats may benefit from seeing the excellent pictures at Greg's Web Page.

Click on the CR 914 picture. When that page appears, scroll down and click on "close up shots for building assistance".

The Editor

RELIABILITY and SALTWATER

The Larchmont MYC boats are sailed exclusively in saltwater and in the winter. Howie McMichael's boat is notoriously fast and reliable in this very competitive fleet. He was asked to contribute what he does to achieve reliability. He responded with the e-mail below.

E-mail from Howie, 12/31/98

Chuck,

The answer is simply keeping the water out of the electrical connections. My boat doesn't leak more than an ounce in heavy weather; the battery is attached to the servo platform on the starboard side under the steering linkage with Velcro; the receiver is attached under the aft deck; the receiver connections have been plugged in with heavy Vaseline around them; the receiver is wrapped in tin foil; there is no on off switch so the battery is connected directly to the receiver with a Deans connector that stays on top of the servo platform when connected. The servos have silicone around all but the moving parts which have Vaseline around them. The companionway hatch is lubed with grease so it also doesn't leak.

When I finish sailing I rinse the inside of the boat by putting water in the bow plug hole and swish it around then empty it.

I open the hatch and give the servos a brief hose dousing-more than a spray and enough to get any salt off them. About the equivalent of pouring a coffee cup of water on them. After all they are basically water repellent with the Vaseline and silicone treatment and will be put away in our dry warm room. Salt - Not water - is the long term enemy.

We store the boats in a heated dry room.

About once every 2 months I take the rudder and keel off and grease the tubes before replacing them. At the same time I check the rigging and then the alignment of the rudder when the fine tune is centered.

I hope this is some help-It's pretty basic and obvious. We have a saying in the boat business for mistreated yachts- "Sailed hard and put away wet"

We are having our New Year's Day regatta tomorrow and it will be cold one! The trick will be to stay away from collisions as the boats are brittle in cold weather and hole more easily. Although I am happy to say that serious collisions are now pretty rare even with the high number of boats.

Have a Happy

Howie McMichael

[See "Waterproofing a Receiver" at top right.]

Hints and Tips

The following ideas were compiled by Jim Linville. Jim is AMYA Region 1 Director and Technical Editor for Model Yachting. They appeared in the Minuteman MYC newsletter. MMYC is in Needham, MA.

WATERPROOFING A RECEIVER

Water and radio gear don't normally get along too well together. One way that I have found to waterproof a receiver, with its many openings, is to completely cover the receiver circuit board with petroleum jelly (Vaseline, or equivalent). Since I treated my two receivers by this process several years ago, I have never lost a radio due to water.

*Dick Hien,
AMYA Treasurer*

GORDIAN KNOT

A common mistake is to tie all connections securely and assume they will stay knotted. My observation is that sooner or later ALL knots on model boats will work loose. The only way to make knots permanent is to place a drop of glue on EVERY knot on the boat. The glue I found that is quick setting and permanent is Cyanoacrylate (Super Glue), gap filling (high viscosity). The fast cure, low viscosity adhesive also will work, but will wick along the line, causing the line to stiffen in undesirable areas.

Dick Hien, AMYA Treasurer

DEAN'S CONNECTOR SWITCH

A trick that I learned from Dave Ayers in Oklahoma a long time ago is to solder the female half of a Dean's connector in series with one of the receiver's battery leads. Epoxy the female half through the deck, and use the male half as a jumper. Use a short length of line as a tether for the male half. Thus you have eliminated any type of mechanical switching arrangement (expensive or not) and still have an external means to turn your radio on and off.

*Harry Robertson,
AMYA Membership Secretary*

MAGNETIC SWITCH

The magnetic mini switches used for door and window alarms make great on/off switches for our boats. Use the type that are off when the magnet is on the boat and on when it is removed. Simply apply small pieces of Velcro to the deck and to the magnet. Finally, attach a long length of colored survey tape or cord to the magnet so that you make sure you have removed the magnet before putting boat in water.

*Dick Rutledge,
AMYA Vice President*

NEW MEMBERS

Last Name	First Name	City	State	Sail Number
Atwood	John	Newport News	VA	691
Brown	Peter	Boston	MA	853
Buchanan	Ron	Richmond	VA	454
Coolidge	John E.	Signal Mountain	TN	360
Cope	Mel	Fredericksburg.	VA	260
Costello	Nancy and Mike	Falls Church	VA	532
Crowe	Patrick J.	Hixson	TN	798
Fowler	Rob	Hixson	TN	274
Freeland	Ernest	Riva	MD	956
Grosvenor	Sandy	Annapolis	MD	265
Hearn	John	Signal Mtn.	TN	267
Kavanaugh	Brendon	Westhampton	MA	261
Kolkmeier	William J.	East Norwalk	CT	264
Levin	Bill	Marshfield Hills	MA	329
Lui	Brian	Mentor	OH	744
MacDonald	Gary	Winthrop	MA	804
MacGregor	James T.	Rockville	MD	678
McLaughlin	Steven L.	Edgewater	MD	309
Mertes	Frederick	Annapolis	MD	427
Myrick	Glen	Chattanooga	TN	738
Norwood	Lewis W.	Edgewater	MD	263
Roberson	Edward L.	Chattanooga	TN	330
Robertson	Bill	Hixson	TN	430
Roy	Carl P.	Norfolk	VA	270
Simonelli	Darren	Seabrook	NH	257
Spalding	Carter	Norfolk	VA	276
Stokes	Gordon	Norfolk	VA	708
Van Tassell	Jon	Winthrop	MA	483
Walerius	Erik	Clyde Hill	WA	575
Wesley	John H.	Chattanooga	TN	262
Wright	John	Worton	MD	266

SAIL SERVO STRENGTH

Kevin Dooley, the 1997 and 1998 National Champion uses the stock sail servo. It is the "hitec" HS-700.

When I first started sailing my 914 I was annoyed when a strong puff would overpower the servo and pull the sails out. I searched for a stronger replacement and did a lot of servo testing. The expensive Futaba S 3801 was my choice.

Early issues of the CR 914 NEWS had articles about the stronger sail servo and a tacit recommendation to use them. But read the first paragraph again. Kevin is especially good in strong winds where one would expect that a stronger winch would be most important.

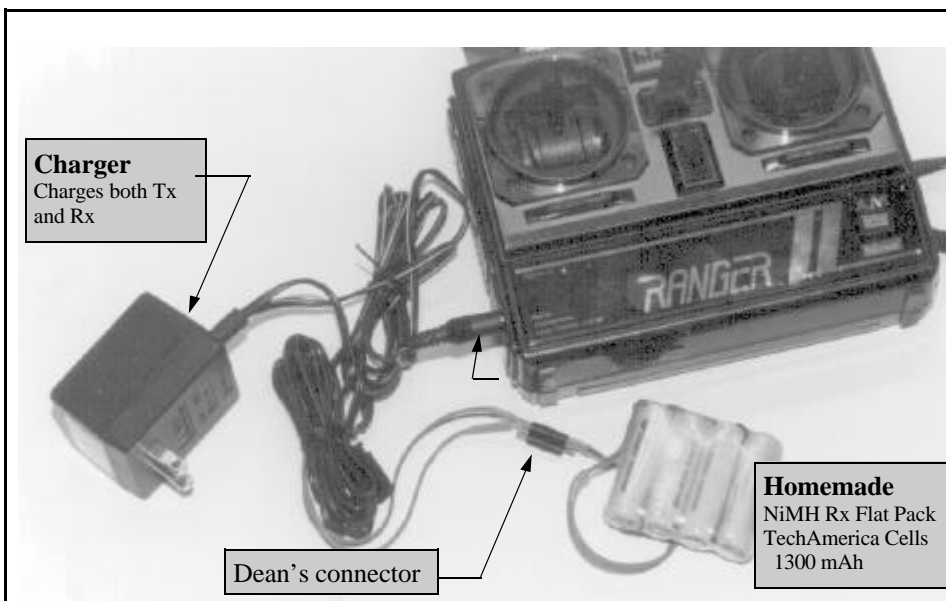
The Message Is Clear.

A stronger than stock winch is not necessary to having a competitive boat.

An Added Comment

Advertising states that the Futaba S 3801 is "water resistant". My boat almost sank once because I failed to replace the stern mounted drain plug. That occured in fresh water. Shortly thereafter the S 3801 seized and was scrapped because of corrosion in the servo motor.

Chuck Winder



ULTRA SIMPLE CHARGER SYSTEM

Use a "hitec" charger, Model CG 25A, and the connectors will be compatible with the stock radio.

Or use a Futaba FBC - 8B charger, but the connectors will have to be changed. Your model shop will help you.

Prudence will dictate changing the battery connectors to *Dean's* for reliability.

The photo shows a homemade battery pack of NiMh cells. See a future NEWS article.

The stock battery box can, of course, be used with this system.

BOAT MAINTENANCE

INTERNAL ANTENNA

By Chuck Winder

When building my second boat, I decided to put the antenna below deck. On my first boat the stock external antenna sticking up at the stern was always a problem when the boat was put into the car. It would get knocked off. And I didn't like the appearance, not to mention that it was windage to slow down the boat. After all, this is a racing boat.

Internal Antenna Performance

There was no noticeable effect on control of the boat using the internal antenna. Control was normal out to as far as the boat could be seen.

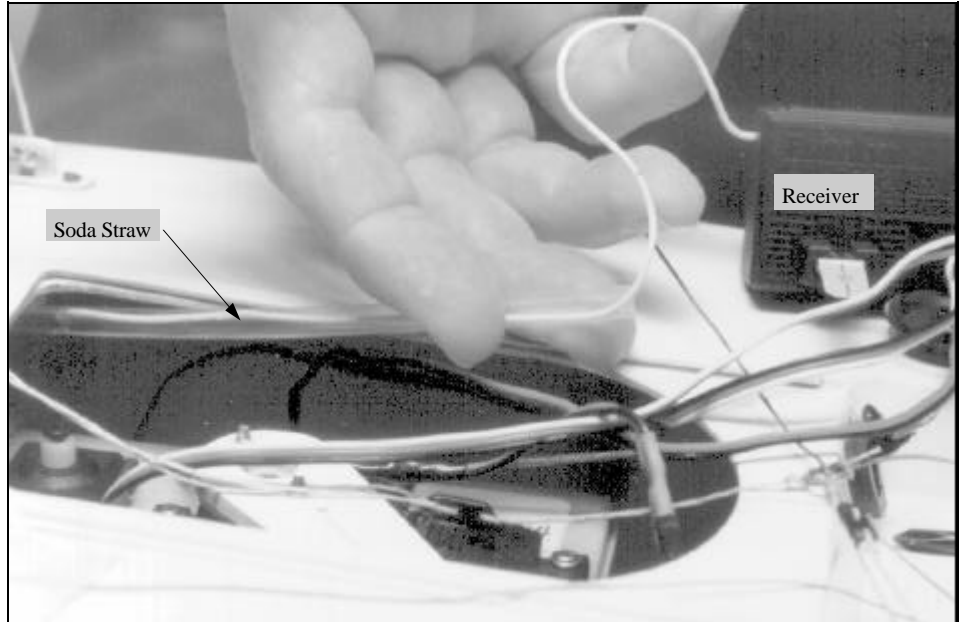
Actually, the internal antenna length is longer than the short stock antenna. But the antenna should be attached to the underside of the deck, not just dumped in the bilge.

DESIGN and INSTALLATION

On my second boat I used plastic tubes sold at model shops for routing antennas in airplanes. The antenna wire is simply slipped into the tube.

The typical tubes are short and require a splice using heat shrink tube or electrical tape. This is small diameter tube that was epoxied to the bottom surface of the deck. The aft end of the tube was just visible at the forward edge of the main hatch opening and it extended to the bow.

On another boat ordinary plastic soda straws were joined together with plastic



electrical tape to get the length desired. These are stiff enough so they won't bend under their own weight with the antenna inside. When this straw tube is pushed forward towards the bow, the forward end slides up the inside of the bow until it is tight up against the deck.

One way to hold it in place is to use Velcro. Tape or epoxy a small piece of wood (1" x ~3/8" x ~1/16 inch thk.) to the straw and use sticky back Velcro stuck to that. (See the photo below.)

Locate a ~1" x 1" piece of Velcro on the underside of the deck just forward of the edge of the main hatch opening on the starboard side. The starboard side is clear of the sail servo arm.

To install the tube just poke it forward until the front end slides up tight against the deck at the bow and then engage the Velcro. The tube will then hold the antenna up close to the underside of the deck.

The tube can be made long enough so that it comes back close to the rear edge of the hatch opening. If it is positioned correctly, the tube will lie up against the deck and out of sight

under the edge of the hatch opening.

To load in the antenna just pull the aft end of the tube (see photo above) out to where it can be seen and feed in the antenna wire. When released, the tube and antenna disappear under the deck.

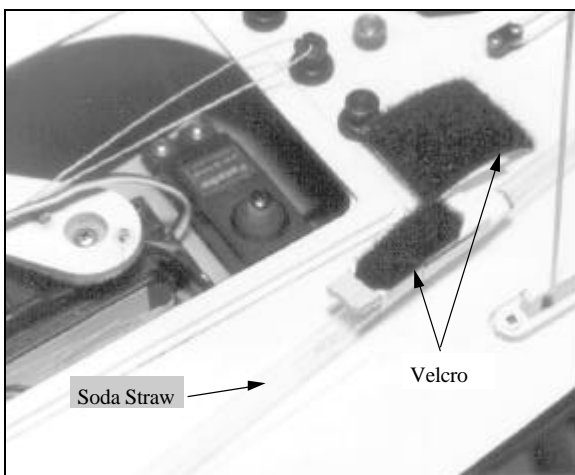
On one boat the receiver is under deck along side the mast on the starboard side. It is very convenient to thread in the antenna.

The other boat has the Rx under the cockpit per the Worth Upgrade. Note that the tube is run further aft for this installation.

In the under deck installation the effective antenna length is longer than the stock arrangement. Both 19 inch 75 MHz and 36 inch 27 MHz antennas work fine under deck.

An Added Virtue

It is very easy to change an Rx because the antenna wire just pulls out of the tube and the new one slips in easily. Feeding the wire into the stock antenna is a little more tedious.



CR 914 YACHT REGISTRATION AND SUBSCRIPTION TO "CR 914 NEWS"

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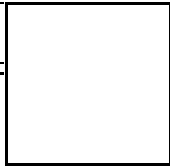
City, State, ZIP _____

Telephone _____ email _____

AMYA Number _____ Club Affiliation _____

Please provide a list of all boats you own with the registration number for each.

A courtesy of the CR 914 NEWS



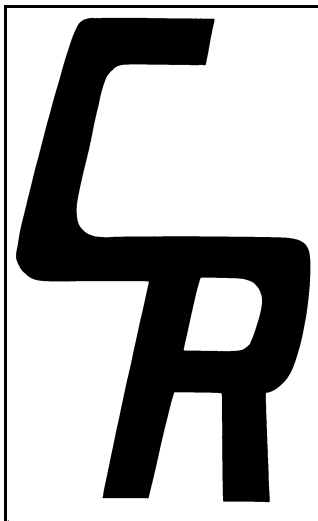
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Worth Marine Boat Show Schedule

Cleveland, OH	January 15 - 24
Chicago, IL	January 28 - 31
Atlantic City, NJ	February 4 - 7
Miami, FL	February 11 - 17
New England Show	March 18 - 21
Oakland, CA	April 14 - 18



**CR 914 SAIL EMBLEM
Full Scale**

**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.

- Regatta results
- Fleet news
- Battery management - continuing
- Surviving salt water - continuing
- Race 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

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