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Super Mini America's Cup Regatta

by Rick Martin

Editor's note: The author lives in Seattle but his work for Boeing takes him to Japan frequently. He has written several previous *CR 914 NEWS* articles about CR 914 racing there. This is his most exciting one to date, as you will see when you read on.

NISHINOMIYA, Japan — The 20th running of the Super Mini America's Cup Japan Regatta, the Japanese equivalent of our US CR 914 national championship, was held on October 17 at the Shin-Nishinomiya yacht harbor 20 minutes south of Osaka, Japan under clear skies, in 80 degree temperatures, and light to no wind. This twentieth running of the event attracted 36 competitors from throughout Japan, including myself, the lone gaijin (non-Japanese) and four out of the five previous champions.

The format is a unique pressure-intensive single day of racing. To start with, each competitor races in four randomly-generated, four-heat, fleet-racing series, to determine the top ten who then qualify to go on and race in the three-race fleet-racing quarterfinals (points do not carry forward from the qualifier to the quarterfinal). The top two finishers from the quarterfinal series become the challengers, who then compete in a best-two-out-of-three match-racing series to determine who gets to meet the previous year's winner in the finals, another best-two-out-of-three series, for the Super Mini America's Cup Championship. The cup defender, the previous year's winner, is permitted to compete in the qualifying series but not in the quarterfinals. This year's regatta had a new twist. The 20-year-old perpetual trophy, modeled after the real America's Cup, would be retired and this year's winner would retain the cup permanently.



photo credit: www.cupracer.com/japan/regatta.html

The wind and course conditions for the day can only be described as challenging. A 300 foot, twice around, windward-leeward course was set up in an east-west orientation between the 15 foot-high stone wall forming the marina shoreline and the marina's main floating pier running parallel to the wall about 100 feet away. All began well in a light easterly but after only a couple of the 16 qualifying heats had been sailed the wind began slowly clocking around to the north, and toward the end of the day it was north-northwesterly and dying. As one can guess, due to the interference of the stone wall, for most of the day the wind on the water could be from any direction, and in anything from 0 to 5 mph bursts. It was not uncommon for boats to be running and beating on the same heading only five lengths apart. Boats were constantly overtaking and being overtaken, making possible spectacular comebacks and huge losses at any time.

It immediately became clear that consistency was going to be a challenging problem. And with only four races to determine who moved on and avoid becoming one of 24 spectators, the pressure was high. Seven-time champion and CR 914 designer

“with only four races to determine who moved on and avoid becoming one of 24 spectators, the pressure was high.”

CR 914 Class

A one-design class
member of the
American Model Yachting
Association



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Kazuo Takei managed to win the qualifier series, a quarter point ahead of this reporter and one point ahead of Tadashi Kato, a two-time winner. In the difficult conditions, past-champion and venerable contender Satoru Shinozuka failed to make the top ten, along with the nine-time winner and current cup defender Motoji Munesuke. With the competition stronger and the conditions becoming lighter and more unpredictable for the three-race quarterfinal, the key to success was to stay clear of traffic and keep the boat moving between wind patches at all cost. The quarterfinal was won by Kato, with this reporter a surprising second, five points back, and with designer Takei falling to fifth.

This set up the semifinal two-out-of-three match race between Kato and myself, a repeat of the 1997 semifinal which I lost 0 and 2 after hitting marks while leading both races. Determined not to repeat my stupid mistakes of the past, I started conservatively and trailed the entire first leg, which alternated between beating and running, a pattern that would repeat itself on every leg of the course. I felt I had enough boat speed if I could catch Kato going the wrong way on one of the shifts, which finally happened halfway down the second leg. From there, by applying loose cover and keeping the boat constantly moving, I was able to win race one. The second start found us disagreeing on a favored end and starting at opposite ends of the 40 foot line, both of us broad reaching in no wind with me to leeward. I made it to the new wind first, a beat

that turned into a big rounder lifting me to the mark in one tack, leaving Kato well behind and giving me an easy win in race two.

The pressure was on for my final against the nine-time champion and defender Munesuke. I think the pressure of wanting to retain the cup permanently, his poor showing in the qualifier, and watching my performance against Kato rattled Munesuke, because in spite of fiercely aggressive starting tactics he was not able to keep his boat moving between wind changes and I was able to maintain early leads to win 2 and 0.

What I found most intriguing about this event was the format that creates a final-stage regatta atmosphere throughout the entire day. With no throw outs and such limited opportunities, it trains you to continuously function under pressure. This was my first win in five tries after one third and three fourth place finishes. I think dealing with the pressure was key. ■



The winner, with Toshihiko Araki, President and C.E.O. of the AG Corporation (manufacturer of the CR 914)

OOOPS

Several copies of the previous issue (#43) of the NEWS have been returned to the office undelivered, because the US Postal Service's automatic sorting machines mangled them, leaving semi-intact only the cover page with the address on it. The fault is mine: unwittingly, I put the staple on the wrong side of the folded copies, and that caused the sorting machines to snag some pages. There is no way to tell how many copies may have been completely lost in the mail, or delivered in a form too mangled to read.

I have sent replacement copies to each subscriber whose copy was returned to me. If your copy was unreadable, or if you did not receive Issue 43, let me know and I will send you a replacement.

The Editor

Cincinnati MCRRC Regatta

by Pablo Godel

ON THE LAST WEEKEND OF AUGUST, nine skippers came together to participate in the Midwest CR Racing Circuit Summer Regatta, which was hosted by the Cincinnati Model Yacht Club. This was the first open regatta organized by our one-year-old club and the second one in this inaugural year of the Midwest Circuit. Two of the nine entrants came from Missouri, with the rest being local. The weather cooperated the entire weekend and the thunderstorms that had been in the forecast stayed away until after the end of racing each day.



photo credit: Carole Martin

It was crowded at the leeward offset mark! Dave Tacosik on port tack (1144) barely clears David Yardy ...or did he?

All participants checked in on Friday evening and some practice races were sailed. We also used the opportunity to set the marks appropriately. Saturday's racing started with light winds from the S-SW, which by lunch time built up to a nice breeze of about 10 knots. During the lunch break the competitors enjoyed sandwiches provided by the regatta, thanks to the help of volunteers who picked up and delivered the lunch boxes. After the end of the 21st race on Saturday, the sailors were treated to a unique experience, a guided tour of the Voice of America building where overseas radio broadcasts originated during World War II and until 1995. After the tour, everyone got together for dinner in a fun and

friendly atmosphere at a local Italian restaurant.

Sunday started with an overcast sky and with more westerly winds. The windward mark proved to be a tough spot to get to, since it was close to the windward shore and had very light and variable winds. Positions often changed there. Similar to the outcome from the first MCRRC regatta in Columbia, Missouri in June, *Mariah*, sailed by Dick Martin from Columbia, took first place with a big point difference. And, equally similar to the earlier event, second place was not decided until the very last race. After 34 races, with only one race to go, Pablo Godel's *Mako* from the home fleet, which had taken second place by three points in the earlier regatta, led

Diversion, sailed by Tom Trabue from Missouri, by 1.1 points (the fraction resulted from the awarding of redress – the average of Pablo's other scores – to *Mako* after she became entangled with *Mariah* who had fouled her in the 28th race). Needing to finish two boats ahead of *Mako* in the final race in order to take second place for the regatta, *Diversion* won the final race while *Mako* came in third. Thus Tom edged out Pablo by 0.9 points, with Dave Yardy fourth and Dave Tacosik fifth.

After the completion of 35 races, the scores were totaled and the awards ceremony took place slightly ahead of schedule. The top five received trophies, and, thanks to West Chester Township and Kevin Roberson's con-



photo credit: Carole Martin

From left to right: Bernard Normand, Steve Mitchell, Travis Frazier, Dave Tacosik, Dick Martin, Pablo Godel, Tom Trabue, David Yardy and John Rodencal

tributions some gifts were passed out by lottery.

The Cincinnati Model Yacht Club was formed in 2003, and began this year with four regular members. We now have eight boats sailing regularly and another four are on their way. This was our first big regatta, in which our members learned a lot, and we can say that the outcome was more than



positive. But it couldn't have been accomplished without the help of all the members of our club and the volunteers who helped with lunches and all aspects of the organization. Also, it couldn't

have been what it was without the participation of out-of-town sailors Dick Martin and Tom Trabue. Thanks to everyone who helped out and participated, we have the satisfaction of completing

a well-run regatta; for those that couldn't come this time, we invite you to our next one in 2005! 📌

Summer MCRRC Regatta Final Results

Final Position	Sail Number	Skipper	Club	Bullets	Total Points
1	1122	Dick Martin	M ₃ SC	17	48.0
2	729	Tom Trabue	M ₃ SC	6	73.0
3	760	Pablo Godel	CMYC	5	73.9
4	1155	David Yardy	CMYC	2	127.0
5	1144	Dave Tacosik	CMYC	3	133.0
6	1029	Travis Frazier	CMYC	1	157.0
7	1189	Bernard Normand	CMYC		166.0
8	1187	Steve Mitchell	CMYC	1	210.0
9	481	John Rodencal	CMYC		242.0

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Is it time to renew my subscription?

How can I tell when it's due to expire?

Have you ever thought that the *CR 914 NEWS* must have gone belly up, only to go back and find that the last issue you had received some time ago bore a bright pink or green label on its address page indicating that it would be your last issue unless you renewed your subscription. I have done it, too (twice). You and I need to work harder to keep subscriptions from lapsing accidentally.

For my part, I am now putting colored reminder labels on not only the address page but at the top of the first page of last issues as well. And *you* need to remember to renew the moment you see those colored labels! (Although, starting next issue, if I have not received your renewal when the subsequent issue is ready to mail I will send you one more reminder to renew at that time.)

Immediately after your name on the address label you will now see the number of the issue when your subscription will expire. Must you wait until your last scheduled issue to renew your subscription? Absolutely not. This would be a fine time to renew, right now!

The Editor

New Boats and Owners

Sail No.	Name	City	State
1192	Robert Rabiner	North Reading	MA
1193	Vincent Peritore	Dania Beach	FL
1194	Scott Salerno	New York	NY
1195	Newt Schneider	Ft. Lauderdale	FL
1196	David Graves	Bethesda	MD
1197	Jeffrey Wezeman	Marco Island	FL
1198	Donald Sievert	Derwood	MD
1199	Brian Daly	South Beach	NY
1200	Pablo Godel	West Chester	OH
1201	Charles Eldred	Yorktown	VA
1202	Paul Bowen	Burlington	NC
1203	John Moran	Essex	CT
1204	Wayne Duerfeldt	Bloomington	MN
1205	Phil Brodersen	Chandler	OK
1206	Thomas Jackson	Delray Beach	FL



What is the best arrangement of boat electronic components?

When a boat develops glitching (intermittent loss of control, usually seen as no control of the boat and/or rapid back-and-forth movements of one or both servos) the most likely culprit is a malfunctioning component of the electronics, and the first thing to do is go through the trouble shooting steps outlined in Dave Ramos' Builders' Column article on page 10 of this issue. If all the components check out OK, however, inadequate radio range may be responsible.

Radio range

If an owner wants to win races, even very brief glitching is unacceptable. For casual sailing an occasional glitch is unimportant. This article addresses different arrangements of healthy electronic components that may influence radio range. There are many arrangements of components in use, and all seem to work. When they don't work, an owner makes whatever changes are required to make the radio performance acceptable.

Testing radio range

The easiest first thing to do is test the range of control with the transmitter (Tx) antenna fully retracted. (This test is best done when no other Txs are turned on.) The shorter the range the more likely that loss of control will occur. Less than 100 feet is not good enough. It is easy to get 200-foot range, which probably is good enough. A range of 500 feet is achievable. *Longer antenna-down range means less glitching.*

Rearranging components

The stock arrangement of boat components as defined in the kit usually works fine. Once in a while, however, owners report problems using that arrangement.

John Rodencal (CR 914 #481, Cin-

cinnati Model Yacht Club) recently bought a used boat that used an Airtronics radio and the stock arrangement. He noted excessive glitching. He sent the radio to the factory to be refurbished, but the problem persisted at the MCRRC regatta in Cincinnati in August. Dick Martin advised him to check his antenna-down range, which proved to be only 60 feet. Then, after reading suggestions in Issue 34 (April-July, 2002) of the CR 914 NEWS, John moved his receiver (Rx) to under the deck at the mast. The antenna was routed through the deck up to the first spreader. He reports that he is now able to sail the entire course used at the MCRRC regatta *with Tx antenna fully retracted.*

Stuart Feinberg (#425, Marblehead, MA) had occasional glitching with the stock arrangement. The boat had an antenna-down range of only about 30 feet using two different Txs. Simply pulling the full length of the antenna out of the aft antenna staff and taping it to the backstay increased antenna-down range to more than 200 feet. The longer vertical antenna is the reason for the improvement. (Why this was necessary is not understood.)

Rx antennas mounted on mast

Two boats at Redd's Pond mounted the Rx antenna on the forward side of the mast with entirely different results.

Steve Uhl (#736, Marblehead) had unacceptable glitching. He uses the stock Hitec Ranger 2 radio. The boat's component arrangement is stock, except the Rx is mounted under deck just forward of the main hatch. He fixed the problem by removing the antenna from the mast and rerouting it through the rudder-rod hole to the backstay.

The other boat, **Ric Dexter's** (#44, Marblehead, MA), also mounted the Rx antenna on the mast. He had fine radio

performance — but his component arrangement is far from stock: (1) The Rx is under the servo board, not under the cockpit. (2) Batteries are located forward of the servo board (he removes the servo board to access the batteries). (3) Radio system is a new Futaba Attack. (4) Ric thought the stock Futaba Rx antenna was too short at 19 inches so he used a connector to add a 39-inch antenna cut from his old Hitec Rx. The excess antenna is wrapped around the servos before leading up the mast.

Best arrangement?

No one really knows what is best, but the best boat component arrangement that has been tested by the CR 914 Engineer locates the Rx under deck on the starboard side of the mast. The stock length antenna is led through deck near the chainplate to the mast at the lower spreader. All wires in the boat are twisted. Otherwise it is the stock kit arrangement. It gives 500-foot antenna-down range. There may be other arrangements that give even better performance. This location of the Rx is not convenient when changing the channel crystal; however it is doable.

The CR 914 Engineer has used the above arrangement on one of his boats for several years. Practically no glitching is experienced racing with the Tx antenna fully extended.

If an owner knows of better or more convenient arrangements, tell us about them. ■

* Chuck Winder, who served as CR 914 Class Secretary from 1996 until this year, also founded and edited the CR 914 NEWS. His careful research and his articles about technical issues made the NEWS not only very popular but a valuable resource that is now available in archives that are posted on the Internet (www.amya.org/cr914/crnews.html). He has promised to continue his research and write this featured column on a regular basis.

He who laughs last, thinks slowest.

Small boats mean fun and a dream career

by Julia Hockenberry

Editor's note: The following article was published in the Annapolis *Capital* on August 3, 2004. It is reprinted with permission of Capital-Gazette Newspapers.

Capital-Gazette

NAVAL ARCHITECT DAVID RAMOS used to help design some of the world's most elite racing sailboats. Today, his boats are still cutting-edge, quick and maneuverable. They're just much, much smaller.

Now the North American distributor for CR-914 remote-control model sailboats, Mr. Ramos says that his passion for design and sailing remains larger than life. "I love it. The physics (of sailing model boats) are the exact same," he said. "The only difference is that you're standing on shore, and it's your eyes telling you how to do it."

Mr. Ramos, 43, once designed racing boats for Bruce Farr and Associates in Annapolis. He left the marine industry to work in computers and did some freelance model building on the side. In 1998, he was offered the position of distributor for the CR-914, opened Chesapeake Performance Models on Kent Island, and never looked back. "I always wanted to do something like this, but how do you start from scratch? I was in the right place at the right time and have grown the business every year," Mr. Ramos said.

The CR-914 model sailboat is based on the 75-foot America's Cup boats. Once finished, the models are three



feet long and five feet high and weigh six pounds. They are sailed using a remote control, which manipulates the sails and the rudder. Mr. Ramos says that the boats can sail in winds from "barely-feel-it" to gusts of 20-30 mph. "The boat just accelerates like a little Ferrari. When it's really windy, you couldn't catch one of these running," he said.

Geoff Becker, national champion in CR-914 racing for the last two years, has built several boats for himself and for others as well. He says that the simplicity of the boat appeals to him. "The thing about the CR is that you can't really modify the boat. You have to use what's in the kit," he said. "You

can't spend more money to get an advantage and because of that it attracts good sailors." Mr. Becker says that those who build the models only need basic skills to create the boat. The advanced skills come once the boat is on the water.

Ernest Freeland, commodore of the Chesapeake Bay Model Racing Association in Annapolis, said that the sport appeals to people from all age groups and walks of life. It's fun and it's relaxing, and it's not physically limiting. "(The sport) has all the same components of big boat racing except you're standing on the dock next to your friends," he said. Mr. Freeland's club has about 30 active members and roughly 100 boats, which compete year-round for bragging rights in local waters. "It's a great product to sell because you're selling fun to people who want to have fun," said Mr. Freeland, a longtime friend and sailing companion of Mr. Ramos.

Since opening Chesapeake Performance Models six years ago, Mr. Ramos has sold working models to roughly 3,000 customers, ranging from beginning racing enthusiasts to professional sailors who sail the model boats from ports of call during racing stops. His more exclusive clients include the Whitbread Syndicates, EF Language and Chessie Racing. He is also the official model maker for the America True America's Cup Syndicate and is currently working on projects for the VOLVO Ocean Race. The models sell as kits for \$475. Half-finished versions of the sailboats are also available, or clients can buy them completely built for around \$850. Each boat takes customers between 15 and 18 hours to build themselves. Last year about 450 boats were purchased from his shop and he built 100 more.

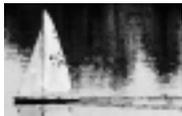
"I love doing stuff with my hands, and I get a lot of pride and satisfaction out of doing a nice job," said Mr. Ramos. He said the boats blend building and sailing with fun, adding up to his dream career. "The only thing that gets me out of the shop at the end of the day is that it's time to go home and play with my kids," he said. "It's not really a chore going to work." ■

Julia Hockenberry is a freelance writer living on Kent Island.

Give (or get) the
CR 914 NEWS
for Christmas



Looking for something to give (or hint to someone to give to you) as a stocking-stuffer present this Christmas? An extension of a subscription to the *NEWS* would be a great gift. Use the handy form on the last page. The number of issues ordered will be added to the current subscription.



Follow in my wake

A FEW YEARS AGO, THE EDITOR was sitting in the shade drinking a beer at a peopleboat regatta in Sandusky, Ohio, when the disk jockey who had been hired to provide the post-race entertainment began to play a Jimmy Buffet ballad entitled "Barometer Soup." If ever a song captured the post-race laid-back mellowness that is one of the best parts of sailboat racing, it was this one, and ever since then on my way home from every regatta I play the CD in my car at least once.

Here are the lyrics, and you can listen to the tune on the Internet as well, at http://home.att.net/~e.zeiser/lyrics/barometer_soup.htm

Follow in my wake
You've not that much at stake
For I have plowed the seas
And smoothed the troubled waters
Come along let's have some fun
The hard work has been done
We'll barrel roll into the sun
Just for starters

Barometer's my soup
I'm descended
from a deckhand on a sloop
I travel on the songlines
That only dreamers see
Not known for predictability

Come and follow in our wake
You've not that much at stake
For we have plowed the seas
And smoothed the troubled waters
Come along let's have some fun
Seems our work is done
We'll barrel roll into the sun
Just for starters

Sail the main course
In a simple sturdy craft
Keep her well stocked
With short stories and long laughs
Go fast enough to get there
But slow enough to see
Moderation seems to be the key

Constantly searchin'
Oh my eyes have seen some horizons
And I've crossed the ocean
for more than just thrills
No I'm not the first
Won't be the last
You lust for the future
But treasure the past

Follow in my wake
You've not as much at stake
For I have plowed the seas
And smoothed the troubled waters
Come along let's have some fun
The hard work has been done
We'll barrel roll into the sun
Just for starters

OK, maybe it's a little hard to barrel roll a sailboat, but cut me some slack, will ya? (Ever sailed a full-scale Laser?)

So what's this got to with building, tuning, tinkering with, sailing and racing your CR 914, you ask? Just this: there is a lot more to enjoy about our wonderful sport. And that's what I want people to think about here, and contribute stories, ideas, humorous anecdotes, and even recipes like this one:

Carole Martin's Frostbite Racing Fuel (circa 1960)

After you finish racing on a cold winter day, this is a great way to warm up, preferably in front of a roaring fire with a bunch of fellow sailors.

- 1/2 gallon cheap California or New York State port wine
- 1 lemon, sliced
- Juice of a half lemon (another one)
- 3 T sugar (more, or less, to taste)
- 4 cinnamon sticks
- 6 whole cloves

Put this all in a pot and simmer long enough to blend the flavors, but don't let it boil. When it's good and hot, strain before serving. Warms the cockles of your heart — and the atria and ventricles, too. Beware, though; it's potent stuff. 🍷

Shoreline Model Yacht Club

And then there were three

by Jim Scudder

WHEN I BOUGHT AND BUILT MY CR 914, the thought of joining or starting a model yacht club never entered my mind. I was content sitting on shore enjoying all the fun of sailing without getting wet, cold or worn out grinding a winch. There are always spectators stopping by asking questions; you have heard them. Does it have a motor? How far out can it go? Then that one person comes along and ten minutes after you hand him your transmitter, says "I have to have one of these." And then there were two. With two, you have a race.



And then there were two

After six months, answering hundreds of questions, handing out lots of flyers on the CR 914 and AMYA, we had three. That's all it takes to get a club started.

The Shoreline Model Yacht Club will celebrate its first anniversary in December. We have a membership of nine, with four active and regular CR 914 sailor/racers. Our venue is Shoreline Park in Mountain View, California. We put together a simple website to promote our club and generate interest in the sport of model sailing. Stop by http://smyc_cr914.tripod.com and take a look. We are open for suggestions on club promotion and welcome any and all ideas.

If you are a new CR 914 owner, hand over your transmitter to the next person that shows some interest in our sport. Before you know it, you'll have three. 🍷

The Captain was in a rare mood as he finished drilling his crew. He barked out a final order: "All right, you idiots, fall out!"

The men fell out, but one sailor stood firm.

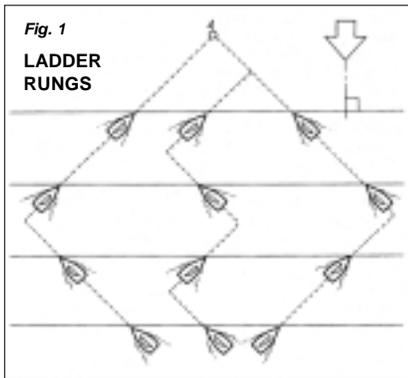
The sailor looked at the Captain and smiled. "There sure were a lot of them weren't there, sir?"



TUNING A CR 914 IS OVER-RATED. Although your boat needs to be properly tuned to be competitive, the mechanics of doing so are simple. Tuning the *driver* is much more complex, interesting, and *fun*. That is the focus of this semi-regular column.

Windshift Geometry

If you watched the telecasts of the 2003 America's Cup, you are familiar with the "ladder rung" method of displaying the relative positions of boats beating to windward, as shown in Figure 1. Three boats that are even with



each other at the bottom of the playing field are sailing at the same speed and tacking angle to windward up the "grid-iron." As long as the wind does not shift



they will remain on the same ladder rung together—that is, a line drawn perpendicular to the wind direction touching the bow of one boat touches all their bows—and they will all get to the windward mark at the same time. (For clarity, this diagram overlooks the fact that the act of coming about causes a boat to lose some ground, but if all the boats tack the same number of times they will end up on the same rung when they get to the top of the ladder.)

Since ladder rungs by definition are perpendicular to the wind, a wind shift changes their orientation, as shown in Figure 2.

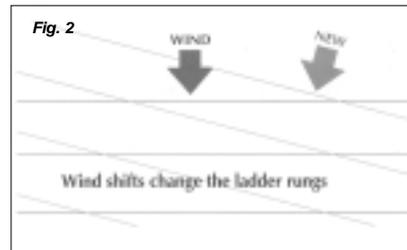
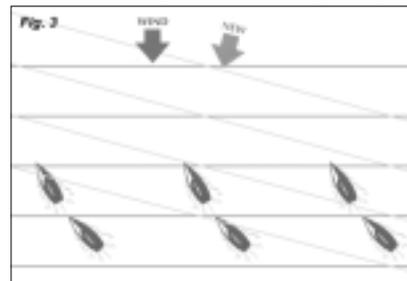


Figure 3 shows the effect of a 15 degree right-hand shift on three boats that had been dead even before the shift, as indicated by the fact that they were on the same (dark gray) ladder rung. Tilt your head 15 degrees to the right to improve your perspective of the new wind and ladder rungs. The shift (lighter gray



wind arrow and ladder rungs) lifts each boat equally. But notice its effect on their positions relative to the new ladder rungs and to each other. The right-hand boat has gained on the boats to her left.

Draw yourself a ladder diagram like this one to see what happens when the wind shifts to the left. You'll find that the left-hand boat gains relative to the

boats to her right in exactly the same way, and you will have discovered a fundamental principle of wind shifts: ① Boats that are closest to the side of the course toward which the wind shifts gain relative to boats that are on the "wrong side" of the shift.

There are two other important conclusions to be drawn from this type of analysis. Make several more drawings, varying the magnitude of the shifts and the distance between the boats. You will discover that: ② The amount a boat gains or loses as a result of a shift is proportional to the magnitude of the shift, and: ③ The amount a boat gains or loses relative to another boat is proportional to the distance between the two boats.

There are other fascinating insights to be derived from spending an hour with pencil, paper, a straight-edge and a protractor analyzing windshift geometry. Such as, if you are sure that the next shift will be a big header and that it will be the last shift before you reach the windward mark or finish line, you should bear off and foot as fast as you can to gain separation to leeward of the fleet before the shift arrives. Here's another: Say that you are about to start a race in a wind that can be counted on to shift several times back and forth 15 degrees on either side of the mean wind direction of 360 degrees (due north), but you cannot predict how many times it will shift before the fleet reaches the windward mark. During the last 30 seconds of the count-down to the starting signal the wind direction is 345 degrees. At which end of the line should you start?

You'll find the surprising answer to that question and the reasoning behind it in a future installment of this column, along with other pearls such as *When in Doubt, Let it Out*; *Understanding Overstanding*; *Go Right, Young Man*, *Go Right*; *Reach for the Gold*; *Join the Conservative Party*; *Coast to Victory*; *A Recipe for Scallops*; and more. ■

NEW STEALTH TECHNOLOGY?

Navy spokesman issues official denial

THE ASSOCIATED PRESS

GROTON, Connecticut — A photographer was arrested yesterday near the United States Navy's top-secret stealth weapons testing grounds on the Thames River. The as-yet-undiscovered man was observing an unusual vessel maneuvering on the river. Moments after he was spotted a claxon sounded and he heard a hail, "Drop that camera." He was able to take this picture before the vessel disappeared beneath the surface.



The Associated Press has learned that the photographer, who managed to email this photo just before his arrest, is being held in the brig at the New London Submarine Base. When asked for comment, an official at the base denied that such a vessel existed and added, "A wind-powered submarine? Who ever heard of such a crazy idea!"

The Honor Role

Many thanks to the following people who **contributed articles and/or photographs for this issue:**

Rick Martin - Seattle, WA
Pablo Godel - West Chester, OH
Julia Hockenberry - Kent Island, MD
Steve Mitchell - Mason, OH
Carole Martin - Columbia, MO
Jim Scudder - Sunnyvale, CA
Dave Ramos - Arnold, MD
Chuck Winder - Marblehead, MA
Nils van den Beemt - Gaithersburg, MD
Dick Martin - Columbia, MO

This is a good beginning, but the class needs *more* people to join these hallowed ranks in future issues. Let's see *your* name here in Issue 45.

WWW.CR914.RESOURCES

AMYA

www.amya.org

ISAF Radio Sailing Division

www.radiosailing.org

US SAILING

www.ussailing.org

ISAF

www.sailing.org

AMYA CR 914 page

www.amya.org/cr914/cr914.html

Model Yachting Resource Center

www.myrc.org

CR 914 NEWS archive

www.amya.org/cr914/crnews.html

CR 914 message board/ListServe (Yahoo!)

<http://groups.yahoo.com/group/cr914class>

2004 CR 914 Nationals website

www.rcyachts.com/Nats/2004/NATS2004.htm

A practical guide to radio-control theory

www.ann-neil.supanet.com/What%20happens.pdf

Chesapeake Performance Models

www.rcyachts.com

Model Sailing Center CR 914 page

<http://sailcr914.com/>

D & M Electronics, radio repair service

www.dnmelectronics.com

CR 914 club websites

Chesapeake Bay Model Racing Association

www.rcyachts.com/CBMRA.htm

Mid-Missouri Model Sailing Club

www.m3sc.org

Houston, TX CR 914 club (The Yacht Club)

<http://home.entouch.net/lark/yc>

Cincinnati Model Yacht Club

www.regatta1.com/cmhc

Cleveland Area CR 914 fleet (Edgewater Y.C.)

www.cr914.org

Shoreline Model Yacht Club (San Francisco Bay area)

http://smhc_cr914.tripod.com

Blue Crab Model Yacht Club (Gaithersburg, MD)

www.bcmyc.com

If your club has a CR 914 website that is not listed here, email its URL to rhm@ussailing.net



Radio Problems Diagnosis and trouble shooting

BECAUSE MOST OF THE SUBSCRIBERS to the *NEWS* have already built their boats, the first few subjects I will be covering in this column will involve maintenance and tuning. One of the problems we have in the 914 is the simple fact that water and electronics don't mix well. Combining them can lead to a number of problems, the symptoms of which range from glitching or twitching to complete failure of the servos and/or receiver (Rx).

Substitution strategy

Trouble shooting involves isolating the component that is causing a problem. You will need to borrow the radio system of another 914 that is problem-free. Because we know that this second system works properly, when we substitute one of its components for one in the malfunctioning system and find that cures the problem, we know that we have identified the culprit. And when a substitution doesn't result in a cure we know we need to keep looking for another malfunctioning component.

Twitching servo

The following steps will identify the cause of twitching, and may produce a cure.

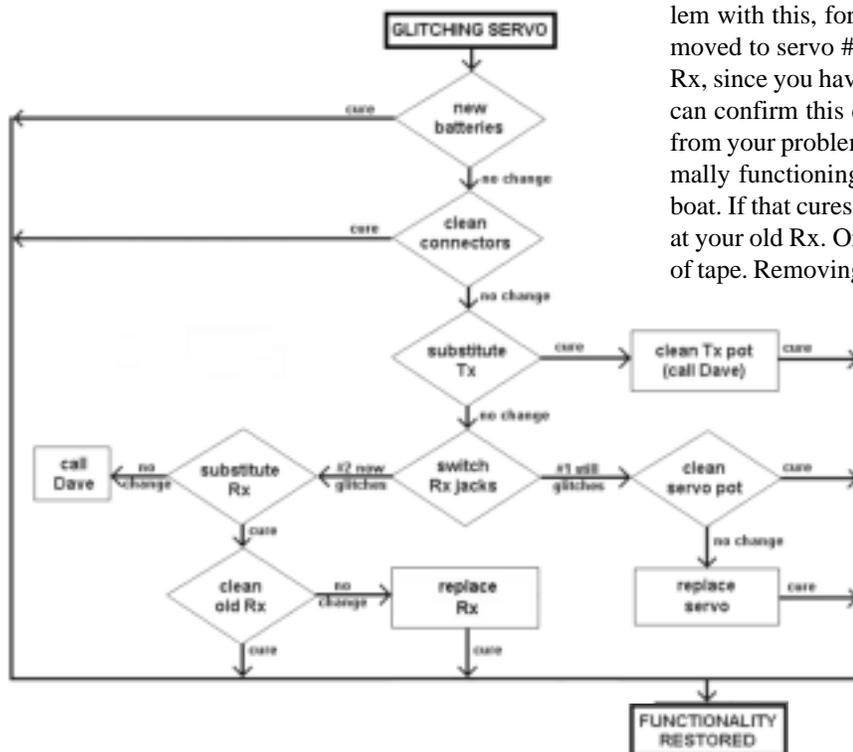
Step 1. Batteries and Connectors – The first thing to do is to try new or freshly charged batteries. When that doesn't help, check to make sure all of the servo plugs, battery and Rx connectors are as clean as possible. Clean the leads and connectors with an electronic contact cleaner you can get at Radio Shack or Boats US. Sometimes that's all it takes..

Step 2. Detecting a malfunctioning Tx – The next step in trouble shooting is to determine whether the fault lies in the boat electronics or the transmitter (Tx). First, remove the crystal from the Tx of your problem system and insert it into the borrowed Tx. If the problem goes away, then your old Tx is the cause of the twitching and you can jump to step 5 below.

Step 3. Detecting and treating a bad servo – If the twitching involves only one servo (e.g., #1), first remove the offending servo wire plug from socket #1 of the Rx and plug it into the other servo slot (#2). If the twitching is still apparent, the most likely cause is that the potentiometer (pot) in servo #1 has become dirty and needs to be cleaned, or the servo needs to be replaced. You will find a step-by-step procedure for cleaning the pot on my web site at www.rcyachts.com/Build/servorepair.htm.

Step 4. Detecting and treating a bad Rx – After switching the servo jacks, if problem servo #1 no longer twitches, insert servo #2 into slot #1 and see if you now have a problem with this, formerly OK, servo. If the problem has now moved to servo #2, the twitching is probably caused by the Rx, since you have already exonerated the Tx in Step 2. You can confirm this diagnosis by plugging the receiver crystal from your problem boat into the Rx from the borrowed, normally functioning, boat and installing this new Rx in your boat. If that cures your problem then you need to take a look at your old Rx. On the edge of the case you will see a length of tape. Removing it will let you open the case and check for corrosion. A good cleaning with an electronic corrosion cleaner has resurrected a number of receivers that were otherwise unusable. If after a good cleaning the problem persists, it is time for a new Rx.

Step 5. Fixing the Tx – Tx joysticks use the same kind of pots as the servos, and with use they, too, can get dirty. To clean a Tx it is necessary to open the Tx case to get at the pots. Because this is a more involved process than we have room for here, you can contact me and I can walk you through the cleaning process.



Dead servo

In this case, you need to take the dead servo (e.g., #1) and plug it into the functioning servo socket (#2) in the Rx and see if it now will work. If not, take the functioning servo #2 and plug it into jack #1 to make sure the problem is in fact in the servo and not in the Rx. If servo #2 works in jack #1 and jack #2, then servo #1 is probably bad and needs to be replaced.

Dead system

In this example, the boat system is totally dead. No twitching, no movement, nothing. Take the battery from the second boat and plug it into the problem boat's system and see if you get power. If you do, your original battery is defective or its connector or battery box contacts are corroded. If the boat still will not power up, then your on/off switch or Rx is at fault. If you use a rechargeable battery pack its plug will fit into any of the three sockets on your Rx. If not, you will need to splice a Hitec/JR male connector to a BEC female connector (you can probably find these inexpensive parts at your local R/C hobby store). Unplug the on/off switch jack from the Rx and plug the rechargeable battery or your standard battery pack connected to the BEC-to-Hitec/JR cable, straight into the battery socket of the Rx. If you now get power, your on/off switch is probably defective and needs to be replaced. If the system still seems dead, remove one of the servo plugs from its socket and plug the battery directly into that servo socket on the Rx (the Rx does not care where power is coming from, so you can plug it into any of the three sockets). If the remaining attached servo now gets power it will operate normally when you plug in the power. If that is the case, the power jack on the Rx probably has some corrosion and needs to be cleaned. ■

Rescue at sea



photo credit: Nils van den Beemt

The crew of the Blue Crab Model Yacht Club's tug boat prepares to cast a tow line to Terry Patterson's CR 914 which had run aground during one of the club's races at the Germantown, Maryland Soccerplex pond.

Autumn, 2004

How do I join the CR 914 class?

And why should I subscribe to the newsletter?

Recently Sandy Purdon asked me to explain to the members of the San Diego Model Yacht Club "how to join the CR 914 class." I suspect that the questions that the San Diego sailors had are fairly common, so here for everyone to read is the answer I emailed to them.

Things don't work the same way as they do with the peopleboat classes and US SAILING. You, and your boat, "joined the class" when you originally paid your \$5 registration fee to obtain a sail number. And, the way the CR 914 class and most of the other RC classes are structured under the rules of AMYA, you don't pay class dues. Instead, you pay annual dues to AMYA (\$25/year, which provides you a subscription to its quarterly magazine called *Model Yachting* and a variety of other benefits including the right to enter AMYA-sanctioned CR 914 regattas like the Nationals).

Thus classes like ours cannot charge "class dues," and their class organizations have no direct source of income other than that one-time \$5 registration fee. That means that most of the classes can afford no other means of communicating with boat owners (i.e., the "members of the class") than AMYA's magazine and its website.

In the CR 914 class we have a class newsletter, and for many CR 914 owners subscribing to it has become more or less the same thing as paying class dues and being a "member of the class." Most (but, alas, not quite all) of the movers and shakers in the class are among the 300 or so subscribers at present. But subscribing is not required. Why, then, should you subscribe, and renew your subscription when it is about to expire every one and a half to three years?

I hope that the content will be of sufficient interest to keep you coming back for more, obviously. In addition, the fairly large circulation of the *NEWS* helps encourage the people who write the articles and provide the photographs that have made it so successful, to keep up their good work – although, obviously, none of us get reimbursed or paid for our efforts. And, finally, I think it is not unrealistic to feel that our newsletter, which wouldn't be published unless lots of CR 914 owners subscribed to it, also helps motivate the folks who volunteer to serve in the leadership of the class and the clubs that sail '914s and run our regattas as well. ■

The Editor

Deadlines for future issues of the *NEWS*

issue	submission deadline	publication date
Winter '05	December 15	January 2
Spring '05	March 15	April 1
Summer '05	June 15	July 1
Autumn '05	September 15	October 1

But submissions are **welcome any time**. There's no law that says you must wait until the deadline! ☺

44:11

Who's Gotta Regatta?

CR 914 Nationals

November 13-15, 2004 - Annapolis, MD

Larchmont Spring Invitational

April ??, 2005 - Larchmont, NY

Region 1 Championship

date TBA - location TBA

Region 4 Championship

date TBA - location TBA

Be sure to get **YOUR** regattas listed here ASAP!
(at least six months ahead of the scheduled date)

2004 Nationals update

WHEN THE *NEWS* WENT TO PRESS ON OCTOBER 31, 25 CR 914 sailors, from ten states, already had indicated to Regatta Chairman Ernest Freeland that they would race in the Nationals in Annapolis on November 12-14.

Here is the list of entries so far:

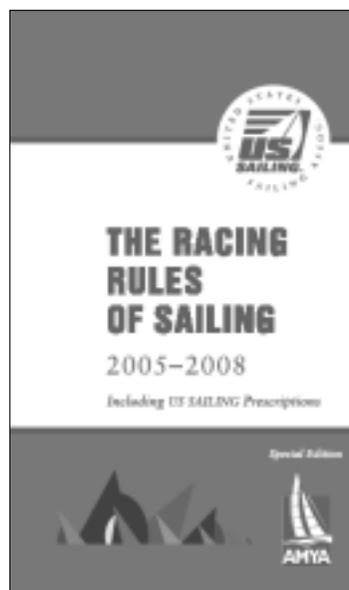
David Ramos	Arnold, MD	238	CBMRA
Ernest Freeland	Annapolis, MD	956	CBMRA
Chuck Luscomb	Deep River, CT	661	DPMYC
Steve Lang	Evergreen, CO	530	TAMYC
David Van Cleef	Annapolis, MD	737	CBMRA
Jean Malthaner	San Diego, CA	476	SDMYC
Dave Ryan	San Diego, CA	973	SDMYC
Tim Mangus	Crofton, MD	194	CBMRA
Darren Bolton	Chicago, IL	1010	
Pablo Godel	Cincinnati, OH	760	CMYC
Hank Buchanan	New York, NY	10	LYC
Greg Kiely	Annapolis, MD	1052	CBMRA
Runnie Colie	Mantoloking, NJ	477	UBCRF
Brian Jobson	Wolcott, CT	867	DPMYC
Dave Tacosik	West Chester, OH	1144	CMYC
Lew Kuhn	Westlake, OH	1137	EYC
James Earle	Mantoloking, NJ	869	UBCRF
Dick Martin	Columbia, MO	1122	M3SC
Jamie Mangus	Annapolis, MD	951	CBMRA
Mark Maiese	Middletown, CT	714	DPMYC
Scott Graf	Annapolis, MD	1085	CBMRA
Danny Hanson	Bolder, CO	93	TAMYC
Stanley Horan	Deep River, CT	1074	DPMYC
Hans Albertsen	Chestertown, MD	73	RHYC
Tom Trabue	Columbia, MO	729	M3SC

Not bad for a regatta that, until the end of September, looked like it might not be held at all this year after the original host club withdrew. Is this a great class or what! 🏠

The Racing Rules of Sailing 2005-2008

A new edition of the RRS will go into effect on January 1, 2005. The changes (to Rule 13 - WHILE TACKING, Rule 16.2 - CHANGING COURSE and Rule 18 - ROUNDING AND PASSING MARKS AND OBSTRUCTIONS) are fairly minor, but you need to be aware of them. There is a good article about the changes, written by Dick Rose, in the October issue of *Sailing World*. You can download the RRS in PDF format from the ISAF website at (are you ready for this URL?) www.sailing.org/menu.asp?MenuID=j0~wGX28zoNPPf6xvTv~%60KY1RDKcuvliAcdT-FhihrEiMowPgRM.

Before long you will be able to order the US SAILING booklet version of the RRS from AMYA's Ship's Store, at www.amya.org/shipsstoreform.html, emblazoned with the brand-spanking new AMYA logo that you can get a better look at on the AMYA membership form on the last page of this issue. 🏠



There are two theories about arguing with women.
Neither one works.

RENEW YOUR SUBSCRIPTION to CR 914 NEWS

It's quick and easy to do:

1. Check your name and address on the mailing label on the reverse side of this form.
2. If the information there is correct, all you need to fill in below is your current email address (they change often) and anything else that is new or has changed since the last time you subscribed.
3. Write a check for \$10 (6 issues) or \$20 (13 issues) payable to R. H. Martin/AMYA.
4. Cut out this form. (If you prefer to make a copy of it be sure to *copy both sides!*)
5. Stick this form and your check in an envelope and mail to the address shown at the bottom of this form.

Name _____ Sail number(s) _____

Address _____

City, State, Zip _____

Email _____ Evening phone number (____) _____ - _____

AMYA Number (if you are a member of the American Model Yachting Association) _____

Sailing club affiliation (if any) _____ Boat name: _____

Want to register another boat?

Download a registration form at
www.amya.org/cr914/914news/914newsform.pdf

Make check payable to:

R H Martin/AMYA

Mail check with this form

to: CR 914 Class Secretary
1206 Castle Bay Place
Columbia, MO 65203

Questions?

Contact Dick Martin
rhm@ussailing.net
(573) 256-7213

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— cut here ✂ —

AMERICAN MODEL YACHTING ASSOCIATION

Application for membership Check one: **New**___ **Renewal**___

Check one: **Adult-\$25**___ **Family-\$27.50**___ **Junior-\$12.50**___

Add \$10 for postage in Canada and \$15 for other countries. Add \$10 for first class mail delivery in U.S.

Enclose check or money order payable to AMYA, or check one: Mastercard___ VISA___

card number _____ expiration date _____ signature _____

Name _____

Address _____

City _____ State _____ Zip _____ Country _____

Telephone _____ Email _____

Current AMYA membership number _____ Club affiliation (if any) _____

List all model sailboats you own:

class	sail number
CR 914	_____
_____	_____
_____	_____



Send completed form to
AMYA Membership Secretary
Michelle Dannenhoffer
558 Oxford Avenue
Melbourne, FL 32935
888-237-9524 (toll free)
office@amya.org

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