

# Sierra Signals

Sierra Foothills Amateur Radio Club  
Auburn, CA  
An ARRL Special Service Club

July 2008

P.O. Box 1005, Newcastle, CA 95658

## Coastal Operator Goes to Sea

(Submitted by Fred, K6DGW)

Most if not all of these random musings of mine in *Sierra Signals* have had a distinctly historical flavor. One reason for that is because I myself am “distinctly historical” -- I realized the other day that I can remember fairly clearly when dirt was young. I’ve also had a fascination with history for my whole life. My Grandmother’s stories about her early life in Germany [actually now Poland] were so great, and history is one of the primary subjects I read -- any history -- radio history is really cool. However, this musing is only slightly historical ... 2005. And, while the story is centered around a tiny little Elecraft radio, the radio was just my attempt at becoming a ship-borne RO.



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#### REPORTERS

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**History:** Gary, KQ6RT  
**Misc Radio:** Fred, K6DGW

### RESOURCES

#### REPEATERS

145.430 (-0.6 MHz/PL 162.2)  
440.575 (+5.0 MHz/PL 94.8)  
223.860 (-1.6 MHz/PL 100.0)

#### CLUB NET

Thursdays, 7:30PM, K6ARR/R  
145.430

#### CLUB MEETINGS

Second Friday of the month,  
7:30PM at the Library, 350  
Nevada St, Auburn CA

#### CLUB BREAKFAST

Last Sat of the month at Susie's  
Café, Cirby at Riverside, Roseville  
– 8:00 AM

#### NET CONTROL OPS

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Gary Cunningham, KQ6RT  
Norm Medland, W6AFR  
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First, the disclaimer. I have no financial connections with Elecraft, unless of course you count the several checks I’ve written to them. I own a K2/100 which I built, a KX1 which I built, a K3/100 which I built, and a couple of smaller kits. I’m falling in love [in the ham sense] with my K3, and this is a problem because I was already in love [in the ham sense] with my K2 and KX1. I try to give them equal attention.

(continued on page 2)

### 2008 Calendar of Events

July 5	VE Session – 8:00 – 10:00am Raley’s - Douglas/Auburn Folsom
July 11	Regular Meeting
July 26	Club Breakfast – Susie’s – Cirby/Riverside
Aug 2	VE Session
Aug 8	Regular Meeting
Aug 23	Annual Club Picnic
Aug 30	Club Breakfast

*We encourage members to receive Sierra Signals via email to save the Club the cost of reproduction and mailing*

## 50 Years Ago At The SFARC

(Reported by Gary, KQ6RT)

8:15 P.M. July 16, 1958. A group of Auburn Amateur operators and other non-licensed people met at the U.S. Naval Reserve Electronics Facility to discuss the possibility of organizing an Amateur Radio Club.

Response among those present strongly indicates the desire to organize such a club. Aside from the social aspect of such a proposed organization, the following reasons were stated for the need for a club:

1. So that the Auburn area hams can help each other in improving their equipment, operating techniques, TVI problems, etc.
2. So that Civil Defense and other public service functions may be carried out more effectively.
3. So that new prospective Amateurs may be encouraged and assisted in obtaining their licenses.
4. So that Field Day and transmitter hunt activities may be more effectively planned.
5. So that some sort of message handling plan can be worked out for the Auburn area.

It was determined that after the first three meetings, the regular meetings would be held once a month (on a Wednesday). The next three meetings will be held on July 30, August 13, and August 27. The Constitution and by-laws will be formulated for adoption and club officers elected during the next two meetings. The name for the club will be decided upon at the July 30 meeting with WN6PMF (Walt Dowdy) donating a prize for the person suggesting the name to be adopted.

The following persons were present at the first meeting:

T.M. Woods - W6ANX  
 W.C. Bauman - K6CBP  
 Ed M. Glass - KN6SYJ  
 Earl Wilson - K6GPB  
 Katherine Woods - W6HGD  
 Arleen Murch - W6UAS

L.W. Waterman - W6ILR

R.H. Hicks - K6VSS

Gerald Murch - W6LTR

Carl Rolufs - W6QK0

Walter Dowdy - WN6PMF

Don Richier - K6SMK

Siegfried Goepner

Jay Peat

Van Bulf (age 13)

Charles Waterman (age 10)

Robert Neil

Bob Richier

Frank Perry - K6TWQ Vistor from Camarillo

Arlene Murch

Secretary

73,

Gary - KQ6RT

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## Coastal Operator...

(Continued from front page)

My wife Andrea is a prolific gardener. It's one of her three hobbies, the others being needlepoint and explaining to me what I've just done wrong. Needlepoint is as expensive as ham radio [I'm not making this up!], and we have an Equal Hobby Allowance policy, so you may now be tumbling to the reason why I have quite a few Elecraft products.

Andrea does not like to travel in the spring, the gardens she works so hard on are coming into bloom, she wants to get the veggies in, and we generally stay home. However, early in 2005, she mentioned that the Auburn Senior Center was sponsoring a 15-day cruise through the Panama Canal in late April. I'm a retired engineer [been tough for her putting up with an engineer-mentality for 40 years], and the Canal is one of the wonders of the world for me. So we signed up with the Senior Center [we were eligible, after all]. The trip was a little pricey, but what the hell, we want to enjoy what we worked for and really don't want to leave it to the kids anyway.

I immediately began thinking of seaborne RO duty, but alas, no suitable radio. I had the K2, but it's a bit too big for our baggage which was filled with a lot of clothes it turned out I didn't need to take, and a huge amount Andrea didn't need. Then, at Pacificon 2004, I wandered randomly by the Elecraft booth and saw the KX1. OK, it wasn't randomly, I looked at the vendor map and went there. Wayne described it to me, and I bought and built it for the trip.

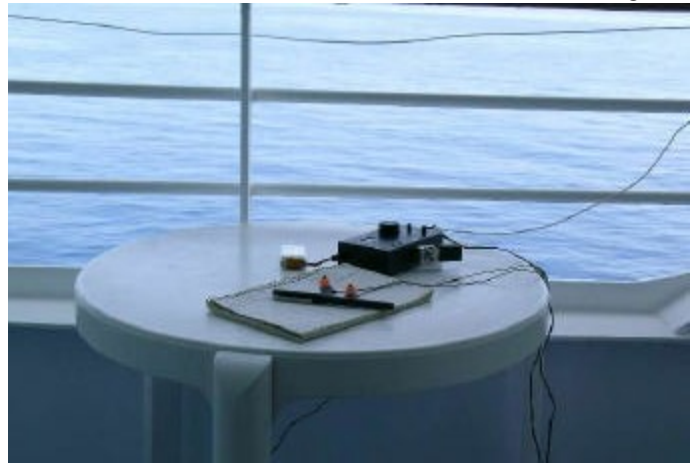
Next issue, permission. I had decided to power my KX1 with a Li-ion battery I found at the RC model shop in Auburn. My back-up was a bank of NiMH AA cells that I had a tiny charger for. I emailed Princess Cruise lines with my request, and like a good engineer included a photo of my radio and batteries and the spec sheet, and the response came by telephone ... "No, you can't do that, you might interfere with the ships navigation and communications, you might endanger other passengers, and you might start a fire." I decided this was a "bureaucratic NO," but the Captain rules the ship, so...

The ship was registered in Bermuda. Following the ARRL instructions ... 1) I'm an engineer, I tend to follow instructions, and 2) I'm married and I know about "instructions" from at least one source ... I asked for permission. No answer for several tries, but finally I got an email that said ... sort of ... "Do whatever you want aboard a ship registered in Bermuda, we really don't care." I took this as a "Yes" and put it in my logbook.

I took the radio, batteries, headphones, and my little old ARRL Mobile Logbook as we left SMF. I have an MP-1 knockoff antenna, but the resonator looks suspiciously like a pipe bomb on the X-ray and, since I'm already toast at airports with the leg braces and scrap metal I carry, I decided to leave the pipe bomb home and just take some wire. Onboard, I talked to the purser's office, they sent the 1<sup>st</sup> Officer, or maybe the 2<sup>nd</sup> or 3<sup>rd</sup>, a young guy at any rate ... he saw my radio and battery and told me I could operate under two conditions: Not in public spaces [leaving mainly our little "balcony" which more resembled a "shelf" as the only choice], and "Don't remove any paint." I asked him to write that in my logbook, he did, and I could already hear the world calling K6DGW/MM and we hadn't even left Ft. Lauderdale yet. A somewhat stoked ham.

Once I saw our "balcony," the stoked part sort of faded a bit. First off, we were on the port side of the ship [the left side as you face the pointy part of the boat for you non-nautical types] so a Ft. Lauderdale to Los Angeles trip pretty much put a few thousand metric tons of big steel between me and North America and Europe ... like I really expected to work EU with 3W. OK, there's still South America. Secondly, our "balcony" was kind of smallish.

My antenna choice was, in retrospect, a mistake. I had gotten the TSA Trainee at the airport [as usual] and pretty much did the full strip search until they decided I was too old to be an effective terrorist. As a result, I would have had plenty of time to explain the intricacies of base loaded short antennas at high frequencies to have gotten the MP-1 through. But, we were now at sea, and my job was to figure out how to hang 27 feet of wire in a steel opening about 8' x 6' give or take a little, in such a manner that it would actually radiate. As a teen ham during the run-up to Cycle 19 [see, history again!], I found I could work the world on 10 meters with 20 watts loaded into the window screen of my bedroom [don't try this at home now. Window screens are no longer metallic, and 10 is pretty dead anyway]. As an OF at sea near the bottom of Cycle 23 with only 3W, this proved to be anywhere from "not very likely" to "you're kidding me, no?"



I did work a few South Americans and had a good time trying. I became addicted to the tropics after nearly 4 years in SE Asia, and sitting out on the balcony while at sea in the Caribbean and off the coast of Central America was really great, and my body made a lot of "feel-good chemicals" in the process.

Would I do it again? Well, we took our kids to Cancun this last Christmas to celebrate our 40<sup>th</sup> [anniversary, not kid], and they unveiled the gift of an Alaskan cruise in early May. We went, we had a blast, spent some extra time in Victoria BC at the gardens, and I did not take the radio. Maybe I would again sometime, I don't really know. On the Canal trip, I found the ports to be really great, the Canal was awesome and took all day, and somehow, ham radio on the little balcony of a big white boat sort of faded down the scale of fun things to do. My images of being the "other guys" at sea when I worked at KOK as a teen didn't square with the very nice room we had, good food, lox, bagels, danish and coffee on the balcony in the morning with dolphins, birds, and turtles frolicking near the boat. Your mileage may vary, however.

If you are into history, and especially American history, I highly recommend "Angels in the Wind" by Benson Bobrick. It's available on Amazon, and no, I don't get anything for this. But it is by far the most readable, interesting, well researched, and surprising account of the American Revolution I've ever encountered, and the author has an amazing way of making the people and their characters come to the forefront.

73,

Fred K6DGW

## June Meeting Minutes

(Reported by Wayne, W6DT)

### Minutes for the meeting of June 13, 2008

The regular membership meeting of June 13, 2008 was called to order at 7:35 PM by President Don, WB6LPJ. Flag salute followed. Introduction of officers took place and introduction of members and guests was later.

Treasurer Leslie, K7NYE, reported that we had approximately \$2800. The missing \$100 reported last month was reported to be a bank error by Wells Fargo.

We received a \$500 donation from the motorcycle group for whom we provided communication for their enduro. One rider had been injured and emergency assistance was called.

Vice President Casey, W7IB, provided the Field Day information. First he announced that the drawing prizes at Field Day would be \$150 for first and then two separate \$50 prizes. The members approved the expenditures on motion brought by Don WB6LPJ and seconded by Jim, KI6AZH.

The club would only be providing dinner, members are to be on their own for lunch. Two separate operating stations are planned using the club call, W6EK. Sign up sheets were passed around for members to indicate what they would be helping with during the field day outing.

The picnic date is August 23, 2008.

An enlightening presentation was made by Marc Matheson KD6KR and Ted Cowden KG6FGT.

Marc wanted to install a vertical antenna at or near the top of an 85 foot pine tree. Ted is a professional antenna climber who works on commercial antenna installations as well as ham installations, both metal and trees! Marc showed pictures of the process and Ted demonstrated just some of his gear and explained how the job was accomplished. This presentation showed that there is a lot more to the installation of antennas than most people think about and professional assistance can be very helpful. The higher you go, the more true this is.

The meeting was adjourned at approx. 9:40 PM.

Respectfully submitted,

Wayne Stilwell, W6DT

Secretary

## **Cape Canaveral Meets Benton Harbor**

*(Reported by Greg, KO6TH)*

I guess it was inevitable. There are kits for nearly everything – rugs, paintings, kites, baskets, even the odd radio. I always thought the most extreme kit was the one where you could build a Rolls Royce out of a Volkswagen beetle and some pieces of trim. But, how could that compare to building your own satellite?

Yes, friends, for \$19.95 and two box tops, you too can join the space race. See? It's easy. Just build this here little kit.

Well, it's not quite that cheap, and of course, not quite as easy. But, it is true that there are now kits for building satellites. Check out <http://www.cubesatkit.com>, and you'll see what I mean. The Cubesat has become the defacto platform for colleges and universities with programs in astronautics to give their students some real hands-on experience. Estimates are that a launch can be had for as little as \$40,000, with maybe the

same investment in construction materials and labor. Frankly, I've seen Rolls Royces that cost more than that.

What you end up with is a “nano satellite”, a little 4 inch cube that weighs in at about two pounds. Inside this cute little frame go all the electronics, batteries, sensors, and radios. Around the outside are the solar cells, and extending from the corners are the antennas. A little ingenuity is all that's needed to put the whole thing together. One team used the tape measure steel for the antennas, complete with the inch markings. No question how long the antenna elements are, I guess. They are wrapped around the cube for launch, and secured with a nylon string. The string passes over a couple of small resistors, which are connected to a small timer, circuitry, and battery. When the timer goes off after launch, the resistors get tied to the battery, and get really hot. That melts the nylon string, releasing the antennas.

This tradition for simple, ingenious spacecraft design goes all the way back to the very first Ham satellite, OSCAR-1. It is reported that the “stress analyzed, mechanically and thermally balanced” ejection mechanism that separated the spacecraft from the launch vehicle was powered by a \$1.15 spring from Sears.

AMSAT held their annual convention in the San Francisco Bay Area in 2006, and I was able to attend. They had on display the flight test prototype for OSCAR-2. They also had a display on the Cubesat program, and passed around a partially assembled one. I held a satellite in my hand. It was amazing.



## **Bringing Back Youth or The Search for the Missing Elmer in Us All**

*(Reported by Casey, W7IB)*

At the May meeting we discussed a current and ongoing problem we have in Amateur Radio – we're getting older, and older. During the meeting we discussed a few opportunities where there are openings for us to make a proactive attempt at connecting with younger candidates. They were:

Outreach

Intake

Training

Examining

Elmering

Each of these areas provide us an opening to connect with younger people and do what hams due best – Communicate.

At the end of my presentation in May, I issued a simple call to action: Think about what we discussed, and let's spend 10 minutes during the July meeting sharing those thoughts. So, I am planning that small, 10 minute time slice, just to see what has come up for you. So, bring your thoughts to the July 11<sup>th</sup> meeting and let's talk!

## **AN ERA COMES TO A CLOSE AS RILEY HOLLINGSWORTH, K4ZDH, RETIRES**

*(Reprinted from ARRL Letter, Vol 27, No 26)*

On Thursday, July 3, Special Counsel for the Spectrum Enforcement Division of the FCC's Enforcement Bureau Riley Hollingsworth, K4ZDH -- the man who has come to embody Amateur Radio Enforcement -- said goodbye to the FCC as he retired and began his life as a private citizen. In May, Hollingsworth announced he would definitely retire; he had contemplated retiring in January 2008, but cited "several issues on the table that I want[ed] to continue to work through with the amateur community." While his successor has not yet been named, he was quick to point out that the FCC's Amateur Radio enforcement program will continue.

Hollingsworth said that he has "loved" working for the FCC and has "always had great jobs, but this one involving the Amateur Radio Service has been the most fun and I have enjoyed every day of it. I've worked with the best group of licensees on earth, enjoyed your support and tremendous FCC support and looked forward every day to coming to work. The Amateur Radio Enforcement program will continue without missing a beat, and after retirement I look forward to being involved with Amateur Radio every way I can. I thank all of you for being so dedicated and conscientious, and for the encouragement you give us every day."

Saying it has been a "privilege to work with and for the Amateur Radio licensees and the land mobile frequency coordinators," Hollingsworth said that he is "extremely fortunate to work for two wonderful groups of people: Those at headquarters in the Enforcement Bureau, and for the Amateur Radio operators."

Before joining the FCC, Hollingsworth, a South Carolina native, graduated from the University of South Carolina and Wake Forest University School of Law. While in high school, he worked as a disc jockey for WRHI, an AM station in Rock Hill, South Carolina. "It's a funny thing," Hollingsworth said. "They once held a beauty pageant in Rock Hill and nobody won!" In the mid-1970s, he was a "Nader's Raider" and worked

on brown lung disease in the North and South Carolina textile mills.

"Basically I'm just an ordinary guy caught in the cross-hairs of radio history," Hollingsworth said. "But I am proud of the fact that the digital clock on my VCR has been blinking for 4 years."

Hollingsworth told the ARRL he was "so very impressed" with the young people who are involved with Amateur Radio: "To the very young Amateur Radio operators I have met who have dreams of being scientists and astronauts and communications engineers, we will be pulling for you; I have a strong feeling we won't be disappointed."

Calling the Amateur Radio Service a part of the American heritage, Hollingsworth explained that he is "going to stay as actively involved in it as I possibly can. Thank you all for working tirelessly to provide the only fail safe communications system on Earth and for helping this country keep its lead in science and technology. What an incredible gift it has been to work with you every day, and how fortunate we are to love the magic of radio! Every gift of lasting value comes with responsibility. We must never forget what we owe for our spectrum privileges. I will continue working with you in every way I can to ensure that Amateur Radio lasts a thousand years."

