

SEPTEMBER 2003

THE MONTHLY NEWSLETTER of the SANTA CRUZ COUNTY AMATEUR RADIO CLUB

# SHORT SKIP



## N6IJ OPEN HOUSE / CAKE MEETING

**T**he Open House event at N6IJ on August 23 was a huge success and what a glorious day it was ! I counted nearly 50 people at one point all busy inspecting the site, admiring the anten-



nas, operating the HF radios, and of course discussing ideas for the future. It was good to see our VP James NF6Z hopping around nicely with his new titanium knee.

The food supplied principally by Kim ,Cap and Elaine was abundant and delicious.

There was clear evidence of the great progress that has been made since our last visit but without a doubt there remains enormous potential for further improvements. Getting the antennas and feed lines in shape is a priority so that we can have first class capabilities on all bands. We also need a mechanically minded crew to overhaul the Onan generator. The general appearance of the site can be much improved by continuing the clean-up, a new carpet and some internal painting will do wonders for the interior. I can see we need some work parties to focus on these action items.

I understand that several new members joined during the day but many more are needed to ensure the viability of this

unique resource. Please consider making a \$25 investment in the future of your hobby, check out the N6IJ web site for details.

On behalf of the CAKErs and SCCARC in general our thanks to Kim KD6TLB and to Eric WA6HHQ for making such a great day possible. We can look forward to many more.

—W6WO



### Sept. Meeting

### BOB K6XX

Sept. 19th will be our next "sccarc" meeting, and we will meet in the basement of the Dominican Hospt. conference rooms 1-2&3. we urge all of our members to attend this next meeting, you will be greatly informed and entertained. we will be priviledged to have as our guest speaker,( K6XX) Bob speaking to us on "SHAPING YOUR OPERATING SKILLS" the competitive side of amateur radio. this will be a meeting not to miss, as i will be there cane rollerskates or crutches. see you all there.

—NF6Z james your vp.

## N6GOW

**I**am confident most of you read in the Santa Cruz Sentinal, Thursday, Sept 4, 2003, and perhaps saw on the various area TV newscasts, that N6GOW, Maurice (Rick) Ricketts is being "eased out" (my wording) of that space in the Veterans Memorial Building where he's operated, almost daily, a ham station located there since 1980. (If u have not noticed the passage of time, that means Rick's station started almost a quarter-century ago!)

One of the two colored photos on the front page of that Sentinal shows him seeking petition signatures to "Save the Veterans emergency radio station," as stated on the poster clear in one photo. The Sentinal story is online at <A HREF="http://www.santacruzsentinel.com/">http://www.santacruzsentinel.com/</A> and is the lead story there.

Point of this briefing: I suggest N6GOW be helped as each of us, AND as the 2 area ham clubs, find appropriate. Possible assistance could include:

- \* Offering N6GOW authorization to set up his station in the SCCARC repeater shack, as suggested by WF6P, Art Lee

- \* Offering \$s to help pay for his continued use of the Vet's room.

- \* Other options, such as . . . ? At the absolute minimum, seems to me, that we, and the clubs, should communicate to Rick our interest, concern, support, admiration, as seems appropriate to each of us.

n my 20 years in this area, this is the first time I can remember hamming getting 2 photos and an article on front page of the local paper. That's FAR more publicity and recognition for hamming than in any and all of hamming's help during the quake, races, events, and such. I understand that Rick does not have an email address. (I may be wrong; correction invited, please.) But he is at phone # 426-5409, and at 125 Hollywood Ave, Santa Cruz. Comments?

—Sincerely, AA6ZG, Leon Fletcher

**CLUB MEETING FRIDAY SEPTEMBER 19, 7:30P.M.**



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**Santa Cruz County Amateur Radio Club, Inc.**

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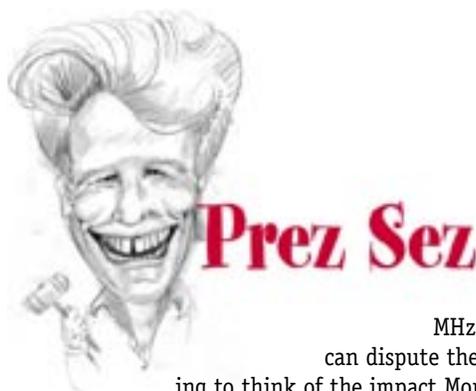
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Now that the summer is drawing to a close and propagation is picking up, it's time for another great meeting! I think this has been one on the clearest most beautiful summers I can remember. I hope you all had as much fun as Sue Ann and I have had. I see great changes ahead for Amateur Radio now that the WRC-03 has made the requirement to send and receive Morse code optional for the privilege of operating above MHz on the amateur bands. I don't think anyone can dispute the usefulness of CW or it's popularity. It's amazing to think of the impact Morse code has had on our history. Indeed, CW is a most efficient mode of operation requiring low power and narrow bandwidth. It's great for the homebrewer with it's relatively simple, less complex and less expensive construction. I have a homebrew kit radio that uses 11 mill amps on receive (0.011 amps). I am glad I learned and am learning Morse code. It has been an exciting challenge. I know I would never have learned it at all if it wasn't a requirement for HF privileges. I believe that all of the modes that amateurs use to communicate are important each with their own special abilities. New amateurs need to be trained in all of the modes including phone and digital to be successful radio operators. I know there are lots of challenges for the up and coming amateur, for example electronic theory, propagation, repeaters and the different modes of FM, AM, SSB, CW, RTTY, Packet, PSK31 and the other digital modes. They are all necessary and have there special place. Amateurs need to be trained and ready to use their skills. Will we be ready for anything if we give any of them up? The more we know the better prepared we will be in the future. Could you work me on my homebrew station sometime? I'll be listening for you. Let me know what you think. I am looking forward to seeing all of you at the upcoming meeting on the 19th. We will have a great time, your friend,—Richard KG6AXD

## PROVIDIAN RELAY

It's that time of year again, where the leaves turn and several hundred runners will make their way from Napa to Santa Cruz on October 12th as part of the Providian Relay!

We're looking for a bevy of volunteers with mobile VHF capability (APRS optional but encouraged) to staff 5 exchange points ranging from the summit of Highwa7 9 where it intersects Highway 35 through the Granit Construction Company site in Felton for approximately nine hours apiece. We're looking for a large number of operators so we can break shifts at reasonable points; the more volunteers we have, the less we'll have to work!

Radio volunteers provide emergency and tactical communication for race volunteer workers; typically we provide a back-up channel for their existing cell phones, which in the past have been, as one might expect, somewhat effective. The Relay Zone Captain for our Zone has been an outstanding person to work with, and very appreciative of our efforts in the past, so it's an excellent opportunity to come out, sharpen our operating skills, and make a good impression. Typically, the SLV ARES also uses this as our official ARRL Simulated Emergency Test (SET).

If you're available, please contact Ray Rischpater, KF6GPE, via email or telephone. (Email is preferred; I'll be out of town off and on for the next week or so, and I might not get your phone messages). Please let me know what hours you can work, and whether or not you can monitor APRS or provide a tracker or both. Thanks & 73 de KF6GPE!

## Two Meter Ducting

Right after the Monday night net on the K6BJ 2 meter repeater, Mark W6ZZZ and Bob K6XX had a short QSO. Then Yuri UT1FG/Maritime Mobile called Bob, but Bob didn't hear him. I called Yuri (about 0305 UTC) and confirmed his call and he told me he was 600 Nautical Miles SSW of San Diego, CA! When I expressed surprise, he confirmed the location again. Looking at the map now, I see that put him about 935 statute miles (regular ol' miles) almost due South of Santa Cruz, apparently near Latitude 23degs,24mins,N. Yuri mentioned the fantastic opening on 2 meter FM, and understood when I told him the location of the repeater he was using (Santa Cruz), and my name and call. Phil KE6UWH had a short QSO with Yuri after mine, and Yuri got Phil's name and call too, before they traded 73 as the duct started closing. I found a picture of Yuri UT1FG, captain of the new (one year old) 27,000 metric ton M/V GREENWING on another ham's website from a visit they had together.

## DIGITAL SCOPES

Taking a casual look at Digital O'Scopes on eBay made me realize that I had a very unsatisfactory notion of what would be important.

Consider the question of sampling rate.

The HP 54501A is described as a 100 MHz scope at 10 Msamples per second

The HP 54201A is 300 MHz at 200 MSamples/sec

OM Nyquist had something important to say about signal fidelity vs sampling rate which I am sure you understand. What's going on here where the  $Msa/sec < MHz$  ?

Then I saw an Instek GDS-820S 150 MHz scope has a 25 Gsa/sec signal acquisition rate "for repetitive waveforms". Hey that seemed way high. Digging further I see this scope has a "real-time sample rate" of 100 MHz. Now I am really confused.

There are other issues such as number of bits, single shot bandwidth, DSP and memory but 'till I can get some clarity on the question of bandwidth and sample rate those questions can wait.

Tell me chaps what's a body to do ?

—Ron



By Art Lee WF6P

## CHATTER

**H**am radio is fun. We get to meet a lot of nice people and our ham license plates help draw hams into a conversation - whether it be in a parking lot, or on the road. I don't use 2 meters much but have had on-the-road QSOs en route to and from Sacramento. I usually have Donna, AB6XJ, give my brother Stan, KB6SEI, a call as we pass through Pinole. If he's home, we swing by for a cup of coffee and a nice chat. He's a former cruiser sailor, having served aboard USS Saint Louis. He was aboard when Pearl Harbor was attacked on December 7th, 1941. As a seaman at the time, he passed ammunition up to the guns firing at enemy aircraft. He tells the story of a torpedo bomber strafing his ship as he came up on deck. He ducked behind a turret and the machine gun bullets hit the barrel of the main battery (maybe 8" guns). A week later, when things calmed down and they returned from sea, he examined the gun to find that bullets had impacted the metal where he had been standing.

Daughter Joyce, KN6RR, received a phone call in Sacramento, from Al Bigler, WA6WJZ, in Chico. Al was passing a NTS message from a ham in Maine. Joyce didn't know the originator was so it remains a mystery. We'll check it out. However, Al had everything under control. He is totally blind and has been passing message traffic since 1962. I talked to Al and he is net control on the 3975 Golden Bear Net on Friday nights from 7 to 8 PM. When not on ham radio, he tunes pianos for a living!

Daughter Joyce and XYL Donna, AB6XJ, each had to renew their licenses. ARRL sent the forms for Donna but Joyce is not an ARRL member. I sent Joyce the ARRL forms over the internet, then decided that they could both renew electronically with the FCC, cutting out the middleman. W5YI would do the renewal for a fee of six bucks. A few of my attempts to renew with the FCC met with no success. It wasn't easy. I kept at it, working for hours, finally getting the correct procedure down. It took patience,

but at long last, I was able to renew Donna's. This was only after Joyce sent email to the FCC asking for help (they answered!). I had to follow that procedure, step by step or it was no joy. The computerized process rejected data until each step was completed. Whew! Granddaughter Cheri, KE6BOP needs to renew her license too. Now that we know how to do it, she should get it done.

I helped a friend, Zachary Fruhling, KD6DXA, and his new bride move into their apartment on Felix Street. He had already scoped out the terrain. A creek runs behind the apartment complex with many handy trees to support a hidden antenna. He can get a wire off his back porch and into the trees, drive a ground rod into the moist soil, and work DX! We plan on doing some cw between the Philosophy classes he teaches at UCSC. He built a QRP kit, but I'll use my trusty Kenwood 930. He uses a straight key, has a good fist at about 13-15 wpm.

## CELL PHONE SYSTEM

Has anybody studied or obtained hard data on Cellular System performance during disasters? Frequently, the news reports explain that during disasters, ham radio became very useful for communications, partly because the cellular system failed. I would be interested to know and it would be useful for the ARES community to know the mechanisms of failure for the cellular systems during disasters. Some time ago a cellular provider talked at a ham club meeting and explained a little known fact that involved all cell users having a 'priority bit' assigned to their Cellular telephone.

This bit is used during disasters to filter out massive use of the system by 'lower priority users', and making it more available to priority users such as professional public safety entities, such as City Governments, Ambulance, Fire Depts, Police Depts, etc. The bit is set or not set at the time of first programming by the seller of the new handset.

Apparently, during a wide spread disaster the Cellular provider can send a command to the cell sites to only allow the high priority users (with the handset priority bit 'set') access to dial tone. To all other users, it just will seem like the Cell system failed, when in reality the filter was applied to prevent overload and lack of access to priority users.

Is this the case? If so, might it be useful and a valid question to allow licensed ham radio operators who own a cellular or PCS phone, to be programmed as priority users?

OR: Do the cellular systems simply shut down from:

1. Massive Overload?
2. Damage to the cell sites?
3. Loss of power to cell sites?

Food for thought..

—73, de Pat aa6eg@hotmail.com

## Ham Hall of Fame

**I**guess we shouldn't expect this list of the "famous" to be different than others these days. It is very easy to confuse notoriety with real fame.

While some of the names on that list are well known, just exactly what was their lasting contribution to ham radio? Did they design anything? Did they sponsor legislation beneficial to amateur radio? Did they enhance the public image of ham radio? Did they create literature promoting the hobby? Or, was it just that their non-ham fame and fortune made them well known within the ham world?

There are people on the list who have done those things. Many more names are not mentioned.

Wasn't Marconi the penultimate amateur?

The first transAtlantic ham QSO took place in 1923. This feat was accomplished with participation of three hams. In Connecticut was Fred Schnell of the ARRL and John L. Reinartz (1XAM, 1QP, K6BJ). Participating in Nice, France was M. Leon Deloy, 8AB. They all used equipment designed by Reinartz.

Reinartz was a prolific contributor to QST and other publications of the twenties and thirties. Reinartz achieved the first trans-continental QSO on 20 M in 1923. He was responsible for numerous technical innovations, and he shared them with other amateurs by publishing in the popular journals of the day. Reinartz held 28 patents in his lifetime.

Then there was Arthur Collins (9CXX) of Cedar Rapids, Iowa. While still a high school student he participated in communications efforts of the first air exploration of the north pole in 1925. In the Arctic, expedition communication was being handled by John Reinartz. The company bearing Art Collins' name commercialized Single Sideband radio in the 1950s and thus hastened its spread to the ham bands.

There was Tom Carter, W5\_\_\_, whose development of the Carterfone in the 1950s contributed to the breakup of AT&T and eventually to the beginnings of telecommunication deregulation.

How about W9LZX, Clarence Moore, who invented the Cubical Quad antenna?

How could we ignore Edward Bayard Heath, founder of the Heath Company in Benton Harbor? His company may have had the most lasting impact on the hobby. I could go on at greater length, but you get the idea. Name recognition alone should not be the criteria for any "Hall of Fame". But then, I don't think it should be the qualification for high political office either.

—Wayne, KB6KN

## SCCARC Officers - 2003

<b>President</b>	Richard Trebbien	KG6AXD	426-0169
<b>Vice President</b>	Jim Welty	KF6YRD	685-9225
<b>Secretary</b>	Cap Pennell	KE6AFE	429-1290
<b>Treasurer</b>	Elaine Pennell	KE6FRA	429-1290
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	Allen Fugelseh	WB6RWU	475-8846
	Mike Doern	KM6IKE	477-1161
	Ron Skelton	W6WO	477-1021
<b>K6BJ Trustee</b>	Royce Krilanovich	AC6Z	475-4798

## MONTEREY BAY ACTIVITY

SCCARC Repeaters: K6BJ 146.790- PL 94.8 Santa Cruz ( linked w/Watsonville full time)  
KI6EH 147.945- PL 94.8 Watsonville (linked w/Santa Cruz full time)  
K6BJ 440.925+ PL 123.0 Santa Cruz  
• SCCARC Net Monday 7:30 PM 146.79- /147.945- /440.925+ linked  
• SCCARC 10 Meter Net 28.308 MHz USB Monday 7:00 PM  
• SCARES Net Monday 8:30 PM 146.835-(PL 94.8)

SLVARC Repeater WR6AOK 147.120+ PL 94.8 Ben Lomond  
• SLVARC Net Thursday 7:30 PM

SLVARES N6IYA 146.745- PL 94.8 Felton  
• SLVRC Net Thursday 7:30 PM  
• ARES Net Monday 7:30 PM

NPSARC K6LY 146.97- PL 94.8 / 444.700+ PL 123 (linked) Monterey  
• Monterey ARES Net Wednesday 7:30 PM  
• NPSARC Net Wednesday 8:00 PM  
• Newsline (Ham News) Broadcast Wednesday 8:30 PM

6 Meter Local Net 52.8 MHz (PL-114.8) Sunday 8:00 PM  
Mont. Bay Chapter 191 QCWA :Tuesday, 7:30PM, NS6G repeater, 146.700- PL 151.4

**FOR MORE INFO SEE: <http://www.k6bj.org/freq.html>**

## SCCARC Calendar of Events

SCCARC Board Meeting 6:30	Friday	Sep. 19
SCCARC Meeting	Friday	Sep. 19
Short Skip Deadline	Monday	Oct. 6
SCCARC Meeting	Friday	Oct. 17

## MONTHLY MEETINGS.

The SCCARC Meets at 7:30 PM, on the THIRD FRIDAY of the each month (except December). Meeting are at Dominican Hospital, 1515 Soquel Drive, Santa Cruz.

**Visit the SCCARC Website at -  
[www.k6bj.org](http://www.k6bj.org)**

## NET CONTROL SCHEDULE (Subject to Change)

9/15 Phil KE6UWH  
9/22 Tom K6TG  
9/29 Allen WB6RWU  
10/6 Joseph KG6NRI  
10/13 Ron W6WO  
10/20 Jeff KF6BKG



SANTA CRUZ COUNTY AMATEUR RADIO CLUB  
P.O. BOX 238  
SANTA CRUZ, CA 95061-0238

**MEETING FRIDAY SEPTEMBER 19, 7:30PM**

**Speaker: Bob K6XX**

**First Class**

## California QSO Party

1600Z October 4, 2003 -- 2200Z October 5, 2003

Sponsored by the Northern California Contest Club (NCCC)

You are "rare DX" and all the other stations in the world are seeking you. When you get on the bands and "call CQ" people will answer you!

Stations outside of California work as many California stations in as many CA counties as possible (CW and phone, 160-80-40-20-15-10-6-2 meters). Stations in California work everyone.

Complete and final rules and other information at <http://www.cqp.org/>

—Marc, W6ZZZ,