

APRIL 2008

THE MONTHLY NEWSLETTER of the SANTA CRUZ COUNTY AMATEUR RADIO CLUB

SHORT SKIP



Field Day Update

Hello all. Even at this early date, we are busy organizing and getting ready for Field Day. This is a quick status update to let people know where we are in the planning/organizing process.

First off, we have received official approval to use our traditional CAL FIRE Ben Lomond Training Center site. Second, Cap (KE6AFE) has also said that the Santa Cruz County COM 2 van will be available to us. These two resources form a nice "center of mass" for additional planning.

And "oh boy" is there additional planning! Tom Guyer (KG6AO) has committed to being the Station Captain for the first SSB station. Tom Ginzberg (K6TG) has committed to being a senior operator on a second SSB station (his work commitments prevent him from being captain). Excellent CW operators Rich S (KE1B), "Hap" (KQ6YV) and old time SCCARC member Jeff K (N6GQ) have signed up for the CW stations. Greg R (N6CK) is contemplating a digital station (RTTY and PSK31) but he is carefully coordinating it with his work duties. Reed (N1WC) has committed to coach the Get On The Air station. Dona (KI6DAR) will be heading up our NTS activities. Jeanette (KI6AJJ) is handling publicity and safety. Greg (K6GPH) will be handling our network coordination. Plus Carrol (KG6YPH) and Brad (KD6ZJN) have also signed up to help operate.

So, a whole lot of your fellow hams have already signed up to help, and we can easily use TWICE that number.

At the moment we are looking for two more RVs to serve as operating positions. This year I'd like the effort we put into raising tents to be put into raising antennas.

Finally, it is time to consider our "antlers." There are a number of cheap and easy wire

SCCARC Repeater Report



Allen on the tower replacing the 440 MHz antenna.

Over the past few weeks and months, slow progress has been made on the club repeaters system. There have been many hands and much work involved! Thanks to all! Now, the link between the 2 meter repeaters in Santa Cruz and Watsonville is working better than it has in a very long while. Both cities can hear each other's HT users again! Hooray! Ready for ragchews!

antennas that perform better than dipoles. Bi-squares, vee-beams, full-wave loops, balloon or kite supported verticals, Moxon rectangles. It would be very neat if a couple people would volunteer to make a couple of these antennas, to improve our overall performance.

Until next month, 73 de Donald

Last Saturday we learned the long-serving 420 MHz link radio antenna in Santa Cruz was broken internally, apparently it's been a problem for a while. Now temporarily we are instead using a surplus "satellite" yagi antenna (that had been stored in the club station) as a replacement for the broken 420 MHz link radio antenna, and it works!



Jeff, AE6KS, checking voltage to the 2m repeater

A couple of antenna tower climbs last Saturday (thanks Allan, and ground-crew Chris!) proved the problem was with the antenna and not the feedline, and effected the temporary replacement. Now we'd like someone to take the broken yagi antenna to Telewave in northeast San Jose for repair. Anybody commuting that way to work already (near Alum Rock, 660 Giguere Court) that can do the pickup from Santa Cruz and delivery? Contact Jeff AE6KS to volunteer. It'll fit in most any car.

Continued page 2

CLUB MEETING FRIDAY APRIL 18, 7:30 P.M.



CAKE ingredients March 22

Fun and games at Gigi's as usual. Very pleased to see Debbie our Presidents XYL with us today and to welcome Donald AE6RF and his bright and charming daughter. Art WF6P joined us prior to attending a Pearl Harbor reunion and subsequently joined us once again at the HF shack. Also we welcomed back David WS2I from his trip to China

Exhibits included a world zone map provided by Marc W6ZZZ. Wot no Ducie Isle? Marc also brought along samples of ferrite cores that you now often see clamped on computer related cables. These can be very useful to reduce RFI conditions and are well worth scavaging. Someone should determine their magnetic properties and this isn't hard to do. Jeff AE6KS handed out some CDs with copies of antenna modeling software and sample models, thanks for these Jeff. Incidentally if you were not at the meeting last night to hear Dave KO6RS you missed a world-class presentation on antenna modeling

Bob K6XX showed his prototype spectrum display based on a softrock SDR RX. Bob's adaptation uses the IF output available in an Electraft K3. Jeff KG6YPS became acquainted with an Autek RF analyser and following the session he made measurements on the K6BJ tri-band beam. These were very good and we have now connected the beam to the TS570 so that remote users can TX on these bands. Some knowledgeable discussion took place on securing nuts and bolts on towers and antennas which isn't something you should go to bed worrying about but they can and do sometimes sheer off or come adrift.

Dave W8FLL MADE MENTION OF THE PARTY THAT HE WILL BE HOSTING CLUB MEMBERS AT HIS QTH ON APRIL 20 don't miss out on this occasion!

Ron W6WO showed a pair of transformers with a 1:16 impedance ratio that he is investigating, these closely match 50 to 800 Ohms with very low loss from top band to 6 meters. They are much simpler to make than those based on transmission line principles.

The question of whether Palm-type devices can decode PSK31 was not fully explored but the likely answer is probably not. I missed a lot of the earnest discussion taking place on the subject of our repeaters but I later saw Jeff AE6KS, Roy KF6KVD and Bruce AC6DN busy working in the repeater building.

From now on CAKE meetings will be held each month on the second and fourth Saturdays unless otherwise notified so I hope to see you on April 12th

—73 Your scribe Ron W6WO

Tecknowledge -Supercapacitor

WIKIpedia Supercapacitors, also known as ultracapacitors or electrochemical double layer capacitors (EDLC), are electrochemical capacitors that have an unusually high energy density when compared to common capacitors, typically on the order of thousands of times greater than a high-capacity electrolytic capacitor. For instance, a typical D-cell sized electrolytic capacitor will have a storage capacity measured in microfarads, while the same size supercapacitor would store several farads, an improvement of about 10,000 times.

100 milestones test was passed in January test by a Honda hybrid electric vehicle HEV. A supercapacitor integrated in the plates of lead-acid battery showed that battery life was extended by a factor of 4 with 50% more power than a conventional lead-acid battery. The capacitor managed the discharge more efficiently and prevented accumulation of sulphur deposits. It is claimed that the battery produces more power and costs far less than a NiMH battery

April Good Buys on Books

I wanted to purchase a used technical text book recently and found one via the Amazon web site at a very reasonable price of \$4.53 plus \$4 shipping. It actually came from Friends of the Phoenix Public Library who sent me this note. "100% of your purchase benefits a nonprofit charitable organization that supports library programs, and we thank you for your support."

My XYL tells me that our local library also regularly sells books to raise funds

—Ron W6WO

Repeater Report continued

The repeaters have seen maintenance work too, Santa Cruz has clean batteries with lots of new stainless terminal bolts now (thanks David!) and improved charger and battery wiring now too has restored the voltage to what it should be (thanks Bruce!). Fresh gas (with Stabil preservative again) for the generator is at hand in the Santa Cruz repeater shed (thanks Roy!), and a oscilloscope has been installed in the 2 meter repeater rack there (thanks Jeff!). The 420 link radios in Santa Cruz and Watsonville have been repaired and adjusted (thanks David, Keith, Rene, Jeff, Bob, Mike, Sean, and Nicky!). Of course there's more work to do.

So that's very good news, that our primary 2 meter SCCARC repeaters (in Santa Cruz and Watsonville) are finally working well again, even across their full-time link! The bad news is that the 440.925 MHz repeater is turned off at the moment because of a repeater radio problem, it's not passing audio. This means that Mike's W6WLS repeater isn't able to link with the SCCARC 2 meter repeaters for the regular Monday evening club net. Solutions are being worked toward, and we hope to again include W6WLS repeater on the Monday net as soon as possible.

Remember the Monday evening club net is now on the club's K6BJ and KI6EH repeaters. Hope to hear you there. The Tuesday evening ARES net is on W6WLS and W6MOW repeaters instead. Both nets start at 7:30 p.m.

<http://www.ares.santa-cruz.ca.us/#NETS>

—73, Cap KE6AFE

WELCOME NEW AND RETURNING MEMBERS!

The following members joined or rejoined us during the first three months of 2008:

Jay Bollinger KG6WIL
Jerry Inman AF6DP
Scott King AH6KL
Steve Meek KD6OBZ
Rick Meyer KI6LQL
Don Radder Hubby of Shirley KI6LTN
Kim Robinson AF6EG
Dan Rosa KE6EWA
Byron Servies KI6NUL
Craig Smith W6WL
Marc Velez N6ACU
Jeff Watson KG6YPS

SCCARC Starters #2

Your Call Sign

Your call sign is unique in the entire world. No other ham has the same sequence of alphanumeric characters that is assigned to you. There are lots of interesting places on the web to find information about your call sign. This includes club station call signs like **K6BJ**.

For example the **K6BJ** license expires on April 23, 2008.

QRZ

The online directory that I like to use to look up information about hams/clubs that I have contacted is:

<http://www.qrz.com/>

It presents you with the FCC information but this web page is a lot easier to use than the FCC web pages. Also hams can upload additional data to the QRZ web site like their email address, some text for a bio and a picture of their ham shack or QSL card.

If some of your FCC data is incorrect (like your address) you have to contact the FCC and submit an update to them (QRZ can't fix FCC data, see the ARRL instructions below on how to update your FCC information).

You can also order a QRZ CD-ROM and store the information directly on your computer if you don't have easy access to the QRZ web site.



Google

Try searching the web for your call sign at

<http://www.google.com/>

You will get a couple of hits even if your call sign is brand new.

Call signs make good identifiers to search for on the web since they are unique and don't match common things like words in any language.

K6BJ returns 1,830 hits and a super-active club member like **K6XX** shows 49,000 hits on Google!



Vanity Headquarters

There are many different tools available here:

<http://www.vanityhq.com/>

My favorite is to click on the **"Ham Locator"** in the left hand frame and then type in your zip code, display a map and find out how many of your neighbors are hams.

Here are the "hams in a zip code" counts based on some of our SCCARC roster zip codes:

89 hams in zip code 95003 (Aptos)
 91 hams in zip code 95006 (Boulder Creek)
 32 hams in zip code 95010 (Capitola)
 64 hams in zip code 95018 (Felton)
 90 hams in zip code 95033 (Summit-Loma Prieta)
 43 hams in zip code 95073 (Soquel)
 206 hams in zip code 95060 (Santa Cruz)
 14 hams in zip code 95061 (Santa Cruz Post Office)
 126 hams in zip code 95062 (Santa Cruz)
 19 hams in zip code 95063 (Santa Cruz Post Office)
 85 hams in zip code 95066 (Scotts Valley)



Of course, this map/count information is all dependent on people's address and zip code being correct in the FCC database.

There is also a lot of other useful links on this site: ARRL Website Links, FCC Website Links, Call Availability, Help, History of Radio, License Exam Practice, More HQ Stuff, Call Sign Certificate – build your own call sign certificate and print it, Print Your Ticket – print a reference copy

ARRL

Another way to search the web is to type your call sign into the **"Call sign search"** on the ARRL main web page at:

<http://www.arrl.org/>



Detailed instructions for call sign license renewals or updating your FCC information are at:

<http://www.arrl.org/fcc/licenseinstructions.html>

The instructions cover the following topics:

- License Changes and Renewals Electronically with FCC Via the Web
- License Changes and Renewals Via Mail to FCC
- License Changes and Renewals Via Mail to ARRL
- Filing for a New Vanity License with associated Fee Via FCC
- Amateur Radio License Filing Forms

"SCCARC Starters" is a column designed to get you "started" on expanding your ham radio knowledge/usefulness/fun by showcasing information that I have found on the Web.



March 15, 2008

W6ZZZ



By Art Lee WF6P

CHATTER

There is a lot of value in attending our club meetings. In addition to the eyeball QSOs it presents, good info is passed out. We were treated, once again, to a fine tech lecture by David Rank, KO6RS, our own UCSC astronomy professor, emeritus. David gave us an in-depth look into antenna properties and the effects on SWR. Replete with power point slides and dashes of humor, it was a fine learning experience.

All of his comments came to mind as I attempted to tune my Kenwood 430S at my daughter's home in Sacramento. The poor little auto tuner chased itself around for a couple of cycles, then gave up. A quick check out the window revealed an absence of wire where half of my dipole should be seen. When last used during our visit in December of 2007, all was well. Entering their backyard between light rain squalls, I discovered my wire, neatly coiled and lying on the top of the doghouse. When a tree was trimmed, the limb holding the antenna guy dropped, jerking the antenna leg loose from the center connector. To meet my Baja Maritime Mobile sked, I hastily wrapped

the bare wire (after cleaning it with a wad of well-used sand paper) around the center connector and tightened the holding screw. Was rewarded by a nice SWR at the lower end of the band. My repairs, although of temporary nature, should last as long as the old connection --- ten years.

The following morning, I attended the CAKE meeting at Gigi's. Due to a breakfast meeting of the Pearl Harbor Survivors in Watsonville, I could only stay for a short time. Who was there? all the regulars plus some extras. Several tables were hastily pulled together to accommodate the approximate 20 members in attendance. At these sessions, additional technical info is discussed. Stop in and enjoy a nice breakfast or cup of coffee with the group.

Later that afternoon I responded to the invitation by Cap, KE6AFE, for all to view or operate the club station at the repeater site. It has been many months since I last visited so I was anxious to see the setup. Several club members and guests were present. Work was in progress on the repeater by Allan Handforth, AF6BO. I was impressed by the features offered by the newest emergency van. Especially the nice bunk arrangement inside for resting during those long watches. "I designed the width to fit the width of my shoulders," said Cap. There was lots of room inside the van, a great jump up from the former vehicle. I was disappointed that it lacked the lettering identifying it as the Amateur Radio Emergency Communications Mobile Unit. On our former red painted van, the lettering looked pretty classy.

Dave's "Big Give"

Mark your calendars: Sunday, April 20, from 1 to 4 PM, Dave Stoddart W8FLL will be having an open house to commemorate his 58 years in ham radio. All SCCARC members and their families are invited to help him celebrate!

Please, bring no gifts, but come prepared to take some home; he'll have mass quantities of radio equipment and accessories as well as test instruments and components.

Dave's address is 358 Crow's Nest Drive in Boulder Creek; talk-in on 147.12, PL 94.8.

—See you there!!

Coming Events that need Radio Support

April 20, 2008

THE RELAY, Stages 30 thru 36(Finish)

April 27, 2008

23rd Big Sur International Marathon

April 30, 2008

Functional Exercise, ARES/ACS, County OES

May 2-3, 2008

EMCOMMWEST convention in Reno, Nevada

May 17, 2008

Red Cross Shelter Activation Exercise

May 18, 2008

Strawberry Fields Forever XIX Bicycle Event

May 23-25, 2008

Watsonville Fly-In and Air Show, 44th Annual

More details and contact ham info for these events on our Events Calendar at: <http://ares.santa-cruz.ca.us/events.html>

—73, Cap

Treasurer's Report

The March 2008 Net Worth Report presented to the Board of Directors showed that the SCCARC treasury had \$4489.99 in cash and bank accounts. At that time all financial obligations had been met, including the annual equipment insurance premium. The full Net Worth Report will be available for review at the April Club meeting.



OT Ham instructor Art Lee WF6P and new Ham Jeff Watson KG6YPS visiting the Club HF shack

SCCARC Board - 2008

President	Rich Olsen	WIWUJ	510 415-8920
Vice President	Don Taylor	K6GHA	k6gha@k6bj.org
Secretary	Kathleen McQuilling	KI6AIE	476-6303
Treasurer	Cody Adams	KG6YPK	
Board	Christopher Angelos	KG6DOZ	688-3562
	Reed Cotton	NIWC	460-1801
	Mike Doern	KM6IKE	477-1161
	Bruce Hawkins	AC6DN	
	Ron Skelton	W6WO	477-1021
K6BJ Trustee	Allen Fugelseth	WB6RWU	475-8846

MONTEREY BAY REPEATER ACTIVITY

Santa Cruz County	K6BJ 146.790- PL 94.8 Santa Cruz KI6EH 147.945- PL 94.8 Watsonville K6BJ 440.925+ PL 123.0 Santa Cruz • SCCARC Net Monday 7:30 PM 146.79- /147.180+ /440.925+ linked • SCCARC 10 Meter Net Monday 7:00 PM 28.308 MHz USB
ARES Nets	SC County Wide ARES Tuesday 7:30 PM on 147.180+ PL 94.8 443.600+ PL 110.9 (Linked repeaters)
San Lorenzo Valley	WR6AOK 147.120+ PL 94.8 Ben Lomond • SLV Net Thursday 7:30 PM
Loma Prieta	AB6VS 440.550+ / AE6KE 146.835- PL 94.8 (Linked for net 94.8) • LP Net Tuesday 7:15 PM
Monterey	K6LY 146.97- PL 94.8 / 444.700+ PL 123 (Linked) Monterey • NPSARC Net Wednesday at 8 PM on K6LY/R • Monterey ARES Net Wednesday 7:30 PM K6LY 146.970- (PL 94.9) • Newsline (Ham News) Broadcast Wednesday at end of NPSARC Net
LPRC	WR6ABD 146.640- PL 162.2 / 442.900+ PL 162.2 (winsystem) • LPRC Net Tuesday 8:00 PM 146.640-(PL 162.2) • Newsline (Ham News) Broadcast Wednesday at end of NPSARC Net

• Santa Clara Valley Section Traffic NET Tuesday 9:00PM 146.640- (PL 162.2)
FOR MORE INFO SEE: <http://www.k6bj.org/freq.html>

SCCARC Calendar of Events

SCCARC Meeting	Friday	Apr 18
Board Meeting	Wed	Apr 23
Short Skip articles due	Monday	May 5
SCCARC Meeting	Friday	May 16

MONTHLY MEETINGS.

The SCCARC Meets at 7:30 PM, on the THIRD FRIDAY of the each month (except December). Meetings are at Dominican Hospital, 1555 Soquel Drive, Santa Cruz.

Don't Need Short Skip In Your Mailbox?

If you're getting Short Skip by postal mail but would rather just read it on the Club's web site, just let me know at ki6aie@k6bj.org and I'll take care of it. If you're on the K6BJ email reflector, you'll get notification when each month's Short Skip has been posted to the Club web site.

--Kathleen, KI6AIE

SHORT SKIP

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April Raffle:

Start Your Spring Cleaning in Your Shack!

Just think how much easier your spring cleaning will be once you've cleared out all that old radio gear and brought it for the raffle at our April membership meeting! We are not limited to radio-related items, though. Your discards may be someone else's treasure!

--Kathleen, KI6AIE