OCTOBER 2007

THE MONTHLY NEWSLETTER of the SANTA CRUZ COUNTY AMATEUR RADIO CLUB

SHORT SKiP

Local hams take it on the road for CQP.

Santa Cruz County Amateur Radio Club member Donald Kerns, AE6RF and his parents, Carrol (KG6YPH) and Dona (KI6DAR) went on a DXpedition to Madera county for the recent California QSO Party contest.

The California QSO Party (CQP) is a contest sponsored by the Northern California Contest Club (NCCC) where hams try to work as many California stations as possible. Stations outside of California tried to work all the Californian counties while Californian stations tried to work as many states and providences as they could. Phone contacts were worth two points while CW contacts were worth three.

The Kerns hams traveled to Sierra Sky Ranch, just north of Oakhurst and set up in the ranch library. Their station consisted of a Kenwood TS-480SAT with CW and SSB filters, a microKeyer rig interface, N1MM logging software and a Heathkit SB-201 linear amplifier. They set up two fan dipoles (10/15/20m and 40/80/160m) "Field Day"-style, attaching to trees, a portable mast and even the ranch's rafters.

The library was supposedly haunted, but the flickering bathroom lights and clicking thermostat were attributed to the amplifier's power load and RFI. At least the Kerns THOUGHT that was the case...

The effort yielded 310 contacts and 48 multipliers. They worked Bob, K6XX, Kit WA6PWW and the N6IJ super-station along the way. The best DX was the Slovak Republic, who dropped in while Donald was working 20m CW. The OM3 call was a surprizing change from the normal assortment of W's, K's and N's.

Other local hams, Kamal, KA6MAL, Rob K6RB, Greg N6CK and JV K6HJU also participated in the CQP from their home stations.

The Kerns were very excited by their results and look forward to finding another rare, yet comfortable, location next year. Donald said "It is sort of like Field Day, but with creature comforts."

—Donald AE6RF

Signals heard from Sputnik

SIGNALS FROM THE SATELLITE
Ham operator Roy Welch of Dallas, seated, plays a tape-recorded signal from the Russian space satellite for fellow hams at the State Fair of Texas. Welch recorded the signals on a receiver at his home.

Building a Softrock Radio

Peter KF6YCS Busy Building his Softrock Radio

CLUB MEETING FRIDAY OCTOBER 19, 7:30 P.M.

CAKE Production Sept 30If I had harbored any doubts about our sessions loosing value they were certainly dispelled today. We welcomed Tom AE6XQ for the first time and he evidently has been bitten firmly with the Softrock bug. We eagerly await reports on your progress Tom. It was also a pleasure to have Jim N6MED join us and we marveled at the professional manual for a SSB microwave system that he was responsible for circa 1986.

Dave W8FLL described a problem that he was investigating where a radio would not load properly. Seems that the LPF is suspect especially if the RX is also insensitive Dave. Marc W6ZZZ had fashioned a very neat surface mount device hold-down for me and I am very pleased indeed. I hope a picture will be included in the next Short Skip. Ideas for the Marc II are also taking shape.

I wanted to ask about the digipeater that Cap KE6AFE had brought along but just ran out of time. I wondered if the HT was powered full-time or not. The mounting plate and shelf is just what I think we need for the Echolink interface box at the BJ repeater.

Jeff AE6KS and Jim are enthusiastic about an alternative to Anderson Power Pole connectors. They use spade and clip connections and are more secure where vibration is a concern as in a mobile installation. Speaking of vibration Eric K6EP brought along a report of the failures that showed up in the soldering of devices with 1500 G of force applied to the board. Photographs showed that the components had lifted right off their pads, dare I say it, rather like the impact of an earthquake on the foundations of a house.

A lot of the discussion that I heard was related to soldering. Reed N1WC described a solder-bath technique using a Walmart beverage warmer. A very well illustrated document from the Electronic Research Group entitled "SMD Soldering Tools and Technique" was circulated. It mentions SOIC as a "large size chip" IMHO this is about as small as many folk like me would be able to deal with. Going below this size may very well justify the cookery and solder paste the paper describes. I don't care much for the idea of soldering lots of pins together then using solder wicks and other ways to remove the surplus. To each his own I suppose. We also talked about tools for cutting pads in a ground plane and I mentioned the diamond tip pad cutter that came from AMQRP a few years ago. Neat tool but more for the Through-Hole and DIP crowd rather than the with-it SMD crowd (no offense please just joking). My call for a tip that would work with a typical soldering iron and having a forked shape for ease of removing 1206 size components resulted in a suggested visit to the De Anza flea market in two weeks time. Stay tuned we might make this a CAKExpedition.

Bob K6XX is fast becoming our metal fab resource now that he has the machine tools and the text books provided by Reed. Bob has yet to publish his labor rates

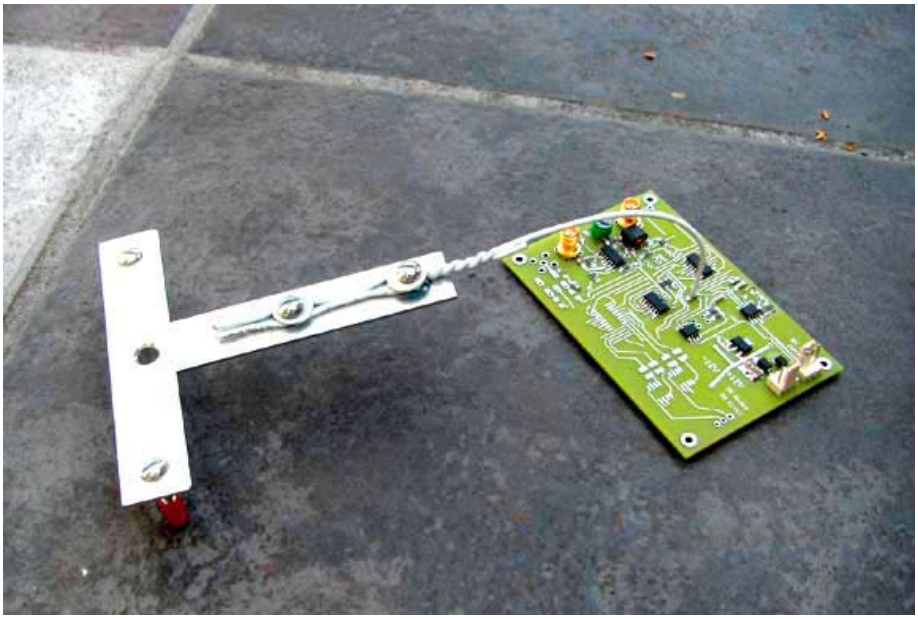
We had a rather exuberant discussion following my question why does a crystal specified for third overtone use, oscillate in conjunction with a TTL inverter. Allied to this question is what are the functions of the high value resistor found in parallel and the L and C components from either side of the crystal to ground. The immediate response was that as gain is involved how would you stop it oscillating? While of great interest for another day, it is different question altogether. I stood firmly on the shoulders of Barkhausen and his criteria that decree the phase shift around the loop must be 360 degrees. This applies to all oscillators with a sustained output and in this instance the loop comprises the inverter contribution of 180 degrees leaving 180 more to be provided as feedback via the crystal. Is this 180 provided at the 3rd overtone by crystal or external properties? There must also be enough gain around the loop to offset losses. With regard to the other L and C components I suggest reading the Analog Devices Engineer to Engineer note EE-168. Rich Olsen W1WUH has bet that he can disprove some of my assertions and a bottle of beer is at stake.

Once again I apologize for missing probably 25% of the action but the fun goes on.

—Ron W6WO

PS. in case you may be wondering, the round green object supplied by Eric is a quince and it has very little to do with ham radio HI HI

"Marc 1" SMD Hold-down



Marc Ziegler, W6ZZZ SMD Hold-down Marc I as seen at the September Cake meeting.

By Art Lee WF6P

CHATTER

The September club meeting was fun, with about 25 members in attendance. During introductions I noticed a member I had not seen for many years, Tom Stoller, AE6XQ (ex-WB6QHF). Tom's QTH is adjacent to the Santa Cruz Medical Clinic parking lot and I remember him showing me his antennas and tower back in 1980. Tom owned Santa Cruz Electronics, if my memory is correct. He recalled my stint as a ham teacher at Cabrillo College after Eddie Pollock, W6LC, moved up to the Computer Science division.

Peter Kyryl II, KE6RAX, had his arm in a sling. I didn't get a chance to wish him well and hope it doesn't slow his CW down any. After surgery on my hand a couple of years ago, operating a straight key was accomplished by wedging a pencil in my cast and depressing the key with the eraser end. It was slow going but I made a lot of contacts.

During the meeting, Allan Handforth, AF6BO, briefed us on his role in Community Emergency Response Teams. There was a lengthy discussion of corrosion avoidance in vertical antenna tubular connections (clean, use conductive paste, spray with clear lacquer).

It was interesting to hear that the donated inop TS570D for our repeater shack, sent to Kenwood, could not be repaired due to non-availability of parts. I guess that obsolescence will catch up with us all. Looking through the pages of QST we can find all sorts of modern rigs that will someday require complex servicing. When my 20 year old rig went in for repairs, the tuner parts were no longer available. When I mentioned it at a club meeting, Frankie Carroll, K6BDK, offered me one of his spares. The price was right -- free. There was a knock at my front door one morning. It was Frankie, delivering the tuner. You can't beat a deal like that! (Thanks Frankie.)

Roy Brayshaw, KF6KVD, provided entertainment with his video shots of field day. Thanks Roy, they were instructive, especially that of erecting the mobile tower -- it looked pretty easy.

The other day my Pontiac would not start. It was parked several miles from home. In the "Start" position, the lights on the instrument panel flickered and went crazy. The engine service light glowed brightly. Strange clickings under the hood and moaning relays under the dash sounded ominous. Don't you hate that? Got a start from AAA but barely made it home. The battery in this car is located under the back seat. After buying and using a trouble-shooting tester and an emergency starting pack, I gave in and purchased a new battery. Sure, that sounds like an easy, old-fashioned solution, but with today's autos being electrical nightmares of relays, sensors, interlocks and computers, anything could go wrong. Who would have thunk it that it was just a plain old battery failure? The four-year-old battery had full voltage and the green eye showed "good." I had no way to load test the battery. So, $150 later for a new, bright and shiny electrical source, my car runs fine.

October CQP DXpedition

This is not some tropical DX island but the choice by W6WO and AC6KW for operating from San Benito Co during the CQP 2007 weekend. The location is McAlpine lake and RV resort and this was our view from a rented cabin. The owners of the site maintain it in a very good condition and were rather sceptical of our plans so we took great care to be as quiet and unobtrusive. All went smoothly and we were invited back. Our antenna was a single inverted Vee for 40 meters that could easily be switched for 20 meters. The antenna was suspended from a single telescopic 35ft fiberglass pole that was taped to the railings. Although our score was only 60% of our score in 2006 we had a really great time. The lake is well known for fishing and it brought to mind that anglers and radio hams have much in common, calling CQ being equivalent to casting a lure. I am sure some anglers thought our 35ft pole and wires was going to be their competuion for the catfish derby that same weekend. Their winning fish was 14lbs, we made 310 cw QSO's for 45,550 points.

—W6WO

SCCARC Board - 2007

President	Christopher Angelos	KG6DOZ	688-3562
Vice President	Pat Barthelow	AA6EG	
Secretary	Cody Adams	KG6YPK	
Treasurer	Kathleen McQuilling	KI6AIE	476-6303
Board	Mike Doern	KM6IKE	477-1161
	Allen Fugelseth	WB6RWU	475-8846
	Bruce Hawkins	AC6DN	
	Vic Linderholm	AE6ID	476-5567
	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+ PL123 (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	Oct 19
Board Meeting	Wednesday	Oct 24
Short Skip Deadline	Monday	Nov 5
SCCARC Meeting	Friday	Nov 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.

NET CONTROL SCHEDULE

(Subject to Change)

10/15	Phil KE6UWH
10/22	Allen WB6RWU
10/29	Chris KG6DOZ
11/5	Tom K6TG
11/12	Cody KG6YPK

SHORT SKIP

Short Skip is published 12 times per year.
Free to members.
Santa Cruz County Amateur Radio Club, Inc.
Post Office Box 238, Santa Cruz, CA 95061
Editor: Ron Baldwin, K6EXT@fireclay.com
Columnist: Art Lee, WF6P
Writer: Ron Skelton, W6WO

THE MONTHLY NEWSLETTER of the SANTA CRUZ COUNTY AMATEUR RADIO CLUB
SHORT SKIP

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

Special Deal: Holiday Luncheon and Membership Renewal

If you renew your membership when you pay for the December 15 holiday luncheon, you'll get an extra five (count 'em, five) tickets for the holiday luncheon raffle! That's in addition to the one raffle ticket that is included with your $15 for the luncheon. For most of you, that will mean $40, preferably paid ahead of time, either at a Club meeting or by mail (SCCARC, P.O. Box 238, Santa Cruz, CA 95061-0238).

--Kathleen, KI6AIE, SCCARC Treasurer