

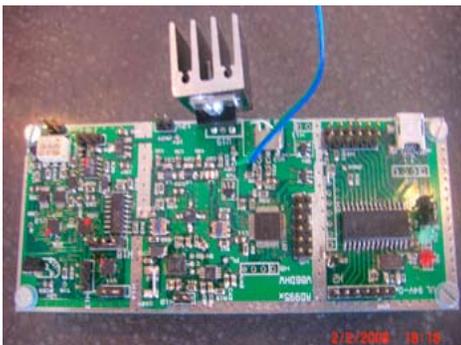
FEBRUARY 2008

THE MONTHLY NEWSLETTER of the SANTA CRUZ COUNTY AMATEUR RADIO CLUB

# SHORT SKIP



## A DDS-Controller



Seen here is an example of part of a very active project involving a talented team of amateurs working together via cyberspace. Our own Rick Meyer (KI6LQL) is a member and you can dig deeper by visiting their Yahoo group called DDS\_Controller. This is their introduction "USBconnections are rapidly replacing serial ports on computers and the simple computer interfaces of the past need a replacement. This group is aimed at experimentors building USB-based controllers for HAM radio. The founding project couples a PIC 18F2455 driving a variety of DDS VFOs to a C# application on the personal computer." This description doesn't do justice to their project which could reasonably be described as the heart of next generation amateur radios, and instruments like a spectrum analyzer and vector network analyzer, at least that is how I see it. Check it out and form your own opinion

—Ron W6WO

## Straight Key Night

Local ham, Donald Kerns, AE6RF, joined thousands of amateurs nation-wide in starting off the new year with a beep. Operating from Sierra Sky Ranch in Oakhurst, CA, he participated in the ARRL's Straight Key Night.

Straight Key Night is an "operating event" where hams set aside their microphones to communicate using Morse Code sent by straight key rather than paddles or computerized keys.



Donald's Straight Key Night set up was a very minimal affair consisting of a straight key, headphones, a Yaesu FT-817ND all-band QRP transceiver, a NorCal Balanced Line Tuner (BLT) and a homebrew 88' doublet that included homebrew ladder line and a water bottle top center insulator.



Homebrew antenna held up by a painter's pole off the porch at Sierra Sky Ranch.

He operated during "stolen moments" on New Year's Eve and New Year's Day. Donald noted a wide range of Morse Code sending styles known as "fists" ranging from almost perfect down to "drunken chicken wandered into the shack." His most interesting contact was with Chris, K6DBG, his Stew Perry 160m contest co-operator, also in Oakhurst about 1.5 miles away. The best DX was Poway, CA.

Operating using very low power (a technique known as "QRP") using a straight key allowed Donald to relive a familiar memory from his Novice days, that of calling CQ endlessly without any responses. hi hi. Next year he would like to get his antenna higher and run more power.

Donald concluded "For real old-school ham radio fun, it is hard to beat QRP/P with a straight key."

—73 de Donald

## February Speaker

Our guest speaker will be Paul Horvat, Director of the Santa Cruz County Office of Emergency Services (OES). Paul will present general information about the county programs, focusing on communication.

In addition, Cap Pennell will be speaking on ARES relationship and integration with the OES.

Additional information on OES can be found at their website:

<http://sccounty01.co.santa-cruz.ca.us/oes/oesmain2.htm>

**CLUB MEETING FRIDAY FEBRUARY 15, 7:30 P.M.**



## Cake January 19

The session today was as exhilarating as usual and that means it was very tough to cover everything going on. I apologize if I missed any pearls of wisdom. We were delighted to welcome three new faces Susan (KI6KWA), Bob (AF6DL) and Rick (KI6LQL). I had met both Bob and Rick on the air recently. We look forward to getting to know what interests them most and hope they will ask for help from our Club and the CAKE group. We are especially good at giving well-grounded opinions.

Susan said she liked being in the mountains so what better event for her is the upcoming FYBO contest. Don't know what FYBO stands for? It is a contest like no other is all I will say about it.

Chris (KG6DOZ) showed an interesting product that can weld multiple metals including aluminum using just a butane torch. Looks like it would have many applications for us, it is called DuraFix and the makers can be contacted at 800 547 WELD.

We talked a little about how to set up our remote HF station on multiple bands. I think that Dave (W8FLL) had the best solution. Use an antenna tuner like one of the SGC products that, given a whiff of RF, will automatically tune many antennas. I know they work very well with loops of various kinds and this may well be our answer. Speaking of antennas, Rick (KI6LQL) described his 7ft dia octagonal loop that can be tuned on 80 meters. Rick designed a most unusual piston capacitor to cater for the very high voltages that can be encountered. Tell us more Rick, I would like to model what you have working.

Rick is deeply involved with an advanced SDR project development team and amazed us by showing his very tightly packed board. Soldering of many components was done using solder flux and a heat gun. For those most interested in SDR developments here's the website of the group. [http://groups.yahoo.com/group/dds\\_controller](http://groups.yahoo.com/group/dds_controller) The manual Rick wrote for the system is at: [http://groups.yahoo.com/group/dds\\_controller/files/KI6LQL%20Files/](http://groups.yahoo.com/group/dds_controller/files/KI6LQL%20Files/)

## Member Profile: Don Taylor K6GHA



This is an introduction to Don our newly elected Vice President.

Don promised his dad (the well-remembered original K6GHA) that one day he would get a license. True to his word Don took the classes that our club helped with at the Yacht Harbor and subsequently upgraded by attending RadioFest last year. This alone tells you what an energetic man we have in our VP slot. Don was born in the old Santa Cruz hospital that is now Branciforte Plaza. He joined the USAF in 1974 as an electronic technician and worked on many types of aircraft. Some had HF in those days and Don was thrilled to test their radios by contacting the mainland from Okinawa.

He took his initial degree at Cabrillo College under Eddy Pollock W6LC followed by a degree in Industrial Technology at San Jose State U. He describes his current 25-year career with HP as an "Imagineer" with world-wide responsibilities for pre-sale product solutions.

Don is well and truly committed to this area and this is reflected in his ideas for bringing the general public into closer contact with Ham Radio. Don sees supporting public service with Amateur radio and engaging youth as the two critical goals for our club and the hobby as a whole. He comments on the welcome that he has received in joining our club and is impressed by the wealth of talent in our membership.

Don is a man of vision, energy and talent and we should all be ready to support his efforts.

My apologies for the shaky picture Don.

—W6WO

The DDS/QSD is done, and a set of band pass filters for 160 - 10 meters, and the QSE and RF chain is going out for PCB boards soon. A VFO application is working and PowerSDR has been adapted to drive the receiver, which is also a signal generator. The technology in projects such as this provide the main functions of a Vector Network Analyzer. We could spend a whole CAKE session talking about this topic. Ron (W6WO) showed the PCB he plans to use to build a VNA designed by Paul N2PK. Don't let anyone kid you home-brew is alive and well and all is not software.

Our Club plans to have a table at the upcoming RadioFest scheduled for Feb 22-24 in Monterey. We will use this to describe the many activities and projects the club is involved with. In my absence the Board

nominated me to herd some volunteers to cover the event. I hate twisting arms so let me know what time(s) you are willing to support the show.

The expertise and range of scientific topics of interest to this group constantly amazes me; literally from sub-terrestrial to astronomical. At one end of the table I overheard a discussion about the formation of the European land mass. At the other end I heard a discussion on the source and nature of the earth's magnetic field and the interchange of energy between earth and the moon.

On the topic of the moon I just received a message from our astronomical member Dave (K06RS) who just recorded his reception of moon-bounce signals at 7MHz! Dave I dub you our SWL leader and suggest using the letters SWLL after your callsign.

## ClubTable at Radiofest

We will have a table at the upcoming event and this is made available at no charge in return for some volunteer time. I have made that commitment on behalf of the Club but I do not have any details of when, where and how much help is required. We clearly will need to have at least one member at our table at all times and I will contact you when I have more specifics.

Our table should have info on the whole range of club activities, copies of Short skip, Meeting schedules available etc. We need key individuals to put together such materials and I would like to hear what you have in mind

My principal role is to arrange examples and demos of home brew projects. This is a general call for anyone who has a home-brew item working or not to step forward and let me know your intent. If you do not plan to attend but otherwise do have an item we can arrange to collect it from you. The organizers of the event are trying very hard to make this the premier event of its kind in this region and they deserve our support

Frank K6BDK uses an implanted hearing aid that unfortunately uses frequencies very close to (and is interfered by) signals in our 6-meter band. Avoiding this problem is one of the few problems our group has not solved. Sorry Frank mebbe a very sharp bandpass filter could do the job but your connector looked like a custom item to me. Plenty of other bands to choose from Frank

## Cake February 2

We were very pleased to welcome Jeff (KG6YPS) to our merry band. It was good to have Mikey (N6IL) with us again and to learn that his prior hard work at college is paying off. Some of you might not know that CAKE was started 5+? years ago by Eric WA6HHQ and myself as a fun form of mentoring. It was very good to have him take a break from his hectic life at Elecraft to join us today. As always it was tough to take note of all the discussions.

Jeff mentioned his interest in music synthesizers, and had questions about off-center-fed dipoles and water in coax. He was looking forward to his first CW QSO. We had quite a debate on dipoles vs loop antennas and he mentioned finding the article "Why Antennas radiate" on the ARRL web site very helpful. Jeff clearly is a very thoughtful guy who likes to know how things work and we look forward to many astute questions from him in the future.



By Art Lee WF6P

## CHATTER

Had a couple of nice QSOs with Zachary Fruhling, KD6DXA, a doctoral candidate at UCSC. He bought a new rig and wanted to give it a workout. We banged away for an hour each time but my paddle kept slipping around the desktop until I wedged it in securely. The little rubber feet on the base have hardened over the years and provide no friction. I think I will just place it on an old mouse pad and that should do it.

Received a nice Christmas card from Gary Baker, N6ARV. He is pursuing his volunteer work at several railroad museums. Gary is highly skilled in keeping the big volts and amps flowing on some mighty ancient streetcars and electric trains at the museum in Perris, near Riverside. In his 2007 motor home travels he visited 29 different states; spends most Christmases with daughter and family in Alaska. Before the "quake of '89" wiped out his radio shack, we used to work CW every morning for about 30 minutes.

Where are they now? While at an auto body shop, it turns out that another customer was Cathy Gunderson. In the 1980s she worked with Mary Duffield, WA6KFA, in helping kids become hams. Cathy taught ham radio classes and included theory in her Scotts Valley classrooms. Several of us used to take the ARES van to her classes and put the 7th graders on the air. (That probably would not interest them these days in the world of IPODS and cell phones.) Cathy is still teaching at a school near the Summit. She inquired into the health of Russ Mackey, NW6U. Russ was a big participant in ARES with Rich Hanset, KI6EH, when we met at Red Cross Headquarters. Received a nice email from Jeff Kenzli, N6GQ (exKA6LAF), last week. He began his ham career twenty years ago when he was only a little kid. He was too fast for me at the time and nearly everyone else in the club. As a pre-teenager he could do 20 wpm. Jeff has been operating CW contests from the shack of Lloyd Cabral, KH6LC (ex-AA6T), in Hilo.

Donna, AB6XJ, and I were driving our pickup in downtown Santa Cruz last week and were waved at by Larry, AA6MV, and Marti Selman, N6ULI. Larry used to help us give Volunteer Exams, Marti has written many articles published in the Santa Cruz Sentinel. Their son, Matisse, is a pal of mine who used to own and manage one of those eatery kiosks on the Mall.

Larry (always looking for bargains WB6MVK) showed how we can apply for two DTV converter boxes free by calling 1 888 388 2009 or by way of <[www.dtv2009.gov](http://www.dtv2009.gov)> You do know what is coming one year from now don't you ?

Marc mentioned that the Loma Prieta club was conducting classes that were attracting individuals who had taken CERT training. We agreed that will be a challenge to how best we can involve them in other aspects of the hobby. Emergency preparedness is the topic for our next club meeting which could be a golden opportunity.

I overheard a conversation between Frank (K6BDK) and Rick on the difference between FSK, PSK and MFSK. Frank is a grand example of someone who believes in life-long learning. Always good to have you around Frank

We are currently exploring how to get the most out of HamRadioDelux software for

controlling the remote TS570 and Rick is customizing the interface to suit our mode of operation.

Ron W6WO needs commitments to provide home brew items to exhibit at RadioFest. Contact Ron and he will collect and take care of your items if you are unable to attend. Deadline is Feb 21st to get stuff to him

Nobody seemed to know what a "Cootie Key" is. Please submit you best explanation via K6BJ.org (humorous entires are acceptable. Our President Rich (W1WUH) asked if "Bubble and Squeak" was a technical term used to describe a particular failure mode. I am only familiar with it as a delicacy in English cuisine involving yesterdays vegetable left-overs fried in lard. Delicious, but an acquired taste HI HI

Have fun all and expose your selves to RF

## SCCARC Board - 2008

<b>President</b>	Rich Olsen	W1WUJH	510 415-8920
<b>Vice President</b>	Don Taylor	K6GHA	k6gha@k6bj.org
<b>Secretary</b>	Kathleen McQuilling	K16AIE	476-6303
<b>Treasurer</b>	Cody Adams	KG6YPK	
<b>Board</b>	Christopher Angelos	KG6DOZ	688-3562
	Reed Cotton	NIWC	460-1801
	Mike Doern	KM6IKE	477-1161
	Bruce Hawkins	AC6DN	
	Ron Skelton	W6WO	477-1021
<b>K6BJ Trustee</b>	Allen Fugelseth	WB6RWU	475-8846

## MONTEREY BAY REPEATER ACTIVITY

Santa Cruz County	K6BJ 146.790- PL 94.8 Santa Cruz K16EH 147.945- PL 94.8 Watsonville K6BJ 440.925+ PL 123.0 Santa Cruz
	<ul style="list-style-type: none"><li>• SCCARC Net Monday 7:30 PM 146.79- /147.180+ /440.925+ linked</li><li>• SCCARC 10 Meter Net Monday 7:00 PM 28.308 MHz USB</li></ul>
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 <ul style="list-style-type: none"><li>• SLV Net Thursday 7:30 PM</li></ul>
Loma Prieta	AB6VS 440.550+ / AE6KE 146.835- PL 94.8 (Linked for net 94.8) <ul style="list-style-type: none"><li>• LP Net Tuesday 7:15 PM</li></ul>
Monterey	K6LY 146.97- PL 94.8 / 444.700+ PL 123 (Linked) Monterey <ul style="list-style-type: none"><li>• NPSARC Net Wednesday at 8 PM on K6LY/R</li><li>• Monterey ARES Net Wednesday 7:30 PM K6LY 146.970- (PL 94.9)</li><li>• Newsline (Ham News) Broadcast Wednesday at end of NPSARC Net</li></ul>
LPRC	WR6ABD 146.640- PL 162.2 / 442.900+ PL 162.2 (winsystem) <ul style="list-style-type: none"><li>• LPRC Net Tuesday 8:00 PM 146.640-(PL 162.2)</li><li>• Newsline (Ham News) Broadcast Wednesday at end of NPSARC Net</li></ul>

• 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	Feb 15
Board Meeting (following club meeting)	Friday	Feb 15
Short Skip articles due	Monday	Mar 10
SCCARC Meeting	Friday	Mar 21

## 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)

2/11	Allen WB6RWU
2/18	Chris KG6DOZ
2/25	Tom K6TG
3/3	Diane K16IFS
3/10	Cody KG6YPK
3/17	Phil KE6UWH

## SHORT SKIP

Published 12 times per year.  
Free to members.

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

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Santa Cruz, CA 95061-0238



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

## Radiofest-Monterey Bay

February 23 & 24 2008  
Saturday 9:00 AM - 5:00 PM  
Sunday 9:00 AM - 1:00 PM

Highlights are:

SCCARC Table  
Free Ham Cram for Tech License  
Free VE testing for tech-gen-extra  
Saturday night BBQ dinner w/ Harold Kramer ARRL Chief Operating Officer  
Speaker:Kenny Jensen presentation on the "NANOTUBE RADIO"  
Door prize drawings Sat & Sun. Much more!

IT ALL HAPPENS IN MONTEREY !  
Monterey Moose Family Center  
555 Canyon Del Rey (HWY 218)  
Monterey, CA 93940

Talk-in frequency: 146.970 Mhz- pl 94.8 (K6LY repeater)  
[www.radiofest.org](http://www.radiofest.org)