

DECEMBER 2006

THE MONTHLY NEWSLETTER of the SANTA CRUZ COUNTY AMATEUR RADIO CLUB

SHORT SKIP



SCCARC Holiday Luncheon



Holiday Luncheon at Marie Callender's

This year's holiday luncheon included a raffle, the Board of Directors installation, and presentation of Certificates of Appreciation to fourteen individuals who have made outstanding contributions to the Club. Our new Secretary, Cody Adams KG6YPK, and Director, Ron Skelton W6WO began their terms in office on this day.

Raffle items included a number of great items brought by our members, as well as two brand-new items purchased by the Club and dinner for two generously donated by Marie Callender's.

Those awarded Certificates of Appreciation (although not all were present) were:

Ron Baldwin K6EXT for consistently maintaining the highest standards in producing Short Skip

Pat Barthelow AA6EG for consistently coordinating top-quality speakers from a distance

Mike Doern KM6IKE for repeatedly securing the excellent venue and great prices for the Club's holiday celebrations

-Tom Ginsburg K6TG for his many years of reliable service as the Club's Net Manager and Net Control Station

-Rich Hanset KI6EH for his years of contributions, including ARES training and member name badge coordination

-Art Lee WF6P for his decades of meticulous collecting and superior writing for Short Skip, and for fostering many new radio amateurs

-Jeff Liebermann AE6KS for being a key caretaker of the Club's repeaters and for his willingness to coach others less experienced than himself

-Kathleen McQuilling KI6AIE for filling in during the 2006 Secretary vacancy and helping out with CAKE and Short Skip

-Kamal Mostafa KA6MAL for his many years of maintaining the Club's web site and reflector

Jamesburg De-Mothballed

We had a fantastic time this weekend building a ham operator work team to "de-mothball" the Jamesburg Earth Station, just an Hour and a half south of Santa Cruz. It was a lot of hands -on, down and dirty work, with hams crawling all over the dish structure with DVMs and handi talkies, wringing out a bunch of darn'ed Emergency Stop Buttons and microswitches distributed all over the facility.

Go to: [http://www.longandflatsociety.com/Galleries/JamesburgEarthStation/ThorsPictures1/tabid/468/path/+currentstrip/1/Default.aspx](http://www.longandflatsociety.com/Galleries/JamesburgEarthStation/ThorsPictures1/tabid/468/path/+/currentstrip/1/Default.aspx) to see some pictures...

The "emergency stop" refers to safety systems that slow and then stop the 30 some tons of dish in its tracks if anything anomolous is detected, during commands to move it. They worked so well, we were not able to move it, at all, this weekend (:>), much less get the high power Moon-bounce equipment installed.

However, there is light at the end of the tunnel, and weekend after next we should have the huge motors and gearboxes humming and whirring, keeping the < 1 degree beam pattern at 1296 centered on the correct crater on the moon, to bounce back to our guys on earth.

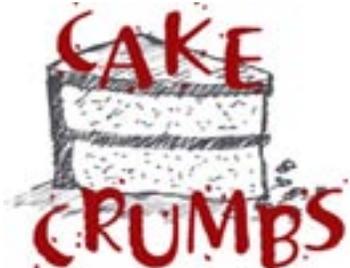
Actually several of us felt moved by the dish (so to speak) by climbing into the dish surface, and walking around, taking pictures....I could feel a small amount of movement (wobble in response to our footfalls) when we walked out towards the edge.

In the process, we discovered an interesting

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



November 18

London has a corner where anyone with a voice can get up literally on a soap box and speak their mind, our little corner of Santa Cruz is rather like that except that instead of one-to-many delivery our CAKE sessions tend to be many-to-many. So it was today but in a little more order than usual. We took turns to brag about our purchases at the club auction the previous night. The big spender was evidently Rich W1WUH who scooped up some remarkable buys including a very cool HP computer and a 200 Watt Ten-tec HF transceiver among other goodies. Next in the shopping hierarchy was none other than our Auctioneer Extraordinaire Dave W8WLL. Taking a \$5 chance on box of unknowns he acquired two very well engineered home brew items. One of special merit was a compact set of four switched LP filters. I have subsequently plotted their response and they are every bit as good as they look. Whoever made this item knew what they were doing both mechanically and electrically. Art AF6P was happy with a marine radio and Ron W6WO was very pleased with half a dozen RF tight project boxes and a nice 12V 26AH battery. Our club session last night was truly great

fun and many thanks are due to Kathleen KI6AIE for her organizing skills

Pat briefly described the big project that he is involved with in Carmel. By big I mean a 100ft dia. dish antenna. Pat has rounded up an impressive group who seem determined to put this dish back into service for university and Ham Radio. It will be a very big coup indeed if Pat et al can acquire the rights to that facility. Mikey N6IL is expert in finding obscure information in real-time. Point to an FCC code or a surface mount part and in a few minutes he has the data on his laptop by courtesy of GIGI's wireless access point. Roy KF6KVD filmed Dave in action last night using a camera not much larger than a credit card. It was good to welcome Frank K6BDK back from his wanderings in Kentucky.

December 2

Based on the many items discussed at today's session I am thinking of proposing to rename our club the Santa Cruz Consumer Electronic Club! It may however just be the silly buying season we are in. The array of tiny items is staggering. I particularly liked the \$12 digital camera, and the portable reading light that W8FLL came with. On a more sober note a complete software development platform was described by Peter AB6WM that sells for \$20 (good to have you back again Peter). Look up EZ430 (a TI product) on Google for more info. It was a pleasure to have Warren WA6EWT and his XYL Jean join us. Better coffee than at the other place eh Warren! Bob K6XX showed the latest version of his intelligent multi-band, multi-rig, multi-antenna control system. This is the result of 6 years of very

innovative effort. Today's mystery item of a Palomar RF noise bridge was not much of a challenge but in answer to your question Richard W1WUH, it uses a single gang variable capacitor. Fully in for XL max and fully out for XC max. Mikey N6IL showed an impressive example of his college work. It was a poster-sized illustration of how to set up surround sound speaker systems. Al KM6VV brought along a serious piece of his professional work based on a Schmartboard. It uses an ATMEL micro-controller and incorporates a 128x64 char.chip-on-glass display. A really exciting example of bread-boarding Al. We had some trouble with a JARL magazine text but the circuit diagrams were clear enough. Ron W6WO described encouraging results so far with his I&Q down-converter. Further improvements will involve achieving higher-gain, lower-noise at audio frequencies. Eric K6EP is doing commercial work in this area. Roy KF6KVD seems to be having a lot of fun recording movies of our club events these days. I presume that we could add some of this material to our web site. Next Wednesday we might also be thinking of Mikey as he undergoes the torture of his final exams. I suspect that proof of algorithms would be a stretch for any of us. Good luck Mikey!

Kathleen was busy at one end of our long table trying to get SKYPE to work but finally played us some XMAS music on her Apple laptop instead.

So on that happy note I wish to thank all who participated during the year. CAKE is now entering its 5th year and I look forward to many fun and informative sessions in

Holiday Luncheon continued

-Cap Pennell KE6AFE for his continued, active involvement as Club officer and with the repeater committee, Field Day, and ARES service

-Ron Skelton W6WO for scheduling, running, and reporting on Coffee Assisted Knowledge Exchange (CAKE) sessions

-Dave Stoddart W8FLL for providing innumerable raffle and auction items, his incomparable auctioneering, and his tireless Elmering



Photos: JV Rudnick (See club web site more photos.)

-Wayne Thalls KB6KN for his writing, exhibits, and public contacts which help to promote amateur radio among the general public

-Bob Wolbert K6XX for enabling the Club to salvage Field Day by offering the use of his property

--Kathleen KI6AIE

Ribbon Microphones

Have you ever wanted to build your own ribbon microphone? There are a couple here. And lots of pictures of other types of microphones. Including the microphones that Bob's company is manufacturing. This is an interesting site detailing some of the varied interests of my associate W1XYZ Bob Crowley. There are links to other hams and projects and it is a site that is rapidly growing. <http://microphonium.blogspot.com>

James Koger

pv544@earthlink.net

Treasurer's Report

At the November Board of Directors meeting, Treasurer Kathleen McQuilling, KI6AIE, reported that the SCCARC treasury had \$5408.26 in cash and bank accounts. At that time all financial obligations had been met, including the annual equipment insurance premium.

SCCARC Membership Renewals

If you haven't already renewed your membership for 2006, you may do it any time now. Annual dues are \$25 for full members, \$6 each for each additional member at the same mailing address, and \$10 for full-time students age 18 or under. Dues may be paid in cash or check (payable to SCCARC) at regular Club meetings, or checks may be mailed to SCCARC, P.O. Box 238, Santa Cruz, CA 95061-0238. Remember, ARRL dues may also be paid through your Club.

ARRL Membership: A Cut For Your Club

You can save yourself 39 cents and make a "painless" donation to your local Club at the same time by joining ARRL or renewing your ARRL membership through the Santa Cruz County Amateur Radio Club. Just bring your check, made out to "SCCARC" instead of "ARRL," along with your ARRL membership form, to the next Club meeting. We will send ARRL your paperwork and dues (less \$15 for a new membership or \$2 for a renewal). Of course, you may also mail your paperwork to SCCARC, P.O. Box 238, Santa Cruz, CA 95061-0238.

—SCCARC Treasurer,
Kathleen McQuilling, KI6AIE



By Art Lee WF6P

CHATTER

Received a call last night from Pete Carroll, KE6WAX, letting me know they are looking for instructors for a Tech class beginning in January, 2007. Al Marconett, KM6VV, has been working with Pete on this. The classes will be conducted at the yacht harbor with many mariners attending. If you desire to get your hand in teaching, contact Al.

Hey! Those CAKE meetings arranged by Ron, W6WO, are popular. Last Saturday we had several tables pushed together with 15 to 20 attendees. Lots of technical stuff was displayed and discussed, as well as much social banter. Ron was drawing some pretty impressive graphs. When I walked to the tables, customers in Gigi's Bakery and Restaurant inquired about our group. This was good PR for ham radio and Gigi's. Maybe we can talk the management into an actual ham station setup for one of our two hour Saturday sessions. Someone pounding out a QSO on a straight key would have to be impressive. I will be out of town and miss our Christmas party (something about being in only one place at a time, like Gilroy). I know that everyone will enjoy the festive luncheon.

Just finished reading a new book (yes, yet another!) about the 1937 disappearance of the famous Aviatrix, Amelia Earhart. This writing, Finding Amelia, by Ric Gillespie, is available in the Santa Cruz library. Of particular interest to me was the emphasis made on possible copying of her signals by ham radio operators and SWLs in California and Florida. Propagation and skip would play a part in this. During WWII, there were reports of ships hundreds of miles from battles picking up combat transmissions from carrier pilots.

Radio communications in 1937 were almost exclusively by cw on HF. Neither Amelia Earhart nor her expert navigator

Fred Noonan, were familiar with radio operation, frequencies or antennas. They were not Morse code operators, and depended on voice transmissions only. The author made a good case and his research was very thorough. We may never know what actually happened, it's an awfully big ocean out there. However, as ham radio operators, this is a book that I highly recommend and well worth exploring.

Today, as I write this, is December 7th. Back in 1941 I was present during the attack on Pearl Harbor by the Imperial Japanese Navy. It was the worst disaster ever experienced by our Navy. On one of the ships, the USS Utah, slept a radioman 3rd class, Ron Hubbard. He reported that he heard two heavy "thuds" and assumed that a tug had inadvertently rammed them. He put his shoes and pants on and ran topside as the ship rolled over. It had been struck by two bombs or torpedoes. He managed to reach the main deck and was the last man out. Others were trapped below. Ron is a ham living in Monterey and was present at today's annual Pearl Harbor Survivor's Meeting. As a thirteen year old back then, I didn't know that nearly fifty years later I would be working him on cw on 40 meters.

Tech License Class

Peter Kyril KE6RAX is organizing a Technicians license class to be held at the Santa Cruz Harbor District meeting room, on January 13 from 1-3pm. For more information contact KE6RAX or listen to the Monday K6BJ net.

Jamesburg Continued

problem. The dish has an elevation drive gear and system that only moves the 30 tons of dish, from the horizon to straight up, (Zenith) and not on over to the 180 degree opposite horizon. If we have a moon or satellite that comes over head, quite high, when it gets near the zenith, we will have to rotate the dish almost 180 in azimuth, to get the dish track the star or moon down the other side.....Capish?

How is this done in tracking programs? It appears to be a complicated problem.. How high in the sky does the moon get, in the worst case, at Say, 36 degrees latitude?

73, DX, de Pat AA6EG aa6eg@hotmail.com;
Skype: Sparky599

SCCARC Board - 2006

President	Christopher Angelos	KG6DOZ	688-3562
Vice President	Pat Barthelow	AA6EG	
Secretary			
Treasurer	Kathleen McQuilling	KI6AIE	476-6303
Board	Mike Doern	KM6IKE	477-1161
	Allen Fugelseh	WB6RWU	475-8846
	Rich Hanset	KI6EH	438-0615
	Bruce Hawkins	AC6DN	
	Vic Linderholm	AE6ID	476-5567
K6BJ Trustee	Royce Krilanovich	AC6Z	475-4798

MONTEREY BAY REPEATER ACTIVITY

Santa Cruz	K6BJ 146.790- PL 94.8 Santa Cruz
County ARC	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 28.308 MHz USB Monday 7:00 PM
San Lorenzo	WR6AOK 147.120+ PL 94.8 Ben Lomond
Valley ARC	• SLVARC Net Thursday 7:30 PM
Loma Prieta RC	WR6ABD 146.640-(PL 162.2) • LPRC Net Tuesday 8:00 PM
Naval Postgraduate School ARC	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)
ARES Nets	SC County Wide ARES Tuesday 7:15 PM on AB6VS 440.550- W6WLS 147.180+ AE6KE 146.835-(Linked repeaters / PL 94.8)
Followed directly by	• SLV ARES W6JVS 146.745-(PL 94.8) & WR6AOK 147.120+(PL 94.8) on alternate Tuesdays • South County ARES K6RMW 147.00+ (PL 94.8) • LPrieta ARES AE6KE 146.835- / AB6VS 440.550+ (Linked /PL 94.8) • Santa Cruz ARES K6BJ 146.79- / (PL 94.8)
	• Newline (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

Short Skip Deadline (January)	Monday	Jan 8
SCCARC Meeting	Friday	Jan 19
Board Meeting	Wednesday	Jan 24
SCCARC Meeting	Friday	Feb 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.

SHORT SKIP

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Free to members.

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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