

# SCCARA-GRAM



## Santa Clara County Amateur Radio Association

Volume 28, Number 11

November 2012



## President's Prose

At the moment, I'm in the airport at Salt Lake City killing time until the next leg of my flight to Butte leaves in two hours. We should be on the runway there by 2330, a most inconvenient hour. However, I've concluded that the worst day of flying is better than the best day of driving after having made this round trip twice already in October.

While at Pacificon, I placed an order for a magnetic loop antenna to be shipped to AE6PM/7. I'm hoping that it will provide some relief from the electrical noise that's prevalent there on 40 meters. I brought along some parts to put together some switching and control circuitry since it's a receiving loop only and its amplifier is unlikely to take kindly to being used as a transmitter load. Given the price I paid for it, I'm not in the mood for any accidents! The demonstration of the antenna at Pacificon was impressive—the electrical interference was reduced to almost nothing. Of course my environment will be completely different from the vendor area at the Marriott and it remains to be seen what the end result will be. Step one is getting another coax into the shack thru a hole that doesn't exist yet. I'm going to try a different approach this time, by not trying to drill thru several inches of concrete aka the basement wall.

I will not be at the November or December meetings, and you'll have a new president next year. Be sure to attend the November meeting; last I heard, Fred has a great speaker lined up. Besides, if you're not there you might get elected to something!

Remotely controlling a station either in Montana or California is still on my list of things to explore. It's on my never-ending list of things to do along with about 20 other projects.

Join Don (K6PBQ) and Wally (KA6YMD) on our 2-meter and 10-meter nets. If you have a license, you can be there.

73, Don, AE6PM



## November Meeting

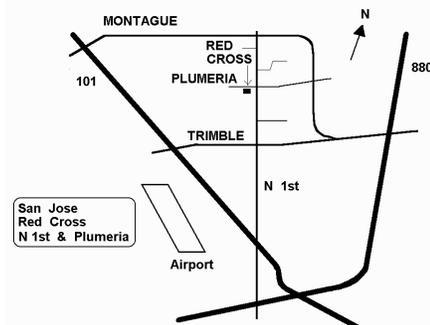
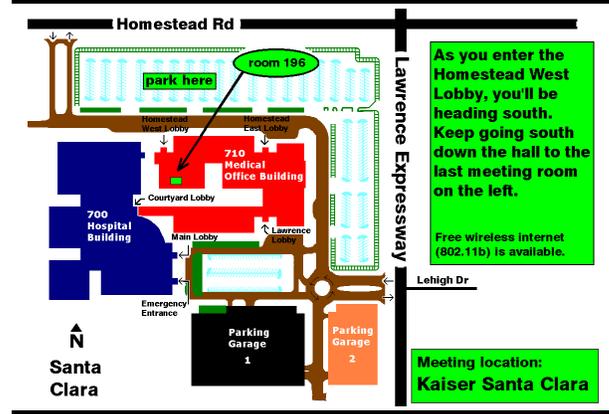
The November 12 meeting will feature Eric Swartz, WA6HHQ, CEO of Elecraft. Eric will demonstrate the KX3, KPA500, KAT500 and the K3/0. For those not familiar with the K-Line the K3/10 is the 10 watt version and the K3/100 is the 100 watt version of the K3. Come find out what the K3/0 is and how it can

## Calendar

- 11/12 SCCARA General Meeting—club elections
- 11/19 SCCARA Board Meeting--(San Jose Red Cross, 7:30p, all are welcome)

## General Meeting

- Day: Monday, Nov. 12, 2012  
Time: 7:30 PM  
Place: Kaiser Santa Clara, Rm 196  
Featuring: Eric Swartz, WA6HHQ, of Elecraft



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**The deadline for articles is the last Monday of the month.**

SCCARA was formed in 1921 and became a non-profit corporation in 1947. SCCARA is an affiliate of the American Radio Relay League (ARRL). The club station is W6UW.

Web page: <http://www.qsl.net/sccara>.

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(all officers are also directors)

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**SCCARA REPEATERS**

SCCARA owns and operates two repeaters under the call W6UU:  
2 meter: 146.985 - PL 114.8  
70 cm: 442.425 + PL 107.2

Phone auto-dial and auto-patch is available. The two meter repeater is located at Eagle Rock near Alum Rock Park in the foothills of east San Jose. The 70 cm repeater is located at the Regional Medical Center (formerly Alexian), east of downtown San Jose, north of 280 and 101.

**SCCARA NETS**

On our two meter repeater: Mondays at 7:30 PM, (not the second Monday--our meeting night). Coordinator: Don Village, K6PBQ. On ten meters, 28.385 MHz USB, Thursdays at 8:00 PM. Net control: Wally Britten, KA6YMD. Visitors welcome.

**N0ARY PACKET BBS**

SCCARA hosts the packet BBS N0ARY (Mt Umunhum). User ports: 144.93 (1200 baud), 433.37 (9600 baud), telnet sun.n0ary.org (login "bbs"). Sysop: Gary Mitchell, WB6YRU (packet info: [www.n0ary.org/ncpa](http://www.n0ary.org/ncpa))

**TELEPHONE NUMBERS**

SCCARA contact	Clark KE6KXO:	408-262-9334
Amateur license testing,	ARRL/VEC Silicon Valley VE group,	
Morris Jones, AD6ZH:		408-507-4698

bring in crystal clear signals when the noise in the shack is 50db over S9.

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## Club Elections

It's that time of the year for the 2013 SCCARA board elections! Each year all the officers are up for election and this year two of the directors are up for election. **Elections and last minute nominations (including self-nominations) will be held at the November 12 meeting.**

The two director slots open are presently occupied by Greg K6FNA and John NU6P. John NU6P has decided not to run for reelection. Our existing president Don AE6PM has also decided not to run. Special thanks to Don for providing fearless leadership as president and for John's excellent technical inputs as director.

So far the nominations are:

President:	Fred AE6QL
Vice President:	John W6JPP
Secretary:	Viki KI6WDS
Treasurer:	Goetz K6GKB
Director 1:	Greg K6FNA
Director 2:	Clark KE6KXO

Joe W6SNV

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## December Meeting

Our annual Christmas meeting will be a luncheon on Saturday December 15 at 12:00 noon. This year our luncheon will be at the Creekside Inn 544 W Alma ave, San Jose (one block west of Hwy 87).

This year we will be having a gift exchange. The way it works is that everyone brings a wrapped gift suitable for a man or women costing about \$10.00. This type of gift exchange is always a lot of fun to participate in.

Reservations need to be in by Monday, Dec. 10, (see the sign-up sheet). Talk-in will be on our repeater. W6UU, 146.985(-). Why not renew your membership at the same time. Looking forward to seeing all of you there.

73, Don Village K6PBQ

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## Work in Progress

The wind generator is up and running. I used schedule 40 1.5 inch galvanized pipe as the mast which works really well. Unfortunately, a ten foot section of galvanized pipe costs \$36 at Home Depot. There is a Tee at the bottom from which the wiring protrudes. Then a nipple and a flange at the bottom where it sits on the railing of my porch. A nylon ratchet strap holds the pipe to a roof beam which extends past the eave of the roof. So there it is, beautifully spinning away. And now the lessons learned...

This is a three phase, AC generator which uses magnets to create the field. Unlike a car generator which can modulate the field with a regulator, this wind generator puts out current all the time. If the storage device is full, then the inverter simply shorts the output wires and the blades come to a complete stop. What happens to



I do know that when the charging LED comes on, there is a slight hum which comes from the generator and propagates through the house which volunteers as a sounding board. This, along with the slapping cables on my antenna tower, similarly strapped to a roof beam, and I'm glad that I live at the other end of the house.

It takes a wind speed between 4 and 5 MPH to trip the inverter into charge mode. At its current height, the charge light is mostly off. The generator needs to be raised before I can expect any meaningful results. I now appreciate the wind gradient which goes from near zero at ground level to full wind speed at some distance above the ground. This is what creates the exquisitely beautiful twist in a sailboat's jib and main when sailing upwind. My wind generator is too close to the roof of the house and spends a lot of time searching for the correct direction. So another ten foot section of galvanized pipe needs to be bought and installed. Assuming that it could produce endless electricity, the next problem is storing that energy. I bought the biggest battery I could afford and it has a 250 ampere hour rating. Unfortunately, it doesn't want to surrender more than 25% of its capacity before it begins protesting and compromising its longevity. It was curiosity that encouraged me during this hobby related experiment, but I wouldn't consider the results encouraging. As winter approaches I am hoping for more wind and maybe I will be encouraged. The final blow is the hash this unit creates if connected to the battery powering my Icom radio. Simply unacceptable! So now I have to see if there is a way to filter out the noise or else the radio and wind generator cannot be on at the same time.

Goetz K. Brandt

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## Station Status



I was asked to witness the installation and fine tuning of a fan dipole antenna on top of the Red Cross building in San Jose. And could I take a picture so others could see what Lou, Gregg and Viki were up to? Well of course I could. No one said anything about a 30 foot ladder in a warehouse section of the building that goes almost straight up. I would rather swim in a shark tank than expose myself to heights. If you do a GOOGLE search on acrophobia you will see my picture. The only thing I fear more is the thought that someone might detect my cowardice, so up I went. Looking only upward revealed that the gorgeous banister on both sides of this steep stairway to heaven ended and that there would be an ugly transition required to reach up and over the high walled box exit to the roof. It is all behind me now except for some extra laundry that needs to be done.

So what's up there? A roof made up of heavy 8 by 8 foot sheets of rubber. They seem to be vulcanized together chemically and require extreme caution to prevent their being punctured and causing leaks. There are huge air conditioners everywhere that are carefully mounted above the surface of the roof. These are serviced by box section electrical conduits that run in all directions. There are PVC pipes that collect the condensation from these beasts that meander everywhere trying to find a drain. There are plumbing vents poking up like dandelions in a lawn. In the middle of the roof is a sinister looking six foot tall by one foot diameter cylinder which has five or six large coax cables stuffed in the bottom. Lou warned me to stay away from this beast lest I lose some of my manhood. In addition there are roughly 15 antennas of the vertical VHF/UHF variety in all quadrants. The coaxial cables to all these are also in electrical conduit pipe and all run to a central pass through box to levels below. All the conduits, box, plastic and metal are supported with wooden blocks to protect the rubber roof.

the output when just below charging speed I haven't figured out.



ascents to the roof planned, but sadly, my appointment book seems to jam packed in the near future.

Goetz K. Brandt

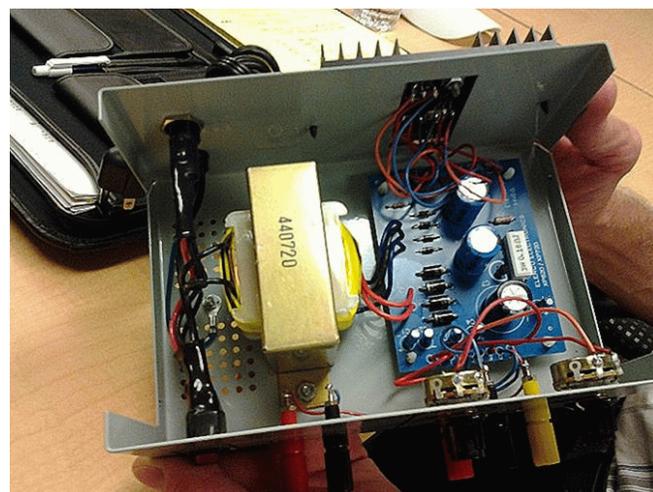
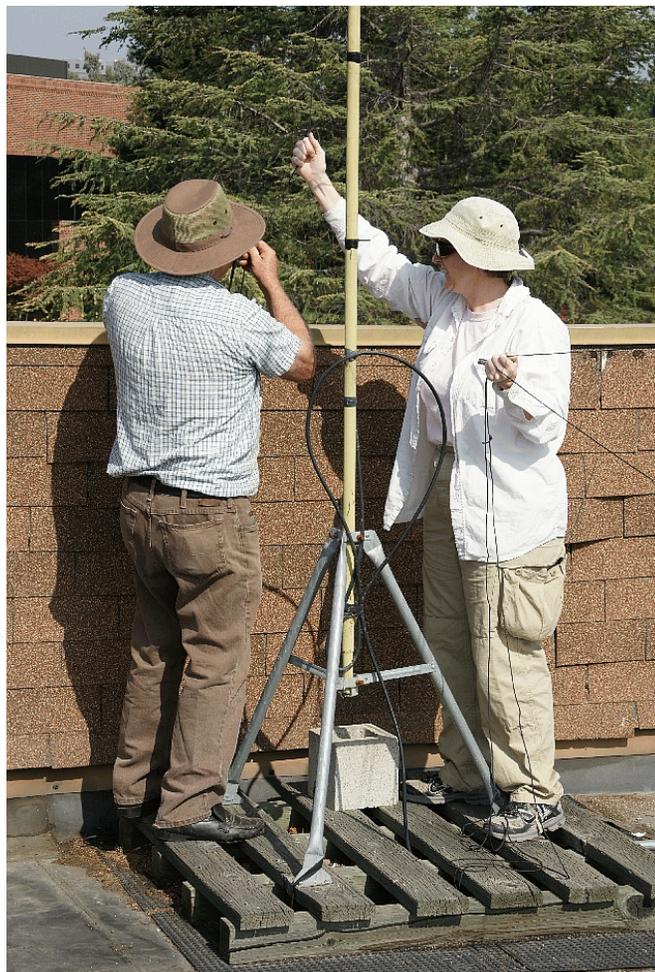
## Cable Wraps

I found a good Sam's Club deal. For all those wall warts, coax cables, interconnect cables, etc. you can get 100 Velcro tie raps for \$6.98. Seems like a lot of tie raps, but once you start cleaning up all the rats' nests they go pretty fast. If anyone is interested let me know and I will order them for you.

Goetz K. Brandt

## Member's Night

The October meeting was our "homebrew" night. Here's a sample of a few of the projects and items:

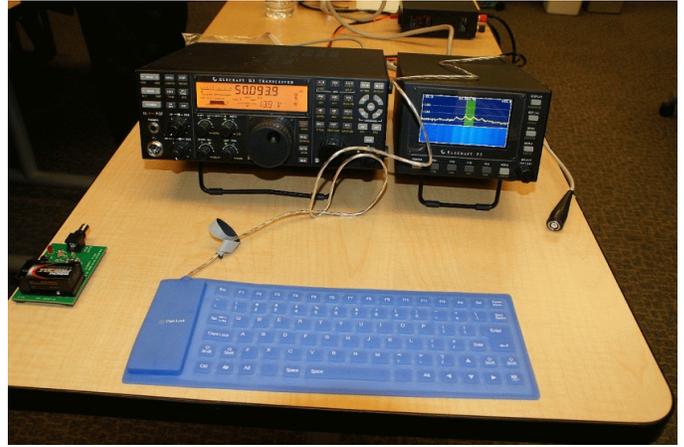


Fred's AE6QL Elenco power supply kit

Greg and Lou were able to find a thick rubber mat and a wooden pallet to place under the center mast for the fan dipole antenna they were installing. The ends of the dipole were anchored with eye-bolts screwed into the four foot high modesty panels that hide the roof from the street. Viki plumb bobbed the mast as Lou and Greg adjusted the tension to exactly vertical. Then the fun began, going below and taking SWR readings of the multiple bands. Lou called out the readings while Gregg created a spreadsheet of the results. Then back up on the roof to trim the elements to match the readings taken. It soon became apparent that what you did to one dipole affected the others. As one began to behave another began to misbehave. There was a lot of mumbling and I think I heard the phrase, "compromise antenna," more than once. There are more



John's W6JPP satellite antenna



Fred's AE6QL K3 + Panadaptor, connected to the noise generator. The green band on the right screen is the +/- 15KHz centered on the tuned frequency.



Jim AG6PC showing his Doppler direction finder board held in the PanaVise. Also l-r, Don K6PBQ, Henry KE6HOU, Mike KB6LCJ, Sheryl KJ6UXU.



Close-up on the noise generator

Photos by Goetz K6GKB, Jeannie KG6YOR, and Viki KI6WDS

## Frequency Test

It's that time of year again. The ARRL Frequency Measuring Test is almost upon us. You might remember that I tried my best last year and reported on my results. Several of the tests I had down to the last decimal place, but alas the pros take it to one thousands of a hertz. What is especially fun about this contest is that it involves only you and your radio.

I have an Icom IC-775DSP with a crystal oven which was calibrated by Kuni in Poulsbo Washington. This had the added pleasure of not having to make any adjustments to my readings. However, you do not need an accurate display of frequency, you simply need to calibrate your receiver using WWV to determine the offsets that need to be applied to your various bands. You can of course join those who take things to 1/100 or 1/1000 of a hertz, but that's a club I wouldn't be able to join.

So here is the website that my shed some light on what I am talking about: <http://www.k5cm.com/>

Goetz K. Brandt



Viki's KI6WDS solar panel with charge controller box and powerpole connections for the battery

# A Day in the Park

At the beginning of September a few of us (Clark KE6KXO, Gregg KF6FNA, Lou WA6QYS, Gwen KF6OTD, Viki KI6WDS, and later DOn AE6PM and a visitor Lee Carlton KG6EPQ) got together at Henry Schmidt park in Santa Clara, originally to do an A/B comparison of a Bravo 5 and Gregg's beam antenna. I don't know the particulars of the beam, because we didn't get as far as setting it up. However, Clark brought along a home-brew buddipole (a portable adjustable dipole) that we assembled and put up (albeit with disconcerting guying results). We spent a bit of time running it up and down while adjusting the lengths of the horizontal crossbars and checking the results on the antenna analyzer. The best contact on the Bravo 5 was American Samoa. It was also a good day for me to try "bike portable" with the new Burley Flatbed trailer. It handles pretty well considering the width, but one does have to get used to thinking about 3 tire paths instead of just one. I also need a better solution to keeping the Bravo 5 pieces attached to the trailer, and generally to just bring less stuff. I was very grateful to Clark for playing Road Angel after I misjudged the setting sun (see the bit about bringing too much stuff!), and following me home at 13 mph in his GTI. And many, many thanks to Gregg and Lou and Gwen for bringing canopies, the generator, charcoal, food, ice cream sandwiches, and all the other amenities that made the day less like a century rest stop, and more like...a day in the park!

antenna and Gwen contemplating the antenna guying status



Clark KE6KXO assembling his portable antenna



Bike portable station: ~50 lbs.



Clark KE6KXO and Lee Carlton KG6EQP ponder propagation while Lou (WA6QYS) makes contacts and Gregg KF6FNA gets the update on Goetz K6GKB's flooded bilge situation



Clark's antenna looming over our 3-tent establishment with Clark and Lou analyzing the



All the comforts of home, in the park!

Viki, KI6WDS

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## Caveat Emptor

The three amigos, Clark (KEE6KXO), Gregg (KF6FNA) and I (K6GKB) went to Sam's Club in Concord to buy a battery for my wind generator. I had in mind an 8D truck battery which they carry for a considerably reduced price. These things weigh just shy of 100 lbs. I know this because I lifted an old dead one which would be the redemption of the \$15 core charge into the trunk of my Camry. Being the driver on the way up, I handed my Samsung Galaxy SII to Gregg and my Tom Tom to Clark with hopes that we might let these GPS's pick the most direct route to our destination. Intuitive seems to be geared to the next generation, because we finally stopped in a parking lot somewhere in Concord where we coaxed Brunhilde into showing us the way.

Can't tell you how accommodating these fellows in Sam's tire/battery department were. They had the old battery out of and the new battery into my trunk before I knew what happened. My credit card finalized the deal in record time and off we went. Actually we stopped at Sam's food court for some Nathan's hotdogs before climbing onto 680 for the return home. Once home, Gregg and I, with Clark supervising, delivered the battery to my porch where the wind generator is installed. That's when I noticed the date stamp on the battery which was 2/11. My heart sank as I realized I had just bought a two year old battery! So I opened up the inspection caps and all cells were low on water. The death of a lead acid battery is sitting unused while the internal resistance slowly discharges the battery. Although I am not a chemist, I understand that during discharge lead sulfate accumulates on one of the plates as part of the process. Not a bad thing if a reverse polarity is applied and this blush of sulfate reestablishes itself as sulfuric acid. But given some time to fraternize and these sulfate molecules fall in love with each other forming lasting bonds that cannot be broken and manifest as crystals that will not dissolve. And so it is that the cells of my brand new battery can only float two of the four balls in my hydrometer.

Bummer! I can't tell you deflating it is to think you have just beaten the system when in fact you have been forked by the fickle finger. These fellows in the tire department spotted a rube and stuck it to him. The moral here is, buyer beware. The battery will go back...

Goetz K. Brandt

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## ARRL News

From *the ARRL Letter*, October 11, 2012

### FCC AGREES WITH ARRL ON EMISSION DESIGNATORS, TDMA

Part of WT Docket No. 12-121 included a response to a March 2011 Petition for Rulemaking filed by the ARRL. Through the Notice of Proposed Rulemaking, the FCC is seeking to amend the Amateur Service rules to allow amateur stations to transmit additional emission types in order to permit Time Division Multiple Access (TDMA) in the Amateur Service; however, it denied the League's request for a blanket waiver pending the resolution of the rulemaking proceeding. The FCC pointed out that one of the purposes of the Amateur Service is to contribute to the advancement of the radio art: "Allowing amateur stations to use communication technologies that are used in other radio services, such as TDMA technologies, allows Amateur Service licensees to

experiment with and improve these technologies and, therefore, is consistent with the basis and purpose of the Amateur Service. For this reason, we agree with the ARRL that the current rules allowing the use of multiple time-slot TDMA repeaters, but not permitting amateur stations to transmit single-slot TDMA emissions, may be unnecessarily impeding Amateur Radio operators in advancing the radio art." (Read more at [www.arrl.org/news/fcc-seeks-to-change-amateur-radio-licensing-rules-allow-additional-emission-types](http://www.arrl.org/news/fcc-seeks-to-change-amateur-radio-licensing-rules-allow-additional-emission-types).)

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From *The ARRL Letter*, October 25, 2012

### FCC SEEKS COMMENTS ON PROPOSED CHANGES TO AMATEUR LICENSING RULES, EMISSION TYPES

Earlier this month, the FCC released a Notice of Proposed Rulemaking (NPRM) -- WT Docket No. 12-283 -- proposing to amend the Part 97 rules governing the Amateur Radio Service. On October 24, a summary of the NPRM was published in the Federal Register and the FCC is seeking comments on it. ([transition.fcc.gov/Daily\\_Releases/Daily\\_Business/2012/db1002/FCC-12-121A1.pdf](http://transition.fcc.gov/Daily_Releases/Daily_Business/2012/db1002/FCC-12-121A1.pdf))

Specifically, the Commission is proposing to modify the Amateur Radio Service rules to grant examination credit for expired and beyond-the-grace-period-for-renewal Amateur Radio operator licenses; to shorten the grace period during which an expired amateur license may be renewed; to revise the time a call sign is not available to the vanity call sign system correspondingly, and to reduce the number of volunteer examiners needed to administer an amateur license examination. The NPRM also asks for comment on amending the rules to permit remote test administration, and proposes to amend the Amateur Radio Service rules to allow amateur stations to transmit certain additional emission types.

Comments must be filed on or before December 24, 2012 (60 days after publication in the Federal Register); reply comments must be filed on or before January 22, 2013 (90 days after publication in the Federal Register). Instructions on how to file comments are listed beginning on page 12 of the NPRM.

### THE 2012 ARRL NOVEMBER CW SWEEPSTAKES

Steeped in tradition and still as exciting as ever, the 79th Annual ARRL Sweepstakes offers US and Canadian operators a fun-filled contest opportunity again this fall. First up is CW Sweepstakes during the weekend of November 3-5. "You don't have to have a huge station with large antennas to have fun in Sweepstakes," explained ARRL Sweepstakes Manager Larry Hammel, K5OT. "Maybe you have 100 W and a backyard dipole or vertical. Or perhaps the challenge of a 5 W QRP effort hits your hot button this year. You will be amazed at the number of stations you can work as you trade exchanges all over the continent."

This year, with four new Canadian Sections, the November Sweepstakes will be a bit different: In August, the RAC split its Ontario Section into four new Sections: Ontario East (ONE), Ontario North (ONN), Ontario South (ONS) and the Greater Toronto Area (GTA). Contesters now need to work 83 sections to earn the coveted Clean Sweep. (Read more at [www.arrl.org/news/fun-and-excitement-fill-the-airwaves-for-the-2012-arrl-november-cw-sweepstakes](http://www.arrl.org/news/fun-and-excitement-fill-the-airwaves-for-the-2012-arrl-november-cw-sweepstakes).)

## W1AW RECEIVES SEMI-ANNUAL ANTENNA INSPECTION, NEW ANTENNA FOR 160 METERS

On October 24, Matt Strelow, KC1XX, and Andrew Toth of XX Towers came to Newington to inspect the antennas and towers at W1AW, the Hiram Percy Maxim Memorial Station, and W1HQ, the Laird Campbell Memorial HQ Operators Club. In addition to the annual autumn inspections, they also repaired some of the W1AW antennas. Strelow and Toth replaced the 160 meter dipole located atop the Rohn 65 (120 foot) tower. The antenna--used for both station broadcasts and visitor operations--was damaged in a windstorm a few weeks ago. "I'm happy that we now have a new 160 meter dipole," said W1AW Station Manager Joe Carcia, NJ1Q. "I missed W1AW being active on 160 meters, as did other radio amateurs. The station's 1300 W 160 meter signal now has someplace to go." (Read more at [www.arrl.org/news/w1aw-receives-semi-annual-antenna-inspecti-on-new-antenna-for-160-meters](http://www.arrl.org/news/w1aw-receives-semi-annual-antenna-inspecti-on-new-antenna-for-160-meters).)

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# Meeting Minutes

## General Meeting, Oct. 8, 2012



Kaiser Hospital, 710 Lawrence Expressway, Santa Clara CA 95051 Status: Unreviewed

The SCCARA General Membership Meeting was called to order by Fred AE6QL at 19:31, as Don was not present.

Members and visitors introduced themselves.

### Announcements:

Fred AE6QL announced that tonight's meeting would be homebrew night, as well as nominations for candidates for office, and a demo of the Panadaptor. He also mentioned that the coming weekend is Pacificon, and also the National Convention.

Don K6PBQ announced the club station will be open Oct 27, after the SVECS breakfast. Also, the station will be open in November for the ARRL phone (Nov 17) and CW (Nov 3) Sweepstakes. The club station has a new 20m fan dipole, and both antennas have been raised.

Lou WA6QYS announced the SVECS breakfast will be Oct 27 at the Santa Clara Seniors Center at Fremont and Monroe: 5\$ for all you can eat. The breakfast is at 9am, program at 10am; be there at 7:30am to help. The speaker will be Stephanie Christenberry, the Santa Clara liaison to the County Terrorism Task Force. See the SVECS web site at [www.svecs.net](http://www.svecs.net). Please let Lou know if you are attending so he knows how many eggs to get: [wa6qys@arrl.net](mailto:wa6qys@arrl.net).

John Parks W6JPP announced that Pacificon is still looking for volunteers for security detail (monitoring the exhibit hall, walking around). If you volunteer more than 8 hours, your admission is refunded. Fred AE6QL announced the Pacificon Antenna Symposium on Friday has been moved to a larger room. John W6JPP also reported that the ARRL headquarters call sign W1AW will be on the air portable, and visitors can sign up and operate.

Joe W6SNV who is our nominating committee of one, summarized the elections activity. Officers are elected every year (President, Vice President, Treasurer, and Secretary). Two of the five Board members are up for election this year (the other three will be next year): John NU6P and Gregg KF6FNA. John NU6P will not be running again, but Gregg will. For President, Don AE6PM is not

running again. Fred AE6QL is not running for Vice President again, but would like to run for President. Goetz K6GKB will run again for Treasurer, and Viki KI6WDS will run again for Secretary, although with some possibility of working remotely. There are openings for Vice President and one Director. The following people self-nominated: John W6JPP for Vice President, and Jeannie KG6YOR and Clark KE6KXO for Director. Voting for Directors will be the highest number of votes for the top two people. Joe W6SNV will follow up by email. Viki KI6WDS will bring ballots to the next meeting, and will email the latest roster to Joe. Absentee ballots were discussed, and will be made available if requested. Floor nominations will also be held next meeting.

The homebrew portion of the meeting commenced with the following projects:

Goetz K6GKB briefly described his Near-Vertical Incidence Antenna project utilizing an 8-ft whip antenna on the back of his car which can be tethered to a nearby fencepost so as to lay roughly flat about 4ft off the ground. He used this on the Rhubarb net. Unfortunately his presentation was on a flash drive and no one brought a laptop.

Goetz also described his wind generator project, soon to be an article in the newsletter. It is up, spinning, and generating electricity. It has a 3-phase generator, making 75V, with a box which turns it into the DC level of the battery it senses is attached: 12V or 24V. When the battery is full, it applies a magnetic brake and comes to a grinding halt; the brake is also applied if the wind is > 150 mph. He got the Sun Force generator at Fry's. It is rated at 650W @ 24V, or 450W @ 12 V. In pursuit of the extra 200W, he is going to get a 24V truck battery.

Jim AG6PC brought a 2m Doppler direction finder he is building from a Ramsey kit he got at Halted. It uses an array of 4 antennas on the car roof, and has an LED display showing the direction of the signal. Other interesting features were the PTT switch (momentary or switched) to avoid the floor switch, a 1.5A power supply with meter, and the PanaVise which held the PC board for display.

John W6JPP built a circularly polarized omnidirectional antenna to work satellites, from an article in QST. It works 2m/440 from either a HT or mobile. It consists of Aluminum pipes at lots of different angles, with ferrite chokes on all leads. The tube and lead dimensions are critical. He built it in LA a couple years ago, and brought it home in checked luggage this fall, to the great interest of the TSA.

Doug AF6CI wanted to build a VFO circuit but doesn't have a lot of test equipment, so he built a temperature controlled oven in order to test the VFO circuit. Using a power FET from his junk drawer, four 50-ohm resistors for the heater, a resistor + potentiometer to bias the FET, and a 27-cent thermistor, all in a 3\$ metal box from Radio Shack, he has an oven for about \$4. It heats from room temperature to about 100 degrees F, runs 4W, and stays about 20 degrees above ambient.

Jim AG6PC had a question for the group: on an old mobile unit that Yaesu deemed "not able to be repaired", he found a diode installed vertically with the upper lead folded back down to the PC board, but in contact with the shield of an adjacent electrolytic cap. He wondered if this was intended. In the group discussion, it was concluded this would likely be a Bad Thing, but that he should check the schematics to see if that lead of the diode and the cap were intended to be shorted on the board.

Viki KI6WDS brought the solar panel assembly used for Field Day. Don AE6PM led the construction effort with use of his shop. The panel has a charge controller which puts out up to 21V DC in

direct sun, and ~16V when facing a bright sky but not in bright sunlight. With a "Watts Up" meter in line to the battery, the voltage and current can be monitored in real time. Viki also brought an example of Cinch-Jones connectors, with a gruesome tale of actually soldering them to 8-conductor controller cable for the Bravo 5 antenna (~6 hours for 4 connectors).

Fred AE6QL brought several projects: one was a power supply kit from Elenco (Deluxe Regulated Power Supply Model XP-620) which was from the time of tubes. It has point to point wiring on a single-sided PC board, which took a long time to do. He also brought a K3-PR6 6m preamp (designed for his Elecraft), which looked like a finely machined piece of art. He also brought a noise generator, which amplifies a 50-ohm noise source for testing filters. He would hook it up to his Elecraft radio to demonstrate, but the AGC on the radio is so good he doesn't see any increased noise.

The last segment of the meeting was Fred AE6QL demonstrating the Elecraft K3 and panadaptor as well as a spiffy roll-up keyboard. The K3 has isolation transformers so it can connect to a laptop to copy CW and RTTY; without the laptop it has a 15-character display. The software wasn't ready to show this on the Panadaptor, but Fred explained the spectrum capability. In a super-het design, the received signal is narrowed down by the IF filter, to exclude stuff on either side. The roofing filter acts like a brick wall. The panadaptor displays what is outside the filters, +/-15KHz of the center frequency. He showed it can also show what is outside USB (above center frequency) or LSB (below). He explained it is excellent for contesting: while you are still making your QSO, you can eyeball the next signal.

Fred concluded the meeting with highlights from the Pacificon talks and testing schedule.

Viki Moldenhauer, Secretary KI6WDS

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## Board Meeting, Oct. 15, 2012



Red Cross Building, 2731 N 1st St, San Jose CA Status: Unreviewed

The SCCARA Board Meeting was called to order by Don AE6PM at 19:42.

Attendance: President: Don Steinbach AE6PM; Vice President: Fred Townsend AE6QL; Secretary: Viki Moldenhauer KI6WDS; Treasurer: Goetz Brandt K6GKB; Trustee: Don Village K6PBQ; Directors: Lou Steirer WA6QYS, Wally Britten KA6YMD, Gary Mitchell WB6YRU, Gregg Lane KF6FNA; Visitors: Gwen Steirer KF6OTD; Clark Murphy KE6KXO; Absent: John Glass NU6P (excused).

Agenda additions were discussed.

Invitation of the ARRL officials to our Christmas luncheon was discussed; Lou WA6QYS moved to invite Bob Vallio and Brandon Bianchi plus one guest each as guests to our luncheon; Don K6PBQ seconded; the motion passed unanimously.

The HF antennas on the Red Cross roof: Gregg KF6FNA reported the vertical is working well after raising it 10 feet; a 20m dipole was added to the 40 and 80; the 20m won't tune: it is flat 3.6 to 3.2 below, through, and above the band, with no dip to a good SWR. The 40 resonates at the low end, and 80 is usable in the center of the voice segment. We are considering turning the 20m 90 degrees to the 40 and 80, to decouple it. There will be another work party

this Sunday Oct 21. Fred AE6QL will bring a fan dipole analyzer.

Don AE6PM announced the SCCARA-gram inputs are due to Gary no later than October 29, 2012 (or sooner!).

Repeater update: Don AE6PM put the repeater, duplexer, and controller in the rack, and powered it up. One control signal is inverted; it has a low output through the duplexer. He will work on it this weekend. Gregg KF6FNA has not yet purchased the 2m antenna. In the ensuing discussion, Fred and Lou thought a 1/2 wave might have more reception down below the horizon. Clark has a 2m vertical at his place: Gregg will look at this one, or look into SVECS' J-poles.

BBS: Gary WB6YRU did some work on the antenna, and found the 220 port not connected to the antenna. The radio up there is only putting out 7 W, the hi/lo power button doesn't work, and the readout has no display. A recommendation is needed for a new mobile 220 rig: it should be 40-50 W, no bells & whistles, just reliable. Fred suggested a Midland. There was discussion of a BBS Site Visit next month, before the weather gets bad. It is on Mt. Umunhum, on the ridge north of the peak. A 4WD vehicle is better but not required. Gary will put together publicity for an event next spring.

AMSAT: Goetz received an invitation to renew membership from AMSAT; annual dues are \$80. Gregg would like to get our satellite-capable club radio up for Field Day next year. Gregg moved we send the \$80 to AMSAT for membership; Fred seconded; there were none opposed. The treasurer will issue a check for \$80 to AMSAT.

Station trustee: Don announced the club station will be open Oct 27th after the SVECS breakfast, and also for the ARRL CW and SSB Sweepstakes (CW on Nov 3rd, 2100 UTC = 2pm, SSB Nov 17th 2100 UTC = 1pm local time, because the time changes in between). The Boy Scouts JOTA got cancelled for Oct 20th, because there were too many scouts and not enough leaders for the Red Cross to handle.

The Christmas party is on Dec 15th: send your RSVP in with 28\$ for the luncheon. You can add the 20\$ for next year's membership at the same time; make the check payable to SCCARA. Mention your menu choice when responding.

Treasurer's report: Goetz handed out copies of the treasurer's report: Checking = \$4683.66, Savings = \$500.07, Cash = \$231.65, Total = \$5415.38. Goetz would like to regularly send backups of the Quicken File to other board members for remote backup.

Windcharger report: Goetz reports it would have been wiser to look at the average windspeed in the Bay Area before installing his system: the average is 4 to 5 mph; the windcharger cuts in at 4.5mph. The little LED that indicates charging is rarely on, and it cuts out if it goes too fast. He suggested putting it up at Field Day next year.

Elections: Voting is next month. Current nominations are: President - Fred AE6QL; Vice president - John W6JPP; Treasurer - Goetz K6GKB; Secretary - Viki KI6WDS; Directors - Gregg KF6FNA, Jeannie KG6YOR, Clark KE6KXO. (Voting for one of each except 2 Directors). Write-ins will be available on the ballot, and we will take floor nominations at the next meeting. Viki will make up ballots and have them available for absentee voting in advance of the next meeting.

Vice President: Fred AE6QL reports the next speaker will be Eric Swartz WA6HHQ from Elecraft.

Don AE6PM will not be here for the next 2 months.

Don AE6PM adjourned the meeting at 21:38.

Viki Moldenhauer, KI5WDS, Secretary

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## Packet Pieces

### Downloaded from the BBS packet network:

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Date: 3 Oct 2012 11:59  
From: GM3YEW@GB7YEW  
To: HUMOUR@WW  
Subject: Jokes 3/10

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A cute blonde walks into a hotel bar, and spots the only other customer, a handsome young man drinking alone at a corner table.

As she gets closer, she notices that he has had a few drinks already, so thinks he will be an easy target.

She walks over to him : "Hi handsome, can I buy you a drink?"

"Sure... Why not," says the young man, "I'll have a Magic Beer please".

"Magic Beer - what's that?" asks the blonde.

"Watch this," says the young man as he drains his glass and walks over to the window. He takes off his black-rimmed spectacles and flicks back his hair from his brow, then he jumps on the window ledge and launches himself off - flies round the building twice, and lands back on the window ledge.

"Wow! That was amazing" says the blonde, as she heads over to the bar. "I'll have two of whatever that young man is drinking please." she asks the barman.

The barman pours two glasses of beer, and the blonde walks back over to the table, and downs her drink in two gulps. She climbs up onto the window ledge, and launches herself off... Falling face-first onto the concrete below.

The barman has been watching what has been going on, and says to the young man...

"You know, Superman - you're a right swine when you've had a few!"

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Next time you think your hotel bill is too high you might want to consider this...

A husband and wife are traveling by car from Key West to Boston.

After almost twenty-four hours on the road, they're too tired to continue, and they decide to stop for a rest. They stop at a nice hotel and take a room, but they only plan to sleep for four hours and then get back on the road.

When they check out four hours later, the desk clerk hands

them a bill for \$350. The man explodes and demands to know why the charge is so high. He tells the clerk although it's a nice hotel, the rooms certainly aren't worth \$350. When the clerk tells him that's the standard rate, the man insists on speaking to the manager.

The manager appears, listens to the man, and then explains that the hotel has an Olympic-sized pool and a huge conference centre that were available for the husband and wife to use.

"But we didn't use them," the man complains.

"Well, they are here, and you could have," explains the manager.

He goes on to explain they could have taken in one of the shows for which the hotel is famous. "The best entertainers from New York, Hollywood and Las Vegas perform here," the manager says.

"But we didn't go to any of those shows," complains the man again.

"Well, we have them, and you could have," the manager replies.

No matter what facility the manager mentions, the man replies, "But we didn't use it!"

The manager is unmoved, and eventually the man gives up and agrees to pay. He writes a check and gives it to the manager. The manager is surprised when he looks at the cheque.

"But sir," he says, this cheque is only made out for \$50."

"That's correct," says the man. "I charged you \$300 for sleeping with my wife."

"But I didn't!" exclaims the manager.

Well, too bad," the man replies. "She was here and you could have."

73 Dave. GM3YEW

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Date: 17 Jul 2010 01:33  
From: W1GMF@W1GMF  
To: HUMOR@USA  
Subject: Dog and Cat Characteristics

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Dogs come when you call them. Cats take a message and get back to you when they are good and ready.

Dogs will let you give them a bath without taking out a contract on your life.

Dogs will bark to wake you up if the house is on fire. Cats will quietly sneak out the back door.

Dogs will bring you your slippers or the evening newspaper. Cats might bring you a dead mouse.

Dogs will play Frisbee with you all afternoon. Cats will take a three-hour nap.

Dogs will sit on the car seat next to you. Cats have to have their own private box or they will not go at all.

Dogs will greet you and lick your face when you come home from work. Cats will be mad that you went to work at all.

Dogs will sit, lie down, and heel on command. Cats will smirk and walk away.

Dogs will tilt their heads and listen whenever you talk. Cats will yawn and close their eyes.

WB6EMR, James D. Armstrong, Jr.,  
evening & msg: 408-945-1202

KD6FJI, Lloyd DeVaughns,  
408-225-6769 e-mail: kd6fji@arrl.net

KK6MX, Don Apte, 408-629-0725  
e-mail: kk6mx@aol.com

W6JPP, John Parks, 408-309-8709  
e-mail: w6jpp@arrl.net

K6PBQ, Don Village, 408-263-2789  
e-mail: donvillage7@yahoo.com

WA6QYS, Lou Steirer, 408-241-7999  
e-mail: wa6qys@arrl.net

WB6YRU, Gary Mitchell, 408-269-2924  
packet: home BBS NOARY  
e-mail: wb6yru@ix.netcom.com

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## Need Help?

Amateurs have a long history of helping each other. An experienced amateur who helps another is traditionally called an "Elmer." If you have a question or problem, you are encouraged to ask one of SCCARA's Elmers. Below is a list of topics including who to contact for each. If your topic isn't listed, ask one of the Elmers under the topic that comes closest and we'll ask around.

If you consider yourself to be reasonably competent in at least one area of amateur radio and would be willing help others, please fill out an Elmer form from the club secretary.

Antennas, feed-lines, tuners: WB6EMR, W6JPP, K6PBQ, WB6YRU

Lightning protection, grounding: WB6YRU

Station set-up, equipment: K6PBQ, W6JPP

TVI/RFI: WB6YRU

Homebrew projects, construction: KD6FJI, WB6YRU

Computers: older IBM PC: WB6YRU

Packet Network (BBS, forwarding): WB6YRU

Code operating and installations: WB6EMR, K6PBQ

DX (long distance/propagation): WB6EMR

Emergency operating/preparedness: WA6QYS

HF operating techniques (SSB, CW): WB6EMR, K6PBQ

Legal/FCC rules: WB6YRU

SCCARA (club inner workings): K6PBQ, WB6YRU, WA6QYS

EchoLink: KK6MX

License testing, new amateurs: W6JPP

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## Newsletter Notes

Thanks to Goetz K6GKB and Viki KI6WDS for the articles and photos, and Jeannie KG6YOR for some additional photos.

There were some photos taken during the meeting (from all contributors) that had focus or movement problems. Please keep in mind that you don't have rush or worry about missing a photo at a meeting. Feel free to ask that someone pose or hold something a certain way or whatever for a good photo.

Some of you may remember Bob KB6OHO who was always taking photos (it was only film back then). He was so good at it, I consider him to be a professional. I never got a bad photo from him—and he contributed plenty of photos. One of Bob's secrets was to not be bashful about asking someone to turn this or that way or please hold still for the camera, or whatever was needed. It only took a couple of seconds and everyone was very cooperative.

So, take your time, do a good job. The rest of us are happy to help if we can, just ask.

73, Gary WB6YRU, editor

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## December Meeting Sign-up

Our annual December meeting will be a luncheon on December 15 at the Creekside Inn 544 W. Alma ave, San jose. We will have a choice of three entrees, \$28.00 each. Talk-in will be on our repeater, W6UU 146.985(-). I'm looking forward to seeing all of you there. Why not renew your membership (back cover) at the same time.

73, Don K6PBQ

For the annual meeting in December, sign me up for the following lunch(es) at \$28.00 ea.

\_\_\_\_ Coulett Steak    \_\_\_\_ Chicken Marsala    \_\_\_\_ Salmon

Name: \_\_\_\_\_ Call: \_\_\_\_\_ Total for lunch(es) \$ \_\_\_\_\_

Give this form(or copy) with payment to the treasurer or mail to: SCCARA PO Box 106 San Jose CA 95103-0006



**SCCARA**

Santa Clara County Amateur Radio Association  
PO Box 106  
SAN JOSE CA 95103-0106

Affiliate of the ARRL,  
American Radio Relay League



**FIRST CLASS**

**ADDRESS SERVICE REQUESTED**

**SCCARA Membership Form for 2013**

If none of your info has changed, fill in name and call only

Name: \_\_\_\_\_ Call: \_\_\_\_\_ Class: E A G T N

Address: \_\_\_\_\_ Licensed since (yr): \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ - \_\_\_\_\_ Licence Expiration  
Date (mo/yr): \_\_\_\_\_

Telephone: ( ) \_\_\_\_\_  New Member  Renewal  
 I'm also a member of the ARRL

E-mail: \_\_\_\_\_

make sure your e-mail is legible and correct if you want the newsletter by internet

Memberships begin January 1 and expire December 31.

**If renewing:** annual membership dues (base rate) are: \$20 Individual, \$25 Family, \$10 Student (under 18)

**For new members:**

If joining in January: base rate

If joining in February through October: base rate x (11 - month) x 10% (e.g. for June, that would be: base rate x 50%)

If joining in November or December: free for November and December if paying the base rate for the following year

\$ \_\_\_\_\_ **Dues payment for:**  individual  family  student

For family memberships (at the same address), please include a separate form for each family member.

**I want the newsletter by:**  U.S. Mail  internet  
(costs the club about \$35/year)

Give this completed form (or copy) with payment to the Secretary or Treasurer at any meeting or mail to the club address.