

SCCARA-GRAM



Santa Clara County
Amateur Radio Association



Volume 20, Number 9

September 2004

President's Prose

It's August 2004, and this year is half over. There is six months left until the end of my term as president. I have enjoyed the last five years as your President. I have learned something about the club, its members, and myself. I have enjoyed working with all members of SCCARA. We have accomplished a lot.

I have the sad duty to report a silent key, Tony Sanchez, K6MOB, passed on Sunday, July 25, of complications due to pneumonia. As of this writing, I do not know about any memorial plans. A moment of silence will be observed at the next meeting in his honor.

I am working on getting speakers for the rest of the year. I am following up on several suggestions for speakers made at the July meeting. The results will be made known on the nets and the August meeting.

I hope I did not forget anyone on the "thank you" list for Field Day. Please let me know if someone was forgotten. So I can thank you properly.

I want to say thanks to David Paul for being our secretary, and note that he is doing an excellent job. I would like him to continue for the next year so that I can be just a regular member for one year. I will take the secretary's position in one more year. I need to take some time for me to get my life back on track.

I would like to hear more check-ins on the Monday night nets.

The speakers at the July meeting were great. They shared their background and their hobby. John Glass, NU6P, and Debbie Norling KF6BKR, clearly have overcome their handicaps (blindness) to be successful ham radio operators. Thank you both for your presentation.

73, Barbara K. Britten, President, KD6QEI



Picnic

The SCCARA picnic this year will be Saturday, September 25, at 10 AM until 4 PM or so, at Mary Gomez Park in Santa Clara. It's located at the north-west corner of San Thomas Expressway and Forbes. Enter from the west side: go west on Forbes, north on Bucher, then turn right into the small parking lot.

We will have a HF radio set up again for a miniature Field Day operation.

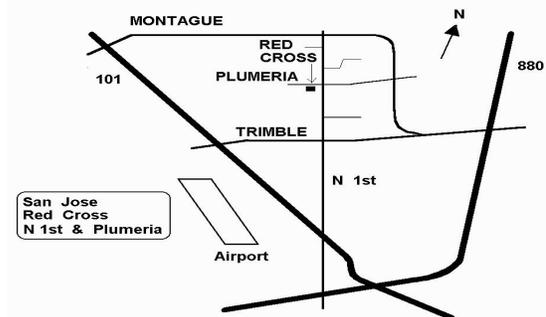
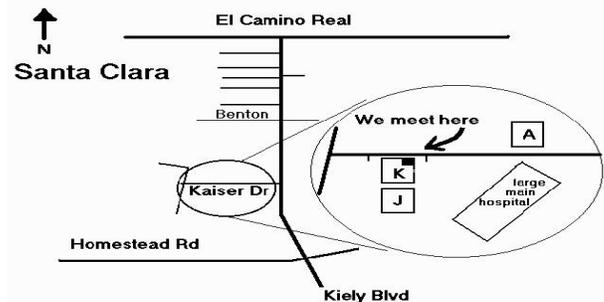
Gwen and Lou will be running our bingo game, so please

Calendar

- 9/4 Livermore Electronic Flea Market
- 9/11 Sunnyvale Electronic Flea Market
- 9/13 SCCARA General Meeting
- 9/20 SCCARA Board Meeting--(San Jose Red Cross, 7:30p, all are welcome)
- 9/25 SCCARA picnic

General Meeting:

Day: Monday, September 13, 2004
Time: 7:30 PM
Place: on Kaiser Santa Clara, Bld K, Rm 1
Featuring: {to be announced}



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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>.

OFFICERS - DIRECTORS - STAFF

President	Barbara Britten, KD6QEI	293-3847
	e-mail: kd6qei@arrl.net	
Vice President	- - -	
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	e-mail: ae6mv@arrl.net	
Treasurer	Lloyd DeVaughns, KD6FJI	225-6769
	e-mail: lloyddevaughns@sbcglobal.net	
Station Trustee	Don Village, K6PBQ	263-2789
Director	Clark Murphy, KE6KXO	262-9334
	e-mail: clarkmurph@yahoo.com	
Director	Don Apte, KK6MX	629-0725
	e-mail: aptekk@aol.com	
Director	Don Village, K6PBQ	263-2789
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	e-mail: wa6qys@aol.com	
Director	Wally Britten, KA6YMD	293-3847
	e-mail: ka6ymd@arrl.net	
Editor	Gary Mitchell, WB6YRU	269-2924
	e-mail: wb6yru@ix.netcom.com	

COMMITTEES

Repeater	Wally Britten, KA6YMD	293-3847
	e-mail: ka6ymd@arrl.net	
N0ARY BBS	Gary Mitchell, WB6YRU	269-2924
	e-mail: wb6yru@ix.netcom.com	

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 and N0ARY BBS 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 K6PBQ. On ten meters, 28.385 MHz USB, Thursdays at 8:00 PM. Net control: Wally KA6YMD. Visitors welcome.

N0ARY PACKET BBS

SCCARA hosts the packet BBS N0ARY (San Jose). User ports: 144.93 (1200 baud), 433.37 (9600 baud), telephone 408 259-8497, internet (by registration only, get info by sending e-mail to: info@n0ary.org). Sysop: Gary WB6YRU

TELEPHONE NUMBERS

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

bring a gift or two for prizes.

The club will provide sodas, plates, utensils, condiments, and charcoal. Please bring your own meat and a dish to share.

Don Village K6PBQ

Treasurer's Treatise

Cash Flow Report
1/01/04 Through 8/16/04

Category Description

INFLOWS

Bonus	326.40
Interest Inc	7.55
Other Inc	3,511.82
Services:	
Newsletter	-1,804.51

TOTAL INFLOWS 2,041.26

OUTFLOWS

Dues and Subscriptions	-253.00
Insurance	651.40
Misc	663.42
Miscellaneous, Bus	1,220.00
Rent	
FIELD DAY SITE	366.00
STORAGE	378.00
TOTAL Rents	744.00
Tax, Business, State	50.00

Utilities:	
Telephone	230.40

TOTAL OUTFLOWS 3,306.22

OVERALL TOTAL -1,264.96

Account Balance Report
as of 8/16/04

Acct	Balance
Checking	3,035.88
Savings	1,970.28
Total Cash and Bank Accounts	<u>4,970.16</u>

Lloyd, KD6FJI, Treasurer

Meeting Minutes

General Meeting, Aug. 9, 2004



Monthly Meeting, August 9, 2004, 19:30, Bldg K, Kaiser Santa Clara.

Attendance: 18, including 2 visitors.

Members present (in alphabetical order): Barbara Britten, KD6QEI, Wally Britten, KA6YMD, Lloyd Devaughns, KD6FJI, Clarence Garcia, KH6HMI, Del Harbold, KG6JPX, Mike Hastings, KB6LCJ, Roy Metzger, K6VIP, Virginia Metzger, K6IUU, Gary Mitchell, WB6YRU, Frank M. Monez, WA6BYB, Clark R Murphy, KE6KXO, David Paul, AE6MV, Douglas Turner, new call K6COM, James W Tyranski, KG6UDW, Don Village, K6PBQ and El Wirt, K6ZYY.

Visitors: Scott Petersen, KG6SPF and Jeannie Felix (unlicensed).

President Barbara Britten, KD6QEI, opened the meeting at 19:30. Barbara welcomed everyone and told us that tonight's presenter will be Wally Britten, KA6YMD, speaking on Repeaters.

Barbara announced that she and Wally, as of this last Saturday, have no children or grandchildren staying with them. She actually arrived home last night, and was able to hear the clock ticking.

The Annual Picnic will be September 25th in Mary Gomez Park, at San Tomas and Forbes.

Saturday September 11 will be SVECS' turn to sponsor the Sunnyvale Flea Market.

Gary Mitchell, WB6YRU, announced no recent changes with the BBS. Gary also displayed some of the Club's old Badges and some old ARRL Member pins, which are free to any member wanting one.

David Paul, AE6MV, asked for any changes or corrections to the minutes of last month's meeting, which are printed in the recent SCCARA-GRAM. Gary handed out extra issues to folks asking for one; no changes or corrections were requested.

At 19:50, President Barbara Britten formally introduced the night's speaker, Wally Britten, KA6YMD. Multiple questions from members gave Wally Britten, KA6YMD, inspiration for tonight's topic: What is a Repeater, and how does it work? Wally was acting as a stand in speaker.

At its simplest, a Repeater is a receiver and a transmitter, connected to a single antenna. The antenna should be mounted fairly high. Our Club 2 M Repeater, W6UU, receives on 146.385 MHz and re-transmits on 146.985 MHz. The repeater listens on 146.385, when it hears an FM signal with the required sub-audible tone, it feeds the audio signal to the transmitter, where it is re-transmitted. So you can be sitting in the meeting room at Kaiser Santa Clara, transmit with your HT at five watts, and have your signal re-transmitted by the repeater with its full wattage. Your signal power doesn't matter, as long as the repeater hears your signal at full quieting. If you hit the repeater with five watts and are full-quieting, then if you increase your transmitter power to 100 watts, it will make no difference to the repeater's output.

The connection from the repeater's receiver to its transmitter is done by a Controller. The Controller includes three timers: 1) a ten-minute timer for Repeater I.D., 2) a short-time timer for the repeater "tail", and 3) a transmission length timer. The first timer

tells the repeater to identify itself every ten minutes. Typically, repeaters add a low-volume "Morse Code" ID when the repeater is processing signals, and a synthesized-speech ID during quiet periods.

The repeater also includes a "Duplexer". The duplexer consists of two or more narrow pass band filters, with one (or more) set between the antenna and the receiver, to prevent any signal at other than the desired frequency (such as 146.385) getting to the receiver from the antenna, and one (or more) set between the receiver and the antenna, to prevent any signal at other than the desired frequency (such as 146.985) getting to the antenna from the receiver. Together, these prevent the transmitter's output from 'swamping' the receiver, and helps reject nearby signals.

Some Repeaters provide an S-Meter feature, providing to users a verbal response indication how well their signal is hitting the receiver. Ours does not have this feature. To perform this function, you need a signal, typically from the discriminator, that will provide a voltage proportional to the incoming signal strength. The you need to know what signal the transmitter needs for full quieting, then you can make an interface that will feed the needed voltage to a speech synthesizer unit, that outputs an audio signal to the transmitter saying something like "S Seven". Some repeaters that have this function have a "feel good" S-meter, that reports your signal to be higher than it actually is - it depends on how you build the interface.

Questions:

- How about linked repeaters? Some local repeaters are linked to other repeaters. This is done by using control links at other frequencies, usually on another band. The Santa Clara County Emergency Repeater (Santa Clara County Repeater Society WB6OQS) is an example.

- What's the difference between a duplexer and a diplexer? A duplexer is two or more narrow filters used to prevent the power of the repeater's transmitter from swamping the input of the repeater's receiver. A diplexer is used to allow the output of one transmitter to feed one of two antennas depending on the band pass frequencies. This allows one transmitter and one feed line, then the diplexer is mounted at the end of the feed line and connected to the two antennas. A triplexer is used similarly, to allow one feed line to feed three separate antennas. (It may be used in reverse to feed different band transceivers with 1 multiband antenna.)

- Is a duplexer tunable? Yes, most commercially available duplexers are tunable anywhere within the band.

Other Old or New Business:

Clark Murphy gave the President the address of Irwin Electric, the company that kindly stores our tower trailer for free - Irwin Electric, P.O. Box 70, Alviso, CA 95002.

Clark reported Gary Mitchell's suggestion that we organize our field equipment better, so we don't have to do it again year after year, and forget stuff each year.

Del Harbold reported he had seen a stack of older QSTs, and found a story on the old Salvation Army Emergency Service Center to be interesting.

Roy Metzger, K6VIP, reported that two local Hams, both previously members of SCCARA, have become Silent Keys. These are K6MOB, Tony Sanchez, and AB6OZ, George Brady, VIP attended MOB's graveside service: he and W6JYN were the only Hams present.

President Barbara Britten, KD6QEI, led a minute of silence for these two Silent Keys.

After further discussion, Clark Murphy moved that the meeting be closed, no one disagreed, and the President adjourned the meeting at 20:57.

David Paul, AE6MV, Secretary

Board Meeting, Aug. 16, 2004



The meeting was called to order at 19:45 by the President, Barbara Britten, KD6QEI. A quorum was present.

Attendees: Barbara Britten, KD6QEI, President, Lloyd DeVaughns, KD6FJI, Treasurer, Clark Murphy, KE6KXO, Director, Wally Britten, KA6YMD, Director, Lou Steirer, WA6QYS, Director, Don Village, K6PBQ Director, Don Apte, KK6MX, Director, Gary Mitchell, WA6YRU, Newsletter Editor and Gwen Steirer, KF60TD, XYL.

President Barbara Britten, KD6QEI, spoke of upcoming elections. Barbara has spoken with David Paul, AE6MV: he is willing to serve as secretary for 2005. The Club needs to find a President and a Vice-President for 2005.

The speaker for September is still not firm. Possible speaker: Howard Califf, KE6PWH, from HRO. Also, Don Apte KK6MX will bring equipment to hold a Radio Clinic, checking our HTÆs

The October meeting (October 11) will be a Pizza Night.

The November meeting will include elections for Officers for 2005; the December meeting will be our Christmas Luncheon.

- Treasurer Lloyd DeVaughns, KD6FJI, reported that he will send his report by email (it is appended û MV).

Newsletter Editor Gary Mitchell reported no change with the newsletter, but proposed that we consider a color front page.

If the Secretary will send an electronic copy of the Roster to Gary, he will include it in the next SCCARA-GRAM.

Old Business

- Clark Murphy reported that he would not like to be paid for the Camp Stove.

- Don Apte will run a test remote base with our 440 MHz repeater frequency, to try for Echo Link.

- Don Village reported that he picked up a nice MFJ Tuner for the club, no interest was evident in purchasing it from him.

- It was discussed that we try another contest for the Club Station, maybe The October QSO or the November Sweepstakes. We need to check the 80/160 M antenna at Red Cross: Lou will check it with Scott KB6UOC.

The President, Barbara Britten, KD6QEI asked for any other items of business, new or old.

Clark Murphy moved that the meeting be adjourned, and Barbara agreed. The meeting was adjourned at 21:25.

Upcoming Meetings:

- The September General Meeting, will be held Monday September 13 at 19:30, in Bldg K, Kaiser Santa Clara.

- The next Board Meeting will be September 20 at 19:30 at the San Jose Red Cross HQ.

- The annual Picnic will be held Saturday September 25 at Mary Gomez Park.

- The date of the annual Christmas Luncheon will be announced soon.

Don Village, K6PBQ Director, for David Paul, AE6MV, Secretary

DV/dp [PBQ/mv]

Appended attachments, as received from treasurer:

Account Balance as of 8/16/04

Checking 3,035.88

Savings 1,970.28

Total 4,970.16

ARRL News

From *The ARRL Letter*, August 27, 2004

ARRL SEEKS COMMENT ON DRAFT "BANDWIDTH" PETITION

The ARRL wants members' comments on a planned petition to the FCC seeking to regulate amateur subbands by bandwidth rather than by mode. The ARRL Board of Directors adopted the petition's guiding principle--to create a regulatory environment more accommodating to newer technologies--two years ago, and it wrapped up its review of a draft petition in late July.

"The main objective is to make appropriate provision for digital modes in the HF amateur bands, while preserving amateurs' prerogatives to use the traditional modes," said ARRL CEO David Sumner, K1ZZ. "Regulation by Bandwidth" is the title of Sumner's "It Seems to Us . . ." editorial in September QST.

The draft petition represents expert input from the ARRL Ad Hoc HF Digital Committee. ARRL staff also provided an interim report, and the Board reviewed a draft petition when it met last January. An ARRL Executive Committee review followed. The EC decided to make a synopsis and explanation of the petition available to ARRL members before it goes to the FCC.

"The regulation of emission modes in Amateur Radio Service allocations is a limiting factor with respect to Amateur Radio experimentation," the petition synopsis concludes. "It leads to attempts to put new technology into a regulatory framework that was designed only to deal with older analog emissions." To implement digital technologies, an underlying assumption of the League's draft petition is to provide for an intermediate bandwidth--between what's needed for the legacy CW and phone modes--in the middle of certain bands.

As drafted, the ARRL's bandwidth petition would preserve double-sideband AM unchanged, but it would stop short of opening the phone bands to digital and other modes of the same bandwidth.

FCC rules now permit RTTY and data emissions throughout the

HF CW subbands, although informal agreements typically keep RTTY and data signals out of those parts of the CW band generally used for CW. The ARRL's petition proposes to limit bandwidth in the CW subbands to 200 Hz, which also will accommodate data modes such as PSK31.

In addition, the League's proposal would limit bandwidth in the existing "RTTY/data subbands" to either 500 Hz or 3 kHz, with phone emissions specifically prohibited in certain subbands where 3 kHz would be permitted. Under the proposal, these would include 3650-3725, 7100-7125, 14,100-14,150 and 21,150-21,200 kHz.

"The reason for this is to encourage the development of higher-speed data communications in these subbands by preventing them from becoming de facto 'expanded phone bands.'" Sumner explained.

The new proposals take into account the ARRL's prior "Novice refarming" petition to expand some HF phone bands, included in the FCC Notice of Proposed Rule Making in WT Docket 04-140.

Amateurs typically won't have to be able to measure the bandwidth of their signals, Sumner says, since the bandwidths proposed are more than sufficient for "clean" signals using traditional HF modes.

The ARRL proposal would eliminate bandwidth restrictions in the 222-225 MHz band--beyond a requirement to keep signals confined within the band.

Sumner encouraged ARRL members to review the synopsis of the petition and the specific rule changes the League plans to propose <<http://www.arrl.org/announce/bandwidth.html>>. Direct questions or comments--favorable or otherwise--via e-mail <bandwidth@arrl.org>. ARRL staff members will respond to any questions, while comments will be forwarded to your ARRL division director. Members also are welcome to comment directly to their ARRL directors <<http://www.arrl.org/divisions/>>, also listed on page 15 in QST.

New Members

SCCARA would like to welcome to the club:

Clarence Peter Garcia, KH6HMI

If you have any questions, ideas, or comments about SCCARA or any activities, please don't hesitate to ask.

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 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, K6PBQ, WB6YRU
Lightning protection, grounding: WB6YRU
Station set-up, equipment: K6PBQ
TVI/RFI: WB6YRU
Homebrew projects, construction: KD6FJI, WB6YRU
Computers: KB6NP; IBM PC: WB6YRU
Packet Network (BBS, forwarding): WB6YRU
Code operating and installations: WB6EMR, K6PBQ
DX (long distance/propagation): WB6EMR
Emergency operating/preparedness: WA6QYS
FM (VHF/UHF, repeaters): WA6VJY
HF operating techniques (SSB, CW): WB6EMR, K6PBQ
Classes/license upgrading: W6ACW
Legal/FCC rules: WB6YRU
SCCARA (club inner workings):
K6PBQ, WA6VJY, WB6YRU, WA6QYS
Children's Discovery Museum, volunteer operator:
K6PBQ
EchoLink: KK6MX

W6ACW, Ed Hajny, (408) 739-6105

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

KD6FJI, Lloyd DeVaughns,
day: (408) 918-4635, evening: (408) 225-6769
e-mail: lloyddevaughns@sbcglobal.net

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

KB6NP, Jon Dutra, day & msg (408) 428-2058
evening (408) 867-8654
packet: home BBS NOARY
e-mail: jad@aol.com

K6PBQ, Don Village, (408) 263-2789

WA6QYS, Lou Steirer, (408) 241-7999
packet: home BBS NOARY

WA6VJY, Stan Getsla, day: (408) 738-2888 x5929,
evening & msg: (408) 275-0735

WB6YRU, Gary Mitchell, msg (408) 265-2336
also (408) 269-2924
packet: home BBS NOARY
e-mail: wb6yru@aenet.net

Newsletter Notes

Way back we used to mention new SCCARA members in the *SCCARA-GRAM*. Now that we have a secretary to keep track of such things, I thought it'd be a good idea to bring back that tradition.

Some of you may remember photos of new members too. That was done by Bob KB6OHO, (who is no longer with us, SK). Are there any photo buffs who would like to do that?

73, Gary WB6YRU, editor

Field Day 2004 Photos

by Mike Wright

I had a videotape running back home so I taped my transmissions (proof it was actually done). When I was at Sunnyvale later Saturday, I transmitted from my digital camera the stills of SCCARA's site at Mt. Madonna park.

I used the K6BEN video repeater. Don Apte, KK6MX, is a active member of this group.



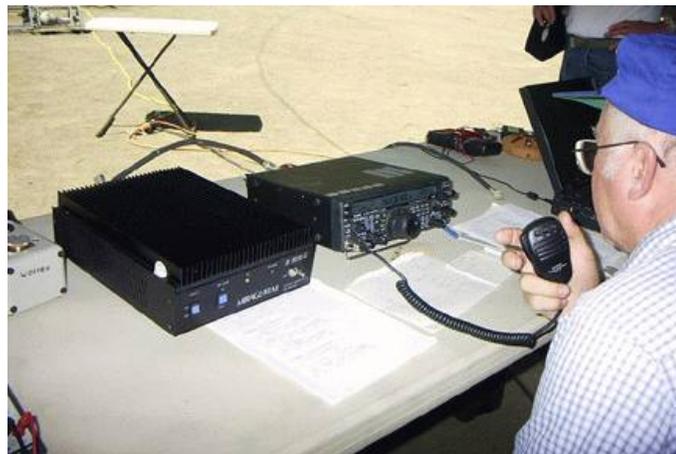
SCCARA's AC generator surrounded by cubicle walls to reduce engine noise. This generator and several DC car batteries supported power needs, SCCARA stations were all based on "emergency power."



Gary, WB6YRU, and Lou, WA6QYS, working one of the HF stations. Gary tracks contacts on a laptop while Lou works the radio.



An overview of the Manzanita campground with the tower trailer holding the HF yagi. Many of the stations used simple dipoles strung across the open area between trees. I could not transmit video from the Manzanita campground because of too many trees. At both sites on Mt. Madonna it was difficult to see the K6BEN output (421 MHz).



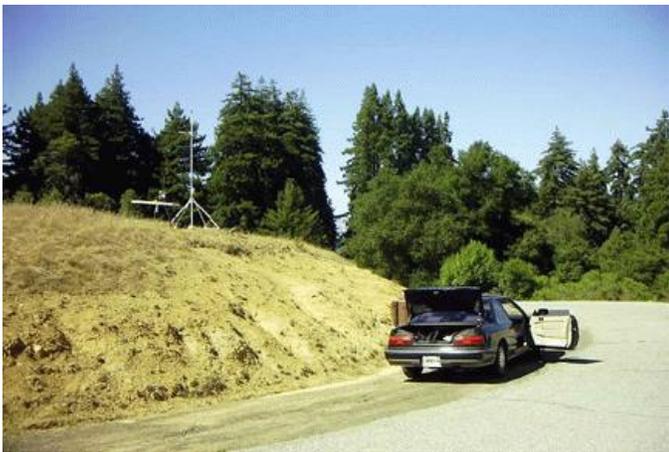
Lou on the VHF station.



A closeup view of one of the laptops used for tracking contacts. Cardboard shields against the bright sunlight. Almost all stations had a second person with a laptop as station contact rate was quite high.



A close up view of my video field setup.



Here is my field deployable video transmission station setup on Valley View Drive at Mt. Madonna park. You can see the camera view with my car down on the road. This was Valley View drive that faces the valley but surrounded by trees. I remember that it was hard to see what I had on the TV set because the sun was so bright. I also was over deviating so the video was not as good as it can be. However, it does show a TV transmission reached from Mt Madonna to the K6BEN video repeater. K6BEN re-transmits on UHF which I had my VCR at home.

I drove to Valley View Drive a half-mile away and this site overlooks the Santa Clara Valley. However, there were a set of trees that made my video transmission (1.2 GHz) to the K6BEN difficult. I did manage to make a very brief link to the repeater but for only a few minutes. I did not know I was successful at the time because it was difficult to see the screen on my TV set as the sun was so bright.



SCCARA members, these are just a few, there were many others.

SCCARA Membership Form for 2004

(Fill in name and address if there is no mailing label below; make corrections if the label is incorrect)

Name: _____ Call: _____ Class: E A G T+ T N

Address: _____ Licensed since (yr): _____

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

Telephone: () _____ New Member I'm also an
 Renewal ARRL member

E-mail: _____ Packet: _____

For family memberships (at the same address), please fill out a separate form for each.
Indicate the "primary member" for mailing purposes: _____

Annual membership dues are payable at the first of the year and expire the following December 31. New members joining on or after July 1, pay half the membership dues.

Annual Membership dues: \$15 Individual \$20 Family \$5 Student (under 18)

Please send the repeater Auto-Dial/Auto-Patch codes (no charge, circle): Yes
WE MUST BE ABLE TO VERIFY YOUR AMATEUR RADIO LICENSE
BEFORE ANY REPEATER CODES WILL BE SENT

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

====> PLEASE DO NOT TEAR OR CUT FORM <====

**SANTA CLARA COUNTY
AMATEUR RADIO ASSOCIATION**

PO BOX 6
San Jose CA 95103-0006

Affiliate of the American Radio Relay League



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