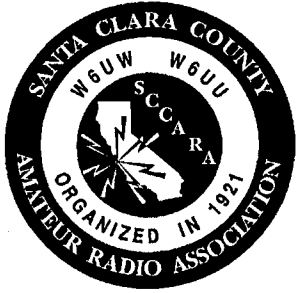


SCCARA-GRAM



Santa Clara County Amateur Radio Association

Volume 17, Number 1

January 2001



President's Prose

The last year has been filled with many things. We have managed to stay afloat adequately. We have had several social events that gave all the participants a good time. It was nice to see so many faces at these events. We have had some good speakers, thanks to Don Hayden's efforts. We have gotten started on building the radio station at Regional Medical Center. I hope that project can be completed soon, so it can be used by club members for general use, or for contesting. The repeater has been moved from Trish Gibbons' home to Santa Teresa Hospital. More work has to be done to complete the move and make it more reliable for use. That too should be done soon after the new year.

The same officers were re-elected for 2001. We are still in need of a secretary and a vice president. All we need is for someone to come forward and take the positions. Meanwhile the Board has suggested that I appoint one person to handle the roster. Because we do not have a secretary, some of our members have not been listed in the roster. I hope that by appointing someone to handle the roster these people will not fall through the cracks so easily.

The next year holds much potential for new ways for our club to serve the community. We also have the potential to gain new members. I hope you will all come to more meetings, and participate in the variety of activities in the coming year. In the meantime, put on your thinking caps and come up with some ideas for speakers, ways to acquire new members, and retain them as active members. Bring your ideas to a meeting. Let us hear from you. This is your club. Make it work for you, and all of us.

I want to thank some people that I left out at the Christmas Dinner. I did not acknowledge the efforts of Mike Hastings, or Don Village for leading the Monday night nets, and Wally Britten, for leading the 10 Meter net.

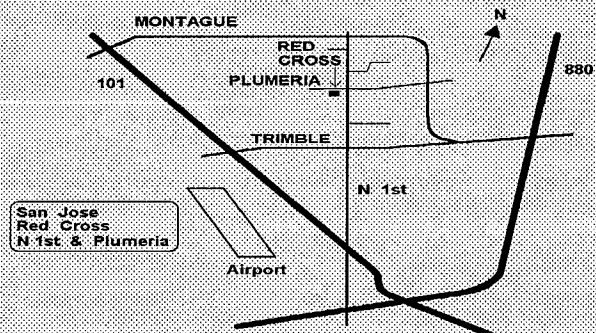
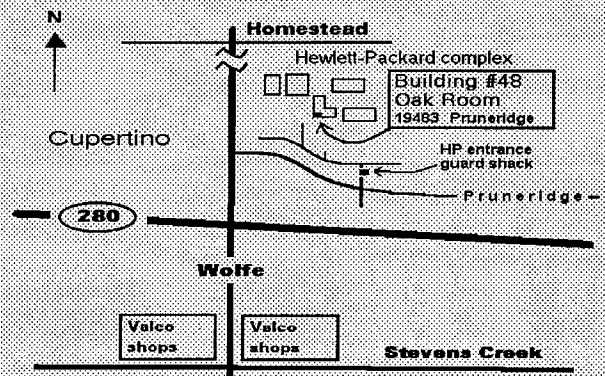
Last year and this year, at the Christmas party, I said a prayer before we ate our meal. One of our club members who attended both events seemed to think that the prayer was inappropriate for the gathering. Your interpretations

Calendar

- 1/8 SCCARA General Meeting--Luncheon
- 1/15 SCCARA Board Meeting--(San Jose Red Cross, 7:30p, all are welcome)
- 2/12 SCCARA General Meeting

General Meeting:

- Day: Monday, Jan. 8, 2001
- Time: 7:30 PM
- Place: Hewlett-Packard's Oak Rm. Bld #48
- Featuring: (to be announced)



The **SCCARA-GRAM** is published monthly by the **SANTA CLARA COUNTY AMATEUR RADIO ASSOCIATION**, PO Box 6, San Jose CA 95103-0006. Permission to reprint articles is hereby granted, provided the source is properly credited. The deadline for articles is one week before 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: ka6ymd@juno.com	
Vice President	- - -	
Secretary	- - -	
Treasurer	Lloyd DeVaughns, KD6FJI	225-6769
	e-mail: ldevaughns@aol.com	
Station Trustee	- - -	
Director	Clark Murphy, KE6KXO	262-9334
	e-mail: cmurphy@izap.com	
Director	Don Apte, KK6MX	629-0725
	e-mail: kk6mx@aol.com	
Director	Don Village, K6PBQ	263-2789
Director	Lou Steirer, WA6QYS	241-7999
	e-mail: wa6qys@aol.com	
Director	Wally Britten, KA6YMD	293-3847
	e-mail: ka6ymd@juno.com	
Editor	Gary Mitchell, WB6YRU	265-2336
	e-mail: wb6yru@aenet.net	

COMMITTEES

Repeater	Wally Britten, KA6YMD	293-3847
	e-mail: ka6ymd@juno.com	
N0ARY BBS	Gary Mitchell, WB6YRU	265-2336
	e-mail: wb6yru@aenet.net	

SCCARA REPEATERS

SCCARA owns and operates two repeaters under the call W6UU:

2 meter: 146.385 + PL 114.8 (none for basic use)
 70 cm: 442.425 + PL 107.2

Phone auto-dial and auto-patch is available. The two meter repeater is located at the Santa Teresa Hospital, south-west San Jose (near IBM). 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

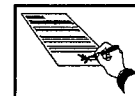
SCCARA hosts the packet BBS N0ARY (San Jose). User ports: 144.93 (1200 baud), 433.37 (9600 baud), telephone 408 259-8497, internet (by registration only, get info by sending e-mail to: info@n0ary.org). Sysop: Gary WB6YRU

TELEPHONE NUMBERS

SCCARA contact Clark KE6KXO: 408 262-9334
 ARRL/VEC Silicon Valley VE group: 408 243-8349
me-ae6z@worldnet.att.net

might not have been the same as mine. Did anyone who attended either event seem offended or felt uncomfortable when I said grace? If so, please don't hesitate to give me feedback. I thought I was doing something good. I would like to know how you feel. Thank you.

Finally, I hope all of your Christmas wishes come true, and that the new year is filled with health, happiness, and prosperity for all of your households. Merry Christmas, Happy Hanukkah, and Happy New Year.



Barbara K. Britten, KD6QEI, President

Meeting Minutes

General Meeting, Dec. 9, 2000



{Nothing received by the deadline. -- Ed.}

Board Meeting, Dec. 11, 2000



Attendance: Don K6PBQ, Clark KE6KXO, Wally KA6YMD, Barbara KD6QEI, Gary WB6YRU.

Meeting called to order at 7:53 PM by president Barbara KD6QEI.

K6PBQ: Field Day will be June 22-24. I'll reserve the camp site at Mt. Madonna as a contingency in case we don't get another site. (They will charge a \$15 cancellation fee, this is OK considering the "insurance" it provides.)

KD6QEI: I wrote to Mike Mylar (HP) to reserve HP's Oak Room for our meetings.

We don't have a secretary nor V.P.

Repeater report, KA6YMD: The repeater is running, but the installation isn't done yet--nothing is bolted down.

Nothing done yet regarding the club station at Regional Medical Center.

BBS, WB6YRU: The two-meter user port is working now. The 1.25 meter forwarding port is still down waiting for parts.

Newsletter, WB6YRU: Not much new to report...After a flurry of photos the previous month, things have really

slowed down. No submissions so far.

K6PBQ: At the December luncheon we had 31 (compared to 29 last year and 39 the year before). The plan is to do the same thing next year. It will be Dec. 15, 2001, same place, same time.

WB6YRU: One of our desktop computers (an old 286) has a problem--it was unusable at Field Day. Should we worry about fixing it? Board consensus was unanimous--get rid of it. Laptops seem to be a better choice for what we do. Clark KE6KXO knows of a place that gets rid of 486 and Pentium laptops. He will look into that and report back, then we can decide if we should replace our other (286) desktops.

Adjourned at 9:05 PM

Gary Mitchell, WB6YRU, recording for the Secretary

ARRL News

The ARRL Letter, December 22, 2000

AO-40 FAILS TO PHONE HOME

AMSAT OSCAR-40 remains silent, and command stations on the ground still have been unable to reestablish contact with the Amateur Radio satellite. It was hoped that onboard computer timeouts--so-called "command-assist" software watchdog routines--would restart the beacon telemetry and give the ground crew some clues as to why AO-40 suddenly stopped transmitting on December 13. That did not happen.

"There were no observations, and command stations tried to re-establish communication by sending blind commands," AMSAT-DL's Peter Guelzow, DB2OS, of the AO-40 team, said after the first watchdog routine date passed December 16. A second watchdog date of December 21 also passed without any apparent reset.

The second reset would have cycled the satellite through various receive, transmit, and antenna modes. Guelzow said the watchdog routines only will work if the onboard computer software has not crashed.

When and whether the satellite will be heard from again depends, in part, on whether AO-40 has picked up any of the "blind commands" sent by ground controllers. If AO-40 did pick up some commands, Guelzow said, the command-assist watchdog would be reset for another 10 orbits. That could extend the wait until Christmas.

Ground controllers want to avoid doing a hard re-boot of the main computer. "If the IHU has crashed, then a reset command can be issued from the ground," Guelzow said. "This would be the last resort." He said ground controllers will thoroughly check out and analyze all other possibilities before issuing a hard reset command. "There is no need to hurry, and the command team doesn't want to miss any option," he said.

The AO-40 team is continuing to investigate reports of weak signals on the 2-meter downlink frequency of 145.898 MHz that seem to be coming from AO-40, but it has discounted reports of telemetry heard there as a hoax. Other reports persist of a weak, unmodulated carrier, however.

Guelzow said the AO-40 team was encouraged by a report from the North American Aerospace Defense Command--NORAD--indicating that AO-40 was in one piece, that the orbit was exactly where it should be, and that the radar cross-section was as expected. Guelzow said the NORAD data counter rumors that AO-40 might have exploded.

Guelzow also has found himself fending off criticisms that AO-40 was launched with known problems in the helium valves that control fuel flow to the onboard 400-Newton propulsion system. "There were no known problems," Guelzow said in a posting to the AMSAT bulletin board. He said a valve which seemed not to operate correctly during ground testing was sent back to its US manufacturer and repaired.

Guelzow said the valve and pressure regulator worked perfectly during pre-launch testing. "All other subsystems worked perfectly, including the 70-cm TX," he said.

PETITION SEEKS INCREASED PRIVILEGES FOR NOVICES AND TECHS WITH MORSE CREDIT

The FCC has put on public notice a petition from Joseph Speroni, AH0A, that calls on the FCC to modify its rules to permit current Novice and Tech Plus or Technician with Morse credit licensees to operate CW in expanded sub-bands on 80, 40, 15 and 10 meters. Speroni proposes permitting Novices and Technicians with Element 1 credit to operate on CW on 3525-3750 kHz; 7025-7150 kHz, 21,025-21,200 kHz and 28,000-28,500 kHz, maintaining the current power limitation of 200 W PEP on those segments. The FCC has assigned his petition Rule Making number RM-10018.

Packet Pieces

Downloaded from the packet network:

=====

Date: 16 Mar 99 21:35
From: AB7RG@K5LRS
To: FARCE@USA
Subject: THE GENIE...

THE GENIE:
=====

A man was walking along the beach and found a bottle. He looked around and didn't see anyone so he opened it. A genie appeared and thanked the man for letting him out. The genie said, "For your kindness I will grant you one wish, but only one."

The man thought for a minute and said, "I have always wanted to go to Hawaii but have never been able to because I'm afraid of flying and ships make me claustrophobic and ill. So I wish for a road to be built from here to Hawaii." The genie thought for a few minutes and said, "No, I don't think I can do that.

Just think of all the work involved with the pilings needed to hold up the highway and how deep they would have to be to reach the bottom of the ocean. Think of all the pavement that would be needed. No, that is just too much to ask."

The man thought for a minute and then told the genie, "There is one other thing that I have always wanted. I would like to be able to understand women. What makes them laugh and cry, why are they temperamental, why are they so difficult to get along with? Basically, what makes them tick?"

The genie considered for a few minutes and said, "So, do you want two lanes or four?"

73 & May the FARCE be with you! Clinton, AB7RG.
AB7RG @ K5LRS.#NWAR.AR.USA.NOAM

=====

Date: 16 Mar 99 21:48
From: WA1GDJ@K1UGM
To: HUMOR@USA
Subject: TWO ATTORNEYS

Two attorneys went into a diner and ordered two drinks. Then they produced sandwiches from their briefcases and started to eat.

The owner became quite concerned and marched over and told them, "You can't eat your own sandwiches in here!"

The attorneys looked at each other, shrugged their

shoulders and then exchanged sandwiches.

73 - Gil, WA1GDJ @ K1UGM

=====

Date: 16 Mar 99 21:50
From: WA1GDJ@K1UGM
To: HUMOR@USA
Subject: BREAD

I've done a little research, and what I've discovered should make anyone think twice....

More than 98 percent of convicted felons are bread users.

Fully HALF of all children who grow up in bread-consuming households score below average on standardized tests.

In the 18th century, when virtually all bread was baked in the home, the average life expectancy was less than 50 years; infant mortality rates were unacceptably high; many women died in childbirth; and diseases such as typhoid, yellow fever, and influenza ravaged whole nations.

More than 90 percent of violent crimes are committed within 24 hours of eating bread.

Bread is made from a substance called "dough." It has been proven that as little as one pound of dough can be used to suffocate a mouse. The average American eats more bread than that in one month!

Primitive tribal societies that have no bread exhibit a low incidence of cancer, Alzheimer's, Parkinson's disease, and osteoporosis.

Bread has been proven to be addictive. Subjects deprived of bread and given only water to eat begged for bread after as little as two days.

Bread is often a "gateway" food item, leading the user to "harder" items such as butter, jelly, peanut butter, and even cold cuts.

Bread has been proven to absorb water. Since the human body is more than 90 percent water, it follows that eating bread could lead to your body being taken over by this absorptive food product, turning you into a soggy, gooey bread-pudding person.

Newborn babies can choke on bread.

Bread is baked at temperatures as high as 400 degrees Fahrenheit! That kind of heat can kill an adult in less than one minute.

Most American bread eaters are utterly unable to distinguish between significant scientific fact and meaningless statistical babbling.

In light of these frightening statistics, we propose the following bread restrictions:

No sale of bread to minors.

A nationwide "Just Say No To Toast" campaign, complete celebrity TV spots and bumper stickers.

A 300 percent federal tax on all bread to pay for all the societal ills we might associate with bread.

No animal or human images, nor any primary colors (which may appeal to children) may be used to promote bread usage.

The establishment of "Bread-free" zones around schools.

73 - Gil, WA1GDJ @ K1UGM

=====
Date: 16 Mar 99 21:35
From: WA1GDJ@K1UGM
To: HUMOR@USA
Subject: EMOTIONAL

"The Emotional Male"

One night a wife found her husband standing over their newborn baby's crib. Silently she watched him. As he stood looking down at the sleeping infant, she saw on his face a mixture of emotions: disbelief, doubt, delight, amazement, enchantment, skepticism.

Touched by this unusual display and the deep emotions it aroused, with eyes glistening she slipped her arms around her husband. "A penny for your thoughts," she whispered in his ear. "It's amazing!" he replied. "I just can't see how anybody can make a crib like that for only \$46.50!"

73 - Gil, WA1GDJ @ K1UGM

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 ask the club secretary for an Elmer survey form and fill it out.

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: WN6U, WB6YRU
Packet Network (BBS, forwarding): WB6YRU
Other digital modes (AMTOR, RTTY): WN6U
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
Mobile operating: WN6U
NTS & traffic handling:
QRP (HF low power, all modes): WN6U
Classes/license upgrading: W6ACW
Legal/FCC rules: WB6YRU
SCCARA (club inner workings):
 K06HH, K6PBQ, WA6VJY, WB6YRU, WA6QYS
Children's Discovery Museum, volunteer operator:
K6PBQ

W6ACW, Ed Hajny, (408) 739-6105

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

KD6FJI, Lloyd DeVaughns,
day: (408) 299-8933, evening: (408) 225-6769
packet: home BBS KB6MER

K06HH, Don Hayden, (408) 867-4643
packet: home BBS NOARY

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

K6PBQ, Don Village, (408) 263-2789

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

WN6U, Doug Eaton, (408) 225-3736
packet: home BBS NOARY
internet: wn6u@aol.com

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
internet: wb6yru@aenet.net

ARRL Pacific Division Update

January 2001

World Radio Conference, 2003

A notice was contained in this Update last month covering a matter certain to come up at the ARRL Board meeting in January. Response to the notice has thus far been very sparse, and as a result, the entire article is repeated here. Please write!

Almost before the memory of the Istanbul World Radio Conference (WRC) has faded, preparations are underway for the next one, probably to be held in Geneva sometime in 2003. Several matters scheduled for consideration at the conference will have a profound effect on the future of Amateur Radio. A good summary of issues can be found on the International Amateur Radio Union's (IARU's) web site at <http://www.iaru.org/cal-181.html>. Of major importance is a proposal to "harmonize" worldwide Amateur assignments on the 40-meter band; that is, have (perhaps!) a single exclusive worldwide assignment for Amateur Radio rather than the patchwork arrangement we now have.

Also of great importance to many is the matter of Morse testing for Amateur HF licenses. This may well turn out to be the Great Debate of 2001. Here's the story.

Article S25 of the ITU regulations governing worldwide Amateur Radio require that all Amateur operators demonstrate proficiency in sending by hand and receiving International Morse code by ear in order to be licensed for operation on any Amateur band below 30 MHz. This is old stuff, but there is a new wrinkle: we've expected for years that S25 would be reviewed and perhaps modified at an upcoming WRC, but it's now really coming: a review is on the preliminary agenda for the 2003 conference. In anticipation for such a review, member societies of the IARU have been working together for several years to establish an Amateur position on the various elements of S25. These preparations have been discussed within the pages of QST on a number of occasions.

As we draw closer to the next WRC, efforts of member societies of the IARU are intensifying. Recently, IARU Region III met in Darwin, Australia. One of the topics of discussion was S25, including the Morse requirement. (The ARRL is a member of the Region III

organization by virtue of its possessions in the west Pacific.) It was proposed at the Darwin meeting that the Morse requirement be eliminated from S25. The proposal passed with only one dissenting vote. That negative vote came from the ARRL representative, Rod Stafford, W6ROD. He voted against the proposal as a consequence of a Standing Order of the ARRL Board of Directors which opposes any change in the international Morse requirement. IARU Region II will have a similar meeting in 2001, and the same subject will undoubtedly be discussed.

Now comes the question! Is the ARRL policy that opposes any change in the S25 requirement for Morse testing still appropriate? This question will almost certainly come up at the ARRL Board meeting in January. What are your views, pro and con?

Note that this ongoing discussion related to S25 concerns the ITU requirement ONLY. The question of whether or not Morse should be required for a FCC issued HF license is a separate, although related, issue.

Vice Director Vallio and I would appreciate hearing your views on this matter. Please email your thoughts to me at w6cf@arrl.org, and to Bob at w6rgg@arrl.org.

Radiofest, Feb. 17, 2001, Monterey

Don't forget to circle Saturday, Feb. 17, 2001 on your calendars. That is the date for the ever-popular Radiofest. It promises to be a welcome change of pace for the wintry weather. Full details are given below in the Coming Events listing.

FAR Announces Ham Scholarships

The Foundation for Amateur Radio, Inc., a non-profit organization with headquarters in Washington, D.C., plans to administer sixty-seven (67) scholarships for the academic year 2001 - 2002 to assist licensed Radio Amateurs. The Foundation, composed of over seventy-five local area Amateur Radio Clubs, fully funds ten of these scholarships with the income from grants and its annual Hamfest. The remaining fifty-seven (57) are administered by the Foundation without cost to the various donors.

Licensed Radio Amateurs may compete for these awards if they plan to pursue a full-time course of studies beyond high school and are enrolled in or have been accepted for enrollment at an accredited university, college or technical school. The awards range from \$500 to \$2500 with preference given in some cases to residents of specified geographical areas or the pursuit of certain study programs. Clubs, especially those in Delaware, Florida, Maryland, Ohio, Pennsylvania, Texas, Virginia and Wisconsin, are encouraged to announce these opportunities at their meetings, in their

club newsletters, during training classes, on their nets and on their world wide web home pages.

Additional information and an application form may be requested by letter or QSL card, postmarked prior to April 30, 2001 from:

FAR Scholarships
Post Office Box 831
Riverdale, MD 20738

The Foundation for Amateur Radio, incorporated in the District of Columbia, is an exempt organization under Section 501(C)(3) of the Internal Revenue Code of 1954. It is devoted exclusively to promoting the interests of Amateur Radio and those scientific, literary and educational pursuits that advance the purposes of the Amateur Radio Service. Thanks, FAR

Coming Events

- Radiofest 2001 - February 17, 2001, 7:00 AM until 3:00 PM. Sponsored by the Naval Postgraduate School Amateur Radio Club. This popular event will be held this year at the General Stilwell Community Center, Ord Military Community (old Fort Ord), 4260 Gigling Road in Seaside. Already scheduled are a radio exposition, flea market, ham radio/computer vendors, door prizes, demonstrations of ATV and Packet, APRS, MARS, community emergency demonstrations, and forums. Speakers will include various leadership officials from the ARRL Pacific division and the Santa Clara Valley section. Talk-in 146.97- PL 94.8. Go to <http://k6ly.org/radiofest> for additional information.
- Livermore Swap Meet - 1st Sunday of each month at Las Positas College in Livermore, 7:00 AM to noon, all year. Talk in 147.045 from the west, 145.35 from the east. Contact Cliff Chiba, KF6EII, (209) 835-6715, email larkswap@usa.com.

Jim Maxwell, W6CF
Director, ARRL Pacific Division



PO Box 473
Redwood Estates CA 95044
(408) 353-3911 (phone & fax)

Packet: W6CF @ N0ARY.#NCA.CA.USA.NOAM
Internet: w6cf@arrrl.org
Pacific Division Web site <http://www.pdarrrl.org/>

Newsletter Notes

I have an idea for the *SCCARA-GRAM*, but it will take help from the membership to pull it off. What does everyone think about having a Project Page?

More than once I've heard people say that *SCCARA* should be more active in "hands-on" amateur radio with projects, kits, and so on. The *SCCARA-GRAM* is one place where this could happen.

Have you done anything in the shack lately, besides click the key or speak into the mic? Anything from putting together kits to "roll your own" projects to novel solutions fixing those pesky problems around the shack is fair game! Let's have a *Projects Page* where you can share it with the rest of us.

A while back someone told me the one thing he didn't like about *SCCARA* was the lack of something for the membership to do regarding amateur radio. Specifically, he wanted projects to work on. He said that was the one thing he liked about the QRP club--they had QRP radio kits.

It's even possible something you get published here might become a club project. Wouldn't that be fun? This could lead to a whole new facet of club meetings--we could start having show & tell sessions. This could make the meetings and the club itself much more interesting and active.

These days, as often as not, projects can be software. That's OK too. If you wrote an amateur radio program that would be too large to publish, we could summarize it here and have a few copies available to anyone who would like to take a look at it. Or maybe we could do what some magazines do--publish a special edition of the *SCCARA-GRAM* with a CD! Wouldn't that be cool?

Impress your friends! Help out new amateurs with something interesting, informative, or just plain fun! Maybe even become famous with your program or project! Put it in the *SCCARA-GRAM*!

Photos and schematic drawings can be included. If you have something special like that, let me know. One way or another, we'll work out a way to get almost anything in print.

If you have something, but don't think it's that great, please let us see it anyway. Even something "ordinary" is better than nothing. It might encourage others to experiment with it. And who knows, someone else might submit an improvement that you haven't thought of in a future *SCCARA-GRAM*.

73, Gary WB6YRU, editor

S.C.C.A.R.A. Membership Form for 2001

(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) name and call:

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: Individual \$15 Family \$20 Student (under 18) \$5 _____

I want _____ SCCARA badges @ \$3 ea. Badge name & call: _____

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 TOTAL: _____

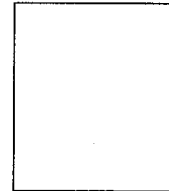
Give this completed form (or copy) with payment to the Secretary or Treasurer at any meeting or mail to the return address below:

===== 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



ADDRESS SERVICE REQUESTED

FIRST CLASS