

# SCCARA-GRAM



## Santa Clara County Amateur Radio Association

Volume 31, Number 2

February 2015



## Prez Sez

Some Things Never Change

The original RS232a specification was written sometime in the 1930s and published in Switzerland in English, French, and German. It was part of a modem protocol. Modems use tones for transferring digital information over phone lines. Modems have been largely supplanted but the current RS232c protocol has hung around as a popular computer interface until about 10 years ago when it started to be replaced by the USB (Universal Serial Bus).

The Elecraft K2 has a RS232 computer interface. The K2 is a modern HF radio but is first and foremost a QRP rig which does CW very well. You can also do SSB and digital modes with a bit more hardware. However it is not a, full featured, all HF band rig and it lacks many of the bells and whistles of many newer rigs. For the K2, RS232 was the right digital interface at its introduction in January 1999.

When the K3 was introduced a decade later I chided Eric Swartz about not having an USB interface for the K3. Instead the foremost state of the art rig with all the bells and whistles had an almost 80 year old RS232 interface as well. Eric's explanation was they would need a USB driver for an USB interface. (Driver = A piece of software used to interface hardware and software.) I thought his excuse was lame. It turns out that was the correct decision but with the wrong explanation.

I got my first call in April 1960 after taking my Novice test in December 1959. I had to wait until the 1961 'Callbook Magazine' was published to see my call listing. That also meant anyone else wanting to QSL me had to have a 1961 or later edition to find my address in order to QSL. However there were two caveats. First, the Novice license was good for only a year and therefore my call and any other current Novice would appear for only one year in Callbook Magazine and second the magazine only listed US calls. For any foreign contacts I would also need to buy the foreign edition and likewise any foreign station I contacted would need to buy the US edition of the magazine.

Magazine was a bit of a misnomer too. The magazine was more like a book with hefty book price. A few libraries carried Callbook Magazine so if you were not rich enough to subscribe you could get your QSL information there but this wasn't something you did every day. In short QSLing was a long process that could take months or even years.

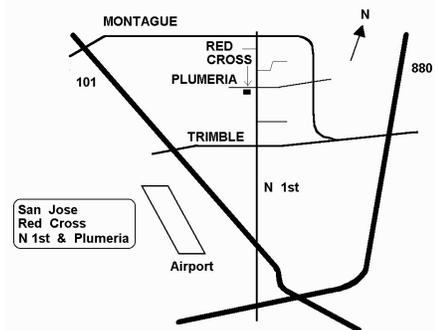
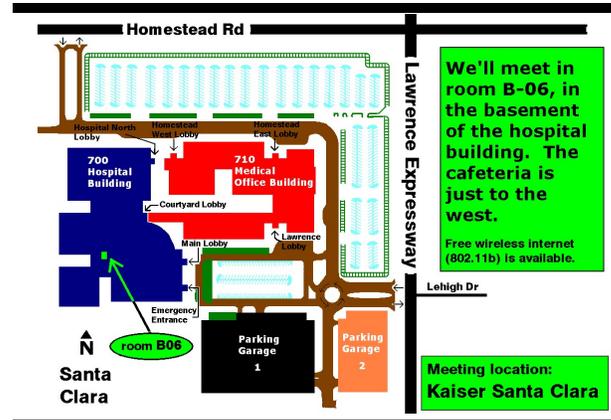
Ya, I know you had it rough too. I know how you had to

## Calendar

- 2/9 SCCARA General Meeting  
2/16 SCCARA Board Meeting--(San Jose Red Cross, 7:30p, all are welcome)

## General Meeting

- Day: Monday, Feb. 9, 2015  
Time: 7:30 PM  
Place: Kaiser Santa Clara, Hospital B-06  
Featuring: {to be announced}



The **SCCARA-GRAM** is published monthly by the **SANTA CLARA COUNTY AMATEUR RADIO ASSOCIATION**, PO Box 106, San Jose CA 95103-0106. Permission to reprint articles is hereby granted, provided the source is properly credited.

**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>. (Webmaster: Wally Britten, KA6YMD, 408-293-3847, [ka6ymd@arrl.net](mailto:ka6ymd@arrl.net))

**OFFICERS & DIRECTORS**

(all officers are also directors)

|                 |  |              |
|-----------------|--|--------------|
| President       | Fred Townsend, AE6QL   | 408-263-8768 |
|                 | e-mail: <a href="mailto:ae6ql@arrl.net">ae6ql@arrl.net</a>               |              |
| Vice President  | Greg Lane KF6FNA   | 408-393-5607 |
|                 | e-mail: <a href="mailto:kf6fna@comcast.net">kf6fna@comcast.net</a>       |              |
| Past President  | Don Steinbach, AE6PM   | 408-867-3912 |
|                 | e-mail: <a href="mailto:ae6pm@arrl.net">ae6pm@arrl.net</a>               |              |
| Secretary       | Greg Lane KF6FNA   | 408-393-5607 |
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| Treasurer       | Goetz Brandt, K6GKB  | 408-259-7287 |
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| Station Trustee | Don Village, K6PBQ   | 408-263-2789 |
|                 | e-mail: <a href="mailto:donvillage7@yahoo.com">donvillage7@yahoo.com</a> |              |
| Director        | Clark Murphy, KE6KXO   | 408-262-9334 |
|                 | e-mail: <a href="mailto:clarkmurph@yahoo.com">clarkmurph@yahoo.com</a>   |              |
| Director        | Lou Steirer, WA6QYS  | 408-241-7999 |
|                 | e-mail: <a href="mailto:wa6qys@aol.com">wa6qys@aol.com</a>               |              |
| Director        | Wally Britten, KA6YMD  | 408-293-3847 |
|                 | e-mail: <a href="mailto:ka6ymd@arrl.net">ka6ymd@arrl.net</a>             |              |
| Director        | Richard Clare WB6EWM   |              |
|                 | e-mail: <a href="mailto:crrr@pacbell.net">crrr@pacbell.net</a>           |              |
| Director        | Lloyd DeVaughns, KD6FJI  | 408-225-6769 |
|                 | e-mail: <a href="mailto:kd6fji@arrl.net">kd6fji@arrl.net</a>             |              |

**COMMITTEES**

|           |  |              |
|-----------|--|--------------|
| Editor    | Gary Mitchell, WB6YRU  | 408-269-2924 |
|           | e-mail: <a href="mailto:wb6yru@ix.netcom.com">wb6yru@ix.netcom.com</a> |              |
| Repeater  | Wally Britten, KA6YMD  | 408-293-3847 |
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| N0ARY BBS | Gary Mitchell, WB6YRU  | 408-269-2924 |
|           | e-mail: <a href="mailto:wb6yru@ix.netcom.com">wb6yru@ix.netcom.com</a> |              |

**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 (connect to n0ary-1). User ports: 145.09 MHz at 1200 baud, 433.37 MHz at 9600 baud, and telnet [sun.n0ary.org](http://sun.n0ary.org) (login "bbs"). Sysop: Gary Mitchell, WB6YRU  
For general packet info, see the NCPA web site [ncpa.n0ary.org](http://ncpa.n0ary.org).

**TELEPHONE NUMBERS**

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

walk 20 miles uphill, both ways, in the snow to school. But, you have a car now and you don't go to school anymore and you probably don't get on the air without computer assistance and the Internet either.

There are programs to help you get your license, locate or build your rig, and find DX. For the rig itself there are dozens of programs to operate your rig locally or remotely. There are programs to program your transceiver's frequency information. There are programs to send and receive slow scan television, or Morse code, or RTTY, or Packet, or a dozen other digital modes. Then if you have a software defined radio (SDR) like the K3 or Flex there are programs to update your firmware.

How do you know if your radio can communicate with a computer? Your radio must have either or both of a programming port and a RS232 port. All HF radios use RS232 conveyed information for control. So to Eric Swartz I say thank you for maintaining software compatibility for the K3. For those people who do not have RS232 ports on their computers, \$20 buys a simple USB to RS232 converter. Oh yes, will find a USB port on the P3 Panadapter accessory for the K3. It's for the keyboard so you can keyboard send CW or RTTY.

Recognizing the importance of computers and their software to Amateur Radio, I'm going to start giving reviews of software for the ham. Let me know if you have a favorite.

73, Fred, AE6QL, [ae6ql@arrl.net](mailto:ae6ql@arrl.net)



## ARRL News

From *The ARRL Letter*, January 15, 2015

### ARRL Library Goes Live

After several months of planning, The ARRL Library is now live! (<http://www.arrl.org/library>) The online Library is a free repository of educational presentations and oral histories. It is aimed at helping to preserve Amateur Radio's history and to educate clubs and individuals.

"This long-term project will be home to what I hope will eventually become one of the largest repositories of Amateur Radio-related papers and presentations, created by and for the Amateur Radio community," said ARRL Media and Public Relations Manager Sean Kutzko, KX9X. "This is your opportunity to submit material for the betterment and education of all radio amateurs."

Kutzko said the Library will initially consist of three major areas. These will include PowerPoint presentations that may be used at club meetings, for outreach to the general public, or for other public presentations; PDFs of general educational material about Amateur Radio, and oral histories of radio amateurs describing their personal experiences with Amateur Radio.

Current content includes presentations on operating digital modes, HF basics, and impedance matching. While the available material is sparse right now, Kutzko invites all radio amateurs to submit material for consideration -- as long as it relates to Amateur Radio. The Public Relations Committee will vet all submissions, and once a submission is approved, it will be added to The ARRL Library.

“We have lots of tutorials and information on how to create presentations on the site,” Kutzko pointed out. “Presenting somebody else’s PowerPoint slides is tough,” he added, “so we’re asking people who submit presentations to make use of PowerPoint’s ‘Notes’ feature, which allows the author to provide more detailed information for the talking points found on each slide, visible only to the presenter. This will make it easier for the presenter to emphasize what the author intended to convey.”

Answers to typical questions, as well as information on how to upload content and how to conduct an oral history interview, can be found in the Frequently Asked Questions area.

“Sharing expertise is one of the best things we can do for Amateur Radio,” Kutzko said. “I hope you will consider submitting material for the Library and help give back to the entire community.”

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From *The ARRL Letter*, January 22, 2015

## **ARRL Board Okays Changes to DXCC Program, VHF and Above Contesting Rules**

The ARRL Board of Directors has tweaked the DX Century Club (DXCC) rules to clarify and expand their recognition of remotely controlled station technology. It has also added a rule that puts greater ethical responsibility on operators with respect to remotely controlled operation. In addition, the Board adopted changes to the ARRL VHF/UHF contest rules that are aimed at encouraging greater participation. The Board took the actions during its annual meeting January 16-17 in Windsor, Connecticut.

The DXCC Rules changes, which affect Section I, subsections 8 and 9, explain and extend how contacts with remotely controlled stations now may be applied toward the DXCC award. According to ARRL CEO David Sumner, K1ZZ, the changes are subtle but significant. The modified rules make clear that contacts with legally licensed, land-based, remotely controlled stations count for DXCC, but the control point -- the operator’s location -- of a remotely controlled station no longer has to be land based; the operator can be literally anywhere.

“It has always been permitted for a QSO to count for both stations, if either station was operated remotely from a control point within the same DXCC entity,” Sumner explained. “Now the location of the operator doesn’t matter; the operator could be on the far side of the Moon, if he or she could figure out how to remotely control a station on land back on Earth from there.” Transmitter location continues to define a station’s location, and, for DXCC purposes, all transmitters and receivers must be located within a 500 meter diameter circle, excluding antennas.

Under the old rules, if either station was operated from a control point in another DXCC entity, the contact did not count for DXCC for either station. “This was unenforceable unless someone was transparent about what they were doing,” Sumner said.

The Board further adopted a new rule, now Subsection 11 (subsequent rules have been renumbered accordingly), that acknowledges the reality of the technology enabling remote operation, and it puts greater responsibility on individuals when it comes to applying that technology ethically and responsibly.

“Issues concerning remotely controlled operating and DXCC are best dealt with by each individual carefully considering the ethical limits that he/she will accept for his/her DXCC and other operating awards,” the new rule states. It adds, in part, “the owner of these achievements needs to be comfortable standing behind his/her

award and numbers. Peer attention has always been a part of awards chasing, of course, but in these times with so many awards and so many players, it is more important than ever to ‘play the game ethically.’”

Subsection 11 acknowledges that technological advances “add to the difficulty in defining rules for DXCC,” but stresses that the intent of the rules is what’s important. “It will continue to be up to the operator to decide what types of legal remote control operating he/she will use (if any) to contribute to an operating award,” the new rule concludes.

## **VHF and Above Contest Rules Revised**

The Board also adopted amendments to the General Rules for ARRL Contests Above 50 MHz to encourage greater participation and band utilization. The changes become effective with the 2015 June ARRL VHF Contest. The revisions stemmed from recommendations offered by the Board’s Programs and Services Committee’s ad-hoc VHF and Above Revitalization subcommittee, composed of active VHF/UHF contesters, and they received strong support from the VHF/UHF community.

The subcommittee was charged with developing recommendations to increase the level and breadth of ARRL VHF and Above contest participation and encourage operation on lesser-used bands. As a start to the process, the Board approved three changes that will permit the use of assistance for all operator categories, with no effect on entry category; permit self-spotting for all operator categories, and allow single operators to transmit on more than one band at a time.

The changes will permit assistance in arranging contacts, but not in conducting contacts. They will, for example, allow a station to announce its location in a chat room, on a repeater, or even via e-mail.

In other actions, the Board instructed the HF Band Planning Committee -- which will soon solicit members’ comments on proposed changes to the ARRL HF Band Plans -- to include the possibility of requesting that the FCC add RTTY and data privileges for Novices and Technicians on 15 meters.

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From *The ARRL Letter*, January 29, 2015

## **FCC “Paperless” Amateur Radio License Policy Goes into Effect on February 17**

Starting on February 17, the FCC no longer will routinely issue paper license documents to Amateur Radio applicants and licensees. The Commission has maintained for some time now that the official Amateur Radio license authorization is the electronic record that exists in its Universal Licensing System (ULS, <http://wireless.fcc.gov/uls/index.htm>), although the FCC has routinely continued to print and mail hard copy licenses. That will stop next month.

In mid-December, the FCC adopted final procedures to provide access to official electronic authorizations, as it had proposed in WT Docket 14-161 as part of its “process reform” initiatives. Under the new procedures, licensees will access their current official authorization (“Active” status only) via the ULS License Manager. The FCC will continue to provide paper license documents to all licensees who notify the Commission that they prefer to receive one. Licensees will also be able to print out an official authorization -- as well as an unofficial “reference copy” -- from the ULS License Manager.

"We find this electronic process will improve efficiency by simplifying access to official authorizations in ULS, shortening the time period between grant of an application and access to the official authorization, and reducing regulatory costs," the FCC Wireless Telecommunications Bureau (WTB) said. According to the WTB, the new procedures will save at least \$304,000 a year, including the cost of staff resources.

In comments filed November 5, the ARRL had strongly recommended that the FCC "give serious consideration to continuing a default provision for sending an initial paper license document to new licensees in the Amateur Radio Service, along with detailed, simple instructions for how to make the elections set forth in the notice relative to future modified or renewed licenses."

Under the new procedures, a new license applicant who already has an FCC Registration Number (FRN) and provides a valid e-mail address under "Applicant Information" in the ULS will receive an official ULS-generated electronic authorization via e-mail. New license applicants lacking an FRN will receive one in the mail as well as a temporary password to access the Commission Registration System (CORES), but will no longer automatically receive a license document; they must request one by changing their "Paper Authorization Preference" in the ULS License Manager.

The ARRL and other Amateur Radio commenters also worried that unless a license document is printed on distinctive paper stock, its authenticity could be questioned in such situations as obtaining vanity call sign license plates. To address this, the FCC said the watermark "Official Copy" will be printed on each page of an official authorization that a licensee prints out from the ULS. The WTB recently stopped using distinctive paper stock to produce hard copy licenses and has been printing these on "standard, white recycled paper." The Bureau noted that the distinctive paper stock it had been using was six times more expensive than the plain recycled paper it now uses.

- ▶ [Apply for a New License](#)
- ▶ [Set Paper Authorization Preferences](#)
- ▶ [Download Electronic Authorizations](#)
- ▶ [Associate Licenses With Your FRN](#)

The ULS License Manager (left) now includes settings that allow licensees to notify the WTB that they prefer to receive official authorizations on paper. Once final procedures go into effect designating electronic access as the default, licensees can change the ULS License Manager setting so that the Bureau will print and mail a license document. Licensees also may contact FCC Support

([http://esupport.fcc.gov/index.htm?job=contact\\_fcc\\_support](http://esupport.fcc.gov/index.htm?job=contact_fcc_support)) via the web, telephone, or mail to request paper licenses.

The FCC rejected as "outside the scope of this proceeding" an ARRL argument that Section 97.23 of the Amateur Service rules be amended to replace "licensee mailing address" with other alternatives, including e-mail, for use in Commission correspondence. The rule, which requires that any licensee mailing address be in an area where the licensee has US Postal Service access, has precluded FCC issuance of location-specific call signs in such areas as Navassa Island (KP1) and some Pacific islands.

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## Packet Pieces

**Downloaded from the BBS packet network:**

=====  
Date: 21 Jun 2010 02:39  
From: W1GMF@W1GMF  
To: HUMOR@USA  
Subject: Diets and Donuts  
-----

A devout man who was very over weight decided to go on a diet. One of his main problems with eating was that he would stop for donuts every morning on the way to work. So to make things easier for himself, he changed his route to work to avoid the temptation of stopping.

As the weeks went by he started losing a lot of weight and was receiving compliments from his friends and co-workers.

Then one morning without thinking, he accidentally turned onto the road which would take him by the donut shop. At first he was going to turn around but then he thought to himself, "maybe the Lord is rewarding me for my efforts". So, he said a short prayer telling the Lord that if this was His true intention let there be an open parking place directly in front of the shop.

And sure enough, on the fifth time around the block there was an open spot right up front.

=====  
Date: 29 Jun 2010 02:35  
From: W1GMF@W1GMF  
To: HUMOR@USA  
Subject: Dirty Magazines  
-----

Soon after being transferred to a new duty station, my Marine husband called home to tell me he would be late again. He went on to say that dirty magazines had been discovered in the platoon's quarters and they had to discipline the whole squad. I launched into a tirade, arguing that many men had pictures hanging in their quarters at our previous post, so his new platoon should not be penalized for something that trivial.

My husband calmly listened to my gripes and then explained, "Honey, 'dirty magazines' means the clips from their rifles had not been cleaned."

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## Meeting Minutes

**General Meeting, Jan. 12, 2015**



*{No minutes received. -- Editor}*

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**Board Meeting, Jan. 19, 2015**



Meeting called to order by Fred Townsend, AE6QL at 7:52 PM.

In attendance were President Fred Townsend AE6QL, Trustee Don Village K6PBQ, Director Wally Britten KA6YMD, Director Clark Murphy KE6KXO, Director Rich Clare WB6EWM, Director Lou Steirer WA6QYS and visitor Gwen Steirer KF6OTD. Absent/excused were Vice President Gregg Lane KF6FNA and Treasurer Goetz Brandt K6GKB. Absent was Director Lloyd DeVaughns KD6FJI.

#### Announcements:

SCCARA's HF station will be open on Saturday, January 31st beginning at 10 AM. Give a call on the club's 2 Meter repeater to verify that someone is there.

The SVECS quarterly breakfast will be held on January 24th at the Santa Clara Senior Center. Scott Morse KC6SKM will speak on Santa Clara County ARES/RACES activities of 2014 and goals for 2015.

#### Reports:

Secretary absent. No report. No minutes.

Treasurer absent. Report given by Lou WA6QYS in his stead.  
Checking...\$6166.72  
Savings...\$500.07  
Cash...\$332.04  
Total...\$6998.83

Trustee Don K6PBQ. HF station will be open January 31st 10AM. All equipment removed for construction/remodel of radio room will be returned. All cables need to be labeled for ownership (Red Cross or SCCARA) and use e.g. power supply for TS440 etc. Suggested logging programs as a topic for future SCCARA meeting.

President Fred AE6QL. Welcome to first BOD meeting of new Director Rich WB6EWN. Vasona Field Day Site near Rain Tree area is 99% approved.

There might be issues putting up a tower as no stakes are allowed in the ground. Park use fee is \$240. Need to check how many vehicles will be allowed to enter park under the permit. Field day activity will be added to events list on SCCARA WEB page.

Need to set up automatic reminders of due dates for P.O. BOX, insurance, license, domain name and NARCC renewals. Goetz is in the process of renewing domain name.

All SCCARA news letters to be electronically archived and kept in secretary's files.

Director Wally KA6YMD. Technical. No spurious signals noted from #2 repeater recently.

Web page. Web page is being kept current.

Editor Gary WB6YRU. In a note to the BOD, Gary seconded Goetz's suggestion of sending important financial records, roster data base, secretary's records to a number of key SCCARA members to have multiple back up copies available.

Miscellaneous: Holiday Luncheon 2015 will be held at Michael's in Mt. View. Don K6PBQ will check availability of Saturday, December 12, 2015. (As of January 26th reservation has been confirmed.)

No news from ASVARO regarding De Anza Electronics Flea Market.

Lou Steirer, WA6QYS, recording for the secretary.

## 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.

### Topics:

Antennas, feed-lines, tuners: NV6W, 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: NV6W, K6PBQ

DX (long distance/propagation): NV6W

Emergency operating/preparedness: WA6QYS

HF operating techniques (SSB, CW): NV6W, K6PBQ

Legal/FCC rules: WB6YRU

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

EchoLink: KK6MX

License testing, new amateurs: W6JPP

### Contacts:

NV6W, James D. Armstrong, Jr.,  
evening & msg: 408-670-1680

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 N0ARY  
e-mail: wb6yru@ix.netcom.com

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## Newsletter Notes

As you all know, some items from the ARRL Letter are included here in each issue. The ARRL Letter contains many articles, it's hard to know what to choose for the *SCCARA-GRAM*. If you would like to see more of any particular topic, please let me know.

73, Gary WB6YRU, editor

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**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 2015**  
 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: \_\_\_\_\_

You'll get a short e-mail notice each month letting you know a new SCCARA-GRAM (pdf) is ready for download.

Memberships begin January 1 and expire December 31.

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

**New members:**

If joining in January: normal dues

If joining in February through October: dues x (11 - month) x 10% (e.g. for July, that's: \$20 x 4 x 0.1, which is \$8)

If joining in November or December: normal dues. That's for next year, and the rest of this year is included free

I want the newsletter on paper delivered by U.S. Mail for an additional \$30

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

For family memberships (members at the same address), please include the following for each member, use separate forms.

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