

SCCARA-GRAM



Santa Clara County Amateur Radio Association

Volume 32, Number 4

April 2016



Electronic Flea Market

SCCARA will be renting a space at the April 9 De Anza Electronics Flea Market. Items have been donated to SCCARA that will be sold to raise funds to support the clubs activities and maintain our equipment. Club members will also be allowed to sell their own items at the club table.

Set up will be at 5:14 AM and tear down at noon (or when we sell out). If you have time to help out, call or email Gregg KF6FNA at 408-393-5607 or kf6fna@comcast.net.

Thanks to everyone that signed up last month (which we canceled do to rain.) It looks like the weather will be on our side this time.

Gregg KF6FNA

Repeater

SCCARA's operating 2 m repeater, 146.985-, 114.8, is currently relocated close to but about 137 feet lower than Eagle Rock site and on private property. It still has battery backup in case of power failure. There is no phone patch currently available on either the 2 m or the 70 cm repeater (442.425+, 107.2).

Both repeaters share the same user features:

Keypad test: Enter *5 immediately followed by several numerical keys which will be read back to you.

S meter: After keyup for 2-3 seconds, pressing 8 will give a relative signal strength reading when you unkey.

Tone pass-through: The # key will cause the subsequent keys to be transmitted by the repeater. This would usually be used if the phone patch were active to issue commands to the phone number originally called - such as calling 511 then requesting traffic info.

PLEASE remember ALL transmissions must be identified. Even just 'kerchunking' the repeater is illegal unless followed by ID and really doesn't verify if you are intelligible through the repeater just that it detected your presence.

The Eagle Rock repeater remains on standby in event of problems at the new site.

Only PL tone 114.8 Hz is now used on the 2 m repeater since only one will be active at a time.

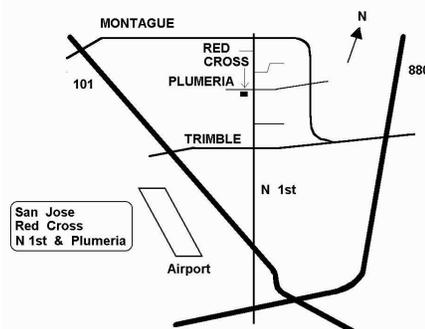
73, Wally KA6YMD, repeater chairman

Calendar

- 4/9 **Electronic Flea Market** -- we'll have a table
- 4/11 **SCCARA General Meeting**
- 4/18 **SCCARA Board Meeting**--(San Jose Red Cross, 7:30p, all are welcome)

General Meeting

- Day:** Monday, April 11, 2016
- Time:** 7:30 PM
- Place:** Kaiser Santa Clara, Hospital B-06
- Featuring:** David Vieira KI6CLA on building a 10 GHz Transverter



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)

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

Bob N6PCQ - SK

Robert L. Forster, N6PCQ died February 24, 2016 at age 83. Bob has been a member of SCCARA since 1987.

Bob moved into the area from Colorado in 1957 and worked at General Electric and Fairchild Semiconductor. His hobbies included amateur radio and POPS music. He is survived by his wife, three children, and five grandchildren.

ARRL News

From *The ARRL Letter*, March 3, 2016

Armed Forces Day 2016 Communication Test to Include Direct Military-Ham Contact on 60 Meters

This year's Armed Forces Day Crossband Communication Test on Saturday, May 14, will include a significant new wrinkle: Select military stations will be using 60 meter interoperability channels to communicate directly with Amateur Radio stations on the band. Back this year, select military stations will use crossband Automatic Link Establishment (2G ALE) communication as well as MIL-STD Serial PSK to send the Secretary of Defense Armed Forces Day message. Armed Forces Day 2016 is Saturday, May 21, but the radio event is held earlier to avoid conflicting with Dayton Hamvention, May 20-22.

The annual Armed Forces Day Communication Test is an opportunity to exercise two-way communication capability between Amateur Radio and military stations using a variety of modes, including SSB and CW as well as digital modes. The annual event gives participants -- including shortwave listeners (SWLs) -- an opportunity to demonstrate their technical skills, and to receive recognition from the appropriate military radio station.

The Army, Air Force, Navy, Marine Corps, and Coast Guard cosponsor the joint military/Amateur Radio, with military stations transmitting on military frequencies and listening on Amateur Radio bands.

Amateur Radio stations and shortwave listeners interested in trying the MIL-STD Serial PSK mode may download the software at http://www.n2ckh.com/MARS_ALE_FORUM/MSDMT.html.

Full details about this year's Armed Forces Day radio will be posted at <http://www.usarmymars.org/home/announcements> by April 12 and will also appear on the US Army Facebook page <https://www.facebook.com/HQArmyMARS>.

First Solid-State Transmitter to Span the Atlantic Now Part of ARRL Historical Collection

A flea-powered transistor ham transmitter built in the 1950s and later used to make a transatlantic contact has become part of the ARRL Historical Collection. The noteworthy historical artifact was donated by Andy Stewart, KB1OIQ, on behalf of the estate of Gus Fallgren, W1OG (SK), the ham who was at the key for the momentous event. Fallgren -- then W1OGU -- and two other Raytheon engineers, Al "Hank" Hankinson, W1OSF, and Dick Wright, W1UBC, built the little transmitter in the summer of 1956 on a lark, to see if they could achieve Worked All Continents (WAC) with it. The 20 meter, 78 mW transmitter was designed around a pair of Raytheon 2N113 transistors -- one as a 7 MHz oscillator, the other as a frequency-doubling power amplifier. On

September 18, 1956, Fallgren, in Chelmsford, Massachusetts, running the transistor transmitter into a three-element wide-spaced Yagi, worked OZ7BO in Copenhagen, Denmark. His signal report was 339.



Gus Fallgren, W1OGU, and his transistor transmitter were featured on the cover of the February 1957 issue of Radio & Television News.

The transmitter was the first to run Raytheon transistors on 20 meters. Hams had previously constructed low-power, solid-state transmitters for 40 meters and made contacts spanning up to 800 miles. Fallgren's 3800-mile contact worked out to approximately 47,500 miles per watt.



Assistant ARRL Laboratory Manager Bob Allison, WB1GCM (L), holds the transistor transmitter and semi-automatic key, while donor Andy Stewart, KB1OIQ, holds the 1957 issue of Radio & Television News that featured W1OGU on the cover.

Raytheon documented the historic contact in the February 1957 edition of Radio and Television News -- with a feature banner and cover photo of W1OGU in his shack with the battery-powered transistor transmitter -- and it was reported in other publications as well, including Raytheon's own publication and the Boston Globe. A November 1956 QST "Stray" reported that Fallgren had "worked KP4, TI2, OZ7, and G3, and has reportedly been heard in VK" with the little rig, and included a photo.

Assistant ARRL Laboratory Manager Bob Allison, WB1GCM, staff liaison to the ARRL Historical Committee, accepted the donation and thanked Stewart for arranging it.

From *The ARRL Letter*, March 17, 2016

ARRL Urges FCC Not to Impose Overbroad Notification Requirement on 2200 and 630 Meter Operation

In an ex parte statement filed March 10 with the FCC, the ARRL has asked the Commission not to adopt "an overbroad"

requirement for notification of utilities in advance of intended Amateur Radio operation on the pending 2200 (135.7-137.8 kHz) and 630 meter (472-479 kHz) bands. The statement, filed in ET Dockets 12-338 and 15-99, supplemented the League's earlier comments in the proceeding. The FCC is expected to provide Amateur Radio with access to both bands and to spell out service rules and operational requirements sometime within the first quarter of 2016. Regulatory provisions under consideration have included a possible notification requirement by some radio amateurs to utilities that operate PLC systems in that region of the spectrum, prior to operating on either new band. Utilities use unlicensed, mostly LF PLC systems to control parts of the electrical power grid.

"ARRL does not object to such a notification requirement, provided that it is appropriately circumscribed, not overbroad in its applicability, and not overly burdensome for radio amateurs to comply with," the League's statement asserted.

The ARRL noted that comments filed by the Utilities Telecom Council (UTC) called for a system of "quasi-coordination" by radio amateurs before commencing operation on 2200 meters. In its remarks to the FCC, the ARRL pointed out, however, that the UTC has not volunteered any information with respect to how a notification process might work, nor offered any PLC database information to the ARRL or to the amateur community so prospective users of the band could determine if their operation might be problematic.

The ARRL expressed concern that "this vague reference" to a notification procedure by UTC might lead the FCC to adopt an overbroad notification requirement for radio amateurs intending to operate in either the 2200 or 630 meter band. The League further pointed out that PLC systems operating between 9 and 490 kHz are not subject to protection from licensed services.

The League reiterated its willingness to accept distance-separation criteria between amateur stations operating on either band and PLC-carrying transmission lines using frequencies in either band, and a notification process in the few instances in which an amateur station intends to operate on either band within close proximity to a transmission line with a PLC using the same frequencies. The League said interference potential to PLC systems from Amateur Radio operation on 2200 or 630 meters is very low, with the possible exception of amateur operation within 1 kilometer of an existing transmission line carrying co-channel PLC signals.

"It would be an unreasonable regulatory burden to require more than this, and there is no record justification for a requirement that all radio amateurs who wish to operate in these bands to have to participate in a notification process," the ARRL said in its ex parte statement.

Any sort of blanket notification requirement prior to transmitting on 2200 or 630 meters "would be clear regulatory overkill," the ARRL concluded.

Over the Horizon Radars Becoming Routine Visitors on Amateur HF Bands

The International Amateur Radio Union Region 1 (Europe/Africa) Monitoring System (IARUMS) has reported a spate of over the horizon (OTH) radar signals on various Amateur Radio HF bands -- exclusive and shared. Many of these signals are being heard outside of the Region 1 confines.

A 50 kHz wide Russian OTH radar has been heard in the evening on 80 meters, often in the CW part of the band. An "often

long-lasting” Russian OTH signal about 13 kHz wide is being heard on the 7000-7100 kHz segment of 40 meters, while some digital traffic (FSK or PSK), and a “Codar-like radar from the Far East” are being heard in the 7000-7200 kHz segment as well as non-amateur CW transmissions.

The same OTH radar being heard on 40 meters also is appearing on 20 meters, along with digital traffic in FSK or PSK and on CW and broadband OTH radar signals from China. Some monitoring reports are intriguing, such as this one on 14.280 MHz from IARU Region 1 Monitoring System Coordinator Wolf Hadel, DK2OM: “Female voice with encrypted msgs -- figures -- 'SZRU' = Foreign Intelligence Service of Ukraine in Rivne -- every Wednesday at 1005 UTC.”

Broadband OTH radars from China, Australia, Cyprus, and Turkey have been monitored in 15 meters. On 10 meters, radars from Iran with FM CW and different sweep rates have been monitored, as well as fishery buoys on CW, and taxi operations on voice from Russia.

Voice traffic from fishing operations has been heard on all or most HF bands, as have a variety of broadcasters, including the third harmonic of Radio Tajik (4765 kHz) on 14.295 MHz, Radio Taiwan and Myanmar Radio, both on 7.200 MHz, and Radio Hargeysa in Somalia on 7.120 MHz.

From *The ARRL Letter*, March 24, 2016

ARRL HF Band Planning Committee Seeks Suggestions on IARU Region 2 HF Band Plan

The ARRL Board of Directors' HF Band Planning Committee is inviting input from the US Amateur Radio community regarding possible changes to the International Amateur Radio Union (IARU) Region 2 Band Plan. That band plan and other significant Amateur Radio spectrum issues will be high on the agenda at this fall's IARU Region 2 General Assembly in Chile. Leading up to that gathering, the ARRL and other IARU member societies in the Americas will be seeking comments and suggestions regarding the Region 2 HF Band Plan. The HF Band Planning Committee will review the current plan, consider comments from the US Amateur Radio community, and recommend any changes to the ARRL Board for submission to IARU Region 2.

“The ARRL HF Band Planning Committee wants to stress that the IARU Region 2 Band Plan is a voluntary guideline and does not supersede FCC regulations related to spectrum usage,” Committee Chairman and ARRL Second Vice President Brian Milesosky, N5ZGT, noted. He also pointed out two other issues for radio amateurs to consider.

Most Region 2 countries outside the US do not have the sort of detailed subband regulations contained in the FCC's Part 97. For radio amateurs in these countries, the Region 2 Band Plan may serve as the only source of guidance on spectrum usage.

The designation of a calling frequency or band segment for a particular purpose or mode in any IARU band plan does not convey any special rights or exclusivity of use. On the other hand, the absence of a calling frequency or band segment associated with a particular purpose or mode should not suggest that these have been overlooked or are viewed negatively.

The Committee is urging US radio amateurs who are considering suggesting revisions to the IARU Region 2 Band Plan first to study <http://www.iaru-r2.org/band-plan/> the existing IARU Region 2 Band Plan. They then should formulate a clear statement of any

proposed changes, including a brief explanation of why each particular change would benefit all IARU Region 2 spectrum users. Participants should include name and call sign. Submit input via e-mail (bandplan2016@arrl.org) by June 1, 2016. Messages will be automatically acknowledged.

The 19th IARU Region 2 General Assembly will take place in mid-October in Viña del Mar, Chile. Held every 3 years, the Region 2 Conference is attended by delegations from IARU member societies in throughout the Americas.

SBE Urges FCC to Improve Medium-Wave Noise Environment

The Society of Broadcast Engineers (SBE) has told the FCC that the regulatory agency needs to take another tack in its efforts to tackle AM broadcast band revitalization. **If the FCC takes the SBE's advice, the result could be less noise in the MF and HF Amateur Radio bands.** In comments the SBE filed in response to an FCC Further Notice of Proposed Rulemaking and Notice of Inquiry (MB 13-249) proposing ways to enhance the viability of the AM broadcast service, the SBE said the Commission must “commit to a regulatory plan which, over time, will reduce the levels of man-made noise in the MF bands, and more broadly in the bands below 30 MHz.” In comments it filed earlier in the proceeding, the SBE pointed out that “AM radio in particular is susceptible to interference from electronic devices of all types,” and that ambient noise on the AM band is only bound to get worse with further proliferation of noise-generating electronic devices, including certain lighting devices regulated under FCC Part 15 and Part 18 rules.

“[T]he only source of regulatory reform that has a meaningful chance to positively affect the noise floor over time are regulations that create obligations on manufacturers and importers and dealers, prior to the point that the consumer or user of the device or system comes into possession of it, and before it is deployed,” the SBE said. The SBE said that while the FCC has strongly supported unlicensed low-power RF devices over the years, it “apparently does not have a clear understanding of the aggregate effects” of these devices on the MF noise environment. In addition, the power grid has expanded, imposing its own family of electrical noises on the radio spectrum.

“Much unintentional interference is local in nature, but the cumulative impact can be extensive,” the SBE told the FCC. “The Commission does not now have, and has never had, a complete understanding of ambient RF noise levels and trends over time.”

The SBE urged the FCC to better enforce some existing regulations and develop new ones to address ambient noise in the existing AM band. “It is obvious that any interference management plan...has to be based on rules which limit RF noise before it becomes an issue, not post hoc, and those rules have to be enforced,” the SBE said.

Meeting Minutes

General Meeting, March 14, 2016



{no minutes received. -- Editor}



{no minutes received. -- Editor}

March Dinner Meeting

I was glad to see that some of our members brought their family. When I was first starting out in Ham Radio my elmer told me to look for a club that was 1/3 radio, 1/3 food, and 1/3 socializing in a way that would include non-HAM family members. I think that our March Dinner Meeting was a success with the last two.

This was also a chance to see some of the work that Gary WB6YRU, our SCCARA-GRAM Editor, has been doing transferring some of our club historical material to a digital format. President Fred AE6QL arrived early and set up his computer so that we could view a video of 1920's era SCCARA. Great job Gary! Looking forward to seeing more.

I would like to take this opportunity to remind members that Field Day is in June and the SCCARA picnic will be in August. September will be SCCARA's month to host the De Anza Flea Market.

There is also an opportunity to help out in April when SCCARA will rent a space at the Flea Market to sell some items that have been donated to us. Contact Gregg KF6FNA if you would like to help out, 408-393-5607 or kf6fna@comcast.net.

Gregg KF6FNA

Packet Pieces

Downloaded from the BBS packet network:

=====
Date: 13 Jul 2010 01:34
From: W1GMF@W1GMF
To: HUMOR@USA
Subject: Does It Bother You.....

At one Army base, the annual trip to the rifle range had been canceled for the second year in a row, but the semi-annual physical fitness test was still on as planned.

One soldier mused, "Does it bother anyone else that the Army doesn't seem to care how well we can shoot, but they are extremely interested in how fast we can run?"

=====
Date: 15 Jun 2010 02:39
From: W1GMF@W1GMF
To: HUMOR@USA
Subject: Dependents

A man, submitting information to his income tax preparer, was asked how many dependents he had.

"Sixteen," he replied. The preparer asked, "Would you mind repeating that?" The man replied, "Not if I can help it."

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 and 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
 - Lightning protection, grounding: WB6YRU
 - Station set-up, equipment: K6PBQ, W6JPP
 - TVI/RFI: WB6YRU
 - Homebrew projects, construction: 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

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

Newsletter Notes

Regarding the archived newsletters on our web site: It's been slow going due to some technical snags, but we're busy working on it.

Regarding the video archives: More details about our film from 1925 have been added, particularly about one of our founding members Frank Qument W6NX. See both the video archive page http://www.qsl.net/sccara/video_archives.htm and the info page http://www.qsl.net/sccara/16mm_film_stills.htm.

73, Gary WB6YRU, editor



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



FIRST CLASS

ADDRESS SERVICE REQUESTED

SCCARA Membership Form for 2016

If renewing and none of your info has changed, we only need your name and call

Name: _____ Call: _____ Class: _____

Address: _____ Licensed since (yyyy): _____

City: _____ State: _____ Zip: _____ Licence Expiration
 Date: (mm/dd/yyyy): _____

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

E-mail: _____

(only for club communications and the SCCARA-GRAM (pdf) newsletter)

Memberships start January 1 and expire December 31. Annual dues are: **\$20 Individual \$25 Family \$10 Student** (under 18)
 For family memberships (members at the same address), please include the above info for each member, (use separate forms).

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 per year, prorated (\$2.50 per month).
 So that's \$27.50 if starting in February, \$25 if starting in March, \$22.50 if starting in April, \$20 starting in May, etc.

\$ _____ **Total membership payment for:** **individual** **family** **student**

Give this completed form and payment to the Secretary or Treasurer at any meeting or mail to the club address.