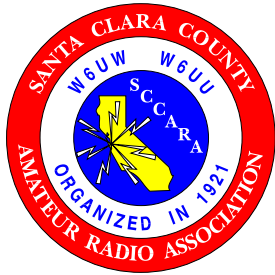


SCCARA-GRAM



Santa Clara County Amateur Radio Association

Volume 33, Number 5

May 2017



President's Prose

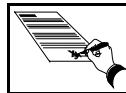
We had a nice turnout for the April SCCARA Meeting. Eric Norris WD6DBM gave his insightful presentation on QRP Operating. With more than 40 years of experience, he described and compared the equipment and practice of QRP. I found myself thinking about the possibilities of a Lithium Iron Phosphate battery, a magnetic loop antenna, and a comfortable chair next to salt water... As Eric finished up, he briefly mentioned some of his experience with WSPR. He offered to come back later in the year and cover the subject in more depth. Looking forward to that!

I would like to thank Nick N6VOA who donated an LED lantern and a GP5-SSB shortwave receiver to be used as raffle prizes at the meeting. Gwen Steirer KF6OTD won the receiver, (sorry I didn't get the name of the other winner).

Don't miss the May 8 SCCARA MEETING. Don Anastasia AA6W will be speaking on DX'ing (see article.) We will also talk about some of the equipment that SCCARA will be selling at the May 13, 2017 De Anza Flea Market. Members are welcome to sell some of their own treasures at the SCCARA table.

On Saturday, May 27 the club station at the Red Cross will be operating. Monitor the SCCARA 2 m repeater and listen for Don K6PBQ to announce that the radio room is open (usually around 11A.M.). Hope to see you there.

73, Gregg KF6FNA, kf6fna@comcast.net



May meeting

Don Anastasia AA6W will cover both 2-way satellite and HF radio DX techniques in his presentation at the May 8 SCCARA general meeting. Don't forget to bring your DX questions to the meeting!

Don was first licensed as WD6EPV in 1977. He became an avid DX'er in 1983 and upgraded to Extra in 1985 (currently AA6W). Don earned mixed mode (both SSB/CW) DXCC in 1992. He earned satellite mode (2-way sats) in year 1993 - award # 157. Don earned CW DXCC in 1999.

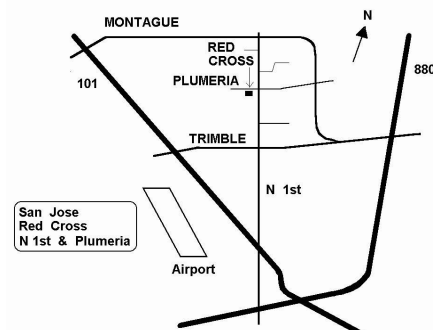
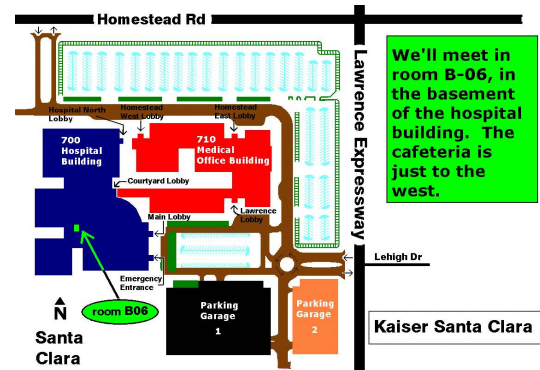
In 2007 Don was the primary (radio) control operator for ARISS (Amateur Radio on-board International Space Station) contact at Dillworth Elementary School. He allowed 22 children to directly communicate using amateur radio vhf to ask (science) questions with on-board astronaut Sunita Williams in a 12 minute time-frame (radio window) while ISS was in view of Northern California.

Calendar

- 5/8 SCCARA General Meeting
- 5/13 Electronics Flea Market at De Anza
- 5/15 SCCARA Board Meeting--(San Jose Red Cross, 7:30p, all are welcome)

General Meeting

- Day: Monday, May 8, 2017
Time: 7:30 PM
Place: Kaiser Santa Clara, Hospital B-06
Featuring: Don Anastasia AA6W on DXing



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: www.qsl.net/sccara

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(officers are also directors)

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	e-mail: wb6yru@ix.netcom.com	
Webmaster	Wally Britten, KA6YMD	408-293-3847
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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 ncpa.n0ary.org.

AMATEUR LICENSE TESTING

ARRL/VEC Silicon Valley VE group:
Morris Jones, AD6ZH: 408-507-4698

Don lives in San Juan Bautista and works as a substitute teacher in the Saratoga Union School District. He earned an AA from West Valley College in Liberal Arts and a BA from Santa Clara University in Social Studies.

Hope to see you at the meeting!

Gregg KF6FNA



Don at W1AW

Flea Market

SCCARA will have a table at the next electronics flea market at De Anza on Saturday May 13. We'll be selling a few club items and a bunch of donated stuff. It starts at 5 AM and ends at noon. However, we may not stay long if we sell everything.

Club members may sell a few of their own items at the club table. But you must be there to sell your own stuff, don't expect us to do it for you. SCCARA has no storage facilities. We appreciate donated items to help out the club, but please be mindful that we can't store donations.

SCCARA items for sale

The Board decided to sell a few club items we don't use. The membership gets first crack at them. **We'll bring them to the May general meeting.** After that, they'll go to the electronics flea market at De Anza on May 13.

The prices mentioned are just to give you an idea of what some people are asking on-line, it's *not* what the club is asking. Make an offer!

AEA 1200 baud TNC, model PK-12 (\$20 to \$75)
AEA PAKRATT TNC, model PK232MBX with Pactor option (\$26.50 to \$110)
Icom 2 m HT, model IC-V80 (\$36, retail \$184)
DCI 2 m band pass filter, model DCI-145-2H (\$120, \$425 retail)
Manual for a Ten Tec Century calibrator 276 and 80308 Crystal Calibrator.
Manual for Procomm v 2.4 terminal software

If you're interested in something but can't make it to the meeting, contact Gary WB6YRU, email wb6yru@ix.netcom.com, phone 408-269-2924.

Estate Sale

The following items are for sale from a SK estate:

1. ICOM IC-718 100W all-mode transceiver, covers 160-10 meters. \$500.
2. SGC SG-230 Automatic Antenna Tuner, 160-10 meters, 200 Watts PEP. \$395.
3. MFJ-4245MV switching power supply, 13.8 V, 45 A, with meters. \$100.
4. Diamond SX20C SWR / Power meter. \$60.
5. Ameritron AL-800 1200 watt PEP output linear amplifier. Covers all HF ham and WARC bands (a simple user mod is required for 10 and 12 m operation). \$1500.

Contact Don Steinbach, AE6PM
ae6pm@arrl.net (408) 867-3912

ARRL News

From *The ARRL Letter*, March 30, 2017

New Bands! FCC Issues Amateur Radio Service Rules for 630 Meters and 2,200 Meters

The Amateur Service will officially get two new bands in the near future. The FCC has adopted rules that will allow Amateur Radio access to the 630 and 2,200-meter bands, with minor conditions. A Report and Order (R&O) was released on March 29. The effective date of the new rules is hard to predict at this point; more below. The R&O, which also addresses several non-Amateur Radio issues, allocates the 472-479 kHz band (630 meters) to the Amateur Service on a secondary basis and amends Part 97 to provide for Amateur Service use of that band as well as of the previously allocated 135.7-137.8 kHz band (2,200 meters). The R&O also amends Part 80 rules to authorize radio buoy operations in the 1900-2000 kHz band under a ship station license.

“It’s a big win for the Amateur community and the ARRL,” ARRL CEO Tom Gallagher, NY2RF, said. “We are excited by the FCC’s action to authorize Amateur Radio access for the first time on the MF and LF spectrum.”

The FCC said the Amateur Radio service rules it has adopted for 630 meters and 2,200 meters allow “for co-existence with Power Line Carrier (PLC) systems that use these bands.” Utilities have opposed Amateur Radio use of the MF and LF spectrum, fearing interference to unlicensed Part 15 PLC systems used to manage the power grid.

Amateurs operating on 472-479 kHz would be permitted a maximum equivalent isotropically radiated power (EIRP) of 5 W, except in parts of Alaska within 800 kilometers (approximately 496 miles) of Russia, where the maximum would be 1 W EIRP. Amateurs operating in the 135.7-137.8 kHz band could run up to 1 W EIRP.

The FCC is requiring a 1-kilometer separation distance between radio amateurs using the two new bands and electric power transmission lines with PLC systems on those bands. Amateur Radio operators will have to notify UTC of station location prior to commencing operations.

The FCC also placed a 60-meter (approximately 197 feet) above-ground-level (AGL) height limit on transmitting antennas used on 630 meters and 2,200 meters. The bands would be available to General class and higher licensees, and permissible modes would include CW, RTTY, data, phone, and image. Automatically controlled stations would be permitted to operate in the bands. More details soon, on the ARRL website.

Effective Date

The fact that the new rules contain a new information-collection requirement -- notification of operation to the UTC -- makes it difficult to guess at an effective date. The FCC R&O says the Office of Management and Budget (under the Paperwork Reduction Act) must first approve the information-collection requirements (in §97.303[g][2]). Then, the revised Part 97 rules sections will become effective after the FCC publishes a notice in *The Federal Register* “announcing such approval and the relevant effective date.”

NVIS Research Paper Available

A thorough and fully annotated discussion of Near Vertical Incidence Skywave (NVIS) is available in the research paper, “Radio Communication via Near Vertical Incidence Skywave Propagation: An Overview,” by Ben A. Witvliet, PE5B/5R8DS, and Rosa Ma Alsina-Pagès.
<https://link.springer.com/article/10.1007/s11235-017-0287-2>

First investigated in the 1920s, NVIS propagation was rediscovered during World War II as “an essential means to establish communications in large war zones such as the D-Day invasion in Normandy,” the paper notes, adding that the US Army subsequently sponsored a lot of NVIS field research, especially between 1966 and 1973. More recently, NVIS has become a popular means to enable close-in communication on Amateur Radio HF bands between 3 and 10 MHz. NVIS can be used for radio communication in a large area (200-kilometer radius) without any intermediate manmade infrastructure, and it has been found to be especially suited for disaster relief communication, among other applications, according to the paper.

“A comprehensive overview of NVIS research is given, covering propagation, antennas, diversity, modulation, and coding,” the Abstract explains. “Both the bigger picture and the important details are given, as well as the relation between them.” As the paper describes it, in NVIS propagation, electromagnetic waves are sent nearly vertically toward the ionosphere, and, with appropriate frequency selection, these waves are reflected back to Earth.

“The great reflection height of 80 to 350 kilometers results in a large footprint and homogeneous field strength across that footprint,” the paper says. “Due to the steep radiation angles large objects such as mountain slopes or high buildings cannot block the radio path.”

As for NVIS antennas, the paper stipulates that important parameters are antenna diagram, polarization, and bandwidth. “As only high elevation angles contribute to NVIS propagation, optimizing the antenna diagram for these elevation angles will increase the effectively transmitted power and improve the signal-to-interference ratio at reception.”

Ham Radio Outlet Closes Silicon Valley Store

On March 22, Ham Radio Outlet (HRO) closed its Sunnyvale, California, store -- one of its first -- which served the Amateur

Radio community in the heart of Silicon Valley for more than a quarter of a century. One of five California HRO stores, the Sunnyvale store has been consolidated as a cost-saving measure with HRO's Oakland operation.

"We needed to make some changes in our Northern California locations," HRO National Sales Manager Steve Gilmore, W4SHG, said in a statement. "Some of the costs associated with operating in the Sunnyvale location have absolutely skyrocketed, and the traffic and parking availability in our current Sunnyvale location has become seriously problematic." Employees in the Sunnyvale store were offered positions in the Oakland shop, about 1 hour away to the north along San Francisco Bay.

Store manager Jon Kelley, K6WV, told The Mercury News that the region's rising minimum wage was also a factor. He said the Oakland shop had become a gathering place for regular customers from the area. One of those regulars, Gregg Lane, KF6FNA, president of the Santa Clara County Amateur Radio Association, told the newspaper, "This is depressing. It's like the end of an era. It's like your best friend moving away."

For the closing, another regular, Steve Stearns, K6OIK, organized a flash mob -- his first -- and a final celebration by local hams of the store and its staff. "More than 60 hams descended on HRO Sunnyvale on its last day of business for cake and champagne," Stearns said. "It was a surprise party for the staff and customers alike."

Shutting the Sunnyvale store leaves HRO with 13 retail outlets around the US. Last year, HRO took over the former Amateur Electronic Supply (AES) store in Milwaukee after AES went out of business.

Centennial of Amateur Radio Blackout for World War I Occurs on April 6

World War I commenced in Europe in August 1914, and the US, under President Woodrow Wilson, was determined to remain neutral. As the fighting and the enemy's resolve intensified, and Germany began sinking ships attempting to evade a naval blockade of England as well as non-military vessels -- including the Lusitania with a loss of nearly 1,200 lives -- it became inevitable that the US would enter the fray. Leaders of the newly formed American Radio Relay League encouraged the organization's 3,000 members to be prepared.

The US officially declared war on Germany and Austria-Hungary on April 6, 1917, and the US government immediately ordered most private radio stations in the US either to shut down or be taken over by the government. For the duration of WWI, it was against the law for private citizens to even own an operational radio transmitter or receiver, so amateur transmitting and receiving stations had to be disassembled. Amateur Radio operating privileges were not restored until November 1919 (QST resumed publication a few months earlier).

Once the US declared war, QST editorials urged qualified amateurs to volunteer their desperately needed skills to the military. Enlistees were particularly directed to the Navy, the nation's principal service user of wireless.

A specific program was developed to induct volunteer amateurs into the Naval Reserve for the duration -- the Class 4 Naval Reserve. The requirements included citizenship, the ability to pass a physical examination, and skill in sending and receiving Morse code at 10 WPM. Many volunteering radio amateurs chose to join this reserve, ARRL's first Communications Manager Fred H.

Schnell, 1MO, among them. He went to sea as a chief radioman.

ARRL co-founder Clarence D. Tuska received a commission as a lieutenant in the US Army Signal Corps, and he established a radio training school at Ellington Airfield near Houston, Texas.

QST suspended publication for the duration of the war. -- Thanks to Mike Marinaro, WN1M, and United States Early Radio History by Thomas H. White.

Meeting Minutes

General Meeting, April 10, 2017



{No minutes received. - Editor}

Board Meeting, April 17, 2017



6:49 PM

Attendance: KF6FNA Gregg Lane; K6GKB Goetz; KA6YMD Wally; K6PBQ Don Village; WA6QYS Lou Stierer; KE6KXO Clarke Murphy; KI6ZSK James Rustermier; KK6VGB Praveen Akunuru.

Visitors: KK6HWN Paul Gorny; WB6YRU Gary

Announcements:

SCCARAGRAM deadline April 24, 2017
SVECS Quarterly Breakfast on Saturday, April 22, 2017
SCCARA Station open Saturday, April 22, 2017
Holiday Banquet

SCCARA to setup a table at field day on May 13th. We need someone to register a table on their name as seller as SCCARA cannot register a table due to rules.

Secretary's Report:

Meeting minutes approved as read.
Members - 33
No new communications

Treasurer's Report:

Checking: 7581.38
Savings: 500.07
Total: 8081.45
Cash: 147.82
Overall Total: 8229.27

Goetz made payment for the Liability Insurance for SCCARA valid until June 2018. \$200.

Trustee:

Station will be open on April 29th Saturday.
Holiday Banquet - Reservation made on Saturday, December 16th at Shoreline Boulevard. We need to confirm by August that we have minimum 25 people. \$30 per person.

President:

Don Anastasia AA6W to speak on May 8th SCCARA meeting on Dxing.

Report of Standing Committees:

Newsletter / BBS -

We need to add announcements to Newsletter with sufficient notice.

Refer to new business.

Repeater / Webpage -

Repeater is working fine from Sunnyvale.

Paul suggested we use 70 cm repeater as well so that members will have it on their radio's. Gary suggested that we use a Piezo electric filter to connect our 2 m and 70 cm repeaters so that both the repeaters can be used. Board suggested that we add this to our to do list.

Paul suggested that we put announcements about our meetings on the 9AM talk-net. Get more publicity. Speak to Mike - NE6RD on Monday 9 AM Net.

Old Business:

Sales list for flea market table - May 13th.

Don Village made a motion to sell surplus SCCARA equipment - (1)RF Filter, (2) AEA 1200 baud TNC, (3) AEA PAKRATT TNC. Wally seconded. Motion carried. Give club members first bid

New Business:

Field Day

A trip needs to be made to the location to find the water faucet.

We need a metal detector.

Filed day is planned at Lariat Way, at Goetz's property.

Picnic

Club picnic on Sunday, August 20th at Henry Schmidt park.

We need to reach early to get the best spot.

BBS:

220 repeater port is not transmitting. We may have to buy a new 220 radio. A new Allinco might cost us \$230. Gregg mentioned that he knows of another company that makes similar radio. He will send the details to Gary to check it out.

Wally made a motion to approve a maximum of \$300 for Gary to fix the BBS. Lou seconded the motion. Motion carried.

Gary wanted to know if the equipment at our radio site is still available or if it can be considered abandoned. Gregg will check on this.

Lou suggested we re-instate our policy to give a complimentary 1 year membership to SCCARA. No motion required as this is an existing policy which was agreed upon by the board previously.

Summary of carried motions & to-do list:

Don Village made a motion to sell surplus SCCARA equipment - (1)RF Filter, (2) AEA 1200 baud TNC, (3) AEA PAKRATT TNC. Wally seconded. Motion carried.

Wally made a motion to approve a maximum of \$300 for Gary to fix the BBS. Lou seconded the motion. Motion carried.

Lou suggested we re-instate our policy to give a complimentary 1 year membership to SCCARA.

Connect the club's 2m & 70 cm repeaters.

Verify if the hospital Wifi has sufficient bandwidth to accommodate remote presentations.

Paul suggested that we put announcements about our meetings on the 9AM talk-net. Get more publicity.

Speak to Mike - NE6RD on Monday 9 AM Net.

Meeting adjourned at 9 PM.

Praveen Akunuru, KK6VGB, 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 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

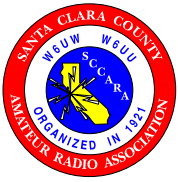
Newsletter report for the year 2016

12 newsletters were printed each month, that's down from 15 in 2015. A total of 144 newsletters were printed in 2016, costing \$433.67. That's an average of \$3.01 per newsletter, up from \$2.65 in 2015, (it depends on the number of color pages).

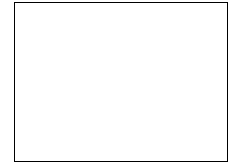
The total postage in 2016 for one member to receive the mailed newsletter was \$5.72. So for one member to get the mailed SCCARA-GRAM through 2016, the total costs was \$41.84. That's an average of \$3.49 per month.

Two members were on the mailing list in 2016, down from five in 2015. That's an all time low. So far there is only one in 2017.

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 2017

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 newsletter (pdf)

Membership type and dues: Individual, \$20 Family, \$25 Student, \$10 (under 18)

Memberships start January 1 and expire December 31.

Family memberships (more than one member per household): please include the above info for each member, use separate forms.

New members:

Dues are prorated: dues x (11 - month) x 10% (Example: July would be \$20 x (11-7) x 0.1, which is \$8)

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

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

(Prorated, \$2.50 per month. That's \$27.50 if starting in February, \$25 if starting in March, etc.)

\$ _____ **Total** enclosed

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