

SCCARA-GRAM



Santa Clara County Amateur Radio Association

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March 2021



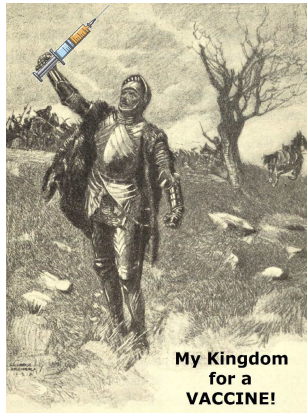
2021 – Our 100th Year!

Meetings & Gatherings

Our in-person meetings are still canceled and the club station is closed because of the covid-19 pandemic.

The board meeting will be held at the normal day and time, but on our 2 m repeater right after the Monday Night Net.

The electronic flea market has been canceled. There could possibly be a few starting this summer depending on conditions. Word has it that Fry's Electronics is closing, so their parking lot may not be available. See [the flea market web site](#) for updates.



ARRL News

From *The ARRL Letter*, Jan. 28, 2021

2021 is the centennial of the Finnish Amateur Radio League (SRAL). The special anniversary call sign OH100SRAL is being used throughout the year. Working at least 100 Finnish stations during 2021 qualifies the operator for an award. The SRAL's OH0W call sign will be on the air from the Aland Islands from January 29 - February 3 for the CQ World Wide 160-Meter Contest (CW) and a few days afterward. Operators will include Niko Halminen, OH2GEK; Martti Laine, OH2BH, and Pertti Simovaara, OH2PM.



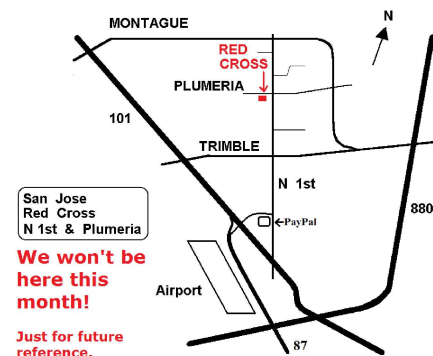
*{We aren't the only ones having a 100th anniversary!
-- Editor}*

Calendar

- 3/8 SCCARA General Meeting -- **canceled**
- 3/15 SCCARA Board Meeting: On our 2 m repeater after the net at 7:30 PM)

General Meeting

Day: Monday, March 8 -- **Canceled**
 Time:
 Place:
 Featuring:



The **SCCARA-GRAM** is published monthly by the SANTA CLARA COUNTY AMATEUR RADIO ASSOCIATION, PO Box 106, San Jose CA 95103-0106.

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.

Permission to reprint articles is hereby granted, provided the source is properly credited.

The deadline for articles is the **last Monday of the month.**

Web page: www.qsl.net/sccara

club email: w6uw@arrl.net or w6uw@sbcglobal.net

BOARD OF DIRECTORS

(officers are also directors)

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	e-mail: w6qys@aol.com	
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	e-mail: bshu288519@aol.com	
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	e-mail: ka6ymd@arrl.net	

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

From *The ARRL Letter*, Feb. 4, 2021

FT8 and the Other WSJT-X Digital Modes are "Tools," K1JT Says

According to WSJT-X software co-developer Joe Taylor, K1JT, the very popular FT8 and the other digital modes in the software suite "are tools, freely available to hams who want to use them. They are very good at some things, not so good at others." Nonetheless, FT8 -- and, by extension, its contest-mode variation, FT4 -- especially have become game-changers on the HF bands, although, as Taylor has explained, FT8 "was explicitly designed" for making contacts during weak, multi-hop, sporadic-E openings on 6 meters.

"It's extremely good at that," he added, and noted that transcontinental and intercontinental DX on 6 meters has greatly benefited from the use of FT8 over the past several years. Developed in 2017, FT8 is named after its developers -- Taylor, and Steven Franke, K9AN. The numeral designates the mode's eight-frequency shift-keying format.

Taylor said that while the development team knew that FT8 would be very useful for weak-signal DXing on HF as well as on 6 meters, it did not foresee that it would have the sort of impact it's had on HF operating.

Taylor agreed that FT8 is "a mature mode," with the protocol's details published in QEX. "Details of message structure, in particular, will not change in a way that is not backward compatible," he said.

Although some FT8 fans may feel the mode is running out of room on some bands, Taylor said that as far as he and his fellow WSJT-X developers are concerned, the 3 kHz slices of spectrum suggested for FT8 use are just that -- suggestions.

"There is no reason why additional slices should not be used when over-occupancy requires it," he told ARRL. "We don't attempt to dictate such usage patterns; band planning is best done by committees created for that purpose."

Many radio amateurs are taking advantage of the FT8 and FT4 modes all the time. FT8 watering holes are sometimes the only places to find signals on bands that otherwise might be considered dead.

The WSJT Development Group this week announced the general availability release of WSJT-X Version 2.3.0. It includes a new Q65 mode but does not involve any changes to the FT8 protocol. A summary of new features can be found in the WSJT-X 2.3 [User Guide](#). The [Release Notes](#) offer additional information, including a list of important program changes since the WSJT-X 2.2. Upgrading from earlier versions of WSJT-X should be seamless. [Installation packages](#) for Windows, Linux, and Macintosh are available.

From *The ARRL Letter*, Feb. 11, 2021

ARRL to Extend Field Day Rule Waivers from 2020, Add Class D and E Power Limit

The COVID-19 pandemic-modified [ARRL Field Day rules](#) from 2020 will continue this June with the addition of a power limit imposed on Class D (Home Stations) and Class E (Home Stations-Emergency Power) participants. The news from the ARRL Board's Programs and Services Committee comes as many

clubs and groups are starting preparations for Field Day in earnest. Field Day 2021 will take place June 26 - 27.

“This early decision should alleviate any hesitancy that radio clubs and individual Field Day participants may have with their planning for the event,” said ARRL Contest Program Manager Paul Bourque, N1SFE.

For Field Day 2021, Class D stations may work all other Field Day stations, including other Class D stations, for points. This year, however, Class D and Class E stations will be limited to 150 W PEP output.

For Field Day 2021, an aggregate club score will be published -- just as it was done last year. The aggregate score will be a sum of all individual entries that attributed their score to that of a specific club.

ARRL Field Day is one of the biggest events on the amateur radio calendar. Last summer, a record 10,213 entries were received.

“With the greater flexibility afforded by the rules waivers, individuals and groups will still be able to participate in Field Day, while still staying within any public health recommendations and/or requirements,” Bourque said.

The [ARRL Field Day web page](#) contains complete rules and entry forms, as well as any updated information as it becomes available.

Article: Ham Radio Forms a Planet-Sized Space Weather Sensor Network

The [article](#) “Ham Radio Forms a Planet-Sized Space Weather Sensor Network,” which appeared on February 9 in Eos, Earth & Space Science News, sprang from a project by the Ham Radio Science Citizen Investigation ([HamSCI](#)), founded by Nathaniel Frissell, W2NAF, of the University of Scranton, one of the paper's authors. The other authors are Kristina Collins, KD8OXT, who led the project, and David Kazdan, AD8Y, both of Case Western Reserve University (W8EDU). The article posits that, with their experience dealing with ionosphere-influenced propagation, radio amateurs have an empirical knowledge of space weather and offer a ready-made volunteer science community.

The article covers the methods and research being used to monitor the effects of solar activity on Earth's atmosphere, telecommunications, and electrical utilities -- and the valuable data being crowdsourced from amateur radio signals.

“To fully understand variability on small spatial scales and short timescales, the scientific community will require vastly larger and denser sensing networks that collect data on continental and global scales,” the article asserts. “With open-source instrumentation cheaper and more plentiful than ever before, the time is ripe for amateur scientists to take distributed measurements of the ionosphere -- and the amateur radio community is up for the challenge.”

“The reach of these crowdsourced systems, and the support of the amateur community, offers tremendous opportunities for scientific measurements,” the article notes.

The research acknowledges a handful of HamSCI collaborators -- from organizations and universities -- and is supported by National Science Foundation grants. HamSCI's Personal Space Weather Station initiative aims to develop a network of specially equipped amateur stations that will allow amateurs to collect useful data for space science researchers. Ham radio operators and researchers,

through HamSCI, are designing hardware for a distributed network of personal space weather stations, the article explains.

The 2021 HamSCI virtual workshop will take place March 19 - 20.

From *The ARRL Letter*, Feb. 18, 2021

South Coast ARES Joins South Coast CERT in California Evacuation Operation

In California, the [SC4ARES](#) group, part of the SC4 Amateur Radio Club of La Honda, Loma Mar, Pescadero, San Gregorio, and South Skyline in the ARRL Santa Clara Valley Section (south of San Francisco in northern California), joined with South Coast CERT members in late January. The groups performed a joint exercise to notify residents in the CZU Lightning Complex fire areas of mandatory evacuations in front of a moderate atmospheric river event that had the potential to cause debris flows in those burn-scarred areas.

Atmospheric rivers are columns of vapor that move with the weather, carrying an amount of water vapor roughly equivalent to the average flow of water at the mouth of the Mississippi River. When atmospheric rivers make landfall, they often release this water vapor in the form of rain or snow.

Fire Chief Ari Delay of La Honda Volunteer Fire Brigade -- a SC4ARES served agency -- called together ARES and CERT leaders on January 24 to evaluate the areas to be evacuated and assess who hadn't already left the area. Angelo Dragone, N6QAD; Bob Smith, W6RES, and Peter Chupity, KI6FAO, used [Radio Mobile](#) to assess likely relay spots in the mountainous terrain of the areas of Whitehouse Creek, Gazos Creek, Butano Creek, Dearborn Park, and Loma Mar. They tested these areas using UHF as a stand-in for the General Mobile Radio Service (GMRS) radios that CERT members would be using for the actual exercise.

On January 26, the CERT and SC4ARES members met at Pescadero High School to deploy teams to warn evacuees and leave literature describing the nature of the incoming weather. The CERT members communicated with the ARES team, and the ARES team kept in contact with the temporary operations center at the high school. In Whitehouse Creek canyon, all CERT members were also hams, so no GMRS radios were needed. CERT/ARES participants communicated with KI6FAO, perched on a hilltop to relay to the operations center.

The operation was a success, and the hourly rainfall rate didn't reach the threshold to trigger debris flows in any of the areas. -- Thanks to Lisa Short Chupity, W6LSC, PIO, SC4ARC/ARES; ARRL Santa Clara Valley Section News

British Columbia Radio Amateur Copies Signal from Mars-Orbiting Satellite

As reported on [Spaceweather.com](#), Canadian radio amateur Scott Tilley, VE7TIL, of Roberts Creek, British Columbia, has snagged another signal from deep space.



His latest conquest has been to copy the signal from China's [Tianwen-1](#) (pronounced “tee-EN-ven”) probe, which went into orbit around Mars on February 10. Tilley told [Spaceweather.com](#) that the probe's X-band signal was “loud and audible.”

"It was a treasure hunt," Tilley told Spaceweather.com. He explained that while the spacecraft did post its frequency with the International Telecommunication Union (ITU), it was too vague for precise tuning (X band is between 8 GHz and 12 GHz).

Launched last July, Tianwen-1 represents China's first Mars mission. It consists of an orbiter and a rover, which will land on the Martian surface in May or June 2021. It is able to photograph the planet's surface while in orbit.

Finding signals from deep space is a sub-hobby for Tilley, who seeks what he calls "zombie satellites" among other signal sources. In 2020, he tracked and identified signals from the experimental UHF military communication satellite LES-5.

In 2018, while hunting for an undisclosed US government spacecraft lost in a launch mishap, he spotted the signature of IMAGE (Imager for Magnetopause-to-Aurora Global Exploration), a NASA spacecraft believed to have died in December 2005.

Tilley has also picked up signals from NASA's [Mars Reconnaissance Orbiter](#), and the United Arab Emirates Hope probe, both orbiting Mars some 124 million miles away.

He uses a homemade 60-centimeter dish and relies on software-defined radios (SDRs) to accomplish the task.

Radio amateurs have been listening for signals from space since the 1957 launch of Sputnik 1, which transmitted at around 20 MHz.

Secretary's Report, Barbara KD6QEI:

The previous board meeting minutes were published in the SCCARA-GRAM.

Approved as published by acclamation

Gregg KF6FNA: Any changes to the roster?

Gary WB6YRU: One deceased member was dropped from the roster, and just a few renewals.

Treasurer's Report, Goetz K6GKB:

Checking = \$ 11413.41, Cash = \$ 216.04 , Total = \$ 11629.45

Trustee's Report, Don K6PBQ: Our Special Event Station normally would be at the club station, but it's closed due to the pandemic so we're operating from home instead. Originally it was to be on Saturday's mid-day, but we're on the air at other times. I haven't had a lot of contacts. Other than that, it's going OK.

Standing Committees:

Repeater chairman's report, Wally KA6YMD: The noise we're hearing I've heard before on other repeaters. Usually cause by the transmitter feeding back into the receiver. Cavities need tuning or there's too much coupling. We could try switching to our backup repeater, see if that makes any difference. To be tried later, not during a meeting tonight.

Gary WB6YRU: I don't hear the noise on the input, but I'm some distance away on the other side of the valley.

John W6JPP: I'm coming in on Echolink and I sure hear it.

Webmaster's report, Wally KA6YMD: Keeping the web site up to date as info comes in. I'm also going to send a reminder to those who have not renewed.

Editor's report: Gary WB6YRU: This month was our 100th anniversary edition. I would like to have seen more articles from the membership, especially those who have been members for a long time and the club higher-ups, but we got a few. I'd like to make the printed version of this edition available free to anyone who would like it, as a keepsake or whatever. There's no rush, we can wait until we have in-person meetings again to save on postage. Any objections?

(discussion followed, but it was difficult due to noise on the repeater)

Gregg KF6FNA: Let's discuss that later when we don't have so much noise on the repeater and we can think about how many we want to print and to whom it may go.

Don K6PBQ: The tube type in my article should have been 6146.

BBS Sysop's report: Gary WB6YRU: Nothing new, the BBS continues to run normally.

Old Business:

QSL certificate, Gary WB6YRU:

We're almost ready for a first draft. Regarding the certificate paper: I sent a few examples to the board, including a scan of a certificate the ARRL sent us for our 50th anniversary as an affiliated club. I favor that type, except blue. Comments?

Gregg KF6FNA: since we're having a noise issue, let's have comments go to you via email.

Regarding the images on either side: Last time most people favored having two keys, but nothing was decided. How about and old key from the 1920's on the left and a modern one on the right? And for the modern one, how about a feature packed electronic keyer?

I noticed something about the QSL text: there was no place for the club operator's name, I added that. Anything else about the text?

Don K6PBQ: perhaps for the old key-old vibro-plex. Almost

Meeting Minutes

General Meeting, Feb. 8, 2021



{meeting was canceled}

Board Meeting, Feb. 15, 2021



Held verbally on our 2 m repeater, W6UU/R

Meeting called to order by President Gregg Lane KF6FNA at 7:40 PM PST

Attendance:

President Gregg Lane KF6FNA; VP Ned Tufekcic AC6YY; Treasurer Goetz Brandt K6GKB; Station Trustee Don Village K6PBQ; Directors: Lou Steirer WA6QYS, Wally Britten KA6YMD, Ben Shuford KK6CCU, James "Rusty" Rustemier KI6ZSK; John Parks W6JPP.

Absent: Secretary Barbara Britten KD6QEI

Visitors: Gary Mitchell WB6YRU, editor; Truman Lindsey N6TRU

Announcements:

Ned AC6YY: We have interference on the repeater input, can we switch to the 70 cm repeater?

Gregg KF6FNA: We'll lose people that way, not everyone has 70 cm.

President's Report, Gregg KF6FNA: Nothing new.

Vice President's Report, Ned AC6YY: Nothing to report.

anything would be OK with me.
Gregg KF6FNA: Any objections? (nothing heard)
Gary WB6YRU: I'll make up a first draft with that and we can go from there.

Gregg KF6FNA:
The antenna at the Red Cross - nothing new has been done lately because of the covid pandemic.

Gregg KF6FNA:
Regarding the QRZ web site, Ned updated it and it looks OK. Several frequencies were listed for our special event station.

New Business:
Gregg KF6FNA: The club got an email from Janet Moore, her father is silent key KH6PR. She has equipment to dispose of and needed help. I'll be contacting some of you by phone to see if anyone can help.
Ben KK6CCU: I'll help.
Don K6PBQ: I'll can help too.

Gary WB6YRU: Question for the board... For new members, we (I) send out a "welcome to the club" packet. You've all seen it. It's several printed pages mailed in a large envelope. We have 7 left. Should I print up more or should we switch to emailing a digital version to new members?
John W6JPP: email them. (discussion followed)
Gregg KF6FNA: We're having trouble discussing this because the repeater noise. Let's table this until next meeting.

Meeting adjourned 8:54 PM PST

Gary Mitchell WB6YRU, recording for the Secretary

Correction

The tube mentioned in Don Village's article last month was a 6146, not a 61A6.

Packet Pieces

Downloaded from the BBS packet network:

=====
Date: 20 May 2011 01:24
From: W1GMF@W1GMF
To: HUMOR@USA
Subject: Dangerous Dog

Upon entering the little country store, the stranger noticed a sign saying DANGER! BEWARE OF DOG! posted on the glass door. Inside he noticed a harmless old hound dog asleep on the floor beside the cash register. He asked the store manager, "Is THAT the dog folks are supposed to beware of?"

"Yep, that's him," he replied.

The stranger couldn't help but be amused. "That certainly doesn't look like a dangerous dog to me. Why in the world would you post that sign?"

"Because", the owner replied, "before I posted that sign, people kept tripping over him."

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 (available from the club secretary or on our web site).

Topics:

Antennas, feed-lines, tuners: **NV6W, W6JPP, K6PBQ**
CW (Morse code): **NV6W, K6PBQ**
DX (long distance, propagation): **NV6W**
EchoLink: **K6GKB**
Emergency operating, preparedness: **WA6QYS**
HF operating techniques: **NV6W, K6PBQ**
Homebrew projects, construction: **WB6YRU**
Legal, FCC rules: **WB6YRU**
License testing, new amateurs: **W6JPP**
Lightning protection, grounding: **WB6YRU**
Packet Network (BBS, forwarding): **WB6YRU**
SCCARA (club inner workings): **K6PBQ, WB6YRU, WA6QYS**
Station set-up, equipment: **K6PBQ, W6JPP**
TVI, RFI: **WB6YRU**

Contacts:

K6GKB, Goetz Brandt, 408-259-7287
e-mail: goetz@ix.netcom.com

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

W6JPP, John Parks
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

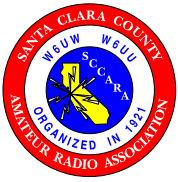
WB6YRU, Gary Mitchell, 408-269-2924
packet: home BBS N0ARY
e-mail: wb6yru@ix.netcom.com

Newsletter Notes

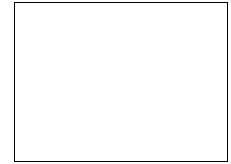
Last month's newsletter was our 100th anniversary edition. If anyone would like a printed copy as a keepsake, let me know. We'll put together a list and see how many we need.

Would you have liked to contribute to our 100th anniversary edition, but missed it? We can still put your article in the next edition. It's still 2021, our 100th year!

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 2021

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

Name: _____ Call: _____ Class: _____

Address: _____ Licensed since (year): _____

City: _____ State: _____ Zip+4: _____

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% For example: July would be \$20 x (11-7) x 0.1 = \$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 \$15 per year

(Prorated, \$1.25 per month. That's \$13.75 if starting in February, \$12.50 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.