



Santa Clara County Amateur Radio Association

Volume 34, Number 6

June 2018

## **President's Prose**

Field Day, June 23-24, 2018

ARRL Field Day is the single most popular on-the-air event held annually in the US and Canada. On the fourth weekend of June of each year, more than 35,000 radio amateurs gather with their clubs, groups or simply with friends to operate from remote locations.

Field Day for SCCARA this year is an informal contest, practice for emergencies, and a BBQ. This is an excellent opportunity to demonstrate Amateur Radio to the organizations that Amateur Radio might serve in an emergency, as well as the general public. For many clubs, ARRL Field Day is one of the highlights of their annual calendar.

The contest part is simply to contact as many other stations as possible and to learn to operate our radio gear in abnormal situations and less than optimal conditions.

Many SCCARA members have joined Don K6PBQ on the last Saturday of each month for socializing and operating in the Radio Room at the Red Cross Building, 2731 N. 1st. St., San Jose (corner of N. 1st. St. and Plumeria). SCCARA is one of the few radio clubs that has a club station that is available year round. We are working every weekend to finish station up-grades by Field Day so that we will be more competitive (and have more FUN!) Make sure that you attend the SCCARA General Meeting on Monday, June 11, 2018 to learn about the new and improved operating opportunities and to find out more about the pot luck/BBQ.

Hope to see you there,

Gregg KF6FNA, kf6fna@comcast.net



### **ARRL** News

From The ARRL Letter, May 10, 2018

ARRL Asks FCC to Protect Amateur Radio Millimeter-Wave Bands

ARRL has asked the FCC to avoid authorizing developmental technologies in two Amateur Radio bands above 95 GHz that some

# Calendar

6/11 SCCARA General Meeting

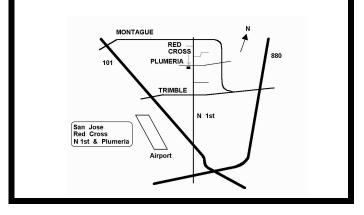
6/18 SCCARA Board Meeting--(San Jose Red Cross, 7:30p, all are welcome)

6/23,24 Field Day -- San Jose Red Cross radio room

### **General Meeting**

Day: <u>Time:</u> <u>Place:</u> Featuring: Monday, June 11, 2018 7:30 PM Kaiser Santa Clara, Hospital B-06 Our Field Day at the Red Cross





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

### **BOARD OF DIRECTORS**

(officers are also directors)

President	Gregg Lane KF6FNA e-mail: kf6fna@como	
Vice President	(open) email:	
Secretary	(open) e-mail:	
Treasurer	Goetz Brandt, K6GKB e-mail: goetz@ix.net@	
Station Trustee		408-263-2789
Director	Lou Steirer, WA6QYS e-mail: wa6qys@aol.	408-241-7999
Director	Wally Britten, KA6YMD e-mail: ka6ymd@arrl	408-293-3847
Director	Clark Murphy, KE6KXO e-mail: clarkmurph@	408-262-9334
Director	James Rustermier, KI6ZSK e-mail: rustermier@g	408 972-1689
Director	(open) e-mail:	man.com

#### **COMMITTEES**

Editor	Gary Mitchell, WB6YRU 408-269-2924		
	e-mail: wb6yru@ix.netcom.com		
Repeater	Wally Britten, KA6YMD 408-293-3847		
•	e-mail: ka6ymd@arrl.net		
NØARY BBS	Gary Mitchell, WB6YRU 408-269-2924		
	e-mail: wb6yru@ix.netcom.com		
Webmaster	Wally Britten, KA6YMD 408-293-3847		
	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.

### NØARY PACKET BBS

SCCARA hosts the packet BBS NØARY (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 <u>ncpa.n0ary.org</u>.

#### AMATEUR LICENSE TESTING

ARRL/VEC Silicon Valley VE group: Morris Jones, AD6ZH: 408-507-4698 radio amateurs may be unaware of. ARRL commented on May 2 in response to a Notice of Proposed Rule Making and Order (NPRM&O) in ET Docket 18-21, released in February. The so-called "Spectrum Horizons" proceeding seeks to make the bands above 95 GHz "more readily accessible for new innovative services and technologies." ARRL said that, while it agrees that "regulatory flexibility is justified" in the millimeter-wave bands above 95 GHz, due to the extensive frequency re-use possibilities, the FCC ought to make two primary Amateur/Amateur Radio Satellite bands in that part of the spectrum unavailable for deployment of unlicensed Part 15 or Part 5 Experimental Spectrum Horizons devices. Amateur Radio has primary allocation status in the bands 134 - 136 GHz and 248 - 250 GHz, both shared with the Radio Astronomy Service, which is secondary.



"The amateur allocations require protection against increases in the noise floor due to aggregate radio frequency devices," ARRL said. "The bands are used u b i q u i t o u s l y a n d unpredictably, typically, but not always, at high elevations for research and

development purposes and propagation studies, for terrestrial point-to-point, satellite, and Earth-Moon-Earth communications experimentation."

ARRL said it would oppose "any proposal to permit unlicensed devices or largely unregulated experimental operations" in the two primary Amateur Radio allocations in the range of spectrum the FCC is considering. "It is critical to preserve for Amateur Radio experimentation the current relatively quiet noise floor, and the positive RF environment that now exists in those two relatively small band segments," ARRL told the FCC. The League's comments noted that the secondary Radio Astronomy Service in those two bands also requires a quiet RF environment.

ARRL said it also would oppose the authorization of Spectrum Horizons experimental authorizations in the two primary Amateur/Amateur Satellite allocations, operating under a new subpart for "Spectrum Horizons Experimental Radio Licenses" in the spectrum at issue.

"Overall, the Commission is on the right track in this proceeding," ARRL allowed. "Opening the millimeter-wave bands to expanded unlicensed operation is not unreasonable. Some, but not all, of the bands above 95 GHz can be removed from the Part 15 restricted band list without significant concern." But, ARRL concluded, "the Amateur Radio primary allocations at 134 - 136 GHz and 248 -250 GHz, which are shared with radio astronomy, should be unavailable for either Part 15 operation or for other commercial development."

From The ARRL Letter, May 17, 2018

### FT8 Activity Bumping Up at Some Expense to Other Modes

Despite largely dismal HF conditions, there is no doubt that the recent FT8 digital protocol has hams on the air. The mode has caught on so quickly that co-developer Joe Taylor expressed surprise last fall at the rapid uptake of FT8 for making contacts on HF bands. Judging by Logbook of The World (LoTW) data, more than 2.3 million FT8 contacts were uploaded in 1 month -- a net gain of 1.2 million contacts on all modes over the same month last year, ARRL Radiosport Manager Norm Fusaro, W31Z, said. Over

the same period, activity in some of the other modes has declined.

"Year-to-date DXCC applications are up by 11% over the same period last year," Fusaro said. "So far, we have processed 898 Worked All States (WAS) applications -- a 72% increase over the same period last year. Of those applications, 347 -- or 39% -- were FT8 endorsements. Application for VUCC are also up by 33% over 2017."

Fusaro said that while some feel that FT8 is "taking over the world," subsuming all other modes, that's not the case. "Activity in the traditional modes of SSB and CW has decreased only slightly, by 10%," he said. "The real decrease is in RTTY and PSK activity and in the other WSJT-X modes. I believe poor propagation would have cut into SSB and CW activity, regardless of the new mode." Anecdotal reports support Fusaro's hard numbers, with wall-to-wall signals surrounding the FT8 watering holes.



Denny Berg, WB9MSM, completed DXCC on FT8.

Late last year, Denny Berg, WB9MSM, achieved his goal of completing DXCC using FT8. It took him just 4 months.

"I can tell all of you that this mode is spreading like wildfire throughout all the HF

bands," Berg told The Daily DX at the time. He said he was able to work all states on FT8 in about 6 weeks of operating.

Taylor has characterized SSB and CW as "general-purpose modes" that are good for ragchewing, DXing, contesting, disaster communication, and other purposes. On the other hand, he has said, FT8 and the other protocols in the WSJT-X suite are "special-purpose modes," designed for making reliable, error-free contacts using signals that may be too weak to work using more traditional modes -- and sometimes even too far down in the noise even to hear.

### From The ARRL Letter, May 24, 2018

### Solar Eclipse QSO Party Research Results Published in Geophysical Research Letters

The first science results from the Solar Eclipse QSO Party (SEQP) last August 21 have been published in the American Geophysical Union journal Geophysical Research Letters. In the paper, "Modeling Amateur Radio Soundings of the Ionospheric Response to the 2017 Great American Eclipse," New Jersey Institute of Technology (NJIT) researcher Nathaniel Frissell, W2NAF, and team present Reverse Beacon Network (RBN) observations of the SEQP and compare them with ray tracings through an eclipsed version of the physics-based ionospheric model SAMI3. HamSCI, the Ham Radio Science Citizen Investigation organization, sponsored the event.

"From a ham radio perspective, this paper very clearly shows the effect of the eclipse on not just a few, but a very large number of contacts," Frissell told ARRL. "You can see from the charts that activity drops off steeply on 20 meters during eclipse totality, while 80 and 160 meters open up. On 40 meters, you can see how the

contact distance increases in step with the eclipse."

Frissell said another key aspect of the paper is that the researchers were able to use ray tracing to compare the observations to a physics-based numerical model of the eclipsed ionosphere.

On 20 meters, eclipse effects were observed as a drop off in communications for an hour before and after eclipse maximum. On 40 meters, typical path lengths extended from about 500 kilometers (310 miles) to 1,000 kilometers (620 miles) for 45 minutes before and after eclipse maximum. On 160 meters and 80 meters, eclipse effects were observed as band openings 20 to 45 minutes around eclipse maximum. -- Thanks to Nathaniel Frissell, W2NAF

### **Meeting Minutes**

### General Meeting, May 14, 2018



Kaiser Santa Clara, 700 Homestead Rd., Hospital Building Rm. B-06.

Meeting called to order by President Gregg Lane at 19:45. Introductions were made.

Announcements:

1) Field Day is June 23-24, 2018 at the American Red Cross BLD., corner of N. 1st. St. and Plumeria, San Jose.

2) SCCARA club station at the Red Cross will be open May 26, 2018. Listen for Don K6PBQ to announce his arrival on the SCCARA 2M repeater around 10:00.

3) SCCARA will have a sales table at the July 14, 2018 Electronics Flea Market, held at Fry's, Sunnyvale. SVECS will sponsor the Flea Market.

### The program for the night was FIELD DAY 2018.

For 2018 SCCARA will be participating if FIELD DAY by operating "CLASS F" from the Club Station at the Red Cross Building 2731 N. 1st. St., San Jose, Ca.

SCCARA has had a relationship with the Red Cross for many years. Many of our members have joined Don K6PBQ on the last Saturday of each month to socialize and do some operating on one of SCCARA's radios. We have had some improvements in the works and we have set a goal to finish them and show off our improved Club Station on Field Day.

The improvement projects are:

1) Make provisions for an additional operating position in the conference room outside of the radio room.

2) Run new coax to the HF Beam on the roof. Change to an improved 3 Element, 4 Band Beam and install a Rotor/control cable.

3) Run coax to the roof for a new 40/20 Wire Dipole for a Digital Station in the Radio Room.

4) Plan out an additional portable operation location on the Patio (by the BBQ.)

Antennae Work Parties:

1) Sat. May 19, 2018 - scope out roof for new 20M/40M dipole location. Make parts list.

2) Sat. May 26 - Club Station open,(stay off roof) run coax to operating position in conference room.

3) Sat. June 2 - install new cables to roof, test rotor, remove existing beam antennae (need 5 people.) Trial set up of portable station on Patio.

4) Sat. June 9, Sun. June 10 - install new beam, install 20M/40M dipole (need 4 people.)

5) Sat. June 16 - TBD

Sat. June 23 - Field Day, start transmitting at 11:00 local time until Sun. June 24, 11:00 local time.

A sign up sheet for work parties was passed around. The meeting was adjourned and refreshments were shared by all.

Minutes by Gregg Lane

### Board Meeting, May 21, 2018



Red Cross Building 2731 N. 1st. St., San Jose, CA.

Meeting called to order by President Gregg Lane at 19:40.

Attendance: President Gregg Lane KF6FNA; Treasurer Goetz Brandt K6GKB; Station Trustee Don Village K6PBQ; Directors: Lou Steirer WA6QYS, Wally Britten KA6YMD, Clark Murphy KE6KXO, James Rustermier KI6ZSK; Editor Gary Mitchell WB6YRU; Visitor Paul Gorny KK6HWN.

Announcements:

1) Club Station open May 26, 2018. Listen for Don K6PBQ on the SCCARA 2M repeater to announce his arrival at the Red Cross around 10:00.

2) The Club Station will not be open on June 30, 2018 due to FIELD DAY on June 23-24, 2018.

Secretary's Report:

1) April 16, 2018 BOD MINUTES approved as published in the SCCARA-GRAM.

2) Gary WB6YRU is loading the new laptop for the secretary with software. He will add N1MM LOGGING SOFTWARE so that it can be used for logging on FIELD DAY.

Treasurer's Report: Goetz K6GKB reported that as of 5/21/2018 checking = \$7,893.28 savings = 500.07 cash = 548.82 TOTAL = \$8, 942.17

Trustee's Report: Don K6PBQ said that the antennas at the Club Station will be upgraded for FIELD DAY. There will be antennae work parties every weed end until the work is completed.

Editor's Report: Gary WB6YRU is urging members to submit articles for the SCCARA-GRAM.

Repeater Report: Nothing new

BBS Report: Gary WB6YRU reported that 6 m port is down at

the BBS. He is checking to see if it needs a new TNC.

President's Report: Gregg KF6FNA stated that he is planning the antenna work parties at the Red Cross Building. We will be installing a rotor on the mast with for our 3 element beam. We have new coax to install for the beam. There will be more information at the June 11, 2018 SCCARA meeting.

Old Business: 1) Rusty KI6ZSK is still negotiating for a printer for SCCARA.

New Business:

1) SCCARA will have a sales table at the July 14, 2018 FLEA MARKET at Fry's, Sunnyvale, which will be sponsored by SVECS.

2) Clark KE6KXO moved that SCCARA purchase a PA system to improve sound at SCCARA MEETINGS. Second by Don K6PBQ. Carried. Gary WB6YRU will look into it.

Meeting closed at 20:30.

Minutes by Gregg Lane

# **Packet Pieces**

# Downloaded from the BBS packet network:

A husband and wife are traveling by car from Key West to Boston. After almost twenty hours on the road, they're too tired to continue and stop at a nice hotel. But they only plan to sleep for a few hours and then get back on the road.

When they check out a few hours later, the desk clerk hands them a bill for \$350. The man explodes and demands to know why the charge is so high. He tells the clerk although it's a nice hotel, the rooms certainly aren't worth \$350.

When the clerk tells him \$350 is the standard rate, the man insists on speaking to the manager. The manager listens to the man, and then explains that the hotel has an olympic-sized pool and a huge conference center that were available for the husband and wife to use.

"But we didn't use them," the man complains.

"Well, they are here, and you could have," explains the manager. He goes on to explain they could have taken in one of the shows for which the hotel is famous. "The best entertainers from New York, Hollywood, and Las Vegas perform here," the manager says.

"But we didn't go to any of those shows, "complains the man again.

"Well, we have them, and you could have," the manager replies.

No matter what facility the manager mentions, the man replies, "But we didn't use it!" The Manager is unmoved. Eventually the man gives up and agrees to pay. He writes a check and gives it to the manager.

The manager looks at the check and says, "But sir, this check is only made out for \$50."

"That's correct," says the man. "I deducted \$300 for sleeping with my wife."

"But I didn't do that!" exclaims the Manager.

The man replies, "Well, she was here and you could have."

A drunk man sat down on a bench in a subway station next to a priest. The man's tie was stained, his face was plastered with red lipstick, and a half empty bottle of Jim Beam was sticking out of his torn coat pocket.

He opened his newspaper and began reading. After a few minutes the man turned to the priest and asked "Say Father, what causes arthritis?"

The priest replies "My Son it's caused by loose living, being with cheap wicked women, too much alcohol, contempt for your fellow man, sleeping around with prostitutes, and lack of a bath."

The drunk muttered in response "Well I'll be damned" then returned to his paper.

The priest thinking about what he had said nudged the man and apologized. 'I'm very sorry. I didn't mean to come on so strong. How long have you had arthritis?'

The drunk answered "I don't have it, Father. I was just reading here that the Pope does."

### **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: 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:**

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

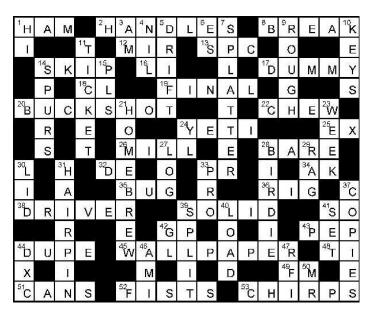
W6JPP, John Parks, 408-309-8709 e-mail: w6jpp@arrl.net

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

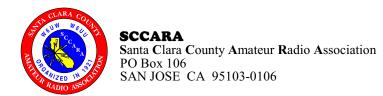
# Answers to the amateur radio crossword puzzle in last month's *SCCARA-GRAM*.



### **Newsletter Notes**

What do you think of the puzzles? That's all I have for now, but if you like them I could look into getting more... maybe even have them regularly. There probably aren't many amateur radio puzzles, what about non-amateur radio puzzles?

73, Gary WB6YRU, editor



FIRST CLASS

### ADDRESS SERVICE REQUESTED

# **SCCARA Membership Form for 2018** 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 Mem	iber Renewal	I'm also an ARRL member
E-mail: on ly for club communications	s and the SCCARA-GRAM new		
Membership type and dues: In	dividual, \$20	Family, \$25	<b>Student, \$10</b> (under 18)
Memberships start January 1 and expire De Family memberships (more than one memb	cember 31. ber per household): please	include the above int	fo for each member, use separate forms.
New members: Dues are prorated: dues x (11 - mon If joining in November or December: n			
I want the paper newsletter del (Prorated, \$2.50 per month. T			
\$ Total enclosed			
Give this completed form and payment to t	he Secretary or Treasurer	at any meeting or mai	l to the club address.