



CLUB STATION
K6SON

Short Skip

The Newsletter of

Sonoma County Radio Amateurs, Inc.

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<http://www.sonomacountyradioamateurs.com>

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REPEATER STATION
W6SON

Volume 45, Number 2

February 2020

Winter Field Day 2020 - Wet But Not Wild



One of our key goals for Winter Field Day (WFD) in 2020 was to secure a location that would enable more members to participate. By choosing one of the group campsites at the Liberty Glen Campground near Lake Sonoma, we accomplished that goal. And I'm certain that if the weather had been nicer on Saturday, we would have had even more participation.

The weather was dry on Friday, January 24, for antenna setup, and it stayed dry until early afternoon on Saturday. Then it continued to shower all day and into the night. Sunday gave us bright blue skies. Good weather for taking everything down.

Logistics were still a challenge, however, as we could not simply hitch up the Breadbox to bring the SCRA-owned equipment to the WFD site. Thanks to Doug, KF6LMB and Warren, K6WRP, we were able to get the gear out of the Breadbox and into their trucks for transport up to Liberty Glen. Doug and Warren also took care of getting the gear back in the Breadbox.

The SSB station was set up in Jack, K6ROW's, RV. The VHF/UHF/Satellite station was set up under one of the pavilions, and the CW and digital stations were set up under the other pavilion. We wrapped tarps around



the stations under the pavilions for added weather protection. Fortunately, there was virtually no wind the entire weekend.



[Continued on page 13...](#)



PRESIDENT'S MESSAGE JAN., 2020



Greetings! January is behind us with several members having participated in Winter Field Day, see articles within. Also, Darryl KI6MSP represented SCRA

at the Kids Education and Enrichment Expo which is sponsored annually by the Sonoma Family Life magazine. Thank you all who participated in the January planning meeting. Due to your hard work, the 2020 budget and schedule will be presented for adoption at the February 5th membership meeting.

The February membership meeting topic will be a video conference with Ed Fong presenting the theory behind his patented tri-band j-pole antenna, presumably model TRJ-1. Many of us are familiar with his dual-band model (VHF/UHF). His tri-band model operates at the fundamental frequency on each of three ham bands 2m, 1.25m, and 70cm (that's 144-148 MHz, 222-225 MHz, and 440-450 MHz) without radials. That's quite a feat as it provides higher gain over j-poles that operate at the third harmonic on UHF.

SCRA has many activities planned this year that will show up on the website calendar and sign-up sheets sometime soon now. Cornell W6HMN is running a Technician License class February 14-16. Brian N6IYY is running a VE testing session for all license classes on February 22. If you are interested in upgrading, we have a mentoring program to help. March appears light at this point, but the March membership meeting topic will be on

working Public Service events. Public Service events swing into full gear in April.

If you'd like to see information added to or deleted from this column, please let me know.

-73,
Fred AE6SF



Ed Fong

FEBRUARY PROGRAM

**Ed Fong's Tri-Band Antenna
(via webcam)**

[...More info...](#)

**JOIN ARRL, THE AMERICAN RADIO
RELAY LEAGUE**

The ARRL is the national organization of Amateur Radio. It represents Amateur Radio at International Conferences and before the FCC. Get the monthly QST magazine, insurance for your equipment and too many other benefits to mention here. Click <http://www.arrl.org/membership/>



If you are not getting the ARRL San Francisco Section news by e-mail and you are an ARRL member, be sure to subscribe under your Members Only information or go to this Web site:

<http://www.arrl.org/Groups/view/san-francisco>

2020 Club Officers

President	Fred Seitel	AE6SF
Vice President	Johnathan Brown	AK6VB
Secretary	Bill Dornbush	AA6BD
Treasurer	Iola Beckley	KK6HRE
Director	Randy Hall	AA6RH
	Warren Pierce	K6WRP
Past President	John Felton	KE5RI

Committee Lineup/Contacts

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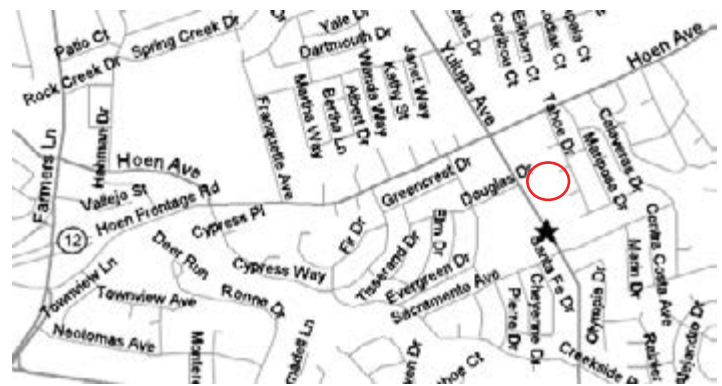


SCRA Club Meetings

The club normally meets the first Wednesday of each month, socially at 6:30 pm, program starting at 7:00 pm. Exceptions are holidays or other big events.

Meeting location:

Luther Burbank Art & Garden Center
2050 Yulupa Avenue
Santa Rosa, CA



All are welcome!

Please join us at our next meeting. Anyone interested in Amateur Radio is eligible for membership. A membership application is included in this newsletter. For more information, contact any SCRA officer, director or member. Hungry before the meeting? Join us for dinner! We Meet at **Round Table Pizza, 2424 Magowan Dr, Santa Rosa.** People start showing up at 5:15 PM. No RSVP is required.

NEW LOCATION!

Board of Directors Meeting

The SCRA Board of Directors will meet monthly on the Second Wednesday at Round Table Pizza, 2424 Magowan Dr, Santa Rosa. All members are welcome to attend, no reservations necessary. Arrive around 5:00pm for dinner. Meeting starts at 6:00pm.

LOANER RADIOS AVAILABLE

The Club has a variety of radios available to members to try out and improve their skills. We have a Kenwood T590 SG HF radio; Yeasu FT 2900 2 meter mobile; Yeasu FT1D, an analog/digital 2 meter and 440mhz HT; Yeasu FT 60, a 2 meter and 440 mhz HT; and a TYT TH-F5 VHF 2 meter HT. Trying these out is an excellent way to learn some radio and test before you buy. Contact Joe, K6AWA, at k6awa@yahoo.com with your request. Joe will forward an information form to you by return email.

UPGRADE TO GENERAL OR AMATEUR EXTRA CLASS

Get more privileges and enjoyment from your Ham Radio Hobby. [Mentoring assistance](#) is available. Contact Cornell Chesnik, W6HMN, SCRA Education Chair, at w6hmn@sonic.net.

Tuesday Night Net

The Sonoma County Radio Amateurs' net meets Tuesday at 7:00 PM on the SCRA repeater, 147.315, positive offset, PL 88.5.

All members and guests are invited to check in. The Net includes updates on SCRA activities, and News-line, the amateur radio community news service.

Anyone wishing to work as net control should contact lola kk6hre, at K6SON@ARRL.NET for assignment. Script and logs are available on the Website at <http://sonomacountyradioamateurs.com/wp/resources/net-script/>



The Weekly 160 Meter Net

Announcing the new 160 meter net which runs from 8:45pm to 9:30pm Tuesday nights, immediately following the 10 meter net hosted by Joe K6AWA. Tune your radio frequency to 1.900 Mhz. LSB. 160 meters requires a General or above license to transmit.

Your Tuesday Night Net Line-up

2 Meter Net (Membership Net) on the SCRA repeater, 147.315, positive offset, PL 88.5

10 Meter Net - starts at 8:00pm (new time) following the regular SCRA net Tuesday nights and ends at 8:45pm. Set your dial to 28,403.00 SSB, USB. Please note that all license classes (including technician) are welcome.

160 Meter Net - runs from 8:45pm to 9:30pm. Tune your radio frequency to 1.910 Mhz. LSB. 160 meters requires a General or above license to transmit.

Digital Mobile Radio Sonoma County Talk Group 31707!

The club's DMR footprint continues to expand! We established a beachhead on DMR and the BrandMeister network of repeaters and hotspots by adding a talk group for Sonoma County! We are using talk group number 31707 to keep in touch on DMR and be able to discuss local news and topics of interest. The use of a talk group like 31707 allows a wider variety of Sonoma County DMR hams to be able to consistently reach each other on the air. Best of all, the 31707 talk group can be reached on hotspots as well as repeaters, meaning you can tie into your local community wherever you are!

Sonoma County DMR Net happens on Thursdays at 6:30 PM PT!

We also started a DMR net for Sonoma County (using talk group 31707) that lets us practice a little bit of traffic handling, while also allowing us to get together and talk about ways we can integrate DMR into our normal operating habits! Currently Randy AA6RH runs net control. If you have a DMR radio, make sure to program it (or ask Randy to help you program it) to include talk group 31707 on any of the area DMR repeaters (there are at least four in Sonoma County!) and join us on Thursday evenings!



2020 SCHEDULE OF EVENTS

Check the [Club website](#) for details

Feb 14-16	Technician Class
Feb 22	VE Testing
Mar 24	Em Comm Class
Apr 4	Fish Rock Bicycle Adventure
Apr 11	Lake Sonoma 50
Apr 17	Family Camping Expo
Apr 17-19	Technician Class
Apr 19	ARRL Rookie Roundup SSB
Apr 25	VE Testing
May 2	Wine Country Century
May 2	Human Race
May 23	VE Testing
Jun 1 - Sep 25	Beginning Morse Code Class
Jun 13	Sonoma Cnty CF Cycle for Life 2020
Jun 14	Monte Rio Vineman Triathlon
Jun 20	Terrible Two – SRCC
Jun 26-28	Field Day
Jul 10-12	Technician Class
Jul 12	Night of Nights at KPH
Jul 18	VE Testing
Jul ?	Sonoma County Fair
Aug 15	International Lighthouse Weekend
Aug 15-16	Mini DX, with NA QSO Party
Aug 29	Tour de Fox
Sep 12-13	Waves to Wine
Sep 18-20	Technician Class
Sep 26	VE Testing
Sep ?	Pacific Coast Air Museum
Oct 3	Levi's GranFondo
Oct 17	Jamboree on the Air
Oct 17	Pacificon STEM presentation
Oct 26	North Bay Science Discovery Day
Nov 6-8	Technician Class
Nov 14	VE Testing
Dec 2	Holiday Party

CONTEST CORNER

Welcome to Contest Corner for February 2020.

The first weekend in February looks to be a busy one for contesters. The Vermont, Minnesota, and British Columbia QSO parties come in on the 1st as well as several sprints which continue to gain in popularity. The cw ops have the AGCW Straight Key Party, FISTS Winter Slow Speed Sprint, North American Sprint, and FYBO Winter Qrp Sprint. The 10-10 Int. Winter Contest, SSB and the Mexico RTTY International Contest round it out for the weekend.

The ARRL School Club Roundup is on the 8th and the ARRL International DX Contest, CW shows up on the 15th. These two are typically well attended and bring activity to the bands. The next big time contest is on the 29th. The North American QSO Party, RTTY will bring the sounds of RTTY to the airwaves. Check out the contest calendars for other favorites not mentioned and you will find something for every op, experienced or not. Have fun!

Something to remember for new contesters is to try and strive for efficiency with each transmission you make regardless of mode. Send your exchange as the rules allow without any embellishment. A clear, succinct, and accurate exchange is what keeps the rhythm going in a contest. Any fills will follow these same guidelines as well. Follow these examples and your skills as an operator will improve and add to the success and enjoyment of amateur radio in general.

Do not forget to check out <http://www.contestcalendar.com>

Contact nq6e@arrl.net for questions/comments/suggestions regarding Contest Corner.
72/73,
NQ6E

Bruce Draper, AA5B, aa5b.corral@gmail.com

Contest Corral

February 2020

 Check for updates and a downloadable PDF version online at www.arrl.org/contests.

Refer to the contest websites for full rules, scoring information, operating periods or time limits, and log submission information.

Start Date-Time	Finish Date-Time	Bands	Contest Name	Mode	Exchange	Sponsor's Website
1 0000	2 2359	1.8-UHF	Vermont QSO Party	CW Ph Dig	RS(T), county or SPC	www.ranv.org/vtqso.html
1 0001	2 2359	28	10-10 International Winter Contest, SSB	Ph	Name, mbr or "0," SPC	www.ten-ten.org
1 1200	2 1159	1.8-28	Black Sea Cup International	CW Ph	RS(T), ITU zone, Black Sea club info (if any)	bscc.ucoz.ru
1 1200	2 1200	3.5-28, 144	F9AA Cup, CW	CW	RST, serial	www.site.urc.asso.fr
1 1200	2 2359	3.5-28	Mexico RTTY International Contest	Dig	RST, XE state or serial	www.rtty.fmre.mx
1 1400	1 2359	1.8-28	Minnesota QSO Party	CW Ph Dig	Name, county or SPC	www.w0aa.org
1 1400	1 2359	1.8-28	FYBO Winter QRP Sprint	CW Ph Dig	RS(T), SPC, name, power, temperature	arizonascqrptions.apps-1and1.com
1 1600	1 1900	3.5	AGCW Straight Key Party	CW	RST, serial, class, name, age	agcw.org/index.php/en
1 1600	2 2359	1.8-28	British Columbia QSO Party	CW Ph Dig	RS(T), BC District or SPC	orcadxc.org/bcqp_rules.html
1 1700	1 2100	3.5-28	FISTS Winter Slow Speed Sprint	CW	RST, SPC, name, mbr or power	fistsna.org
2 0000	2 0400	3.5-14	North American Sprint, CW	CW	Other station's call, your call, serial, name, SPC	ncjweb.com
3 2000	3 2130	3.5	RSGB 80-Meter Club Championship, SSB	Ph	RS + serial	www.rsgbcc.org/hf
4 0200	4 0400	3.5-28	ARS Spartan Sprint	CW	RST + SPC + Power	arsqrp.blogspot.com
5 2000	5 2100	3.5	UKEICC 80-Meter Contest	Ph	4-char grid square	www.ukeicc.com
6 1800	6 2200	28	NRAU 10-Meter Activity Contest	CW Ph Dig	RS(T), 6-char grid square	nrau.net/activity-contests
6 2000	6 2200	1.8-50	SKCC Sprint Europe	CW	RST, SPC, name, mbr or power	www.skccgroup.com
8 0000	9 2359	3.5-28	CQ WW RTTY WPX Contest	Dig	RST, serial	www.cqwxprtty.com
8 1000	9 1000	1.8-28	SARL Field Day Contest	CW Ph Dig	RS(T), number of xmtrs, category, province or "DX"	www.sarl.org.za
8 1100	8 1300	7, 14	Asia-Pacific Spring Sprint, CW	CW	RST, serial	jsfc.org/apsprint/aprule.txt
8 1200	9 1200	1.8	KCJ Topband Contest	CW	RST, JA Prefecture/District code or continent	www.kcj-cw.com
8 1200	9 1200	1.8-28	Dutch PACC Contest	CW Ph	RS(T), province or serial	pacc.veron.nl
8 1200	9 2359	1.8-50	SKCC Weekend Sprintathon	CW	RST, SPC, name, mbr or "none"	www.skccgroup.com
8 1400	10 0200	All (no WARC)	YLRL YL-OM Contest	CW Ph Dig	Serial, RS(T) SPC	ylrl.org/wp/yl-om-contest
8 1500	9 1500	1.8-28	OMISS QSO Party	Ph	RS, SPC, mbr (if any)	omiss.net/Facelift/qsoparty.php
8 1700	8 2100	3.5-28	FISTS Winter Unlimited Sprint	CW	RST, SPC, name, mbr or power	fistsna.org
8 1900	8 2300	1.8	RSGB 1.8 MHz Contest	CW	RST, serial, District code (if any)	www.rsgbcc.org/hf
9 1300	9 1700	3.5, 7	Balkan HF Contest	CW Ph	RS(T), serial	hamyo.ro/balkanhf2019
9 1400	12 0800	1.8-144	Classic Exchange, Phone	Ph	Name, RS, SPC, radio manuf/model	www.classicexchange.org
10 0100	10 0259	3.5-14	CQC Winter QSO Party	CW	RST, SPC	www.coloradoqrclub.org
10 0100	10 0300	1.8-28	4 States QRP Group Second Sunday Sprint	CW Ph	RS(T), SPC, mbr or power	www.4sqr.com
10 1300	14 2359	All (no WARC)	ARRL School Club Roundup	CW Ph	RS(T), Class (I/C/S), SPC	arrl.org/school-club-roundup
12 0130	12 0330	3.5-14	NAQCC CW Sprint	CW	RST, SPC, mbr or power	naqcc.info
12 2000	12 2130	3.5	RSGB 80-Meter Club Championship, Data	Dig	RST, serial	www.rsgbcc.org/hf
14 0000	14 2359	1.8-7	PODXS 070 Club Valentine Sprint	Dig	Name, OM/YL, SPC	www.podxs070.com
15 0000	16 2359	1.8-28	ARRL International DX Contest, CW	CW	W/VE: RST + SP; non-W/VE: RST + power	www.arrl.org/arrl-dx
15 1200	16 1159	1.8-28	Russian PSK WW Contest	Dig	RST, 2-letter oblast or serial	www.rdrclub.ru
15 1900	15 2059	1.8-28	Feld Hell Sprint	Dig	RST, mbr, SPC, 4-char grid square	sites.google.com/site/feldhellclub
15 2300	16 2300	1.8-14	AWA Amplitude Modulation QSO Party	Ph	Name, SPC	www.antiquewireless.org
17 0200	17 0400	1.8-28	Run for the Bacon QRP Contest	CW	RST, SPC, mbr or power	qrptest.com/pigrun
19 1900	19 2030	3.5	AGCW Semi-Automatic Key Evening	CW	RST, serial, year first used a bug	agcw.org/index.php/en
21 2200	23 2200	1.8	CQ 160-Meter Contest, SSB	Ph	W/VE: RS, SP; DX: RS, CQ Zone	cq160.com/rules.htm
22 0600	23 1800	3.5-28	REF Contest, SSB	Ph	RS, Department/Prefix or serial	conours.r-e-f.org/contest
22 1200	23 1200	3.5-28	UK/EI DX Contest, CW	CW	RST, serial, District code (if any)	www.ukeicc.com
23 1400	23 1700	3.5-14	SARL Digital Contest	Dig	RST, serial	www.sarl.org.za
23 1500	23 1700	3.5-28	High Speed Club CW Contest	CW	RST, mbr or "NM"	www.highspeedclub.org
24 1300	25 0400	1.8-28	QCX Challenge	CW	RST, name, SPC, rig	qrp-labs.com/party.html
26 0000	26 0200	1.8-28	SKCC Sprint	CW	RST, SPC, name, mbr or power	www.skccgroup.com
26 2000	26 2100	3.5	UKEICC 80-Meter Contest	CW	4-char grid square	www.ukeicc.com
27 2000	27 2130	3.5	RSGB 80-Meter Club Championship, CW	CW	RST, serial	www.rsgbcc.org/hf
29 1200	1 1159	1.8-28	Russian WW Multimode Contest	CW Ph Dig	RST(Q), oblast or serial	www.rdrclub.ru
29 1300	1 1300	3.5-28	UBA DX Contest, CW	CW	RST, serial, province (if ON)	uba.be/en/hf/contest-rules
29 1500	1 0159	1.8-50	South Carolina QSO Party	CW Ph Dig	RS(T), county or SPC	scqso.com
29 1800	1 0559	3.5-28	North American QSO Party, RTTY	Dig	Name, state/DC/province/country	www.ncjweb.com
29 1800	1 0559	3.5-28	NA Collegiate Championship, RTTY	Dig	Name, state/DC/province/country	www.w9smc.com/nacc

All dates refer to UTC and may be different from calendar dates in North America. Contests are not conducted on the 60-, 30-, 17-, or 12-meter bands. Mbr = Membership number. Serial = Sequential number of the contact. SPC = State, Province, DXCC Entity. XE = Mexican state. Listings in blue indicate contests sponsored by ARRL or NCJ. The latest time to make a valid contest QSO is the minute listed in the "Finish Time" column. Data for Contest Corral is maintained on the WA7BNM Contest Calendar at www.contestcalendar.com and is extracted for publication in QST 2 months prior to the month of the contest. ARRL gratefully acknowledges the support of Bruce Horn, WA7BNM, in providing this service.



SCRA Merchandise QST

The limited edition SCRA 80th Anniversary Lapel Pins are available at \$5 each. These stylish 1.25" lapel pins feature our full color 80th Anniversary logo with an epoxy dome finish and a military/butterfly clutch back to secure the pin in place.

They not only look good on a lapel, but they'll give your hats, sweaters, jackets and tote bags that SCRA touch.



The SCRA/Halls webstore is on-the-air! Just tune your internet device to the website hosted by Halls Executive Gifts and Awards (AKA Frederick Engraving) at <http://scra.hallsapparel.com>.

This time, when you order a shirt, in the style, color and size of your choice, it will be available for pickup within a couple of weeks. And now you also have the option to either pick it up from Halls yourself or pick it up at a future membership meeting.

Most members have found that the shirt sizes fit as expected, but if you tend to run in between sizes, we recommend the larger size.



Please email any questions and comments to merchandise@sonomacountyradioamateurs.com.

SCRA Membership QST

The SCRA membership stands at 236.



Welcome new and returning members:

- Ken Kimari KF6KEN (T) Penngrove
- Rachel Foreman KN6FXM (T) Santa Rosa



New call signs:

- Ed Peoples WA6DDO (T) Forestville
- Martin Olmsted KN6CAJ (T) Santa Rosa
- Rick Richard KG6UZF (G) Santa Rosa



License Class Upgrades:

- Mark Aldridge KN6CWX – General

If you have recently achieved a new license class, obtained a new call sign, or changed your address, email or phone, please email membership@sonomacountyradioamateurs.com with your update. And don't forget to report your address change to the FCC!

SCRA Membership Renewal Season Ending Soon! Members that haven't renewed for 2020 by the end of our club meeting on Wednesday, February 5th, will be moved to our Past Members table and will no longer receive the weekly SCRA Blog, monthly Short Skip newsletter, and the Membership Roster.

Don't Delay Renew Today!

Membership Count by License Class	
License Class	Count
Advanced	3
Amateur Extra	71
General	61
Technician	92

We have **9** Associate members.

153 SCRA members are ARRL members.



Sonoma County Radio Amateurs Membership Meeting Minutes for January 2, 2020

Call to order: 6:59 PM

The president, Fred Seitel AE6SF, reviewed the agenda with the membership present.

The president determined that a quorum is present.

Board members present: Fred Seitel AE6SF, Johnathan Brown AK6VB, Iola Beckley KK6HRE, Bill Dornbush AA6BD, Randy Hall AA6RH, Warren Pierce K6WRP, John Felton KE5RI

Absent: none

New members: Ken KF6KEN, Mary KN6FCP, Rachel KN6FXM

Guests: John KM6XO, Josiah KN6GNY

NET CONTROL: The following members are the net control stations for:

Jan 7 – Joe K6AWA

Jan 14 – Darryl KI6MSP

Jan 21 – Warren K6WRP

Jan 28 – Brian N6IY

Feb 4 – Dan KK6VIQ

Ham of the Year 2019 – John KE5RI presented this to Joe K6AWA.

Ham of the Month: Doug KF6LMB presented this to Cornell W6HMN.

Fred AE6SF suggested we change this to eliminate the Ham of the Month. If someone does something special, let them know. We will publish the attaboys in Short Skip.

Announcements, Upgrades, Lies, and Brags: Iola KK6HRE presented an award to Craig Gaeverth K6XLT for his public service coordination since 1994 for his bike club, and since 2005 for club public service events.

Our February meeting topic will be Ed Fong presenting his triband antenna.

John Breckenridge WB6FRZ recorded the history of the club in documents which were distributed at the Christmas meeting, and are available tonight.

Joe K6AWA: At 4:53 pm Tuesday, he heard a woman calling CQ and he spoke for about 10 minutes with JM2OWE.

Gary KM6CPU: the question pool for Extra changes July 1.

Darryl KI6MSP announced that with David N5PSM, they put up an antenna system for his home, a long wire about 25 feet up connected to a 9:1 UNUN. He contacted Japan for his first time JM8---

Kathy K6KDW had a shout out to John KE5RI who helped install a rear view camera for Iola KK6HRE.

Winter Field Day: Brian N6IY said it is in 3 weekends at Liberty Glen campground at Lake Sonoma. We will start setting up on Friday, Jan 24, and operate starting at 11 am Saturday 1/25 through 11 am Sunday 1/26. If you are interested, particularly in operating, and particularly CW, he would like to know. Charlie KZ6T added that technicians can operate too, such as 2M digital, and he will work with you to make contact with the Field Day crew.

Refreshments: Feb-Apr: Nick N1CKA

Radio loaner program: Joe K6AWA has available electronic antenna analyzer, Yaesu FT1D, TS430s HF Kenwood, and we have more available. Contact him at K6AWA@yahoo.com. He will submit a list at next month of items not in demand to be disposed of.

Program: 2020: What's Next? By Randy AA6RH. He invited committee chairs to talk about their committees. Dan KK6VIQ discussed Membership and Merchandise. Darryl KI6MSP discussed community outreach. Bill AA6BD discussed Growing Radio Amateurs. Randy AA6RH discussed Public Service. Randy reviewed a list of possible meeting topics and groups of topics: digital voice, tinkering, packet, operating, gear, and contesting. Special interest groups can be started. He presented a tentative calendar. He asked club members to discuss and brainstorm about what we might be interested in.

Continued on page 9...

Minutes continued from page 8...

He asked members to send ideas and suggestions to him at aa6rh@socorad.io

Darryl KI6MSP introduced Annie KM6QIW. John KE5RI asked and Fred AE6SF announced the planning meeting is Saturday at Rincon Valley Mobile Estates, at 9 am to 1 pm. All are welcome.

BREAK

Approval of minutes: Doug KF6LMB moved that the November membership meeting minutes as published in Short Skip be approved, Charlie KZ6T seconded, and the motion passed on voice vote.

REPORTS

Treasurer report: Iola KK6HRE reviewed our income and expenses with the result of net income for 2019.

Iola noted that our payment of \$1500 to LBAGC rent is due.

Kathy K6KDW moved that we pay them as noted, Darryl KI6MSP seconded, and the motion was approved by voice vote.

Social Committee: Iola KK6HRE noted that two members lost wives and she sent cards for the club.

Activities: no report

Community outreach: Darryl KI6MSP noted we are back in the Air Show with more to come.

Growing Radio Amateurs: Bill AA6BD noted that we are looking for more to help with our causes, such as Morse code and makers.

Education: Cornell W6HMN said the next class is Feb 14-16. Charlie KZ6T asked if there will be a General class and Cornell said they are working to develop one.

Field Day: Brian N6IYY said he working to get through Winter Field Day and then will work on summer Field Day. We may need a new location. Charlie KZ6T noted that the results for last Field Day are available in QST.

Merchandise: Dan KK6VIQ noted that he will present a budget proposal at the planning meeting for Badges, safety vests, shirts, and more.

Membership: Dan KK6VIQ said we have no new members tonight. We are at 68% renewed from 2019 to 2020 to date.

Joe K6AWA said members need help with programming FT60 and FT1DR and FT2DR, and asked for volunteers to help.

Repeater: Erin K6ERI noted that APRS and WIRES-X are working now.

DX Team: Doug KF6LMB is looking for a replacement to lead this team.

VE testing: Brian N6IYY will have dates proposed at the planning meeting.

Public Service: Fred AE6SF noted we will have 3 bike events and more to be discussed at the planning meeting.

Refreshment committee: This was discussed earlier.

OLD BUSINESS

none

NEW BUSINESS

LBAGC rent already reviewed.

Dan KK6VIQ noted we have a Sebastopol member who wants to provide some donations. David N5PSM will work with Dan.

John KE5RI said if you bring something to donate, don't leave it here, take it home or dispose of it.

Kathy K6KDW moved that we adjourn. Iola KK6HRE seconded, and the meeting adjourned at 8:47 PM

Respectfully Submitted,

Bill Dornbush AA6BD

SCRA BOARD OF DIRECTORS MEETING MINUTES Date: January 8, 2020

The meeting was called to order by Fred Seitel AE6SF at 6:00 pm. A quorum was present.

Board members present: Fred Seitel AE6SF, Johnathan Brown AK6VB, Iola Beckley KK6HRE, Bill Dornbush AA6BD, Randy Hall AA6RH, Warren Pierce K6WRP, John Felton KE5RI

Absent: none

Others: Darryl Paule KI6MSP, Cornell Chesnik W6HMN, Dan Drummond KK6VIQ, Charlie Sikes KZ6T, Brian Torr N6IYY, Pat Coyle KG6JSL, Erin Casteel K6ERI, Mike Van der Porten AD6YB, Howard Sidorsky K6SID, Philip Humes KF6GNH, Doug Payne KF6LMB, Andrew Raika KE6HID, Joe Fortuna K6AWA

Approval of previous meeting minutes: John KE5RI moved that the minutes of the December, 2019, meeting as published in Short Skip be approved, Warren K6WRP seconded the motion, and the motion was approved by voice vote.

OFFICER AND DIRECTOR REPORTS

Treasurer report: no report

Motion: Fred AE6SF moved that the Board establish committees and chairs as listed below under Committee Reports, Bill AA6BD seconded the motion, and the motion was approved by voice vote.

Motion: Fred AE6SF moved that the Board authorize the President to appoint John KE5RI as the club station license trustee, Randy AA6RH seconded the motion, and the motion was approved by voice vote. Fred AE6SF appointed John KE5RI as the club station license trustee.

COMMITTEE REPORTS

Activities – Jeff KI6PBF – not present
Community Outreach – Darryl KI6MSP – On 1/18/2020, the Kids Education and Enrichment Expo is being held. Darryl KI6MSP stated that the fee for us has been waived and we will be participating.
Emergency Preparedness: Sonoma Ready Series

is being held at the Library. ACS participates, and Darryl KI6MSP will attend for us and will recruit others as well.

Growing Radio Amateurs – Bill AA6BD – reported that the committee plans to focus on working with local schools and the library; Contacting local makers and makerspaces; Developing a Morse code program for our targets of youth and 30/40/50s; and Expanding our social media presence on Facebook, Twitter, and Instagram. Randy AA6RH suggested that we add Snapchat. Bill AA6BD asked that we open our Facebook page to public viewing, and Short Skip on the website be open to all for viewing. Dan KI6VIQ noted that the Short Skip on the website is out of date. Bill moved that we make Short Skip issues available to all on the website. John KE5RI seconded the motion. Randy AA6RH asked that we vet the Short Skip to keep private financials. The motion passed on voice vote. Mike AD6YB noted that the archives he maintains are publicly available if one knows where to find it.

Education & Mentoring – Cornell W6HMN – There is lots of demand for Feb class, and he is looking for a larger room. He has started a waiting list. Suggestions were made for other possible sites: Red Cross, Salvation Army Stony Circle, Santa Rosa EOC. Cornell W6HMN will email mentors on the website to confirm their interest in continuing to be listed as available.

Emergency Service – Pat KG6JSL - Philip KF6GNYH will work with Pat – There is nothing active now. He is looking at times available for training. Bill AA6BD suggested that we provide training on digital methods for service. Pat KG6JSL said he needs instructors, and Pat KG6JSL asked Bill AA6BD to investigate. Pat KG6JSL said he will concentrate on what we do as club, that is, propagating information on the air. John KE5RI suggested that it might be better if knowledge is developed under public service. Charlie KZ6T will help Pat KG6JSL with Digital activities.

Field Day – Brian N6IYY – is looking at other venues for Field Day, which must be a public place, such as a park. There was discussion about Winter Field Day if the weather is inclement, and the consensus is that it will be held regardless of the weather.

Continued on page 11...



BoD Minutes continued from page 10...

Volunteer Examiners – Brian N6IY – 6 exam sessions this year, all at Bennett Valley Guild Hall, as noted below in the schedule.

Membership – Dan KK6VIQ – 72% or 168 members from 2019 have renewed for 2020. He said that one member requested a complimentary membership for Rollie Jones KB6AQW who lost his home in the fire. His membership expired in 2017. We agreed to not offer this.

Merchandise – Dan KK6VIQ will send a report on last year. He will start working on new items.

Newsletter – Dave KI6UGB - not present

Website – Dave KI6UGB - not present

Programs – Randy AA6RH - Ed Fong is confirmed for the February membership meeting program. There was discussion about the public address system at the Luther Burbank Art & Garden Center.

Public Service – Randy AA6RH – some events are not yet confirmed. He plans to launch public service events at the March membership meeting.

Radio Loanout program – Joe K6AWA is compiling a list of items to be disposed of. He will bring it to the club for approval, probably at an auction at a club meeting.

Refreshments – Fred AE6SF will recruit in 3 month increments.

Repeater – Erin K6ERI noted the proposed members of the repeater committee to be appointed by the board: Erin K6ERI as chair, Nick N1CKA, Jack K6ROW, Bill AA6BD, Randy AA6RH, Curt WA6TIP, Dave WA8YWQ, Andrew KE6HID, Brian N7MOE, and Alain K6PTC. It was moved and seconded to appoint them and the motion was approved by voice vote.

NEW BUSINESS

Proposed 2020 budget – was developed at the planning meeting. A deficit budget is proposed like last year, and we assume we will not spend as much as budgeted. Discussion followed on the repeater budget and donations budget. John KE5RI moved that the budget be submitted to membership, Johnathan AK6VB seconded the motion, and the motion passed on voice vote.

Fred AE6SF distributed a tentative calendar for 2020 from the planning meeting. SoNoMas appears to not be scheduled this year by Bike Monkey, its sponsor. Tour de Cure was discussed and Randy AA6RH suggested we remove it from the schedule and wait until they approach us and then we can discuss how to proceed, which was agreed.

On Outreach, Darryl KI6MSP added the January expo.

On Education, Cornell W6HMN added Feb 14-16 Technician class.

Morse code class – Bill AA6BD will ask John WB6FRZ for an alternate to Monday as several nets meet then.

Bill AA6BD moved that the schedule be presented to membership as discussed at this meeting, Fred AE6SF seconded, and the motion passed on voice vote.

OLD BUSINESS

Credit Card – Discussion followed, and no action was taken at this time.

NEW BUSINESS

Darryl KI6MSP suggested that we use Mary's on Summerfield as they have a more expansive menu. John KE5RI moved for adjournment, Lola KK6HRE seconded, and the motion was approved on voice vote.

The meeting ended at 8:00 PM.

Respectfully Submitted,
Bill Dornbush AA6BD

difficult compared to the rest of the pool. The 2020 pool has 10 diagrams, which have been renumbered because the new question pool has two fewer than the 2016 question pool.



Ooh, ooh, I have a Question!

From the NEW 2019 -2023 General Class Question Pool:

G2E10 (D)

Which of the following is a way to establish contact with a digital messaging system gateway station?

- A. Send an email to the system control operator
- B. Send QRL in Morse code
- C. Respond when the station broadcasts its SSID
- D. Transmit a connect message on the station's published frequency

And What About This?

From the Extra Class Question Pool:

E2D07 (C)

What digital protocol is used by APRS?

- A. PACTOR
- B. 802.11
- C. AX.25
- D. AMTOR

[New Amateur Extra Question Pool Released](http://arrl.org)

01/27/2020 (<http://arrl.org>)

The new Amateur Extra-class license examination question pool, effective from July 1, 2020, through June 30, 2024, has been released and is available at the [National Conference of Volunteer Coordinators \(NCVEC\) website](#).

The [2020 - 2024 Extra-class pool](#) incorporates significant changes compared to the current 2016 - 2020 question pool, which expires on June 30. The number of questions in the pool was reduced from 712 to 622. The result was 239 modified questions, 49 new questions, and 139 questions removed due to changes in what was felt to be an abundance of outdated questions, while areas of new technology and subjects were added.

In addition, an effort was made to balance the difficulty level, removing or replacing some questions deemed too easy or too

SCRA HAM OF THE MONTH RECIPIENTS			
Year	Month	Name	Call Sign
2020	Jan	Cornell	W6HMN
2019	Dec	—	—
2019	November	Doug	KF6LMB
2019	Aug/Sep/Oct	Scott	KJ6QIQ
2019	June/July	Carol	KK6OLL
2019	May	Randy	AA6RH
2019	Apr	John	WB6FRZ
2019	Mar	Erin	K6ERI
2019	Feb	Fred	AE6SF
2019	Jan	Dave	KI6UGB
2018	Dec	—	—
2018	Nov	Iola	KK6HRE
2018	Oct	Dan	KK6VIQ

Mentors

Having a problem with your equipment? Can't get the SWR down or your radio won't tune up? Notice some smoke escaping from your transceiver? You may need some help but where to go for this help. You could come to the club meetings and talk to people to see if they can help. You're bound to find someone to help you.

Help can also be found at the SCRA web site (sonomacountyradioamateurs.com). Just log in and click on the Member Area and then click on Mentors. Here you will find a list of hams that are willing to help out so you can your problem solved and get back on the air.

Cornell, W6HMN



Winter Field Day continued from page 1...

We would be operating in the 4I (4 Indoor) category. Our exchange would be 4I SF (indicating the San Francisco ARRL section).

From an operating perspective, we did face some challenges. We had one radio that started acting up, so we swapped in a back-up rig. I'm pleased to hear that the radio that had been acting up is now working OK. We also faced inter-station interference, due to some of the antennas being too close to one another, and that made making some contacts very difficult. If we go back to this same site next year, I have ideas to improve that situation.



Sunday morning we were back at it and we had both the SSB and Digital stations making contacts by 9am to operate the last two hours of WFD.



Our biggest challenge, however, was lack of operators. We only had one CW operator, Leland, W6GEE. I tried to make some CW contacts after Leland left Saturday night, but the bands were pretty dead by then. As it is, the last contacts on Saturday were made around 10pm. Of course, better propagation would have helped. The highlight of Saturday, however was bagging the satellite contact worth 1500 points. Charlie, KZ6T put a lot of effort into getting a good setup put together and it paid off. He also tried giving some other WFD participants a satellite contact as well.

Iola, KK6HRE, brought dinner for us around 3pm on Saturday. We had lasagna (meat and veggie), salad, French bread and cake. It hit the spot! Thanks to Iola for this welcome treat!



Continued on page 14...

Winter Field Day continued from page 13...

At 11am, we started packing it all up. The antennas went down a lot faster than they went up (typical). We were driving out of the park by 12:30pm. I don't have all the logs, so I cannot tell you how we scored. I hope to have an update on this at our February meeting.

Thanks to those participating, and especially their flexibility with some of the logistics issues. I'll try to get together a debriefing session for Winter Field Day 2020 so that we can try to make improvements for WFD 2021.

73,
Brian Torr, N6IYY
Winter Field Day Chairman

Photos by Bill AA6BD



Abstract - Triband Talk

Our guest speaker for the February meeting will be Ed Fong (WB6IQN). As many of you know, he is the inventor of the DBJ-1 and DBJ-2 antenna that was featured in the February 2003 and March 2007 QST. Both of these antennas are featured in the ARRL VHF antenna Handbook and also in the ARRL Antenna Classic Handbook. There are over 23,000 of these antennas in use today. His most recent antenna is the TBJ-1 – a triband base antenna that was published in March 2017 QST. This antenna covers 2mt/220 MHz/70cm in one 6ft 3/4 inch pvc pipe and requires no radials.

Ed will give a history on how these antennas were developed and the theory on how and why they work so well. There is no “black magic” to antennas. He will explain in a non-mathematical manner to convince you for overall performance and simplicity his approach is one of the most practical.



Biography:

Ed Fong was first licensed in 1968 as WN6IQN. He later upgraded to Extra Class (when 20 WPM was required) with his present call of WB6IQN. He obtained the BSEE and MSEE degrees from the Univ. of California at Berkeley and his Ph.D. from the Univ. of San Francisco. A Senior Member of the IEEE, he has 12 patents and over 40 published papers and books in the area of communications and integrated circuit design. Presently, he is employed by the University of California, Santa Cruz (previously with Berkeley from 1997-2010) as an instructor teaching graduate classes in RF design and high speed interface. In his 35 year career, he has done work for Stanford University, National Semiconductor, Advanced Micro Devices, numerous startup companies in the Silicon Valley.

WINTER FIELD DAY – SOLO

By Fred Seitel AE6SF

This year I chose to operate Winter Field Day from a state recreation area at Lake Isabella in Kern County, between Bakersfield and Ridgecrest. The setup consisted of an ICOM IC-7300 radio, an MFJ-949E 10:1 external tuner, and a 22 AWG double-length NorCal doublet antenna supported by three 20-foot Wonderpole crappie telescoping fishing rods. A 170 AH battery bank and portable 120W folding solar panel provided 12 VDC power. I operated in the comfort of a heated fiberglass trailer, a welcome reprieve from the cold biting wind during dark hours. My class and section were 1I SJV for 1 transmitter, Indoors, San Joaquin Valley. Figures 1 and 2 show the setup.



Figure 1



Figure 2

The background noise level was phenomenally low. Rather than using RF attenuation on receive, I was able to use RF preamplification. Locating away from civilization has communication advantages.

My modus operandi was to pounce rather than to run. Pouncing is easier but slower. Pouncing incurs the time cost of waiting in pileups before being recognized or determining that one can't be heard. Of 68 attempted contacts, only 39 QSOs or 57% got through. In contrast, running is fast as pouncers come to you until no more pouncers can hear you at which point it's time to start pouncing or change bands or modes.

I operated on three bands (80M, 40M, 20M) in two modes (CW, SSB) yielding a score multiplier of X6. I attempted 160M, but the band was full of activity with a different contest in progress where no one was working Winter Field Day. A bonus of 3000 points for operating away from home and not on commercial power was earned, for a total claimed score of 3612. Last year I claimed a score of 3408, but apparently there were busted contacts resulting in a final score of 3344. The increase this year was due to completing 39 QSOs vs 29 QSOs last year.

The antenna was oriented NW-SE, meaning the main radiation lobe was NE-SW. Figure 3 is a QSO map of ARRL sections contacted. The farthest contacts were Maine, Florida, Hawaii and BC. I heard no stations in states adjacent to CA, and with rare exception stations in CA. I suspect they were in the skip zone.

Winter Field Day is very similar to the ARRL Field Day event in June except for scale and weather. Last year, 799 stations participated, some with multiple transmitters and operators. In contrast, the June Field Day event had 35,000 hams on the air. Winter Field Day sports plenty of QSO opportunities but with much less bedlam and interference.

It was quite satisfying spending dedicated time operating in this event. I'll do it again.

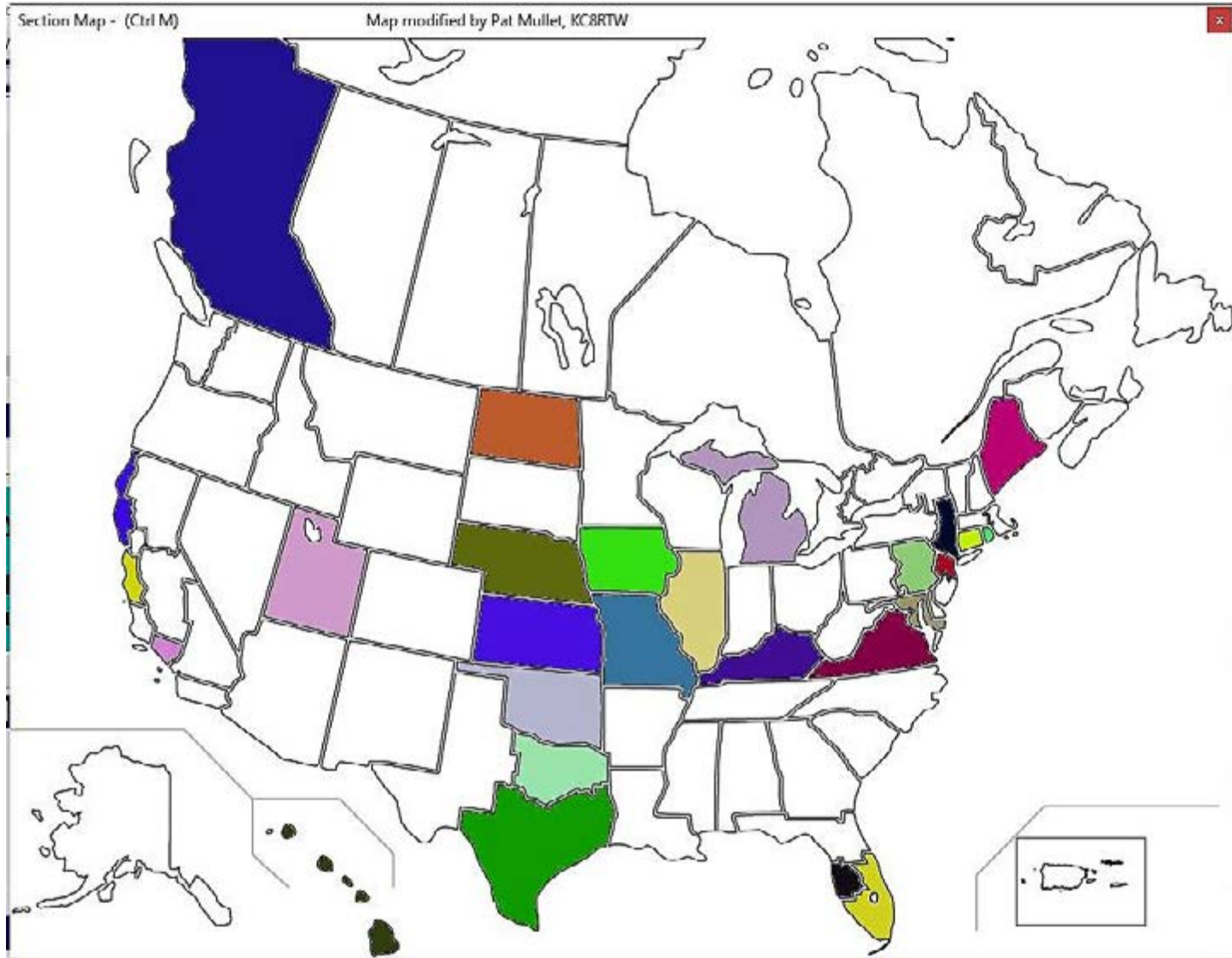


Figure 3

[On the Air Magazine](http://www.arrl.org/read-on-the-air)

(<http://www.arrl.org/read-on-the-air>)

On the Air magazine is the newest ARRL member benefit to help new licensees and beginner-to-intermediate radio communicators navigate the world of amateur radio. Delivered six times a year, the magazine will present articles, how-to's, and tips for selecting equipment, building projects, getting involved in emergency communication as well as spotlighting the experiences of people using radio to serve their communities, and those using it for enjoyment.

have been licensed for years but never got around to making contacts or starting a project, On the Air can help you take your interest in radio to the next level with clear, useful information.

Whether you just passed your Technician exam or



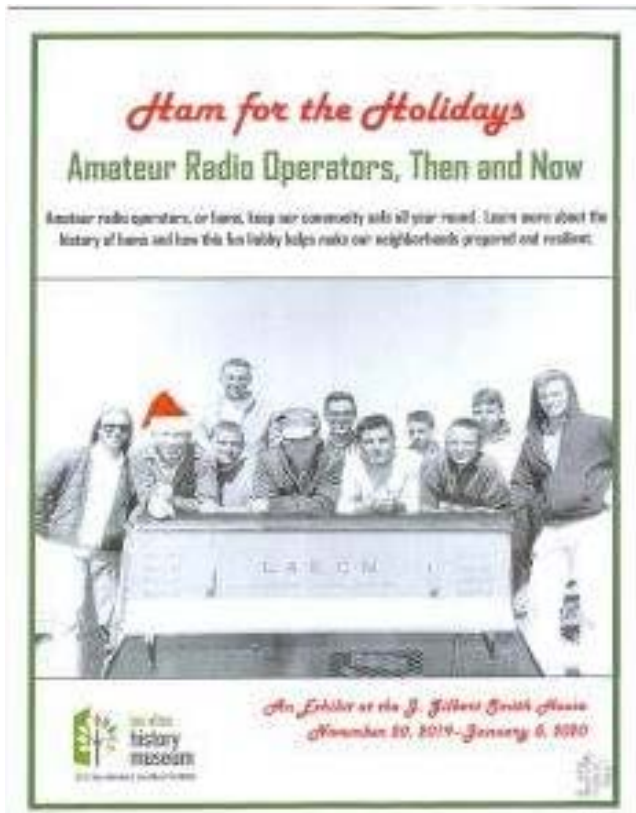


EXHIBIT: HAM FOR THE HOLIDAYS
AMATEUR RADIO OPERATORS, THEN AND
Now

by Philip Humes KF6GNH

I went to the Los Altos History Museum exhibition on the last day of this event. It was in the J. Gilbert Smith House. I was disappointed with my experience. I expected a ham radio operator at the exhibition. It was a self-guided exhibit, however.

When we went up to the museum, we looked for the Smith House. We found it after five minutes or so of looking for it. All the doors were locked and there was no signage about the exhibit. We went to the museum and asked about the exhibit. It was closed. Anyway, they unlocked the door and we looked for the exhibit. It was in a medium sized room upstairs.

The exhibit was advertised this way: “The exhibition offers a perspective on how radio hobbyists help keep

neighborhoods safe during disasters and features ham radio equipment through the years and archival photos of hams and local volunteers. Visitors can learn more about what hams do, how they communicate with one another, the equipment they use and how they help keep the community safe.”

I took pictures of all the equipment displayed.



“Then” Radios

Continued on page 18...



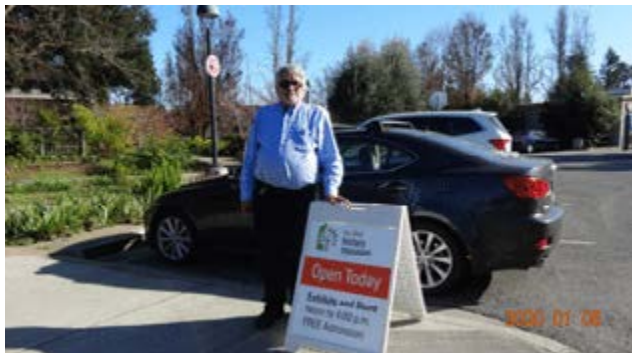
Hams then and now continued from page 17...



“Now” radio



Darryl KI6MSP



Phil KF6GNH



2019 Holiday Party

Photos by Dave Harrison



Continued on page 19...

Holiday Party continued from page 18...



Continued on page 20...

Holiday Party continued from page 19...



Continued on page 21...



Holiday Party continued from page 20...

Next Exam Session:

Saturday, February 22, 9:00 am



Our next exam session is scheduled for Saturday, February 22, from 9:00 am until we run out of people to test. The location will be the Bennett Valley Guild Hall, 4145 Grange Road, Santa Rosa. Walk-ins will be accepted and all test elements will be administered.

<http://www.sonomacountyradioamateurs.com/ve-testing.html> .

Please arrive by 8:45am to be signed in. Testing will begin shortly thereafter.

Directions: From Hwy 101, take Highway 12 East to Farmers Lane. Turn right onto Farmers Lane and then left onto Bennett Valley Road. Stay on Bennett Valley Road approximately 4.1 miles and turn right onto Grange Road. Bennett Valley Guild Hall is 0.5 miles from Bennett Valley Road on the right

Candidates should bring the following:

- One (1) photo ID or two (2) non-photo ID
 - FCC Registration Number (FRN, if you have one) or Social Security Number (if you do not have an FRN)
- If you have had any FCC license assigned to you, amateur or otherwise, or had any prior business with the FCC, you probably have an FRN.
- Original and photocopy of your current amateur radio license (if licensed)
 - Original and photocopy of any valid CSCEs (if applicable)
 - #2 Pencil and eraser
 - \$15.00 exam fee. Checks may be made payable to "ARRL-VEC"

Calculators may be used, but it must be demonstrated that all memories and programs have been erased. The calculator function in a cell phone or PDA may not be used! If you have any special needs, please contact Brian Torr, N6IIY in advance.

Good Luck!

Brian Torr, N6IIY
n6iiy@arrl.net
(707) 575-5871





Sonoma County Radio Amateurs, Inc.
PO Box 116, Santa Rosa, CA 95402

(Please print & fill out the form and mail it in with your check payable to SCRA.)
(Please check all (X) that apply)

Date: _____ New Member: () Renewal: ()
1) Name: _____ Call Sign: _____ License Class: _____
Address: _____ City: _____ Zip: _____
Cell Phone: _____ Home Phone: _____
Email: _____ Show contact info in Roster: ()
ARRL Member: ()

SCRA Dues: The renewal date for SCRA dues is January 1st. Dues are \$20/year for individual, \$30/year for families, and \$15/year for youth (under 18).

* Prorated Dues for New Members Only: Reduced dues after the 1st quarter.
2nd Quarter April-June: \$5.00 off - 3rd Quarter July-September: \$10.00 off
4th Quarter October-December: Pay the yearly dues for next year and get the rest of this year free.

Family Membership Members:

2) Name: _____ Call Sign: _____ License Class: _____
Address: _____ City: _____ Zip: _____
Cell Phone: _____ Home Phone: _____
Email: _____ Show contact info in Roster: ()
ARRL Member: ()
3) Name: _____ Call Sign: _____ License Class: _____
Address: _____ City: _____ Zip: _____
Cell Phone: _____ Home Phone: _____
Email: _____ Show contact info in Roster: ()
ARRL Member: ()
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ARRL Member: ()

I would like more information about:

- () a) Public Service Events () f) Training Classes
() b) Field Day (4th Saturday in June) () g) VE License Exams
() c) Contesting & DXing () h) Field Trips
() d) Emergency Services () i) Short Skip Newsletter
() e) SCRA Net Control () j) SCRA Committees
() f) SCRA Loaner Radio Program () k) Other

SCRA Dues: Individual \$20, Family \$30, Youth (under 18) \$15 (*see Pro-Rated Dues above) \$
Name Badge: \$10 each Please circle clasp type, either Clip or Magnet. \$
1) Call Sign: _____ First Name: _____ City: _____ Clip or Magnet
2) Call Sign: _____ First Name: _____ City: _____ Clip or Magnet
3) Call Sign: _____ First Name: _____ City: _____ Clip or Magnet
4) Call Sign: _____ First Name: _____ City: _____ Clip or Magnet
SCRA Logo Patch: \$5 each \$
SCRA Logo Decal: \$2 each \$
Please make check payable to SCRA. Total Amount Due: \$



HAM RADIO OUTLET

MULTI-STORE BUYING POWER!

ICOM



IC-9700
All Mode Tri-Band Transceiver



IC-7300
HF Transceiver



IC-7100
All Mode Transceiver



ID-5100A Deluxe
VHF/UHF Dual Band Digital Transceiver



ID-51A Plus2
VHF/UHF D-STAR Portable

KENWOOD



TS-590SG
HF/50MHz Transceiver



TM-D710G
2M/440 Dualband



TM-V71A
2M/440 DualBand



TM-281A
2 Mtr Mobile



TH-D74A
2M/220/440 HT

YAESU
The radio



FT-991A
HF/VHF/UHF Transceiver



FT-891
HF+50 MHz All Mode Transceiver



FT-450D
A100W HF + 6M Transceiver



FTM-400XD
2M/440 Mobile



FT-70DR
C4FM/FM 144/430 Xcvr



- RETAIL LOCATIONS – Store hours 10:00AM - 5:30PM - Closed Sunday
- PHONE – Toll-free phone hours 9:30AM - 5:30PM
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Contact HRO for promotion details. Toll-free including Hawaii, Alaska and Canada. Call will be routed to the nearest store. All HRO 800-lines can assist you. If the first line you call is busy, you may call another. Prices, specifications and descriptions subject to change without notice.



SHORT SKIP ARCHIVES AVAILABLE

Mike, AD6YB, has set up archives for past and present issues of Short Skip. They are available on the Website under the tab, Our Club. Mike has scanned in the old paper issues and it is really interesting to browse through them to see what those guys were doing. There are historical photos as well. An important record of our history and ham radio in general. Good Stuff.

[\(Click Me\)](#)

DIDN'T FIND WHAT YOU NEEDED?

If you are looking for something more on a topic or your topic of interest hasn't been covered lately, let us know. Something you'd like to see in Short Skip?

Contact the editor, shortskippeditor@gmail.com or for general questions and /or suggestions, k6son@arrl.net

SHORT SKIP NEEDS YOUR INPUT

SHORT SKIP ARTICLES WANTED

Dave, KI6UGB, our Short Skip editor is always looking for articles of interest. They can be technical, a good (or bad) experience that other members may learn from, hints or kinks that worked for you in solving a problem, or just about anything ham radio related. Send your contributions to Dave at shortskippeditor@gmail.com

