



CLUB STATION
K6SON

Short Skip

The Newsletter of

Sonoma County Radio Amateurs, Inc.

P.O. Box 116, Santa Rosa, CA 95402-0116 707-538-2931

<http://www.sonomacountyradioamateurs.com>

Repeaters:

English Hill: 147.315+ 88.5 / 441.375 +88.5



REPEATER STATION
W6SON

Volume 45, Number 9

September 2020

Digital Voice Blues

by Andrew KE6HID and Dave KI6UGB

Don't have a Digital Voice radio..., yet? Don't get the Digital Voice Blues. You can still join in on the DMR, D-Star and Fusion talk groups without a radio. I know, it seems like cheating, but it's all about communication.

What is it that makes this all possible?

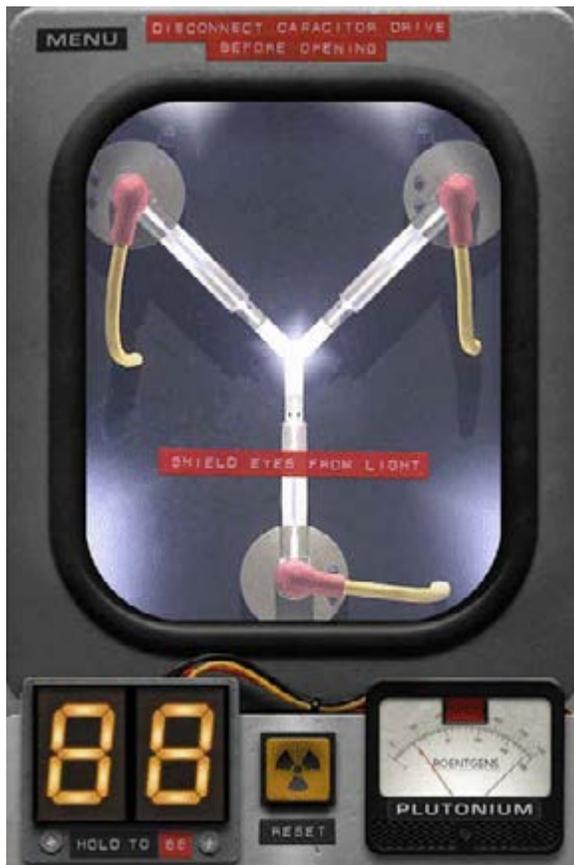


Fig. 1 - Flux Capacitor

Nope, that's "what makes time travel possible" – Dr. Emmet Brown in [Back to the Future](#).

You can use your computer's microphone or a smartphone to access DMR, D-Star and Fusion networks with the aid of some free software and a USB device (not free).

Digital Voice Radio networks use reflectors that connect to the internet as well as the airwaves. This structure opens the door to access the world of Digital Voice Radio by tapping in through an internet connection.

Before your voice gets to the internet it needs to be converted into Digital Voice format. The actual device of choice for this job is Digital Voice System's AMBE-3000™ Vocorder Chip. There are several devices that use the AMBE-3000™ with a USB connection to make this happen. The flow goes this way:
Voice -> Microphone -> Computer -> AMBE-3000™ device -> Computer -> Internet -> DV Reflector -> DV Receiver

[Continued on page 16...](#)

FEATURED ARTICLES:

- DIGITAL VOICE BLUES BY ANDREW KE6HID & DAVE KI6UGB [PAGE 1](#)
- SCRA LOANER PROGRAM [PAGE 13](#)
- GROWING RADIO AMATEURS CLASS... BY BILL AA6BD [PAGE 14](#)
- MEMBER OF THE YEAR NOMINATIONS ARE OPEN [PAGE 15](#)
- YAESU FUSION WEEKLY NET BY BILL AA6BD [PAGE 17](#)



PRESIDENT'S MESSAGE SEPTEMBER, 2020

Greetings!

On August 17th, a spectacular lighting storm struck the Bay Area and much of California, sparking over 600 wildfires which to date have burned more than 1 million acres, with major fires in Sonoma and Napa counties. Sadly, there

have been a least seven deaths and about 2000 structures destroyed. Commercial communications remained sufficiently intact. Local hams participated ad hoc by sharing real-time situational reports.

Welcome to our new Director, Howard K6SID, who was elected during the August Membership Meeting. Howard has hit the ground key down, lining up program topics for the Membership Meetings. The topic for this Wednesday's meeting will be "Zooming in the Wildfire" by Dan KK6VIQ.

The club has a new Zoom account. Be sure to use the new Zoom links for attending the September Membership Meeting on September 2nd at 7PM and the Board of Directors Meeting on September 9th at 6PM. Thank you Charlie KZ6T for your previous hosting of these meetings. Nominations for Member of the Year are now open. See announcement in this issue.

Brian N6IYY and his team of VEs will conduct the next parking-lot exam session on September 26. There are a few openings available. Preregistration is required. Contact Brian N6IYY.

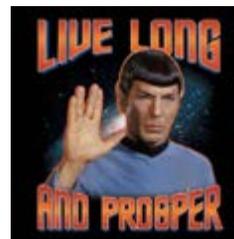
Bill AA6BD continues to teach electronics with Raspberry Pi in his Growing Radio Amateurs class. This month will continue the subject of WinLink hardware and software. The Radio Loaner program has moved. Joe K6AWA conceived of, implemented, grew, and promoted the Radio Loaner program. Thank you, Joe! Many of us have benefited from your enduring efforts. The new chairperson is Bill AA6BD who will manage the program. See within this issue for a list of equipment that is available for loan to club members.

After a close call with fire evacuation, John WB6FRZ is back teaching his code class and running the code-practice net on the SCRA 2M repeater Friday evenings.

We have a new net, the Yaesu System Fusion (YSF) Net on the SONOMACOUNTY (#62732) Room. It is coordinated

by Bill AA6BD. See the announcement within this issue.

Live Long and Prosper,
- Fred AE6SF

**SCRA Membership Meeting (Online only)**

We switched to Zoom. Arrive early.

Wed, Sept 2, 2020 7:00 PM

Via computer, tablet or smartphone.

<https://zoom.us/j/95450532024?pwd=V25FWFM0MHNNMVFVFIjMGFqTUtdz09>

Meeting ID: 954 5053 2024

Passcode: 123698

Via one tap mobile

[+16699006833,,95450532024#,,,,,0#,,123698#](https://zoom.us/j/95450532024?pwd=V25FWFM0MHNNMVFVFIjMGFqTUtdz09) US (San Jose)

Via telephone (voice only). Long distance charges may apply:

+1 669 900 6833 US (San Jose)

Meeting ID: 954 5053 2024

Passcode: 123698

Find your local number: <https://zoom.us/u/acm9Tw3VzM>

SEPTEMBER PROGRAM

"Zooming in the Wildfire"

A primer on zoom.us and <http://alertwildfire.org>

by Dan KK6VIQ

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/](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	Warren Pierce	K6WRP
	Howard Sidorsky	K6SID
Past President	John Felton	KE5RI

Committee Lineup/Contacts

Activities	Iola Beckley activities@sonomacountyradioamateurs.com
Programs	Howard Sidorsky, K6SID programs@sonomacountyradioamateurs.com
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SCRA Web site	http://www.sonomacountyradioamateurs.com

Short Skip Advertising Rates

Business Cards	\$12 per month
1st Quarter Column	\$13 per month
Each Additional Quarter Column	\$4 per month
Full page (one side)	\$35 per month
Pre-printed inserts (each)	\$35 per month

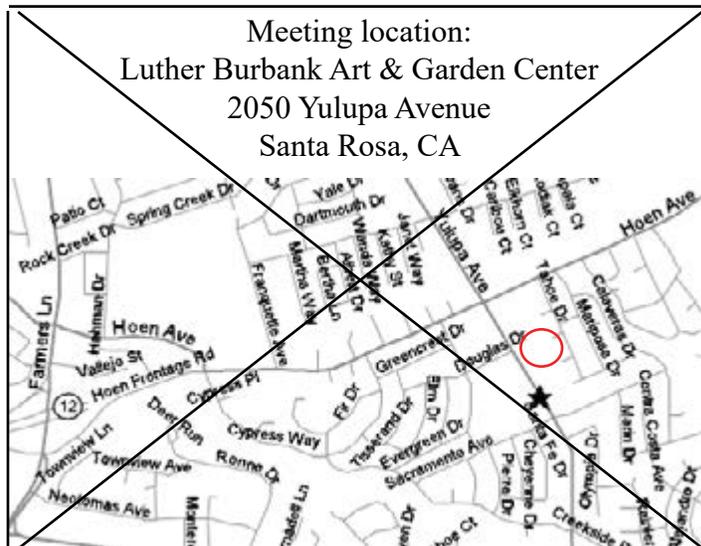
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SCRA Club Meetings

Online this month, [see page 2](#).

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.**

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 Iola kk6hre, at K6SON@ARRL.NET for assignment. Script and logs are available on the Website at <http://sonomacountyradioamateurs.com/wp/resources/net-script/>

SCRA Board of Directors Meeting (Online Only)

The SCRA Board of Directors will meet monthly on the Second Wednesday online. ~~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.

We switched to Zoom. Arrive early.

Wed, Sept 9, 2020 6:00 PM

Via computer, tablet or smartphone.

<https://zoom.us/j/92394941525?pwd=WXYzaW4zZ1VybGhPcHkyMmx2TGhiUT09>

Meeting ID: 923 9494 1525

Passcode: 123698

Via one tap mobile

[+16699006833,,92394941525#,,,,,0#,,123698#](https://zoom.us/j/92394941525?pwd=WXYzaW4zZ1VybGhPcHkyMmx2TGhiUT09) US (San Jose)

Via telephone (voice only). Long distance charges may apply:

+1 669 900 6833 US (San Jose)

Meeting ID: 923 9494 1525

Passcode: 123698

Find your local number: [https://zoom.us/u/a5vkJ0H1Z](https://zoom.us/j/92394941525?pwd=WXYzaW4zZ1VybGhPcHkyMmx2TGhiUT09)



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 MHz 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. If you have a DMR radio, make sure to 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

Many events have been canceled as shown in strikethrough text.

Sep 12-13	Waves to Wine
Sep 18-20	Technician Class
Sep 26	VE Testing
Oct 3	Levi's GranFondo Rescheduled 2021
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

UPGRADE TO GENERAL OR AMATEUR EXTRA CLASS

Get more privileges and enjoyment from your Ham Radio Hobby. Mentoring assistance is available. Contact the SCRA Education Chair, at education@sonomacountyradioamateurs.com.

Reporter Wanted for Contest Corner

Frank NQ6E has retired from Contest Corner. Short Ship is looking for a reporter to replace him in this capacity.

Qualifications for this position are mainly an interest in contesting. If you have experience in contesting that is a plus, but not completely necessary. As a reporter you could expand your current knowledge by contacting other operators and documenting their experiences. There is a lot of information available online as well. Interested persons should contact Dave KI6UGB at shortskipeditor@gmail.com.

CONTEST CORNER

Welcome to Contest Corner for September 2020.

This month there are a number of state QSO parties across the U.S. Plenty of chances to hit the ionosphere in the East Coast contests: Maine, Tennessee, Alabama, New Jersey and New Hampshire. In the middle states there are the Iowa and Texas QSO Parties as well as the Wisconsin Parks on the Air and Ohio State Parks on the Air Contests. There is also a chance to rack up some QSOs in the Western State Parties; Colorado QSO Party and Washington State Salmon Run. All on phone, CW and Digital.

ARRL contests include the ARRL EME contest on Sept. 12. This contest challenges the operator to make as many contacts as possible by moon bounce (Earth-Moon-Earth path) above 50 Mhz.

Also on the 12th is the ARRL September VHF contest. Both of these are phone, CW and Digital.

The last of the ARRL contests is the 10 Ghz and Up contest on Sept. 19. Also phone, CW and Digital.

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

Contact shortskipeditor@gmail.com for questions/ comments/suggestions regarding Contest Corner or to become a reporter.

72/73,
Dave KI6UGB





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

Contest Corral

September 2020

Check for updates and a downloadable PDF version online at www.arrl.org/contest-calendar.

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

Start - Finish Date-Time	Finish Date-Time	Bands	Contest Name	Mode	Exchange	Sponsor's Website
2 1700	2 2000	144	VHF-UHF FT8 Activity Contest	Dig	4-char grid square	ft8activity.eu/index.php/en
2 2000	2 2100	3.5	UKEICC 80-Meter Contest	Ph	4-char grid square	ukeicc.com/80m-rules.php
2 2300	4 2300	3.5-28	G3ZQS Memorial Straight Key Contest	CW	RST, SPC, name, mbr or power	www.fistsna.org
3 1700	3 2100	28	NRAU 10-Meter Activity Contest	CW Ph Dig	RS(T), 6-char grid square	nrau.net/activity-contests
3 1900	3 2100	1.8-50	SKCC Sprint Europe	CW	RST, SPC, name, mbr or power	www.skccgroup.com
5 0000	5 2359	1.8-28	CWops CW Open	CW	Serial, name	cwops.org/cwops-tests
5 0000	6 2359	3.5-28	All Asian DX Contest, Phone	Ph	RS, 2-digit age	www.jarl.org/English
5 0600	5 0800	7,14	Wake-Up! QRP Sprint	CW	RST, serial, suffix of previous QSO	qrp.ru/contest/wakeup
5 1300	6 0400	1.8-UHF	Colorado QSO Party	CW Ph Dig	Name, CO county or SPC	ppraa.org/coqp
5 1300	6 1259	1.8-28	IARU Region 1 Field Day, SSB	Ph	RST, serial	darc.de/der-club/referate/conteste
5 1300	6 1300	3.5-28	RSGB SSB Field Day	Ph	RS, serial	www.rsgbcc.org/hf
5 1400	6 1400	145	IARU Region 1 145 MHz Contest	CW Ph Dig	RS(T), serial, 6-char grid	iaru-r1.org/on-the-air
5 1600	5 1900	7	AGCW Straight Key Party	CW	RST, serial, class, name, age	agcw.org/index.php/en
5 2000	6 2000	3.5	PODXS 070 Club Jay Hudak Memorial 80-Meter Sprint	Dig	RST, SPC	www.podxs070.com
6 1000	6 1400	144	WAB 144 MHz QRO Phone	Ph	RS, serial, WAB square or country	wab.intermp.net
6 1800	7 0300	1.8-UHF	Tennessee QSO Party	CW Ph Dig	RS(T), TN county or SPC	tnqp.org/rules
7 1900	7 2030	3.5	RSGB 80-Meter Autumn Series, SSB	Ph	RS, serial	www.rsgbcc.org/hf
7 2300	8 0300	1.8-50	MI QRP Labor Day CW Sprint	CW	RST, SPC, mbr or power	miqrp.net/contest
8 0100	8 0300	3.5-28	ARS Spartan Sprint	CW	RST, SPC, power	arsqrp.blogspot.com
9 1700	9 2000	432	VHF-UHF FT8 Activity Contest	Dig	4-char grid square	ft8activity.eu/index.php/en
12 0000	12 2359	3.5-28	Russian RTTY WW Contest	Dig	RST, oblast or CQ zone	qrz.ru/contest/detail/93
12 0000	13 2359	2.3 GHz +	ARRL EME Contest	CW Ph Dig	Signal report	www.arrl.org/eme-contest
12 0000	13 2359	3.5-28	WAE DX Contest, SSB	Ph	RS, serial	darc.de/der-club/referate/conteste
12 1000	13 1000	1.8-28	SARL Field Day Contest	CW Ph Dig	RS(T), number of xmtrs, category, province or "DX"	www.sarl.org.za
12 1200	13 2359	1.8-50	SKCC Weekend Sprintathon	CW	RST, SPC, name, mbr or "none"	www.skccgroup.com
12 1400	12 2200	3.5-28	Ohio State Parks on the Air	Ph	Park abbreviation or "OH" or SPC	ospota.org
12 1400	13 2000	1.8-UHF	Texas QSO Party	CW Ph Dig	RS(T), TX county or SPC	www.txqrp.net
12 1500	13 0300	3.5-28	Alabama QSO Party	CW Ph	RS(T), AL county or SPC	alabamagsoparty.org
12 1500	13 0959	3.5-28	Russian Cup Digital Contest	Dig	Serial, 4-char grid square	qrz.ru/contest/detail/86.html
12 1800	14 0300	50 +	ARRL September VHF Contest	CW Ph Dig	4-char grid square	www.arrl.org/september-vhf
13 0000	13 0400	3.5-14	North American Sprint, CW	CW	Other station's call, your call, serial, name, SPC	ncjweb.com
14 0000	14 0200	1.8-28	4 States QRP Group Second Sunday Sprint	CW Ph	RS(T), SPC, mbr or power	www.4sqrp.com
16 1900	16 2030	3.5	RSGB 80-Meter Autumn Series, CW	CW	RST, serial	www.rsgbcc.org/hf
17 0030	17 0230	3.5-14	NAQCC CW Sprint	CW	RST, SPC, mbr or power	naqcc.info/contests.html
17 1930	17 2059	3.5	BCC QSO Party	CW Ph Dig	RS(T), T-shirt size	bavarian-contest-club.de/2326
18 2100	18 2359	3.5	AGB NEMIGA Contest	CW Ph Dig	RST, serial, mbr (if any)	ev5agb.com/index_eng.html
19 0000	19 2359	1.8-VHF	FOC QSO Party	CW	RST, name, mbr (if any)	g4foc.org/qsoparty
19 0000	20 2359	1.8-UHF	Collegiate QSO Party	CW Ph Dig	School name, RS(T), operating class	collegiateqsoparty.com
19 0600	20 2359	10 GHz +	ARRL 10 GHz and Up Contest	CW Ph Dig	6-char maidenhead locator	www.arrl.org/10-ghz-up
19 1200	20 0800	144,432, 1296	SARL VHF/UHF Digital Contest	Dig	RST, 6-char grid locator	www.sarl.org.za
19 1200	20 1200	3.5-28	Scandinavian Activity Contest, CW	CW	RST, serial	sactest.net/blog
19 1200	20 1200	1.8-28	All Africa International DX Contest	CW Ph Dig	RS(T), serial	www.sarl.org.za
19 1400	20 0200	1.8-UHF	Iowa QSO Party	CW Ph Dig	RS(T), IA county or SPC	www.w0yl.com/IAQP
19 1500	19 2100	1.8-28	QRP Afield	CW Ph Dig	RS(T), SPC, mbr or power	newenglandqrp.org/qrp-afield-2018
19 1600	19 2300	3.5-144	Wisconsin Parks on the Air	Ph	WI park abbreviation or SPC	wipota.com
19 1600	20 0359	3.5-28	New Jersey QSO Party	CW Ph Dig	RS(T), NJ county or SPC	k2td-bcrg.org/njqp
19 1600	20 2200	1.8-UHF	New Hampshire QSO Party	CW Ph Dig	RS(T), NH county or SPC	w1wqm.org/nhqso
19 1600	20 2359	1.8-144	Washington State Salmon Run	CW Ph Dig	RS(T), WA county or SPC	wwdxc.org/salmonrun
19 1800	19 1959	1.8-50	Feld Hell Sprint	Dig	RST, mbr, SPC, grid	sites.google.com/site/feldhellclub
20 0000	20 0400	3.5-14	North American Sprint, RTTY	Dig	Other station's call, your call, serial, name, SPC	ncjweb.com
20 1700	20 2059	3.5-28	BARTG Sprint 75	Dig	Serial	bartg.org.uk
20 2300	21 0100	1.8-28	Run for the Bacon QRP Contest	CW	RST, SPC, mbr or power	qrpcontest.com/pigrun
21 1900	21 2300	144	144 MHz Fall Sprint	CW Ph Dig	4-char grid square	svhfs.org
23 0000	23 0200	1.8-28	SKCC Sprint	CW	RST, SPC, name, mbr or power	skccgroup.com
24 1900	24 2030	3.5	RSGB 80-Meter Autumn Series, Data	Dig	RST, serial	rsgbcc.org/hf
26 0000	27 2359	3.5-28	CQ Worldwide DX Contest, RTTY	Dig	RST, CQ zone, US state or VE area (if US/VE)	www.cqwrrtty.com
26 1200	27 1200	1.8-28	Maine QSO Party	CW Ph	RS(T), ME county or SPC	ws1sm.com/MEQP.html
26 1400	26 1800	144, 432	AGCW VHF/UHF Contest	CW	RST, serial, power, 6-char grid	agcw.org/index.php/en
28 1900	28 2030	3.5	RSGB FT4 Contest Series	Dig	4-char grid square	www.rsgbcc.org/hf
29 1900	29 2300	222	222 MHz Fall Sprint	CW Ph Dig	4-char grid square	svhfs.org
30 2000	30 2100	3.5	UKEICC 80-Meter Contest	CW	4-char grid square	ukeicc.com/80m-rules.php

There are a number of weekly contests not included in the table above. For more info, visit: www.qrpfoxhunt.org, www.nccsprint.com, and www.cwops.org. All dates refer to UTC and may be different from calendar dates in North America. 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 251.



Welcome new and returning members:

- Andrew Musselman KI6UOC (G) Corte Madera
- Kevin Dwan KJ6VQH (T) Sebastopol
- Ryan Martin Associate Sonoma



New call signs:

- Jay Swetech AJ6CA
- Tony Goodwin KN6KIC



License Class Upgrades:

- Ann Ivan KM6QIW - General
- Les Goldner KN6HZS - 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!

Membership Count by License Class	
License Class	Count
Advanced	2
Amateur Extra	70
General	66
Technician	101

We have **12** Associate members.
164 SCRA members are ARRL members.



KUDOS

Hammy: Our statue for ham of the month.

Dan KK6VIQ awarded Hammy to Brian N7MOE for his long-standing weekly presentation of Amateur Radio Newline on weekly nets.

Fred AE6SF gave a kudo to Iola KK6HRE for providing coffee and donuts to the VE exam session on Aug 1.

Ann KM6QIW gave a kudo to Darryl KI6MSP who assisted 5 hams to set up antennas and radios.

Dick KN6FXO gave a kudo to John WB6FRZ who repaired his hotspot.

Andrew KE6HID gave a kudo to John WB6FRZ for leading code practice every Friday and Monday.

SCRA HAM OF THE MONTH RECIPIENTS			
Year	Month	Name	Call Sign
2020	Aug	Brian	N7MOE
2020	July	John	KE5RI
2020	June	Darryl	KI6MSP
2020	May	Charlie	KZ6T
2020	Apr	David	N5PSM
2020	Mar	Bill	AA6BD
2020	Feb	–	–
2020	Jan	Cornell	W6HMN
2019	Dec	–	–
2019	Nov	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

Sonoma County Radio Amateurs Membership Meeting Minutes for August 5, 2020

Call to order and review agenda: The meeting was called to order at 7 pm.

The president, Fred Seitel AE6SF, determined that a quorum is present.

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

Absent: none

New members: Bob K3FUL

Guests: Andrew KI6UIC

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

Aug 11 – Iola KK6HRE

Aug 18 – Warren K6WRP

Aug 25 – Ann KM6QIW

Sep 1 – Brian N6IYY

Announcements Upgrades Lies and Brags: Andrew KE6HID noted that our DMR repeater is off the air right now and Curt WA6TIP will be there tomorrow. Andrew KE6HID noted the Papa System can connect to D-STAR, DMR, Yaesu System Fusion, and analog nets every night.

Dave W6IBC monitored the Golden Bear Net and John KE5RI will be the Vice President.

Andru KJ6YFD noted he is tutoring Vince KN6DLS who got his Amateur Extra upgrade. John KE5RI noted that Les KN6HZS upgraded from tech to general.

Andru KJ6YFD tested radios last year. Radioddity

GD-73A and TYT MD-430 had a bug, released firmware update and the bug is fixed. He was glad that he reported a bug and someone listened to him. Jay AJ6CA changed callsign from W6LZJ.

Darryl KI6MSP with Ann KM6QIW crashed AT&T Internet and are now connected at another location.

Hammy:

Fred AE6SF gave a kudo to Iola KK6HRE for providing coffee and donuts to the VE exam session on Aug 1.

Ann KM6QIW gave a kudo to Darryl KI6MSP who assisted 5 hams to set up antennas and radios.

Dick KN6FXO gave a kudo to John WB6FRZ who repaired his hotspot.

Andrew KE6HID gave a kudo to John WB6FRZ for leading code practice every Friday and Monday.

Dan KK6VIQ awarded Hammy to Brian N7MOE for his long-standing weekly presentation of Amateur Radio Newline on weekly nets.

Approval of minutes: Kenn N4NTJ moved approval of minutes as published in Short Skip, Iola KK6HRE seconded the motion, and it was approved by voice vote.

ELECTION OF DIRECTOR:

Iola KK6HRE moved that the nominations be closed. John WB6FRZ seconded, and the motion was approved by voice vote. The nominees are:

Philip KF6GNH

Howard K6SID

David N5PSM

Dave KI6UGB withdrew

Bill AA6BD noted that Howard K6SID was elected to Director.

Continued on page 10...

Minutes continued from page 9...

REPORTS

Treasurer report: KK6HRE – No report.

Social Committee: KK6HRE – No report.

Activities: KK6HRE – No report.

Community outreach: KI6MSP – No report.

Growing Radio Amateurs: AA6BD - No report.
Counting Votes.

Education: WB6FRZ - CW class is progressing well,
week 10 of 17.

Field Day: N6IYY will recap Field Day during tonight's
program.

Emergency Communications: KG6JSL will present
FirePower during tonight's program.

Merchandise: KK6VIQ – No report. Counting votes.

Membership: KK6VIQ – No report. Counting votes.

Repeater: K6ERI – No report.

DX Team: AE6SF – No Mini-DX for 2020.

VE testing: N6IYY – Electronically uploaded Aug 1
drive-up exam data for 8 examinees and results were
posted on FCC ULS in 2 days' time except for one
examinee. Eight persons are interested in the Sep 26
drive-up exam session.

Public Service: AE6SF - Waves to Wine canceled. No
scheduled events for 2020 at this time.

Radio loaner program: K6AWA not present.

Refreshment committee: AE6SF – Bring your own
refreshments until further notice.

Short Skip: KI6UGB – Thanks to all who submitted.
Bill AA6BD had most articles. Need a reporter for the

recurring Contest Corner feature in Short Skip.

Website: KI6UGB – The website designers are
upgrading features and breaking things. Dave
KI6UGB is repairing the damage as they go.

OLD BUSINESS

NEW BUSINESS

Teleconference Hosting

Kenn N4NTJ moved to move forward with Zoom
monthly package and that the board will then report
back on further direction. Iola KK6HRE seconded
the motion. Dan KK6VIQ volunteered his pro
subscription to try. The motion passed on voice vote.

Program:

- **Fire Power!** – Pat KG6JSL – Because PG&E
is preemptively cutting off power, Pat presented how
to determine how much power you need, and then
use that to provide your backup power – generator or
batteries

- **Field Day 2020: Not your ordinary Field
Day!** – Brian N6IYY presented the results of this year's
Field Day

Fred AE6SF moved that the meeting be adjourned,
Johnathan AK6VB seconded, and the motion was
approved by voice vote.

The meeting adjourned at 9:44 PM.

Respectfully Submitted,
Bill Dornbush AA6BD

SCRA BOARD OF DIRECTORS MEETING MINUTES

Date: August 12, 2020

The meeting was called to order by Johnathan Brown AK6VB at 6 pm. A quorum was present.

Board members present: Johnathan Brown AK6VB, Iola Beckley KK6HRE, Bill Dornbush AA6BD, Warren Pierce K6WRP, John Felton KE5RI, Fred Seitel AE6SF (late), Howard Sidorsky K6SID (late)

Absent:

Others: Darryl Paule KI6MSP, John Breckenridge WB6FRZ, Dan Drummond KK6VIQ, Mike Von der Porten AD6YB, Richard Downing K6ZGN, Andrew Raike KE6HID, Brian Torr N6IYY

Approval of previous meeting minutes: Johnathan AK6VB moved the minutes as published in Short Skip be approved, John KE5RI seconded the motion, and it was approved by voice vote.

OFFICER AND DIRECTOR REPORTS

Treasurer report: Iola KK6HRE has no report as there were no transactions except on PayPal for new members.

COMMITTEE REPORTS

Activities – Iola KK6HRE – no report

Community Outreach – Darryl KI6MSP – no report

Growing Radio Amateurs – Bill AA6BD reported that the fifth session will be a week from today and will cover Winlink on a Raspberry Pi. He reported that Will Bradley KG7PTW will advertise the sessions in the Chimera publications which might attract new participants from their maker community.

Education & Mentoring – Fred AE6SF - not present at this time

Emergency Service – Pat KG6JSL - not present

Field Day – Brian N6IYY noted that he will send out the certificates for Field Day awards soon with pins. Volunteer Examiners – Brian N6IYY – Our last session went well, with 8 people being tested. He submitted all information electronically, and by Tuesday, licenses were granted for all but one. September 26 is the next session and he has 10 people interested already. He is looking at alternate sites. He is looking forward to getting the team ready to do remote exams during the winter. He will recommend some videos that Marcel Stieber AI6MS and others have recorded about this.

Membership – Dan KK6VIQ noted that membership is 249, and the latest new member is Andrew Musselman KI6UOC.

Merchandise – Dan KK6VIQ – will be getting new name badges out shortly.

Newsletter – Dave KI6UGB – had the most submissions ever for the last issue and is looking forward to again getting so many articles.

Website – Dave KI6UGB – is updating call signs from the Membership database. He noted that Boy Scouts JOTA will likely be cancelled.

Programs – Zoom was suggested as a topic, and this will be discussed later.

Public Service – All events are cancelled or rescheduled.

Radio Loanout program – Joe K6AWA - not present

Refreshments – Fred AE6SF – not present at this time.

Repeater – Erin K6ERI – not present

OLD BUSINESS

a. Loaner program equipment disposition - Bill AA6BD relayed what was discussed between Joe K6AWA and Fred AE6SF. We will publish the inventory one time in Short Skip and ask all inquiries be by email to Joe. We will evaluate after that as to next steps.

Continued on page 12...

BoD Minutes continued from page 11...

b. LBA&GC letter – Iola KK6HRE said that they are waiting for a response from us about scheduling future events. Most expressed support for staying at LBA&GC although some other sites were mentioned. Iola will contact them to see what can be negotiated for getting credit for meetings that cannot occur.

NEW BUSINESS

a. NVIS invitation by Canejo Valley ARC – Fred AE6SF had sent information that this club is offering an event to construct and communicate with NVIS antennas and that about five club members have indicated they want to participate. Bill AA6BD moved that we respond to Canejo Valley ARC that we want to participate as a club. Johnathan AK6VB seconded the motion. The motion was approved by voice vote.

b. Zoom account authorization: Bill AA6BD moved that SCRA purchase a 1-year subscription to the Zoom single-host Pro Annual plan. Iola KK6HRE seconded the motion. Fred AE6SF had emailed earlier that he could set up a forwarding email address at, say, scrazoom@fredee.com to register at Zoom and redirect it anywhere, to allow for future changes. The cost would be \$150, but probably \$120 at the current discount and Fred AE6SF offered to charge on his personal credit card and submit the expense to the club. The motion was approved by voice vote.

c. Adding another net: Weekly YSF WIRES-X net – Bill AA6BD

Johnathan AK6VB moved that we approve a weekly YSF WIRES-X Net on our repeater, and Bill AA6BD seconded the motion.

Bill has heard interest in holding a net for those with Yaesu System Fusion radios. He proposed the following notice be published in the weekly blog and Short Skip:

“Every THURSDAY night at 7:00pm Pacific Time, Bill AA6BD coordinates a Yaesu System Fusion (YSF) Net on the SONOMACOUNTY (#62732) Room. If you have any device that can access YSF (and there are quite a few, have a look at the “Presentation on YSF from 7-1-2020” at <http://sonomacountyradioamateurs.com/wp/irlp/yaesu-system-fusion-wires-x/>), why not come join us on this interesting and really high quality voice mode! We’ll see you there! “

Andrew KE6HID suggested that we announce equipment available from the club equipment loaner program.

The motion was approved by voice vote.

September program. Zoom was suggested by Andrew KE6HID as the program. Dan KK6VIQ suggested he could show what it can do, such as annotation, voting, etc. Dan also suggested wildfire topics such as [alertwildfire.org http://www.alertwildfire.org/northbay/](http://www.alertwildfire.org/northbay/)

Darryl KI6MSP will also do an ACS presentation.

Howard K6SID suggested for October a presentation on the MARS station during the Vietnam War and will consider being programs chair.

Mike AD6YB noted that Roberts Rules of Order is being revised to the 12th edition, and Iola KE6HRE said she would order a copy.

We discussed what to do for the December meeting if we are not able to meet in person with perhaps a meeting on Zoom.

Johnathan AK6VB moved that we adjourn this meeting, Iola KK6HRE seconded the motion, and the motion was agreed by voice vote. The meeting ended at 7:00 PM.

Respectfully Submitted,
Bill Dornbush AA6BD

Respectfully Submitted,
Bill Dornbush AA6BD

SCRA LOANER PROGRAM:

SCRA has a variety of radios and other equipment available to members to try out and improve their skills. Trying these out is an excellent way to learn and test before you buy. After reviewing equipment capabilities online, contact Bill AA6BD at aa6bd@arrl.net with your request. Bill will send an information form to you by return email.

Thanks to Joe K6AWA for managing the SCRA loaner program for 6 years. Please let him know that you appreciated his service.

AVAILABLE EQUIPMENT TO LOAN:

KX3 Elecraft transceiver w/ auto tuner, 2 meter module, roofing filter, SN #9957.

Yaesu FT 991 transceiver, 12VDC, no power supply. Operational condition, excellent, built in limited range antenna tuner.

Kenwood TS430s Transceiver, 12VDC, no power supply. Operational condition, fair.

Kenwood TS440s Transceiver, 12VDC, no power supply. Operational condition, fair.

Kenwood (KW) TS590 SG transceiver, SN: B6610162 51. KW fused power cord w/ KW connector KW 600 ohm hand mic.

MFJ 40 meter CW QRP only transceiver 12VDC
Yaesu FT60R, dual band analog FM HT, operational condition: excellent

Yaesu FT1D, dual band, FM analog/digital Fusion HT, operational condition: excellent 81. Cardboard case TYT TH-5, HT, 2 meter analog FM. Operational condition: unknown

Yaesu FT2900R 75 watt 12 VDC 2 meter only mobile radio, no power supply

YAESU FT2DR/DE C4FM/Analog HT's w/power cube and antenna

Anyone AT D868 UV DMR/analog VHF/UHF HT

Samlex SEC-1235M power supply SN: 03435-1625-0133

Astron RS 35 M 35 amp 120 AC/12 VDC linear power supply

Yaesu YH77 stereo headphones

Fluke 87 multimeter

Mono/stereo headphone amplifier, 12VDC, no power supply

MFJ 407D electronic keyer

3PCO programmable keyer

MFJ J-557 code oscillator

QSK 2C paddle key

Bencher navy straight key

Bencher paddle key

Gorden West WB6NOA Morse code course

MFJ pocket tutor for CW

Tigertronics Signalink USB with cable kit for 6 pin mini DIN

2 positions antenna switch

MFJ 269C antenna analyzer 12VDC, no batteries

MFJ antenna tuner 80-10 meter bands with match needle SWR/Power meter 150 watt max.

End fed 44 ft. antenna w/matching transformer

MFJ 4416C adjustable battery voltage booster

The Growing Radio Amateurs Class Continues

In May, 2020, we started classes online to explore **Basic Electronics and the Raspberry Pi**. About 15 members have attended the classes, held once a month on Zoom. The class sessions so far are:

- 1 - Beginning Raspberry Pi – the Basics
- 2 - Using LEDs and Resistors, and Determining Voltage and Current
- 3 – Using Capacitors, and exploring the RC time constant
- 4 – Sensors – Temperature and Humidity



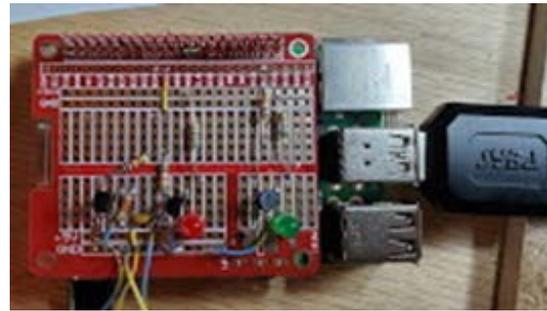
We used an inexpensive sensor to measure temperature and humidity. We displayed it on our Raspberry Pi and also connected it to the Adafruit IO (AIO) cloud so

we could see our measurements graphed and displayed on any web browser including a cell phone. We also used AIO to control an LED on our Raspberry Pi from any web browser.

5 – Winlink on a Raspberry Pi



We completed the first session on what is Winlink. We will continue in September with implementing PAT, a Winlink client, on a Raspberry Pi and a variety of sound card and TNC interfaces.



You are welcome to join us. We meet via Zoom on the third Wednesday of each month at 7 PM. I can provide the class session handouts (digitally, of course) and you can get up to speed on our journey so far. Contact me, Bill Dornbush AA6BD at AA6BD@arrl.net.

FCC Proposes to Reinstate Amateur Radio Service Fees

Contributed by Darryl KI6MSP

08/28/2020 from arrl.org

Amateur radio licensees would pay a \$50 fee for each amateur radio license application if the FCC adopts rules it proposed this week. Included in the FCC's fee proposal are applications for new licenses, renewal and upgrades to existing licenses, and vanity call sign requests. Excluded are applications for administrative updates, such as changes of address, and annual regulatory fees.

Read the full story here. -> <http://www.arrl.org/news/fcc-proposes-to-reinstate-amateur-radio-service-fees>

Member of the Year Nominations Are Open

by Fred AE6SF

Is there a club member who you think is worthy of the momentous Member of the Year award? If so, send you written nomination to me (Fred AE6SF, President). "Written" includes electronic text. Per the Bylaws, the Board of Directors (BOD) is convening a Member of the Year Committee to consider and recommend for BOD approval a club member to receive this award. The committee consists of the President and two anonymous members appointed by the President.

Submit your written nomination now during the month of September. Nominations will be kept confidential. To be eligible, a member must be in good standing and have not received the award during the past three years, which rules out Joe K6AWA, Iola KK6HRE, and Charlie KZ6T (although they are in good standing...)

Include your name and call, and reasons why the nominee is deserving. Reasons are not limited to the current year. Here are some possible criteria to consider:

- Duration of membership in SCRA
- Participation in SCRA activities
- Competency in rules, regulations, operating practices, and radio theory
- Progression of license upgrades
- Leadership in office, committee or activity
- Innovation in club programs or radio art
- Mentoring
- Presentations given at membership meetings
- Specific contributions to the betterment of SCRA and its members

Of course, you may roll your own criteria. And if no nominee rises to a sufficient level of excellence, the honor need not be awarded (so be thankful the nominations are confidential).

And now is a good time to reflect upon the past recipients. If you can fill in the blanks, please send that information to k6son@arrl.net. Kudos to all the past recipients!

Member of the Year Award Recipients

YEAR	NAME	CALL
2019	Joe Fortuna	K6AWA
2018	Iola Beckley	KK6HRE
2017	Charlie Sikes	KZ6T
2016	No Recipient	
2015	David Harrison	W6IBC
2014	Darryl Paule	Ki6MSP
2013	Jack Christiansen	K6ROW
2012	No Recipient	
2011	John Felton	KE5RI
2010		
2009	Pat Coyle	KG6JSL
2008	John Breckenridge	WB6FRZ
2007	Craig Gaevert	K6XLT
2006	Brian Torr	N6IHY
2005		
2004		
2003		
2002	John Mullen	KD2L
2001	Bob Magnani	K6QSY
2001	Al Ferrera	WA6MXI
2000	Marie Mappus, Life Member	KI6QY
1999	Kelly Cureton	KD6CIQ
1998		
1997	Larry Gustafson	KD6VUM
1996		
1995		
1994		
1993	Kathy Mahan	KC6UXJ
1992	John Wallack	W6TLK
1991	John Breckenridge	WB6FRZ
1990	Bill Splaine	N6CHG
1989	Jim Pelmulder	N6PTM
1988	Sarah Davis	N6FAX
1987	"Hoppy" Bravin	WD6CKP
1986	George Shedore	KF6W
1985	Betty Bravin	AG6C
1984	Steve Schaffer	KD6GC
1983	Hank Davis	Q7DTV
1982	Al Bloom	N1AL
1981	No recipient	
1980	Mike Tersarkisoff	N7DRZ

Digital Voice Blues continued from page 1...

You can also use an Android phone in place of the computer. Sorry, not developed for iPhone, yet.

There are a couple of combinations out there. In particular there is a freeware program from David PA7LIM called BlueDV which manages the AMBE-3000™ device. Here is the link with instructions and a download area for BlueDV -> <http://www.pa7lim.nl/bluedv/>. It also lists compatible devices and links to find them. They all will connect to D-Star and DMR networks and most to Fusion as well. Here's a video on how to use it on YouTube -> <https://www.youtube.com/watch?v=9boJDuyUSCI>

BlueDV can also be used to manage a Digital Voice Hotspot. Now that SCRA has Digital Voice enabled repeaters, this is not as critical as it used to be, but it is still convenient and if you get out of range, necessary. The DV hotspots use RF to connect your DV radio to the internet and a DV reflector via the internet, similar to IRLP.

There is, in fact, a DV hotspot called BlueDV which can be your Raspberry Pi project of the month. <https://www.dvmeqa.nl/wp-content/uploads/2018/11/DVMEGA-BlueDV-manual.pdf>



Blue Spot BlueDV hotspot at <https://www.passion-radio.com/d-star/kit-bluespot-dvmeqa-420.html>

Ok, so there are some more reasons to learn about Digital Voice Radio. For an introduction, read the DMR sections on the SCRA website, <http://sonomacountyradioamateurs.com/wp/irlp/dmr-info/>



BlueDV software at <http://www.pa7lim.nl/bluedv/>



DVMEGA DVstick 30

<http://www.combitronics.nl/>



Northwest Digital Radio's NWDR ThumbDV

<http://nwdigitalradio.com/product/thumbdv/>

YAESU SYSTEM FUSION WEEKLY NET




Yaesu System Fusion – the Easiest to Use Digital Voice System

At the July SCRA club meeting, I presented Yaesu System Fusion, or YSF. After using both DMR and YSF, I believe YSF has the edge over DMR on ease of use. You don't need to do anything in advance to program anything on your radio.

To connect to a "Room," the YSF name for a reflector or talk group, you can enter the room number (DTMF ID) or search for the name and use it. That's all you need to do. No programming or code plug is needed.

To find room numbers/ DTMF IDs and names, see https://www.yaesu.com/jp/en/wires-x/id/active_room.php For example, you will find the SONOMACOUNTY room, with a DTMF ID of 62732.

Other rooms you might be interested are:

- WW6BAY-ROOM / 28339
- LA-REPEATER / 21042
- AMERICA-LINK / 21080

Our repeater, located on Castle Rock at 441.375 MHz, defaults to the SONOMA COUNTY room, and you can connect to other rooms as you want. You can use this repeater to talk on analog as well as YSF Digital. It supports both, another feature of Yaesu System Fusion.

To see the presentation and more information, see <http://sonomacountyradioamateurs.com/wp/irlp/>

--Bill Dornbush AA6BD

A number of YOU have expressed interest in attending a Yaesu System Fusion Digital Voice Net. As a result, every THURSDAY night at 7:00pm Pacific Time, Bill AA6BD will coordinate a Fusion Digital Voice Net on the W6SON repeater at 441.375 MHz on the SONOMACOUNTY (#62732) Room. If you have any device that can access Fusion / WIRES-X / C4FM, why not come join us on this interesting and really high quality voice mode! This will give you an opportunity to try out your rig, ask questions, and exchange ideas. And join in for the Question of the Week. We'll see you there!

For more information on Fusion, have a look at the "Presentation on Fusion from 7-1-2020" at <http://sonomacountyradioamateurs.com/wp/irlp/yaesu-system-fusion-wires-x/>

For those who do not have a Yaesu System Fusion / C4FM radio, the club equipment loaner program has several units. Contact Bill AA6BD about availability at AA6BD@ARRL.net

For questions on the Fusion Net, contact Bill AA6BD at AA6BD@ARRL.net.



Ooh, ooh, I have a Question!

From the NEW 2019 -2023 General Class Question Pool:

G8A08 (D)

Which of the following is an effect of overmodulation?

- A. Insufficient audio
- B. Insufficient bandwidth
- C. Frequency drift
- D. Excessive bandwidth

And What About This?

From the NEW Extra Class Question Pool:

E1E12 (A) [97.509(j)]

What must the VE team do with the application form if the examinee does not pass the exam?

- A. Return the application document to the examinee
- B. Maintain the application form with the VEC's records
- C. Send the application form to the FCC and inform the FCC of the grade
- D. Destroy the application form

New Amateur Extra Question Pool Released

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 2016 – 2020 question pool, which expired 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 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.

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.

[SCRA Education Chair](#)



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 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:

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

I would like more information about:

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



IC-705
HF/50/144/430 MHz All Mode Transceiver

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



FTM-300DR
C4FM/FM 144/430 MHz Dual Band



FTM-400XD
2M/440 Mobile



FT-70DR
C4FM/FM 144/430 Xcvr

5 Ways to Shop!

- RETAIL LOCATIONS – Store hours 10:00AM - 5:30PM - Closed Sunday
- PHONE – Toll-free phone hours 9:30AM - 5:30PM
- ONLINE – WWW.HAMRADIO.COM
- FAX – All store locations
- MAIL – All store locations

HRD is family owned and operated by active hams!

ANAHEIM, CA
(800) 854-6046
PLANO, TX
(877) 455-8750

OAKLAND, CA
(877) 892-1745
SAN DIEGO, CA
(877) 520-9623

PORTLAND, OR
(800) 765-4267
DENVER, CO
(800) 444-9476

PHOENIX, AZ
(800) 559-7388
ATLANTA, GA
(800) 444-7927

MILWAUKEE, WI
(800) 558-0411
NEW CASTLE, DE
(800) 644-4476

WOODBIDGE, VA
(800) 444-4799
SALEM, NH
(800) 444-0047

**Shop Anytime From Anywhere
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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.

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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

