

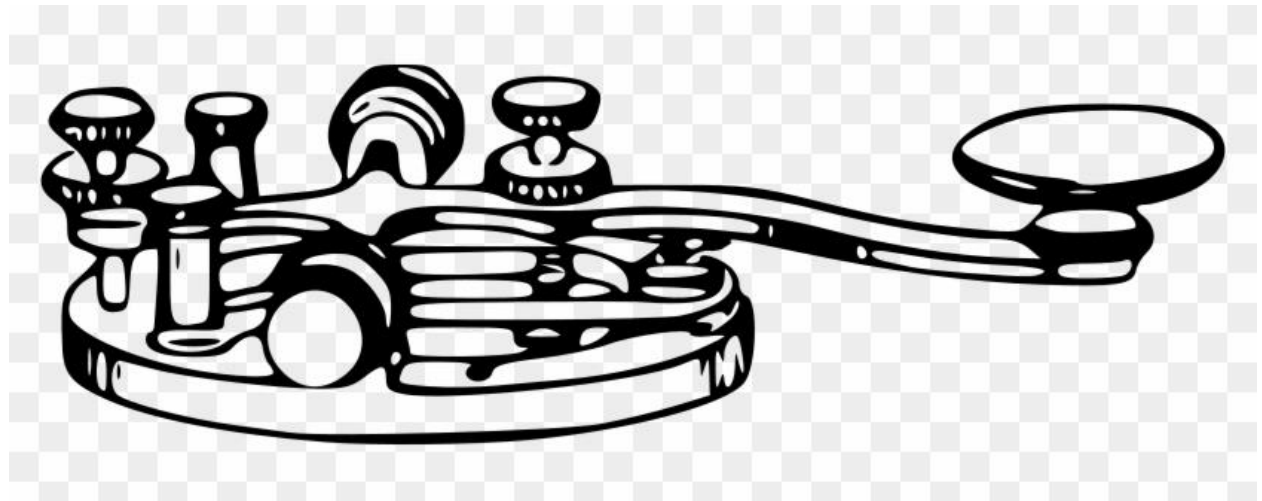


QSA-5

Marin Amateur Radio Society Monthly Newsletter

Established 1933

December 2022



When all else fails, you can count on Amateur Radio

From Our President:

As Lynn Anderson will be reminding us “Soon it will be Christmas day” 2022 will wind its way to its end. Like the last few years 2022 has been pretty bumpy. On the other hand, for many of us things are in some way getting back to something like normal. I am not sure I have ever written a sentence with more qualifiers than the last one. I have to say I am pleased with how our club has done through the plague and things look good for the future. We have new members, we as a club have commenced new ventures including RCV and the NBAM. We have or are in the process of changing the club leadership both in new committee chairs and we will soon have an almost entirely new board of directors. I am very pleased with the quality of all the folks who stepped up to run. I also want to thank each and every one of you who did for being willing to help make the club better. Clearly some of the candidates won’t be elected and for those of you who fall into that category I commend you to the mantra of many sports teams “Wait ‘til next year!”

I am pleased to see more people showing up in person at our Friday meetings. If you intend to show up can you email rsvp@w6sg.net so we can make sure to have enough pizza on hand. I also want to thank all of you for putting up with my seemingly endless term as president. The fact that we have a three consecutive two-year term limit on board members is a strength since incumbents have such an advantage in an organization like ours. I am not going to devolve into a maudlin remembrance of my term. I will remind you that I will remain as membership chair, and I intend to run again for the board again... Wait ‘til next year! I will also whine a bit, however. As of this morning only 50% of eligible members have voted. This will probably get you to after the 11:45 pm closing of the election tonight. I am compelled to remind you all that democracy works best when everyone votes.

Enough navel gazing... Toward the end of December I will be sending out the dreaded membership renewal reminders. I hope all of you will have found enough value in the club to renew your membership. This officially begins my haranguing you to renew and although these reminders won’t be in this space anymore, they won’t go away either.

I wish you all, and your families a Merry Christmas, and a Happy New Year!

From the Editor:

Happy Holidays everyone. Congratulations, we've made it to the end of the year. As you likely noticed, the November issue of the QSA-5 was reduced in size. I'll continue this process in this month's issue to provide more information in a smaller amount of space. As I mentioned in the last issue of the QSA-5, I had a chance to speak with several club members regarding what they thought would be good to cover. With each issue (starting in January), I'll put some of their suggestion into the publication. It is then up to you to decide whether they should become a monthly column. All you need to do is let me know if you like the new material and want to see the QSA-5 explore that material further. If you don't like it, please let me know. While I wish I could read minds, I don't have that talent, so it's up to you to pick and choose what you want to see in our club publication.

There's a lot of interest from QRP enthusiasts regarding uSDX SDR transceivers. If you want to know more about the, please let me know. I own one and participate in the online community that supports them. This is a topic I'd like to cover but will only do so if there is some interest from club members. This is your publication. I'm only the glorified typist and cut and paste guy. Please email at the email address below and let me know what you want to see within the pages of our publication. You know the adage, "it takes a village...." In the spirit of keeping this short, I'll sign off here.

QSA-5Editor@w6sg.net



New Members:

Kathleen Funke-Spicher KM6URP – Petaluma





“Your parents hath given you a name. And the FCC hath given you another...”



**Marin Amateur Radio Society
Board of Directors Meeting
10 November 2022**

Call to Order 19:30 Hours (7:30 PM)

Attendance:

President: Curtis Ardourel WA6UDS (1)

Director: Skip Fedanzo KJ6ARL (2)

Vice President: Tom Jordan KG6TCM (2)

Director: Ken Brownfield AB6JR (2)

Director: Mark Klein KM6AOW (1)

Secretary/Trustee K6GWE Brian Cooley K6EZK (1)

Treasurer/Trustee W6SG: Bruce Bartel N6VLB (1)

Committee and other Reports:

- 1. Membership:** 154 | 100% Curtis reported on the 3 different email pitches that go out to various current members, lapsed members and public-service only volunteers who aren't members.
- 2. Facilities:** Skip ARL reported that some leaf buildup has been cleared. Arturo, our gardener, should be sending an invoice to the Club for Bruce's attention. Curtis suggested we make the landscaping work a regularly scheduled service. Skip ARL will look into it with Arturo. He also reported briefly about his attempt to inspect the battery backup for our club door entry system. (Also agenda'd below under Old Business.) It was also arranged to get Pam & Stan's help with their truck to do some debris hauling from the club. Milt described one load as just junk, the other as electronic gear that needs disposal after one last pass of sorting.
- 3. Public Service:** Pam PDW reminded about the new Spartan Classic that is coming and said she will inquire about an insurance cert for the club from the event. She is also starting to pull together the 2023 schedule which the board normally votes to approve in March or April. Skip also mentioned that scheduling is more complex lately as PS events can overlap with RCV exercises. It was also noted that we should file the insurance certs that PS event organizers issue to us, Pam will forward what she has to Brian.
- 4. Technical:** Milt ASI updated the board on new locations for UHF that may be activated next. Also, about linking the UHF network and how it might work. He also mentioned the coming sorting of some W6ECU gear that will be coordinated with the county. He also updated us on frequency coordination. His main priority is the MARS simulcast system that needs some important

maintenance, especially the Tam link channel antenna and its feedline that are old and in poor condition. Eric at the county will help us, since it's hosted at their site, as they are hoping to oversee some of the sloppy install work that is done by some amateurs. Milt suggested the board establish ongoing standing funding for simulcast system maintenance. Skip moved for a \$3,000 authorization from the Building account toward repairs and maintenance of the main Tam antenna and feed line and possibly the UHF link antennae as well as some possible consulting time to accomplish this. This request could be re-upped with a future request if needed. (This is separate from a previously discussed allocation for antenna mounting equipment that is now in hand.)
M/S/A by show of hands.

5. **VOAD/RCV:** Skip ARL reported on a new member in RCV and progress of another member-in-process. This season's exercise calendar is mostly done, unless we get a rainy spell when Skip may call an audible to have RCV members do a wet weather coverage test from each operator's QTH. A proposal is being drawn up for the pending new head of Office of Emergency Management suggesting a single unit that has RACES and RCV within it in the future.
6. **VE Testing:** Ken AB6JR says next session is Jan 14 and he will soon be coming up with the full 2023 calendar to send to ARRL, Curtains will update the site to match.
7. **NBAM:** Jeff KM6Y reported that the primary backbone sites will be complete very soon, then the work turns toward creating portable mesh units in case a primary node is down. One may be handheld, the other more like a [CoW](#). These will also be useful for training around the NBAM area. Michael K6MLF is taking a hiatus from the NBAM team and Ken AB6JR will be joining the team in his place.

Old Business:

1. **Field Day – Settling up with REDXA** Still pending, per Curtis.
2. **Website password update** Still pending, per Curtis.
3. **Battery backup for entry system** Discussed above.

4. **Board election – 5 seats.** Voting between 11/24/22 and 12/1/22 using [ElectionBuddy](#)
 - a. Steve Toquinto KB6HOH
 - b. James Saltzgaber KM6WWY
 - c. Dan Sobel N6HLZ
 - d. Rich Cochran AG6QR
 - e. Dave Chaney AA6AE
 - f. Alan Bowker WA6DNR
 - g. Bruce Bartel N6VLB

The voting is for board members. Once the results are announced at the Dec 2 general meeting, the board convenes on Dec 6 as normally scheduled to name officers as needed. The new officers take office at that time.

New Business:

1. **Signup for opening for Babble Class** Michael K6MLF says there have been scant signups to open the club building for our Sunday openings (see photo below). Milt asked if signup could be put on the club site, which would be much easier than driving down to the club to sign a piece of paper. Curtis said he would be able to do that.
2. **Club Awards**
 - a. **Ham of the Year** – Contribution to the club in 2022
 - b. **Hi Roberts Award**– Long term contribution to the club
 - c. **John Butler “Elmer” Award**
 - d. **Life Membership** (Board nominates, membership approves)
 - e. **Ted McMillan Youth Advancement** (Under 18)
3. **MEAS or MARS UHF Repeater on Sonoma Mountain:** Tom TCM suggested a delay in consideration of this idea until a later meeting as some pieces of the proposal are still in motion. Tabled until 12/6/22 meeting.
4. **NCSWG (NARCC) Spectrum Usage Survey** NARCC is doing a pair of surveys:
 - 1.) of repeater equipment and
 - 2.) of equipment Bay Area hams possess.Much of this has to do with a NARCC interest in moving hams to narrowband cohesively. We have been asked to complete a form listing our repeater gear and send out another poll to all of our members to report on their gear. Skip suggested that, if we do send the poll to our members, to make sure we call it out as a third party poll and not mandatory

whatsoever. Milt suggested the member inventory request of members is tedious and would generate data that seems useless. Repeaters, we agreed are a different issue, and worthy of being cataloged. Skip ARL moved that we comply with the repeater survey as a club, but send out the operator survey link to each of our members in a special email that makes it clear this is not our survey and that it is not mandatory for any operator to complete it. Tom suggested we make an addendum to the club survey noting that our repeater gear is largely used to conduct public service and drills. He motioned that we comply with the NARCC **club repeater survey** as thusly described. M/S/A

As to the NARCC **survey of operators**, there was a discussion about the propriety and relevance of MARS amplifying the **operator survey** that NARCC is requesting. The conversation yielded few if any opinions on the board in favor of the survey or its lack of clarity. Curtis noted that there will be **no** club effort to send out the NARCC operator survey.

5. **Google account and MFA** Curtis discussed the club buying a phone that would be tied to our Google account as its MFA device. This club phone would physically be in the hands of a club *officer*, rather than in the hands of a specific *individual*. Mark AOW suggested we use an authenticator app that each board member would have access to but it is unclear if our Google account, which is a free personal account, supports an authenticator. Mark will look into this and determine if we need a paid Google Drive account to get authenticator access. Tom suggested we also consider moving to a simple FTP server. This topic will be continued per further research.

Good of the Order: Bruce asked Curtis to take care of transferring some cash out of a dormant account into our General account before it's potentially seized by the state as an abandoned asset. Curtis will put his attention to it asap.

Tom asked that the record note that a Sonoma County club system will be getting access to our Bahia site, which was expected under our agreement with the water district that owns that site. No interference or interaction is expected. This is an item of information.

Executive Session N/A
Adjourn 21:21

Next Regular Meeting 2 December 2022
Next Board Meeting 8 December 2022

B. Cooley

**Marin Amateur Radio Club
Balance Sheet Comparison
As of November 29, 2022**

	AS OF NOV 29, 2022,	AS OF NOV 29, 2021 (PY)
ASSETS		
Current Assets		
Bank Accounts		
B of A Building account - 8795	6,319.44	2,366.51
B of A General account - 4328	11,697.83	15,036.66
CD	25,000.00	25,000.00
Money Market	5,000.00	5,000.00
Total Bank Accounts	\$48,017.27	\$47,403.17
Other Current Assets		
Uncategorized Asset	-95.00	
Total Other Current Assets	\$ -95.00	\$0.00
Total Current Assets	\$47,922.27	\$47,403.17
Fixed Assets		
Clubhouse - 27 Shell Rd. MV	58,983.00	58,983.00
Total Fixed Assets	\$58,983.00	\$58,983.00
TOTAL ASSETS	\$106,905.27	\$106,386.17
LIABILITIES AND EQUITY		
Liabilities		

Total Liabilities**Equity**

Opening Balance Net Assets	124,400.00	124,400.00
Retained Earnings	-16,461.90	-21,928.89
Net Income	-1,032.83	3,915.06
Total Equity	\$106,905.27	\$106,386.17
TOTAL LIABILITIES AND EQUITY	\$106,905.27	\$106,386.17

Marin Amateur Radio Club
Profit and Loss
January 1 – November 29, 2022

	TOTAL JAN 1 – NOV 29, 2022,	JAN 1 – NOV 29, 2021 (PY
YTD)		
Income		
Auction Income	60.00	
Donations	142.99	262.03
Dues	6,305.00	6,676.47
Field day refund	1,375.00	
Income from club activities	90.00	828.00
Public Service Refund	450.00	475.00
Rent	29,100.00	27,525.00
Sales of Product Income	24.69	40.20
Unapplied Cash Pay Income	250.00	
Total Income	\$37,797.68	\$35,806.70
GROSS PROFIT	\$37,797.68	\$35,806.70
 Expenses		
Accounting	110.00	
Awards		300.00
Car & Truck	54.49	1,348.94
Equipment < \$2,500		322.79

Field day	2,184.67	
Food	850.00	1,536.00
Garbage	478.40	379.92
Insurance	7,191.75	6,450.00
Job Supplies		87.37
Legal & Professional Services	575.00	25.00
Meals	3,788.00	
Public Service Expense	841.09	
Reimbursable Expenses	5,610.51	5,146.12
Rent & Lease		150.00
Repair & Maintenance	1,643.50	2,281.66
Repairs & Maintenance	2,880.00	895.18
Repeater		-3,764.68
Taxes & Licenses	7,930.84	8,476.20
Telephone	94.47	93.24
Uncategorized Expense	275.00	1,127.50
Utilities	3,375.20	6,218.55
VE Session	275.00	188.00
Water	672.59	629.85
Total Expenses	\$38,830.51	\$31,891.64
NET OPERATING INCOME	\$ -1,032.83	\$3,915.06
NET INCOME	\$ -1,032.83	\$3,915.06

LIFE IS SIMPLE



Marin Amateur Radio Society News

Meet Your ARRL Pacific Division Representative

This was forwarded from **Michael Fischer K6MLF**:

Greetings Pacific Division members!

I hope you all had a great Thanksgiving and are prepared for getting back to preparing for the Holidays. I hope your bargain hunting has gone well.

It is time for our division-wide meeting. It will be held on Zoom, as it has the last few years. I think our previous meetings have been very productive, They give you a chance to interact and ask questions, and they give me some great feedback for the upcoming ARRL Board Meeting in January. Of course, all of you are encouraged to contact me personally with any issues you may have, even if you can't make the meeting.

With that said, I would like to schedule the meeting one week later than our usual date. I have been under the weather, and I also have a number of other activities that fall on that day. Sadly, that next weekend conflicts with the ARRL 10m Contest. Despite that, we will meet on Saturday December 10th at 10:30 AM PST (1830Z) via Zoom. I will provide the zoom link shortly. Until then, have a great time getting ready for the Holidays and don't forget that the ARRL 160-Meter Contest is this weekend.

ARRL Pacific Division

Director: Kristen A McIntyre, K6WX

k6wx@arrl.org

If any of you are interested in meeting our Pacific Division member of the ARRL

board of directors, plan to attend this Zoom briefing that Kristen McIntyre K6WX will be holding.

Not familiar with ARRL? It's the American Radio Relay League, the premier national organization of ham radio operators. <http://www.arrl.org/> If you are not yet a member, please consider joining!

I will post the Zoom link here when Kirsten sends it along.

Happy Holidays!

Cordially,

Michael K6MLF

VE News

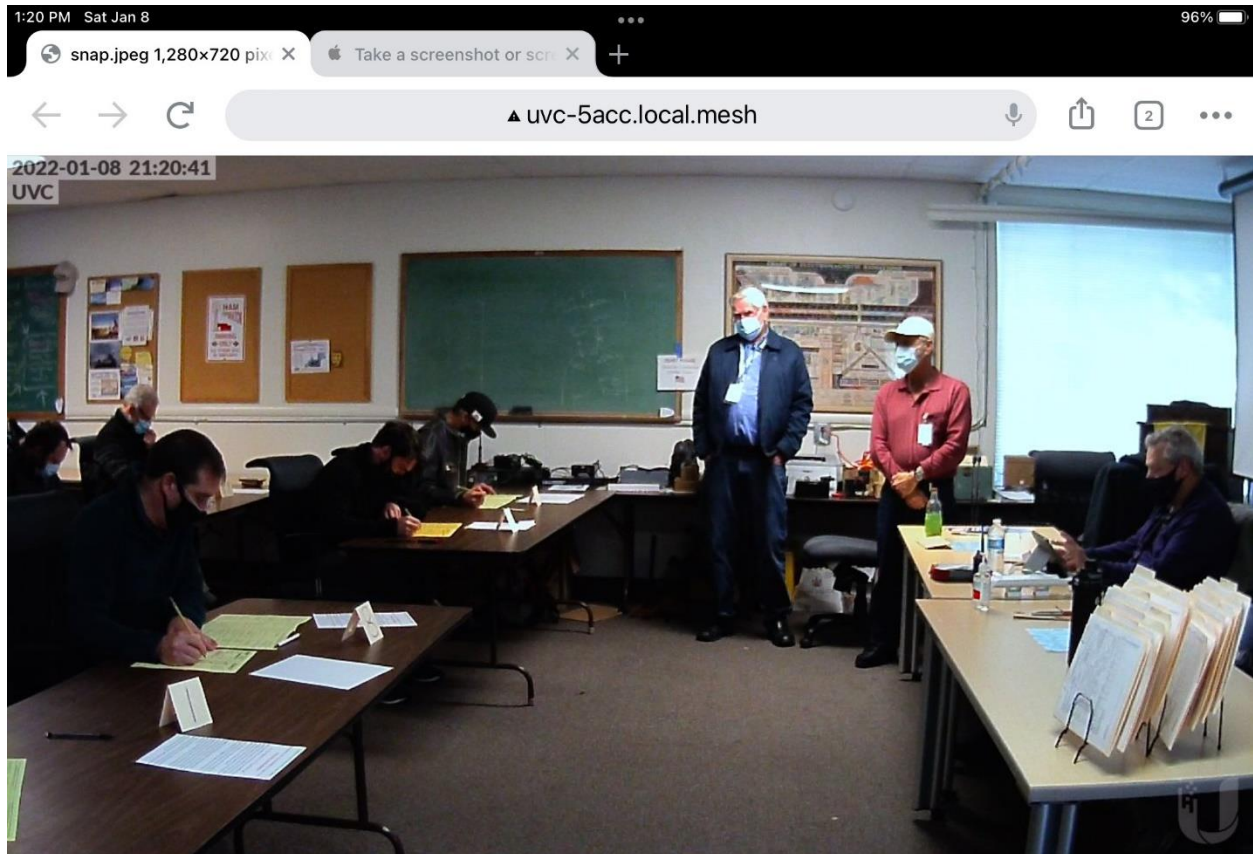
The Marin Amateur Radio Society's VE team had a successful year bringing new ham radio operators into the fold and help existing license holders upgrade their licenses. VE team leader, Ken Brownfield AB6JR, has announced the 2023 examination schedule: The dates are Jan-14, April-8, July-8 and October-14 (2023). The examines start at 1:00 but attendees should arrive early and follow the guidelines regarding what you need to have with you when you sit for a license exam. Why is the VE program so important?

To keep our passion alive, we need younger generations of people to join the ranks of amateur radio operators. Any interest can only be kept alive by bringing in new blood, younger members willing to keep that interest going into the future. Amateur radio clubs around the country partake in the Volunteer Examiner's program, providing examinations for those new to ham radio or those upgrading their existing license. The VE program keeps amateur radio alive by giving license

examinations and then sending the paperwork of successful examinees to the FCC where a Callsign is issued.

To become a Volunteer Examiner, you must read the VE manual and take a test. That's exactly what I did. My reasons for doing so were simple: I took all three license tests during the Covid-19 Pandemic. There were no physical testing sites available, so I had to sit for my exams online. The Lake Washington Radio Club did online testing, so I signed up. Online testing, due to the stringent testing requirements of the FCC was daunting at best for the Washington based radio club. However, they did it. I had several issues with my computer while testing and the club patiently worked with me to ensure I made it through the exam. This inspired me to say "thank you" by becoming a VE. Of course, radio clubs are now opened to in-person testing and the Marin Amateur Radio Society is one of those clubs that offers testing opportunities to both new hams and hams upgrading their licenses. With that said, please consider joining the VE program. You can find further information at the ARRL website:

<https://www.arrl.org/volunteer-examiners>



The Marin Amateur Radio Society did four testing sessions during 2022 (one was a last-minute testing opportunity brought about due to the change in the question pool). Once again, Ken and his team did a great job.

, a

HF Exercise

Of Saturday, November 5th, a last-minute HF event was held by members of the Marin Amateur Radio Society in the jury parking lot at the Marin Civic Center. Club members used HF rigs to participate with a SFARC event taking place on Angel Island. Those wishing to listen to the event from the comfort of their homes could participate by listening on the Big Rock UHF repeater (442.175). This event was in conjunction with Summits-On-The-Air (SOTA) and Parks-On-The-Air (POTA). The event started at 11:15. Dirck KM6VKQ reported that he was able to make contact

on the 20m band from his boat. Here's a brief report from Rob NZ6J :

Thanks to a lousy weather forecast we didn't get wet! Following the August critical mass HF set up we decided to have a more leisurely re run.

The players were Jerry WA6BXV, Bob AI6EE, Mark KM6AOW, Jeff KM6Y, Gerald K6NOV, Skip KJ6ARL, Milt KM6ASI, Ann K6SHO, Dan KN6PNA, Frank W6?, Doug K6DRK and Rob NZ6J.

We set up six stations and checked each antenna for SWR. Jerry's WW2 vertical won, and suspicions about it being a dummy load were put to rest by all the contacts he made! Here are some photographs from the event starting with the event's information flyer:



Announcing the 2022 San Francisco Radio Club Angel Island OTA-Trifecta **Plus** Event

The SFRC will be activating Angel Island for
Summits-On-The-Air
Parks-On-The-Air
World-Lighthouses-On-The-Air (ARLHS)
 with an additional
Boats-On-The-Air
 operation in the surrounding waters.

Date / Times:

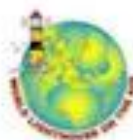
November 5, 2022 11:15-14:15 PDT 18:15-21:15 UTC

Contact our operators and receive an event QSL card!



Starting Frequencies (+/- subject to traffic)

SOTA	7.033 CW	14.063 CW	146.505 VHF
	7.243 SSB	14.328 SSB	445.425 UHF
POTA	7.178 SSB	14.275 SSB	146.415 VHF
			444.125 UHF
WLOTA / ARLHS	7.270 SSB	14.340 SSB	146.550 VHF
			446.650 UHF
BOTA	7.250 SSB	18.100 FT-8	146.580 VHF
		14.265 SSB	446.675 UHF



BOATS  ON THE AIR





The Great Shakeout

The Bay Area recently had a 5.1 magnitude earthquake, reminding us that the big one is coming. When that big one comes is the question we can't answer. When we are hit with a large magnitude earthquake, there will be no notice. Because we live in an earthquake zone, our emergency responders and volunteer groups participate in exercises meant to prepare them for a no notice disaster. This information comes from Skip Fedanzo KJ6ARL:

From October 20th to the 22nd of this year, our own RCV and RACES held joint exercises to see how well Marin radio operators could standup a pre-activation, pre-EOC resource net. That resource net is the foundation used for an amateur radio response when the EOC decides it is time to activate RACES and/or RCV. Here's breakdown of the event:

The Great Shakeout is an annual earthquake preparedness event each year, nominally on or around the third Thursday on October 1. It is intended to raise awareness of the threat of earthquakes and educate the general population of appropriate actions to take when a major earthquake comes: "drop, cover and hold on." The event is used by a number of institutions and response agencies as an opportunity to exercise their own preparedness in response to a catastrophic earthquake.

Marin County's ACS-RACES and RCV programs asked their operators, as well as other amateurs in the county, to participate in an exercise that simulates what might actually take place on local area repeaters and simplex frequencies during the initial hours of a major earthquake. Specifically, both ACS-RACES and RCV leadership have developed protocols for such a "no-notice" event. This exercise is intended to be a training opportunity for our operators, as well as a test of the adequacy, strengths, and limitations of these newly drafted protocols. Although the exercise began on Thursday morning October 20, organizers realized that not all operators would be free to participate on a weekday. Therefore, they conducted limited activities on Thursday and Friday, with a more complete simulation on Saturday. In an actual event, the Marin Operational Area Emergency Operations Center (OA

EOC) would activate quickly but could have limited staffing and knowledge of the extent of damage and response needs for a number of hours.

ACS-RACES operators would NOT be activated during these initial hours, and no operators would deploy to other locations. At some point in time the EOC staff would formally activate ACS-RACES, and their initial request would include a report of the number, location and availability of operators who could be deployed.

The ACS-RACES “no-notice protocol” is intended to develop that information prior to activation to support decisions on operator deployment when activation occurs. Similarly, RCV operators will build an RCV Operators resource net as soon as is practical in the hours following a major earthquake. Because RCV is not officially activated during this time activity is limited to creating its own resource log. That information might be compiled by monitoring a shared ACS-RACES/RCV repeater or on a separate repeater. Circumstances will determine which option is appropriate. Once an RCV resource log is available it will be forwarded to the OA EOC/VOAD position for further action.

It is virtually certain that a number of operators not affiliated with either ACS-RACES or RCV will come up on various repeaters. A key component of this exercise is to establish a “resource net” (i.e., a net intended to identify amateur operator resources for potential deployment). Simultaneously, situational awareness information in the form of reported infrastructure damage (roads, water, power, telecom), fires and injuries can be developed for relay to the EOC as the opportunity presents. Unaffiliated operators would be welcome to provide such information, subject to the net control station being able to complete the task of identifying operator availability. Although ACS-RACES does have a standing Memorandum of Understanding (MOU) with the Marin Amateur Radio Society (MARS) granting it priority access to MARS repeaters in emergencies, it should not be necessary to limit access to a specific repeater or repeater system prior to formal activation by the EOC. RCV Operators Please Note: For purposes of this exercise both RACES and RCV are considered “branches” of Marin’s Auxiliary Communication Service (ACS). This means that on Day 1 and Day 3 of RCV’s activities, the morning net is a general ACS pre-activation radio net. On Day 2

and the afternoon of Day 3 RCV will have its own net and Net Control Station.

How Critical Mass Started

The QSA-5 often reports on critical mass events in the Bay Area. While the QSA-5 has provided the “what is” regarding critical mass, we had not given you the “how” of the story, as in how critical mass started. Thanks to Michael Fischer, who forwarded this piece, you can now learn about the founding of this crucial service. A typical day’s schedule and what you need to bring with you is presented at the end of this article.

First written by AA6SF - SK - April 24, 2012)

Way back in early 2010, I was sitting at home looking at my HT radio that hadn’t needed charging in some time. Since I got my license in January 2009 (Technician & call sign KI6NYQ), I had taken all the HCT (Ham Communication Team) classes offered by SF NERT and many emcomm classes offered by Santa Clara County ARES/RACES, even participated in their drills, volunteered as a radio operator for Bay to Breakers, SF Marathon, SF Nike Marathon, joined SF ACS; but I still did not feel like I knew that much about my radio and emergency communications and needed more radio practice opportunities.

I came to the realization that here in San Francisco there were few opportunities to learn more about my radio, simple UHF/VHF radio communications and few opportunities to practice using my dual band HT.

I decided to start a radio practice group. I thought I would gather together other

ham radio operators to learn and practice with them and help them to learn and practice— about simple UHF/VHF radio communications. For weeks I scouted many venues in San Francisco and chose Spreckels Lake in Golden Gate Park. I announced the radio practice at the end of weekly ham nets, handed out announcements at an ACS meeting and an SFARC meeting.

Two of my best friends, Jan WB6SPX and Jim KI6RYE, said they would help and we three met over a nice bottle of red wine at Jim's house to work out (loosely) the details of the first practice. (Better than a garage in Los Altos.) I told them I had a name for the radio practice: "The 2 Meter Critical Mass Amateur Radio Practice". **On July 10, 2010, the first 2 Meter Critical Mass Amateur Radio Practice took place from 1000 hours to 1200 hours at Spreckels Lake in Golden Gate Park.** Twenty (20) hams were in attendance. Imagine that!

We talked on our radios. Some had trouble with Tone, Tone Frequency, offsets, phonetics, low battery power. There were lots of questions and the Elmers answered them.

I learned a lot that day. Exactly what I had wanted. Since then, when we meet, we continue to talk on our radios, solve problems and learn new things about our radios. I have learned something every time we met. Only once a month. Only two hours from 1000 to 1200 hours on a Saturday. Where else can you go in the city to learn about ham radio and help others learn? If you know of another place for radio practice, please tell me.

Thank you Peter McElmury AA6SF-SK for developing this for our community. We look forward to carrying on your tradition.



positive Covid test result in the last 14 days.

Bring your freshly charged 2M radio, your user manual, a clipboard (and pens or pencils), and a filled water bottle.

- **What:** 2 Meter Critical Mass Radio Practice
- **Where:** Northwest Corner of Spreckels Lake (Near Fulton and Spreckels Lake Drive
- **When:** 10:00 AM to 12:00 AM Saturday, November 12th

Please program your radios in advance; here are the frequencies we'll use.

1. Channel Alpha 146.475 PL 100
2. Channel Bravo 147.585 PL 100
3. Channel Charlie 146.445 PL 100

You are all set if you have the NERT Band Plan on your radio.

Ham Radio News

Each month, QSA-5 searches the internet for stories about amateur radio in the news. As editor of our publication, I merely present these articles and do not take a position regarding their message or content. Our first story regards Amateur Radio's longevity:

Ham radio operators: A long-lasting technology: An interesting piece about the longevity of radio.

<https://www.winknews.com/2022/06/24/ham-radio-operators-a-long-lasting-technology/>

Amateur Radio Club Members Assist Law Enforcement: A local radio club provided surveillance for a large state fair.

<http://www.arrl.org/news/amateur-radio-club-members-assist-law-enforcement>

If China declares war, these ham radio enthusiasts could be crucial: An interesting piece from the Los Angeles Times:

<https://www.latimes.com/world-nation/story/2022-10-27/taiwan-ham-radio-amateurs-civil-defense>

Amateur Radio Operators Continue Response to Hurricane Ian: One of the most important aspects of amateur radio is assisting when disaster strikes. Here's a piece from the ARRL about the role amateur radio has played during this devastating event.

<http://www.arrl.org/news/amateur-radio-operators-continue-response-to-ian>

Local ham radio operators providing help as Hurricane Ian sweeps across Florida: This comes from TV Station WTVA (TUPELO, Mississippi). This piece covers how amateur radio operators connect family members with loved ones in the path of the hurricane.

https://www.wtva.com/news/local-ham-radio-operators-providing-help-as-hurricane-ian-sweeps-across-florida/article_f2fda4e8-3f6c-11ed-bd5f-97a1bad70dad.html

Ham radio operators: A long-lasting technology: A nice blog piece on the longevity of amateur radio.

<https://www.winknews.com/2022/06/24/ham-radio-operators-a-long-lasting-technology/>

Ham radio operators practice for emergency: This comes from the Times online and is a decent article.

<https://www.tnonline.com/20220627/ham-radio-operators-practice-for-emergency/>

GE Ham News: This is a great site I found by accident. It was published by General

Electric to help sell their vacuum tubes. As an electronics nerd, I am fascinated by these downloadable PDF issues. The dates of publication range from 1938 to 1968.

https://worldradiohistory.com/GE_Ham_News.htm

FCC Regulatory News

Here are the current regulatory changes and FCC news as it applies to Amateur Radio. This section of the QSA-5 newsletter was introduced last year. We will add new regulations and rules monthly, removing the older regulations and rules as new regulations/rules are introduced. As of the August 2021 issue of the QSA-5 newsletter, this list of FCC regulations and changes will be reduced, only covering this year's new regulations and rules. The newest regulations and changes will appear at the top of the list. Note that we are not able to cover every change the FCC has made this year within our publication:

FCC Grants an ARRL Emergency Request to Permit Higher Data Rate Transmissions for Hurricane Relief Communications: The FCC has granted a 60-day ARRL emergency request intended to facilitate amateur radio emergency communications for hurricane relief.

<http://www.arrl.org/news/fcc-grants-an-arrrl-emergency-request-to-permit-higher-data-rate-transmissions-for-hurricane-relief-c>

FCC Grants an ARRL Emergency Request to Permit Higher Data Rate Transmissions for Hurricane Relief Communications: The FCC has granted an [ARRL](#) emergency request for a 60-day temporary waiver intended to facilitate amateur radio emergency communications for hurricane relief.

<https://www.arrl.org/news/fcc-grants-an-arrrl-emergency-request-to-permit-higher-data-rate-transmissions-for-hurricane-relief-c>

FCC Hiring for High Frequency Direction Finding Center: Just in case you're looking

for a career change:

<http://www.arrl.org/news/fcc-hiring-for-high-frequency-direction-finding-center>

FCC Legacy CORES System to be Retired: It seems that the FCC is retiring their CORES system:

<https://www.arrl.org/news/fcc-legacy-cores-system-to-be-retired>

FCC Proposes Record \$34,000 Fine for Alleged Interference and Unauthorized Transmissions During Idaho Wildfire: The FCC takes using unauthorized frequencies very seriously.

<http://www.arrl.org/news/fcc-proposes-record-34-000-fine-for-alleged-interference-and-unauthorized-transmissions-during-idaho>

Propagation News

Here are some links dedicated to propagation conditions, space weather, sunspot cycle information and all things related to solar conditions:

The K7RA Solar Update: This is the K7RA solar update, which is updated regularly:

<http://www.arrl.org/news/the-k7ra-solar-update-november-28-2022>

DX.QSL Propagation:

A simple, straightforward website for propagation conditions that is regularly updated:

<https://dx.qsl.net/propagation/>

Radio Society of Great Britain: What's New and Propagation Now:

A great resource from the UK version of the ARRL regarding solar activity and propagation:

<https://rsgb.org/main/technical/propagation/whats-new-propagation-now/>

SunSpotWatch.com:

A good general interest site for amateur radio operators who follow solar activity:

<http://sunspotwatch.com/>



DIY Radio References

We have added a few additional links to our list and will continue to do so as we discover more websites related to the Do-It-Yourself movement! QSA-5 is going to keep adding to the original list of online resources, bringing you more resources as we find them. If there is anything you think would be useful to other club members, contact me and I will be happy to include it in this reference section.

Microcontrollers and Single Board Computers: With the advent of the Arduino

micro-controller board, the Raspberry Pi (a single board minicomputer) and Texas Instrument's Launchpad (also a single board microcontroller), Amateur Radio enthusiasts can build both accessories, such as antenna tuners, and fully functioning transceivers. I have spent the last year at the University of California studying these devices, learning how to use them and incorporate them into electronic projects. I was able to build two HF receivers based on the Arduino and Raspberry Pi devices. The best news of all is that these devices are inexpensive! I encourage you to check these websites out!

Arduino: The Arduino microcontroller board was the first to popularize these devices. They are inexpensive and can be used for a variety of radio related projects. I will include some links to radio related Arduino projects in the next issue of the QSA-5. Here's a link to the Arduino homepage:

<https://www.arduino.cc/>

Raspberry Pi: Did you every wish you could have a PC small enough to fit into your shirt pocket? Your dream has come true. The Raspberry Pi 4 is a fully functional Quadcore 1.6 GHz computer, about the size of a package of playing cards. It has an Ethernet jack, two USB 2 ports, two USB 3 ports and two HDMI ports. Next month, I'll post some links to radio related Raspberry Pi projects. Here's a link to their homepage.

<https://www.raspberrypi.org/>

Texas Instruments TI Launchpad: The Launchpad is Texas Instruments answer to the Arduino. The Launchpad is geared more towards advanced projects and is slightly more expensive. However, the Arduino still holds it own against this device. The Arduino also has more in the way of opensource software. Here is a link to the TI Launchpad homepage.

<https://www.ti.com/design-resources/embedded-development/hardware-kits-boards.html>

Tools for electronics: It is a lot easier to build or repair your electronics if you have the right tool. Paperclips and duct tape are not the solution to everything (unless you are McGyver – hopefully, you got the reference). Therefore, we added some links to suppliers of electronics tools.

All Electronics: A one stop electronics shop that has a variety of tools for your repair and building needs:

<https://www.allelectronics.com/category/780/tools-and-supplies/1.html>

Jameco Electronics: A supplier of decent tools at a reasonable price:

<https://www.jameco.com/Jameco/content/tools.html>

Electronic Printed Circuit Boards (PCB): If you design and build projects that require specific circuit boards, you know how difficult it is to find a board that will work for your purposes. Designing a board and then having it made can be expensive. Here is a company that has a large number of radio PCBs you can purchase and then add components to. They also can take your design and fabricate a PCB at a very reasonable cost. The company's name is **PCBway**:

<https://www.pcbway.com/project/>

Electronic Components and Parts: Many of us involved in amateur radio are constantly tinkering with electronics. It seems to be part of our genetic makeup! Here are some links to companies that sell electronic components and parts, starting with San Rafael's own Electronics Plus (Support local business).

Electronics Plus: It's great to have an electronics store close by for those times when you need a part immediately:

<https://www.electronicplus.com/>

Digikey: A good source for DIY and Maker projects as well as parts. They claim to have the world's largest selection of electronic components.

<https://www.digikey.com/>

Jameco: This company is a good source for almost everything, especially mainstay items such as resistors, capacitors, etc.

<https://www.jameco.com/>

Homemade Antennas: Many new amateur radio enthusiasts put a great deal of time and effort into researching their first radio. However, they often neglect the most important component to a successful radio experience, the antenna. Even if you have some ham radio experience, antennas can be a daunting subject. Commercially manufactured antennas can be expensive and beyond your budget during these hard financial times. Even if you have the funds available to purchase an antenna, reading through the antenna's specs can be akin to reading some long lost ancient language. A good solution for increasing your knowledge of antennas and radio wave propagation, not to mention cutting the costs down, is to build them yourself. Here are some links to DIY (do it yourself) sites to give you a start:

Antenna building basics:

<https://www.wikihow.com/Build-Several-Easy-Antennas-for-Amateur-Radio>

Good Reference for several antenna types:

<https://www.hamradiosecrets.com/homemade-ham-radio-antennas.html>

A step-by-step guide for building a simple antenna:

<https://geardiary.com/2012/07/21/building-a-simple-ham-radio-antenna-without-soldering/>

Instructions for a VHF/UHF dual band antenna:

<https://www.instructables.com/Quarter-Wave-Dual-Band-VHFUHF-Ham-Radio->

[Antenna/](#)

Build an HF dipole antenna:

<https://www.electronics-notes.com/articles/antennas-propagation/dipole-antenna/hf-ham-band-dipole-construction-80-40-20-15-10-meters.php>

Introduction to antennas:

<https://www.onallbands.com/ham-radio-antenna-options-for-home-and-portable-operations/>

Ham Radio QRP Transceiver Kits: With the advent of SDR (Software Defined Radio), building fully functioning ham radios has become a lot easier and extremely inexpensive. While, having fewer bells and whistles, as well as being low power units, many have fully functional touchscreens and cover many of the HF bands:

An easy to build QRP transceiver. No soldering needed to build:

<https://www.hfsignals.com/>

An easy to build, single band CW kit:

<https://qrp-labs.com/>

Offering several kits and finished transceivers:

<https://youkits.com/>

Propagation Websites: Propagation is a key factor in successful radio communications. Here are some links to websites that will help you with all your basic propagation needs:

Real time band conditions:

<https://qrznow.com/real-time-band-conditions/>

VOACAP band conditions:

<https://www.voacap.com/hf/>

ARRL Propagation Page:

<http://www.arrl.org/propagation>

Real Time HF Propagation Prediction:

<https://hamwaves.com/propagation/en/index.html>

Ham Radio Websites of general interest:

Ham Radio News: Here are some sites and articles you may find of interest regarding ham radio.

ARRL News Page, which is a good place to find national news regarding ham radio:

<http://www.arrl.org/news>

QRZ Now. Another good site for ham radio news from around the globe:

<https://qrznow.com/>

The Amateur Radio Newsline. An AP styled news feel page for amateur radio:

<https://www.arnewsline.org/>

