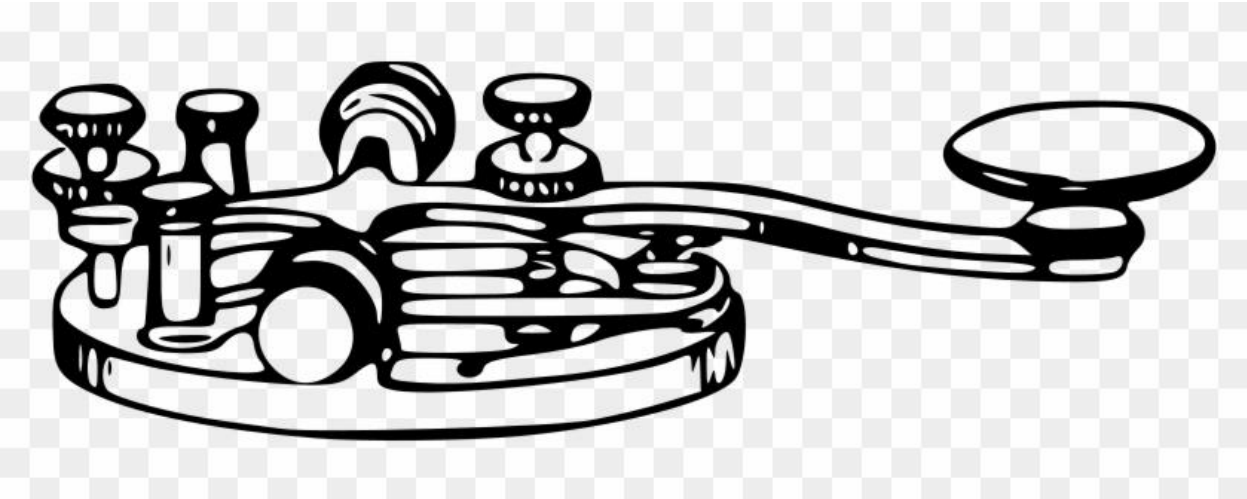
QSA-5

Marin Amateur Radio Society Monthly Newsletter

Established 1933 **May 2023**



When all else fails, you can count on Amateur Radio

From Our President:

No Words this month. Hope everyone has a great May 2023.

From the Editor:

I want to apologize for the problem with the links in last month's edition of the QSA-5. Unfortunately, Microsoft Office has a bug that was automatically downloaded to my computer. That bug created several issues. While I was able to resolve most of them, the link problem required some expertise above my skillset. The links should be functioning now. However, due to the other problems, I'm keeping this month's issue bare boned content-wise, until I am certain there are no further technical glitches. I checked each link by producing a test copy of the PDF version of the QSA-5, and they worked (depending on your OS, you may be asked for permission to go to the link). We'll resume articles on QRP radios in next month's issue.

As always, I thank all of you, especially Curtiss Kim, that sent in articles and ideas for the pages of the QSA-5. I also want to thank you for sending them in earlier rather than the day before publication. You make this publication what it is.

Summer is nearly here and the warmer weather of late beats the day after day rain we experienced at the beginning of the year. I'm looking forward to the summer and outdoor events that don't get cancelled due to rain. Here's to a great summer!

QSA-5Editor@w6sg.net

New Members:

Dave Kanter KM6MBA – Larkspur

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

Marin Amateur Radio Society – Board of Directors Meeting

April 13, 2023

Call to Order: 2000 hours by President Ken Brownfield. Zoom active at 1930 hours

Attendance
President: Ken Brownfield AB6JR
Director: Rich Cochran AG6QR

Vice President: Tom Jordan KG6TCM
Director: Jeff Young KM6Y
Secretary: Jim Saltzgaber KM6WWY
Trustee K6GWE: Brian Cooley K6EZX
Treasurer: Bruce Bartel N6VLB
Trustee W6SG: Marc Bruvry KF6VNT
Director: Steve Toquinto KB6HOH
Also Present: Charlie Bennet, Larry Bradley, Curtis Ardourel

Adopt Agenda: As Submitted, MSC

Approve Minutes: of March 9, 2023 MSC

Secretary's Report: Curtis has been provided notarized letters and documents to recover access to the W6SG.net web hosting account on Network Solutions. He reports that this has been successful. 2022 tax returns will be uploaded to MARS Google drive.

Treasurer's Report: Financial report is in QSA-5. 2022 taxes have been completed and filed. Van Registration was finally completed, and the address changed to our PO Box. Marin Rod and Gun Club still owes a $450 deposit refund from the Public Service Picnic that was relocated to the clubhouse due to weather in February, however they have refused refund for the basic cost of the venue.

Committee and other reports

Membership: Curtis: We have 137 members, 87% of last year. QSA-5 list has been purged of non-paid members. Non-paid members will not be contacted for renewal further.

Facilities: Skip (Absent) - Ken reported building ok. Curtis has reprogrammed the thermostat program and it will auto turn down to 40 degrees at each preset time after being set to run heat. Remote control thermostat credentials have been sent to Rob, Rich, Skip, Jim. Operating instructions to be posted. The stove was found left on VERY low on the first Sunday of April by Curtis who turned it off and vented the building. Club house camera system locations and capabilities were discussed. Rob R. has control of these cameras. Tom - AQI sensor would be

appropriate to install in the kitchen to warn of gas in the building. Option to turn off stove gas supply when not in use was discussed. To be followed up with the Facilities committee for resolution. This is considered a serious problem and a safety issue for our tenant. Anyone using the stove is requested to be extremely vigilant about turning it off and checking it before exiting the clubhouse.

Public Service: Rob/Pam (Absent) Jim - Next event is MCBC Jane Fondo Sat. 4/15/23, Net control will be at Olema. The duty roster is published and Comm van will be in use at this advent. No other info to report.

Technical: Milt (Absent) Ken- Big Rock repeater K6ECU, is back up! Transmit/receive frequencies have been swapped and traffic has been heard.

VOAD/RCV: Skip (absent) Ken- April 22nd test event will test out of county repeater access.

VE Testing: Ken - VE test session was held on 4/8. A We had 11 people test. One person failed the Technician test. 5 new Genera licensees (San Francisco, Alameda, Larkspur, San Rafael, Windsor). 1 person went from no license to General. 1 from Tech. to Extra. 4 new Tech. licensees (San Francisco, Pt. Reyes, San Jose, Livermore). Jeff Young and Dave Sneed conducted a pretest cram class, with Curtis observing, for 2 of the RCV CBO managers. 1 passed, 1 failed. Jeff commented that the plan is to continue to pursue and improve the use of cram sessions for licensing any RCV CBO's that are interested in licensing their personnel. Ken will provide special VE sessions if necessary for CBO licensing. Tom commented that our strong work as a club is to get community members who need the communications capabilities that Ham radio can provide introduced and assisted with no-code Tech licensing. Jeff added that we are going to need some Elmering to accomplish this and that the most likely candidates are the RCV members. We may ask for some additional Elmers from the club general membership.

NBAM: Jeff - NBAM has submitted a new $33K grant request. Good news is that he hasn't heard anything back yet, but sees that as a positive sign, and is encouraged that we may receive it. The previous grant has $500 that NBAM

wants to transfer to MARS for future club costs related to NBAM site leases and requested Bruce to set up accounting for this NBAM fund.

Recent progress includes Sugarloaf Mt. in Napa - re-aligned 3 antennas for better coverage. Dave Snead, joining the steering committee, is in Napa and has been working with OES people in Napa. He will be doing a demonstration on May 18 to show them how mesh networks can be of use to them. They do not have a Ham group pe se, but do have one search and rescue type group that helps them out. This will be a good opportunity to assist OES in Napa, and to have a Mesh sector antenna pointed towards the Marin Mesh infrastructure. Mt. St. Helena NBAM site was destroyed in the snowstorm. We will go back out there and reinstall antenns Link to east bay has failed and will is being restored. Tomorrow Timber Cove antennas will be aligned, and site tested, as well as Bodega Bay Marine Lab. Castle Rock and other sites are in the final stages of aligning antennas. All of the sites are pretty much up now but will possibly be doing something for the Muir Beach area.

NBAM has built an enclosed area in the back of the Clubhouse for storage of NBAM mesh equipment and parts. They have built 3 different types of portable equipment packages and will display those when they have a Mesh session at the clubhouse. These go from what a ham would use to go out and set up a simple Public Service site to equipment for setting up a primary node. Need volunteers to assist with learning more about the Mesh and are willing to train others. This year's goal is to get the word out as to what it is, what it can do, and how to get it set up. Mark, AOW will be setting up a demo station at the clubhouse, with a full server so people both outside and inside the club can learn more about how the Mesh works. It will have a mailbox, chat room, and file server. A working station demonstrates much more than a verbal description can. If anyone knows of someone who would be interested in working with the Mesh group, have them contact Jeff, Rob, or Ken.

Education: Curtis - Observed 4/8 Cram class for CBO personnel with Jeff at clubhouse. Getting more people licensed as Hams is our goal and that helps on that front. The cram book we have has some technical discussion as well as Q&A. Ken has set up Q&A only sheets. Tom - no code tech is a leash to get people into the Ham hobby. We can assist them with what knowledge they may need as we go forward. Discussion followed on using both Technician cram classes and

full featured classes to provide education and upgrade knowledge. Both are seen as useful tools and a benefit for the Ham community and prospective hams.

Comm Van: Jim- Guards were installed by Michael Fisher and myself to prevent van door corners from damaging the garage fabric. Michael Fisher has updated van radios to reflect Big Rock Repeater frequency swap. They are programmed with the RACES channel lineup. Ken asked about the van budget, no work has yet been done on that. Tom inquired about financial records that could provide needed info for the budget, Bruce remarked that he has provided the last two years expenditures that were tagged for vehicle costs. Tom commented that the Van can be used much more of a community asset similar to what KWMR in Point Reyes provides, than simply public service such as having capabilities for additional Emm Comm and other community needs. Jeff remarked that the van also could be used for RACES and RCV drills and as well as other emergency services if fitted with GMRS radios and similar equipment. Funds may be available from that front to accomplish the addition of equipment. Rich remarked that another good use for Van would be Field Day.

Old Business

1. **None**

New Business

1. **Clubhouse:** Ken - Building exterior is getting pretty shabby looking, would like to investigate contractor painting for at least the front of the buildings. Tom knows a painting contractor who could possibly oversee bids. Mark - let's get bids on additional spackling and sealing and touchup painting on the rest of the building. Ken - expense will probably be too much for a complete job all at once, but we need to get bids for front and for the rest of the building at the same time. It could be done in increments, with the front being the first priority. The part that is not expensive would be to get some work parties to paint the inside, we need

to get some volunteers. There should be enough people in the club to get the interior cleaned up and painted. Hoping for volunteers to help Skip and Rob, who can work toward getting things organized. Encourage anyone who can to get involved in this. Let's get some life into the clubhouse.

2. **Field Day Committee Chair:** Haven't been contacted by REDEX for participation this year. We have received email that Marin Rod and Gun Club may not be available at this point. Discussion followed on how many Mars members were present at last year's field day, participation levels on both sides, and logistics required to do field day, at RRGC or other sites. Covid was still more prevalent last year than now. Past site at Monkey Ranch was discussed and not found to be ideal. Rich to search out possible field day location? Does REDEX need us/or them us? Logistics were shared by both clubs. We supplied computers to run logging software, generators, meal assistance, logistics. radios and antenna towers were REDEX. Curtis - we need to get moving, June comes quick! Ken – 84 days! Rich Carbine has obtained RRGC before as well as Ann Shores for Public service. Steve T. will call Rich Carbine regarding Field Day and will try with Rich Cocheran and Curtis to get a plan going. Alternative sites were discussed. Marc - alternate sites in the past have been hard to find. Tom expressed that the new relationship with county public works and use of parks may be possible. Steve T. inquired about whether or not the nb2mCM site work? That was determined to be Marin County Fair grounds and the schedule would conflict with the County Fair. The Field Day Committee will consist of Steve T., Rich C., and Curtis A. Jerry Foster will be asked when he returns.

Good of the Order: Tom- Picnic is coming up. We need to get plans started. He will start now to get the plans rolling and work with Milt and whoever else would like to be part of the picnic committee. Last year's site was agreed to be acceptable.

Executive Session: Not required.

Next Regular Meeting May 5th 2023
Next Board Meeting May 11th 2023

Adjourn: Jeff Young Moved to adjourn, Numerous Second's, and so Carried. Adjourned @ 21:19

Links From Last Month's Meeting:

Attachments:
Michael Fisher Letter 2/26/2023
https://docs.google.com/document/d/15qPlRgrIO2o_uGqTU_J5uIFMww0T5fvOBpPjBLRhzLo/edit?usp=sharing

Peter Bland Letter 3/6/2023
https://docs.google.com/document/d/1Y-pJE6hsrLNqyZR1HaTxM3FlC_Sj0pzucgxMQvNlVrc/edit?usp=sharing

Marin Amateur Radio Club

Profit and Loss
January - April, 2023

	TOTAL	
	JAN - APR, 2023 JAN	**APR, 2022 (PY YTD)**
Income		
Auction Income		50.00
Donations	1,517.69	100.00
Dues	6,979.75	6,305.00
Income from club activities		90.00
Interest Income	792.77	
Public Service Refund		450.00
Rent	10,400.00	10,200.00
Sales of Product Income		24.69
Total Income	**$19,690.21**	**$17,219.69**

GROSS PROFIT	**$19,690.21**	**$17,219.69**
Expenses		
Accounting	870.00	
Awards	299.99	
Car & Truck	1,016.59	588.49
Car & Truck Gas	60.59	54.49
Total Car & Truck	**1,077.18**	**642.98**
Field day	122.97	350.00
Garbage	191.36	191.36
Insurance	1,683.00	3,301.00
Comm Van Insurance	2,173.00	
Total Insurance	**3,856.00**	**3,301.00**
Other Business Expenses	104.93	
Public Service Expense	1,328.83	3,168.19
Reimbursable Expenses	2,448.73	1,071.12
Repair & Maintenance		1,100.22
Repeater	1,567.50	
Taxes & Licenses	25.00	3,925.64
Utilities	1,342.12	1,118.67
VE Session	129.00	90.00
Water	210.22	255.53
Total Expenses	**$13,573.83**	**$15,214.71**
NET OPERATING INCOME	**$6,116.38**	**$2,004.98**
NET INCOME	**$6,116.38**	**$2,004.98**

Marin Amateur Radio Club
Balance Sheet Comparison
As of April 30, 2023

	TOTAL	
	AS OF APR 30, 2023	AS OF APR 30, 2022 (PY)
ASSETS		
Current Assets		
Bank Accounts		
B of A Building account - 8795	5,917.13	7,034.95
B of A General account - 4328	45,427.68	13,925.13
CD	0.00	25,000.00
Money Market	0.00	5,000.00
VE Session Cash	-129.00	
Total Bank Accounts	**$51,215.81**	**$50,960.08**
Other Current Assets		
Uncategorized Asset	-95.00	
Total Other Current Assets $	**-95.00**	**$0.00**
Total Current Assets	**$51,120.81**	**$50,960.08**
Fixed Assets		
club house- 27 Shell Rd. MV	58,983.00	58,983.00
Total Fixed Assets	**$58,983.00**	**$58,983.00**
TOTAL ASSETS	**$110,103.81**	**$109,943.08**
LIABILITIES AND EQUITY		
Liabilities		
Total Liabilities		
Equity		
Opening Balance Net Assets	124,400.00 1	24,400.00
Retained Earnings	-20,412.57	-16,461.90
Net Income	6,116.38	2,004.98
Total Equity	**$110,103.81**	**$109,943.08**
TOTAL LIABILITIES AND EQUITY	**$110,103.81**	**$109,943.08**

Marin Amateur Radio Society News

Proposed RACES/ACS Field Event Saturday May 5, 2023

Further to discussion at the RACES leadership meeting 1/14/2023, we could combine the MARS Public Service Event for the Miwok 100 with a parallel RACES exercise to ascertain baseline Marin repeater's performance.

As there is little Miwok 100 activity in the morning, I suggest from 10am to noon we run an overlapping repeater check. Operators additional to those assigned to the rest stops would need to deploy to non-Miwok 100 sites, as shown in table 2. Operators at Miwok 100 sites would of course defer to any Miwok 100 traffic!

Here's are the 2022 Assignments:
https://docs.google.com/document/d/1B3EbbmBZ3L0HZGHGqco_7vG1yMngiyST0G8OWITQj2w/edit?usp=sharing

Table 1: These are the Miwok 100 sites:

Site	Primary repeater	Other repeaters
Stinson Beach Net control at Fire Station	147.330 MHz PL **192.8** Tam West VHF	Simulcast (all 4 inputs), Tam UHF, Barnabe UHF, Big Rock UHF
BOFAX aka Bolinas Ridge (Trail & Bolinas Fairfax Road)	147.330 MHz PL **192.8** Tam West VHF	English Hill, Sonoma Mtn, Diablo, Simulcast, all UHF
Randall Trail (Hwy 1 and Randall Trailhead)	147.330 MHz PL **192.8** Tam West VHF	Simulcast, Barnabe UHF, English Hill
Muir Beach (Muir Beach Parking Lot)	147.330 MHz PL **192.8** Tam West VHF	Simulcast (all 4 inputs), Tam UHF, Barnabe UHF, Big Rock UHF
Tennessee Valley (End of Tennessee Valley Road)	147.330 MHz PL **192.8** Tam West VHF	Simulcast, Station 9 UHF, Tam UHF, K6ER UHF,
Gerbode Stables (Bunker Road)	147.330 MHz PL **192.8** Tam West VHF	Simulcast (all 4 inputs), Tam UHF, K6ER UHF
Cardiac Hill	147.330 MHz PL **192.8** Tam West VHF	Simulcast (all 4 inputs), Tam UHF, Barnabe UHF, Big Rock UHF. K6ER UHF, Station 9 UHF

Table 2: Other sites to check. Require deployment of mast antenna and 50W mobile radio if none already exist. RCV has already tested many of these paths

EOC at Los Gamos, preferably from radio room	Simulcast (all 4 inputs), Tam UHF, Barnabe UHF, Big Rock UHF, English Hill, Sonoma Mtn
Coast guard station at Fort Baker	Simulcast (all 4 inputs), Tam UHF, Big Rock UHF, Station 9 UHF, K6ER UHF, W6PW Sutro
Nicasio School	Simulcast (all 4 inputs), Tam UHF, Barnabe UHF, Big Rock UHF, English Hill, Sonoma Mtn
Stinson Beach School	Simulcast (all 4 inputs), Tam UHF, Barnabe UHF, Big Rock UHF, W6ER, W6PW Sutro
San Geronimo Old Golf Course	Simulcast (all 4 inputs), Tam UHF, Barnabe UHF, Big Rock UHF
Walker Creek	
Valley Forde	
Tomales	
Fallon-Two Rock	

Please add comments or populate table 2!

Plan of Action

During the RACES activity each of the Table 2 stations should endeavor to get signal reports from each of the Table 1 Miwok stations as Event traffic allows. As well as testing Tam West, where possible as many of the external repeaters should also be tested. A spreadsheet

Rob Rowlands NZ6J
415 849 5667

RCV News

The first article comes from Curtiss Kim. It gives you a good idea of what the RCV does. Thanks Curtiss!

The Radio Communication Volunteers (RCV) continued their readiness preparations conducting an exercise to access the use of repeaters located outside of Marin. The drill had various RCV members stationed at community-based organizations from Petaluma to Sausalito and as far west as the San Geronimo Valley. The group conducted roll calls on seven repeaters testing signal quality, accessibility, and whether UHF or VHF made a difference. The repeaters tested included Mt. Diablo, San Pablo, Vallejo, Sonoma Mountain and both the UHF and VHF repeaters in Berkeley. The newly installed repeater at Fire Station #9 in Tiburon was also included.

Each RCV operator kept reception reports on each of the repeaters. According to Skip Fedanzo, Lead Operator of RCV, the exercise had one primary goal to discover which CBO locations could reach repeaters outside of the area. In the event the local repeaters are knocked out of service during a natural disaster, tests of this type give RCV members knowledge of what other resources might be available for use.

RCV members taking part included, Dirck Brinckerhoff (KM6VKQ), Bob Salter (AI6EE), Bruce Bartel (N6VLB), Brian Cooley (K6EZX), Kevin Johnson (W6KPJ), Warren Leiden (K6WRL), Charlie Benet (AI6TT), Ken Brownfield (AB6JR), Ed Essick (K6ELE) and Curtiss Kim (KM6GUY), Working out of the EOC as the main net controller was Rob Ireson (K6RGI). Each member used personal battery-operated radio gear with portable antennas.

Thanks went out to those clubs who maintain the repeaters that were used including the Mt. Diablo Amateur Radio Club, Northern Alameda County Amateur Radio Operators, Contra Costa Communication Club, North Bay Amateur Radio Association and the Sonoma Mountain Repeater Society.

The goal of RCV is to help local community organizations operate and communicate in an emergency while letting the agencies focus on what they do best: serving vulnerable Marin residents.

Anyone interested in joining Radio Communication Volunteers can contact Skip Fedanzo at KJ6ARL@ARRL.NET.

(picture 1, RCV member Curtiss Kim (KM6GUY) taking part in the out of county repeater exercise from the San Geronimo Valley.)

(picture 2, One of the repeaters that seem to work well outside of Marin County was Mt. Diablo in Contra Costa County.)

(picture 3, the drill could not have happened without the help of neighboring radio clubs such as the Sonoma Mountain Radio Society)

Here is the revised Marin RCV Sunday Morning Net script. It has been shortened and revised (including the Big Rock Repeater changes) through input from various RCV members. Please use only this script going forward. Please report any errors or access problems to me. Thank you, Jim S. KM6WWY

Marin Radio Communications Volunteers (RCV)
Weekly Roll Call Net Script
[REV. 4/10/2023]

QST QST QST: This is the Marin Radio Communication Volunteers (RCV) **9:45 am Sunday** roll call on the UHF Big Rock repeater at **447.175 MHz -156.7**.

This is a **directed net** so please go through net control to contact another station. Your net control operator today is (*Your Name & Call)-*

For information on this program please contact *Skip Fedanzo* at *kj6arl@arrl.net*

Stations checking in, please give your callsign, name and location. Let Net Control know if you have any traffic or comments for the net.

Does anyone have any emergency or priority traffic for the net?

[Handle any emergency or priority traffic]

Stations with emergency traffic can break in at any time by saying "BREAK BREAK" followed by your call sign.

I will now start the roll call.

[Log member check-in using roll call spreadsheet]

This concludes the roll call as I have it. Are there any late or missed members?

[Log missed and late check-ins]

Guest check-ins?

[Log guest check-ins]

Does anyone have any **RCV news or items** for the good of the net?

[Handle any RCV news or other items]

Any stations wishing to function as net control on a future Sunday, please come now or email Skip at **kj6arl@arrl.net**

[Handle any net control sign ups]

With no further traffic, this concludes the Sunday RCV Roll Call Net.

Thanks to everyone who participated in this morning's net, and to the Marin Amateur Emergency Communications Unit (W6ECU) for use of this repeater.

This is *your name, your call sign.* This repeater is now returned to normal operations.

Big Rock Repeater is Back Online

Thank you to Skip for this update: The Big Rock UHF repeater will be back on the air with a new frequency pair. The key changes are:

Set Receive frequency to 447.175
Set a MINUS (negative) offset

When finished your configuration should look like this:

Receive Frequency	Transmit Frequency	Offset Frequency	**Offset Direction**	Operating Mode	Name	Tone Mode	CTCSS
447.1750	442.1750	5 MHz	**Minus**	FM		Tone	156.7 Hz

Note that the CTCSS value remains 156.7 Hz.

RCV Out of County Repeater Access Exercise

Saturday April 22nd 2023

Exercise Plan:

This exercise has one primary goal: Discover which CBO locations can reach UHF or VHF repeaters located out of Marin. The exercise will include North Bay and East Bay repeaters. In the unlikely event our Marin County repeaters are unavailable tests of this type give us some foreknowledge of what other repeater resources might be available for our use.

Exercise coordination will be via the Mt. Tam 443.250 repeater. Please stay tuned to 443.250 for instructions during the exercise. Access has already been proven for Big Rock, Mt. Barnabe & San Rafael Hill UHF repeaters as shown in Appendix A so we won't be retesting them this month.

Make sure you pre-program the frequencies, offsets and CTCSS settings for the repeaters being tested. This exploratory roll-call exercise may require other RCV stations to temporarily assume net control just in case the EOC cannot reach one or more of the repeaters being tested. Please log all successful contacts on an ICS-309 form (Appendix B). Record signal quality by a Circuit Merit 1-5 number (1=Useless, 5=Great).

Please print multiple copies of the attached communications log form.

RCV Operators will remain in or near their vehicles, follow COVID-19 restrictions and not interrupt CBO activities. Once on site, radio operators should follow the process and schedule set out below. Solo operators serve as their own scribes.

RCV Operators Meeting for 04.24.23; Agenda

Thanks to Kevin Johnson for bringing this to our attention.

Agenda RCV Operators Meeting

RCV Operators VIRTUAL Meeting

The monthly RCV Operators meeting is Monday April 24 th at 1730.

Take note! This is a new Zoom link for this meeting!

Meeting facilitator: Ann Shores, K6SHO

Primary Agenda items are:

1. Update on Skip (Rob)
2. Saturday 4/22 Drill Recap (Rob)
3. RCV operator meetings with CBOs; update (Adriana)
4. Golden Eagle 2023; update (Rob)
5. Reminder about Big Rock UHF repeater changes (Kevin)
6. Volunteers needed to help manage/run/administer parts of RCV (Discussion)

Next meeting is May 29th, 2023, on Zoom. Agenda, relevant documents and Zoom login to follow.

Critical Mass Event

This comes to us from Rob Rowlands, NZ6J. If you have an interest in the monthly Critical Mass event, this will give you an idea of what takes place at their monthly meeting. The **North Bay** 2-Meter Critical Mass was held in person at the Marin Civic Center in the Jury Parking lot at **10am, Sunday, April 16th**. Rob Rowlands NZ6J was the host.

For once we are holding this month's event on the correct date! This month we start with our usual phonetic phun. Come prepared with the name of the town or locality you were born in, phonetically spelt.

We then review Saturdays Jane Fondo event and see what teachable moments come out of it.
See https://docs.google.com/document/d/1xVvHNOBDw1y511Ka4wcmPXhHNvvVwgeWM789dMSnq8U/edit

We will then spread out over the parking lot etc with DMR radios to practice using simplex on 433.45 MHz. We will have loaner radios if you don't have one. If you do, make sure you've programmed the simplex frequency.

we will then connect to an available repeater and practice the kind of interactions typical of a public service event. Doubling can be a problem or in some cases not being heard at all! We are still trying to tie down loose ends like this before we commit to DMR for public service in 2024.

73,

Rob Rowlands NZ6J
415 849-5667

VE Examination Report

The Marin Amateur Radio Society's VE Program held a testing session on April 8th. Here is an excellent write up of the session from Curtiss Kim:

Ham radio is alive and well judging by the turnout at the most recent MARS VE licensing session. Eleven candidates drove in from all points of the compass. Hopefuls turned up at the Mill Valley clubhouse driving in from as far away as Livermore, San Jose and Windsor. Four of the Hams upgraded their license to General, one went from Tech to Extra and the rest started their amateur radio journeys passing the requirements to become a Technician. One of those testing failed Element Two but received encouragement to return and try again.

It's often been said that to keep our passion alive, we need younger generations of people to join the ranks of amateur radio operators and that is the object of these regular testing get-togethers.

The VE examination program is under the direction of MARS President, Ken Brownfield (AB6JR). ” I’m extremely happy with the turnout,” said Brownfield. “Covid has subsided, and we have a renewed interest in amateur radio”.

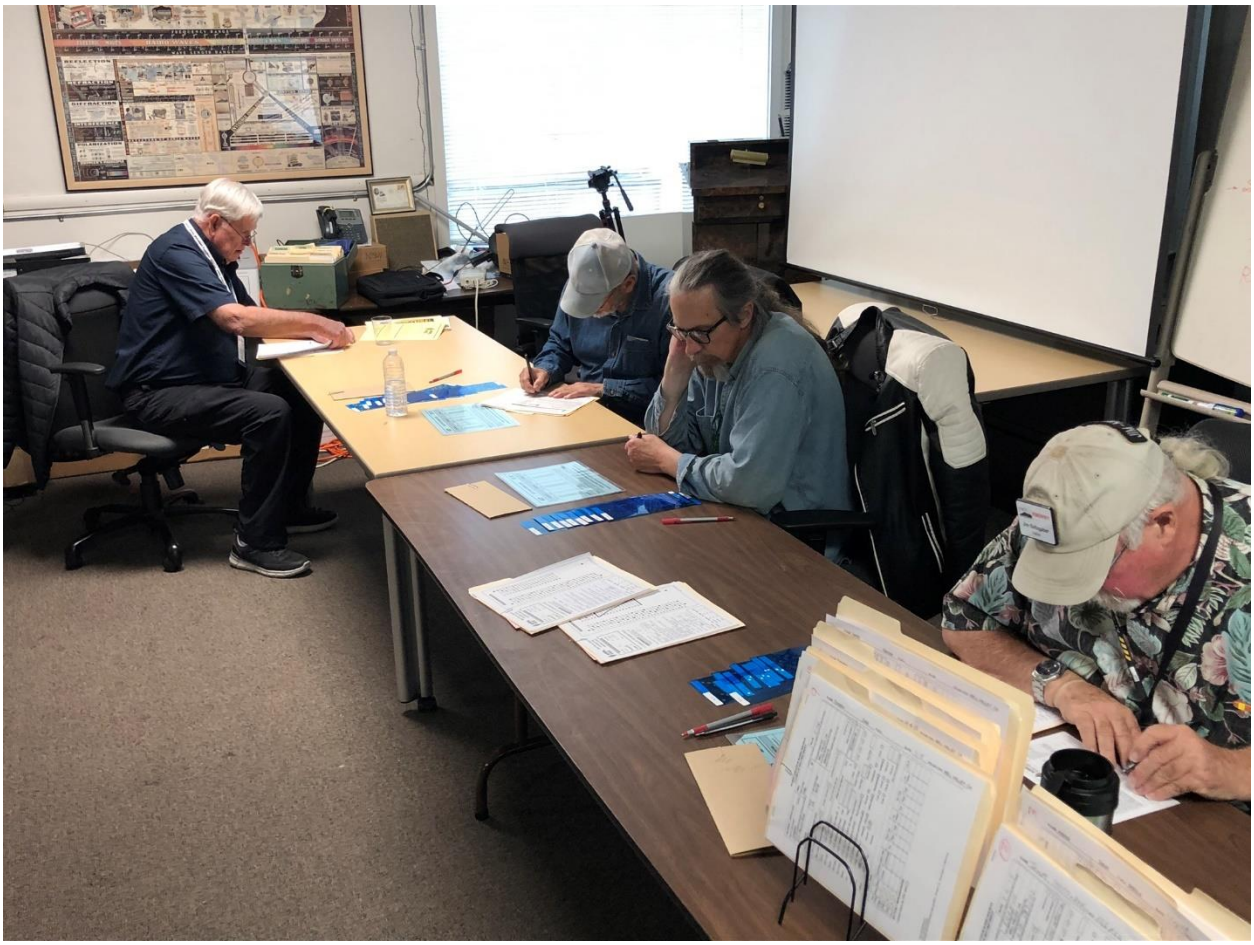
The Volunteer Examiners for the April gathering were VE's Mel Nunes (AB6QM), Hugh Patterson (KN6KNB) and James Saltzgaber (KM6WWY).

Lending their support Jeff Young (KM6Y), David Sneed (WD6L) and Curtiss Kim (KM6GUY).

One of those who originally signed up for the in-person test decided to take the exam online. That option is relatively new and comes with some caveats. Before you get in touch with a Volunteer Exam Coordinator (VEC) to try to schedule your exam, make sure you have studied for the exam and can easily score the 74% required to pass. There is some setup required with a webcam, a Zoom meeting, and possibly a qualified proctor – it all depends on which VEC you choose to administer your exam. Each VEC will have their own detailed requirements and instructions.

Several candidates who showed up to upgrade their current license forgot to bring a copy of their current license with them. Remember you must submit a photocopy of your current license when testing for the next level.

“All went well”, said Brownfield who went to say the next MARS VE session will be held July 8th at the Mill Valley clubhouse.




HAM
PARKING
ONLY


REFLECTION
REFRACTION
DIFFRACTION
INTERFERENCE
POLARIZATION
449.125
2022

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. The news was a bit slow during this last month. Our first article regards changes to the 60-Meter band:

ARRL Advocates for Radio Amateurs as FCC Proposes Changes to 60-Meter Band: The FCC is looking for input regarding the 60-Meter band.

http://www.arrl.org/news/arrl-advocates-for-radio-amateurs-as-fcc-proposes-changes-to-60-meter-band

Tornado Season and Amateur Radio: Another example of the importance of amateur radio during a disaster.

https://www.arrl.org/news/tornado-season-and-amateur-radio

W8LT - A History of Amateur Radio at Ohio State University: A nice article on ham radio at the University.

https://www.arrl.org/news/w8lt-a-history-of-amateur-radio-at-ohio-state-university

Marines To Gain Radio Op Experience Via Amateur Radio: A good article from the ARRL.

https://www.arrl.org/news/marines-to-gain-radio-op-experience-via-amateur-radio

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

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. There has been little FCC news over the last few months:

ARRL Advocates for Radio Amateurs as FCC Proposes Changes to 60-Meter Band: The FCC is looking for input regarding the 60-Meter band.

http://www.arrl.org/news/arrl-advocates-for-radio-amateurs-as-fcc-proposes-changes-to-60-meter-band

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-arrl-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-arrl-emergency-request-to-permit-higher-data-rate-transmissions-for-hurricane-relief-c

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-775

DX.QSI 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/