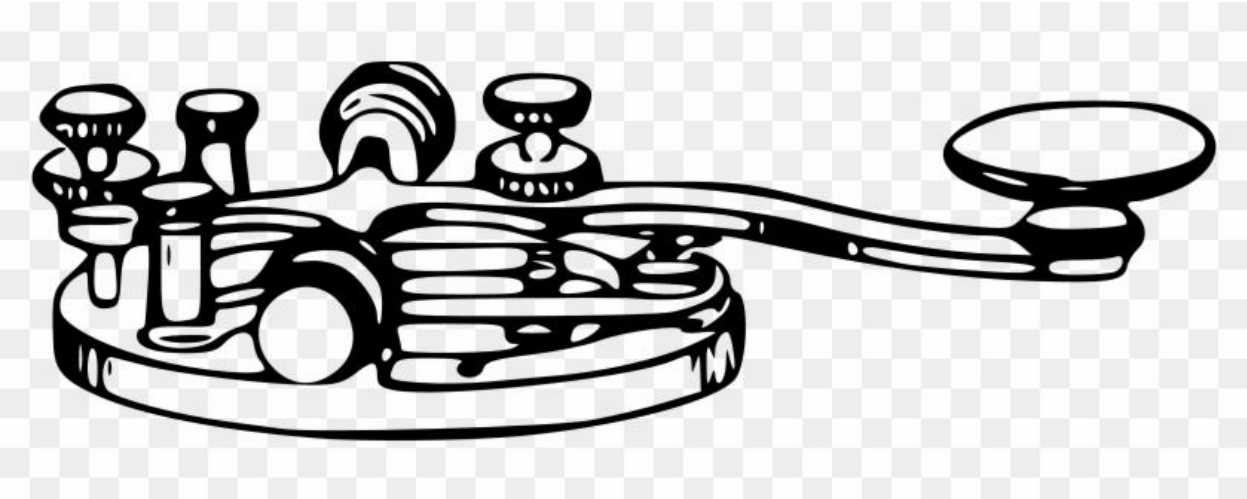
QSA-5

Marin Amateur Radio Society Monthly Newsletter

Established 1933 **August 2023**



When all else fails, you can count on Amateur Radio

From Our President:

There is no Letter from the club President this month.

From the Editor:

It's been a hot July, and August looks like it may be a repeat performance of the previous month. It's been wonderful to have a normal summer again. While we still face some economic woes, such as inflation, at least the price of computer chips has gone down, which is good news to SDR and do it yourself amateur radio operators. The Marin Amateur Radio Society has gotten back to the business of holding regular events. The QSA-5 has settled into an established format of club related news without a lot of side articles. I'd like to thank Curtiss Kim for his contributions to our publication. He has produced extremely informative and professional articles regarding our club's activities. Also, a thank you to the many club members who have contributed to this publication.

All in all, it's full steam ahead! Again, thanks to everyone who emails in content. My work schedule unfortunately coincides with many of the club's events. Thus, I can't be at those events in person. I asked for help with this and you, MARS members, came to the rescue. Thanks for making my life easier.

QSA-5Editor@w6sg.net

New Members:

Christopher Wong N6JGC - American Canyon

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

Marin Amateur Radio Society – Board of Directors Meeting
July 13th, 2023

Call to Order: 1900 hrs. Actual: 19:35

Attendance:

President: Ken Brownfield AB6JR
Vice President: Tom Jordan KG6TCM
Secretary: Jim Saltzgaber KM6WWY
Treasurer: Bruce Bartel N6VLB
Director: Steve Toquinto KB6HOH
Director: Rich Cochran AG6QR
Director: Jeff Young KM6Y
Trustee K6GWE: Brian Cooley K6EZX
Trustee W6SG: Marc Bruvry KF6VNT

Members Present: Skip Fedanzo, Pam Witherspoon, David Sneed WD6L, Milt Hyams, Curtis Ardourel.

Adopt agenda: Burce Bartel requested New Business addition – Reimbursement. Added, MSC to approve amended agenda.

Approve minutes: of June 8, 2023, MSC to approve.

Secretary's Report: Jim Saltzgaber - Notes of post field day meeting will be included in QSA-5 with Board Minutes.

Treasurer's Report: Bruce Bartel - In QSA-5

Committee and other reports

Membership: Curtis Ardourel - 152 currently, 97% of last year.

Facilities: Skip Fedanzo - Getting painter estimates.

Public Service: Pam – Season is going along nicely. Participation has been a bit light but have been getting enough volunteers to support the events. Rob has been rocking and rolling on getting the MCBC Dirt Fondo go on 7/22. Stan and she are working with the Marin Century for August 5th. She is limiting number of emails being sent as much as possible until after the Dirt Fondo, they are both bicycling events and she doesn't want to cause confusion. We have 2 events Sept. 16th and we have had to split our volunteers a little bit. We have events Oct 14th and Oct. 22nd. Thanks to the board for working with Public Service. Skip – last year's Spartan, first for-profit event, in Nov. are we doing this again this year?? Yes, Rob is in charge of that. Discussion followed regarding how the 2023 event went, the for-profit nature of this event, and operational and planning problems that the Spartan organizers experienced. Jeff expressed concerns and feels that we should not be doing events that are for profit. Since Rob is handling the Spartan event, and is not present, consensus was that no decisions should be made without him being present. Following further discussion Jeff moved that: "Mars not embark upon any commercial events in the future, including the one that is now scheduled". Motion was seconded. Discussion of the motion included that we had previously successfully done for profit sponsored events other than Spartan. It was again agreed that any further discussion should include input from Rob Rowlands, and that this motion should be tabled until the next board meeting.

Technical: Milt- Generally impressed by how well the new antenna on Tam middle works. Numerous good reports; seems to be improvement in the Mill Valley area. Muir Beach water tank – Jeff has a new container, equipment is all

compiled & Dan Healy will assemble the repeater, goal is to have it installed before next general meeting. Frequencies will be: RACES Freq.W6ECU-5.

VOAD/RCV: Vests, still approving artwork. Planning team meeting tomorrow (7/14), to review what has been accomplished so far, what sort of leadership will be needed if rolled into ACS umbrella. No indications that mission would change but could be enlarged with additional clients. Other issues have to do with recruiting new members and verifying the status of existing members.

VE: Testing Ken Brownfield – There were no candidates for the 7/8 session, however we have one signed up for the October session already.

NBAM: Jeff Young- Our second grant approved for next year. $33,000.00. Bruce will open a new account with Ken and him as signers. Grant to educate people on what an AREDN mesh system can do in emergency. Will allow NBAM to serve additional communities. Dave Sneed has been involved in this. Also, some funding for non-profit equipment. Skip – what is the amount of non-profit funding available. Jeff – not specified, as per need. Training of users and potential users. Phase 2 is now under way. We need to have an NBAM steering committee. At this point, active NBAM people are David Sneed WD6L, Ken Brownfield AB6JR (club president), and Jeff Young KM6Y. Recommend to the board that this be the steering committee. If others wish to join, let us know. They will be expected to do something. We do need more people, some Sonoma County people possible. We will see increased activity in the next few months.

Education: Curtis Ardourel - Nothing new to report.

Old Business

1. Club Tower – What is the future of the antenna tower that the club had purchased for installation behind the clubhouse? Milt Hyams discussed the history, and frustrations, of our attempt to permit the antenna tower with the county. The planning department is very opposed to allowing the club to install it. The high-tension wires above the property were considered a problem, and he had consulted with Adam McLaughlin, a very knowledgeable professional antenna tower installer, and researched the PG&E regulations, we had determined that they were not. However other issues remained. In lieu of continued efforts to

permit the tower, Milt proposed installation of a vertical antenna, mounted on the edge of the clubhouse upper deck. An antenna is available at no cost from the downsizing of the Red Cross radio installation. This will not involve planning department involvement and can be easily accomplished. We do need to obtain 20 feet of 2" aluminum pipe for the vertical antenna mast. Installation would likely be done in one weekend. Following discussion, Tom Jordan Moved that "The board approve the sale of the crank up tower, that was initially purchased for use at the clubhouse, for a price no lower than $2000.00, with the caveat that the buyer will be picking up the tower." Motion was seconded and carried by a show of hands. It was discussed and agreed that Mr. P. Cook be given the right of first refusal at an asking price of $2500.00. If he is not interested, Milt will touch base with Adam to see if he has an interested customer.

2. Backroom cleanout on Aug 12 and 13: There are 2 trailers in the back yard. Cal Amber was interested in one or both. Discussion of ownership and whether the club can use either of them. Milt stated that the smaller trailer is licensed to the club, we will likely keep that one, possibly for the generator. Other one, ownership unknown, has been abandoned and we will allow Cal to take that one if he wants it. Rob and Milt will look at the stuff and mark or move the things that need to be retained. A video of the back room will be emailed by Curtis, requesting volunteers. Decision makers will be there to decide what goes and what stays, what members may claim and take. Pizza will be provided for lunch.

3. Field Day 2023 then 2024: Steve – Field Day at Stafford Lake Park, June 24/25 worked out relatively well, some good and some setbacks. A 2024 Field Day Committee has been formed and has decided to go with the overflow parking area again, and we need to get a reservation in place. Board MSC to lock in the location with the County Parks Department. Our transmitters were interfering with each other, and Band pass filters are needed for future Field Days. As stock is low of filters, the board agreed that it will be ok to preorder without them a purchase commitment to get a place in line when stock is available. We need to do training on the N1MM logging software. Curtis will be at the next Field Day committee meeting, scheduled for zoom immediately following the August general meeting, 8/4/23.

New Business

1. Club Picnic: We currently have a reservation for October 7th at Stafford Lake Park, area 1 Pavilion picnic area. We need to establish a Picnic committee to move forward and nail down a caterer if necessary or to set menu and procure food, drinks, and misc. items. Tom – Volunteered to coordinate the picnic food and some other aspects. Mary Hyams has volunteered again to help with food, and Curtis will send an email requesting people to help and to rsvp for attendance. Caterer will be explored (date has been submitted to one for consideration.) vs. bring food and BBQ at the picnic.

2. 100 Year Anniversary: Tom J.- Actually, it's the club's 90–year anniversary. Possibly do a small 90-year event and use the next ten years to plan a big 100-year event. May be done in conjunction with the Christmas Party.

3. Christmas Party: Curtis: We should ask members if they are interested in a Christmas Party at the next general meeting. The possibility of having a restaurant party will be explored.

4. Field Day Patches: Jim S. Proposed the making of simple 2" X 3" Velcro backed hat or vest patch with 3 lines that would read: MARS, Field Day, 2023. Quantity price at 20 – 100 would be $5.55 each. Decided to determine how many patches would be needed, club to provide one to each participant who operated at our field day, or actively participated in setting up, making Field Day happen, and breaking down. Also, for any first responders who were there, Stafford Lake Park rangers, the County Parks supervising ranger, and Supervisor Dennis Rodoni (we would include a hat for these people.)

5. Reimbursement: Bruce – Field Day personal expenditures: He has sent receipts for Field Day expenditures totaling just under $500 that he made with a request to the board to approve reimbursement. MSC to reimburse Bruce.

Good of the Order: Bruce – Donation received from Jonathan Allen, in memory of Chet Rice. Curtis will write a thank you note. Steve - Marin County Fair: Steve noted that MARS would in years past set a radio station booth at the Marin County Fair. Have not done this for at least 10 years. Would we be interested in doing this again in the future.

Executive Session: Not required.
Adjourn: MSC @ 2150

ZOOM MEETING, 6/20/2023 Hosted by Steve Toquinto KB6HOH, Field Day Committee Chairman

Attendees: Ken Brownfield, Bruce Bartel, Dan Sobel, Frank Klebanoff, Jerry Foster, Marilyn Bagshaw, Rich Carbine, Mark Kein

After Field Day 2023 Agenda (What went Right and what did NOT!)

1. Thank You Letter: from the Club to Jason Olivetti, Chief Parks Ranger North/Northwest District and Adam Craig, Stafford Lake Park Ranger.

Letter should come from club president. Add complete park staff including Lisa. Everyone was very helpful. Gerald also noted the importance of thank you letters.

2. Operations Interference between stations (BAND PASS FILTERS Needed): 80/40/20/10 meters are all Field Day Bands that would require filters for. Filters for 20 and 40 meters were loaned to us by Antonis AA6PP for tryout. They were VERY effective in isolating stations on different bands.

3. Purchasing BAND PASS FILTERS: Sourcing Vendors and pricing. What bands to start with?

The filters that Antonis loaned us were made in Russia and are sold through DX Engineering who show no stock on any filter. There are several US manufacturers. Ken will send out an email with links. Jim S. will research the different filters. We need to determine how many different stations we want to operate at once. Need to have no additional transmitters on same band. Need to emphasize that this is a group activity and operators will need to participate as part of the group. Also, an idea that a couple of “Guest Operator” tables be available with a single antenna having a BP Filter. Operators could sign up for a two-hour window with a set-up and break down hour before/after so that members could bring and

operate or test their equipment. A Second table would be available to set up and then operate while first table breaks down and sets up for next operator.

4. Antennas setup (Comments):

Set up and antennas were all up in time. Lots of other details had to be worked out on the fly but we did it. Discussion on putting a small element beam on the van mast. We need to change the coax and remove unused equipment and possibly add a Ham small rotator.

5. Scheduling Board for operating times (Comments) What could have been done better:

We needed more operators! Not enough operators for nighttime particularly. George was rocking and rolling all night long and making lots of contacts.

6. Head Count:

Ken made 2 or 3 head counts 23 once and up to 26 people there at one time. We had 38 signups.

7. Comm Van (Comments):

Discussion on putting a small 3 element beam on the van mast. Rich W6UDS – we should have one at the club house. We need to change the coax and remove unused equipment and possibly add a Ham small rotator. Need to include this in Comm Van plans if agreed upon.

8. Com Trailer (Comments):

Jerry: We had fun! Nice to have people to help put it out there. Antennas went up fast, radios worked all night long! Had his grandson made 5 contacts! Hudson didn't want to go home! He had a pileup going. Trailer towed fine. Maybe could put a beam on the trailer in the future. Did not use CHA250 vertical, wasn't needed. Was able to instruct new field day operators. WE NEED MORE OPERATORS. Trailer packed up well. Will work on it to make it better.

9. Generator (Comments):

We know about how much gas it takes all night now! It's a bit overkill, could have used a couple of 2kw units, but it worked out VERY well. It was a good time to give it a 24-hour test on it and the cables etc. The cables and cords were all there, the power distribution panel has a couple of circuits out that need to be fixed, we can do that sometime in the future. Dan N6HHLZ and Jim S. have dropped it off at Buck's Saw Service in Novato to have it fully serviced including coolant replacement. No hour meter on generator, will put Service Date label on it after service. The generator is 8 – 10 years old, service history is unknown. Using the big generator gives the ability to add lighting and other electrical equipment.

10. Food, Saturday Lunch Pizza, Saturday BBQ and Sunday's Breakfast (Comments) Leftovers:

Bruce did a good job on the Sat. lunch Pizza! Marilyn – David Chaney sent 5 boxes of See's Candy. Leftovers are at clubhouse – for Sunday Mornings. Frank would be very, very happy to run the BBQ and food. He felt that the food could have been done a bit better. All in all, Cal busted butt and did a good job! (No Cold Beer). Everybody got fed something, we had food. Setup could have been more organized – maybe setup a better galley type thing. More canopies and still keep the emergency egress intact. Cal didn't know he was going to be doing this until the last minute and did a great job in light of that. Bruce brought fantastic ribs!

11. Field Day 2024 June 22 – 23, Locations:

Cost was minimal for Stafford Lake Park – permit $34! Money wise we did good with food and all! Future at Pavilion would be $270/day. Picnic will be at Pavilion Oct. 7th (tentative) first Sat. in Oct. at Area 1. Has a canopy over picnic tables, and a large BBQ pit. For an additional fee, we can have an adjacent area suitable for setting up some radio stations. Hopefully the county will help us out, but the fee for both would be $770.00.

Rod and Gun rental was approx. $800. Total costs with deposits, food, and trailer rental were about $2000. We are still due refunds that we are working on. They also rented other areas and limited our parking area. Ken – MARS does not need

to go back to R&G. Marilyn is very frustrated with R&G. Group consensus – nope. Is Stafford too far out, consensus is no.

Paradise Park and other possible locations were discussed. Consensus was to work with Stafford Lake for next year. We should get on with reserving space for June 22-23, 2024.

Will present to membership at 7/7 meeting and the board at next meeting. If agreed, Ken will work on getting it set up with county parks.

12. Computers:

We need an additional computer for backup. Also need training on N1MM logging software. Many contacts will be duplicates without a computer to identify them before calling. And Operators should sign in on the software when they start operating. Also need to have log in credentials on the computers – Curtis A. has already said he will handle that.

Comments:

Jeff Young KM6Y – Thanks for doing this. Might be a good idea to do something a couple of months before field day, maybe at clubhouse. Get people out ahead of time and show them pictures of what we had and get people excited about Field Day.

Bruce N6VLB – You guys did a Herculean effort.
Jeff Young – Were there any complaints from the park staff? Nope, both Jim S. – last man standing – and Ken checked the site Sunday afternoon.
Jim Saltzgaber – We need to get FD committee meetings started and generate interest early.
Jerry Foster- The fact that we were able to have Field Day, particularly after COVID, JOB WELL DONE!
Steve T. – We need to get the club website updated for Field Day 23 and 24. Last but not least: NO MORE ACCIDENTS!
Alex KN6RST – I had a ton of fun! Thanks to everyone who put in a lot of work into it. Pretty MT sign up boards. We need pictures, particularly of Supervisor Dennis Rodoni.

Ken – Who wants to be on the committee for next year. (Everyone took one step BACKWARDS!) Jim, Jerry, Steve, Mark KM6AOW

MEETING CHAT LOG:

19:40:08 Dan - N6HLZ: Curtis said that he would put the Passwords with the laptops next year.
19:42:31 Dan - N6HLZ: Nope
19:42:36 Dan - N6HLZ: password was "Bahia".
19:43:34 Dan - N6HLZ: Big Hint - If Antonis has it, odds are, it's top shelf.
19:44:28 Dan - N6HLZ: https://Translate.Google.com
19:46:25 STEVE TOQUINTO: https://surgestop.com/index.html
19:47:59 Dan - N6HLZ: 111 Euro's is about $120 US Dollar
20:13:30 Jim S KM6WWY: All, anyone having pictures, could you please put them up in a google drive that we can share?
20:30:29 Dan - N6HLZ: and Dr. Jason was there too.
20:31:33 Bruce Bartel: Last year's picnic rental at Miwok Park was $250ish.
20:37:35 Dan - N6HLZ: No Mic
20:39:30 Dan - N6HLZ: The block and tackle worked so well, AB6JR did all the lifting

Next Membership meeting: Aug 4, 2023.
Next Board meeting: Aug 10, 2023.

Marin Amateur Radio Club

Profit and Loss
January 1 - July 30, 2023

TOTAL

	JAN 1 - JUL 30, 2023	JAN 1 - JUL 30, 2022 (PY YTD)
Income		
Auction Income		60.00
Donations	1,699.17	118.98
Dues	7,074.75	6,305.00
Field day refund		625.00
Income from club activities		90.00
Interest Income	792.77	
Public Service Refund	450.00	450.00
Rent	18,200.00	18,300.00
Sales of Product Income		24.69
Unapplied Cash Payment Income		250.00
Total Income	**$28,216.69**	**$26,223.67**
GROSS PROFIT	**$28,216.69**	**$26,223.67**
Expenses		
Accounting	1,035.00	
Awards	299.99	
Car & Truck	2,306.02	637.04
Car & Truck Gas	258.02	111.43
Total Car & Truck	**2,564.04**	**748.47**
Field day	659.26	1,591.18
Garbage	336.54	287.04
Insurance	1,821.50	3,628.75
Comm Van Insurance	2,374.75	
Total Insurance	**4,196.25**	**3,628.75**
Legal & Professional Services		575.00
Meals		2,208.00
Other Business Expenses	104.93	
Public Service Expense	1,379.96	3,168.19

Reimbursable Expenses	2,448.73	1,801.12
Repair & Maintenance		1,100.22
Repairs & Maintenance		2,880.00
Repeater	1,567.50	
Taxes & Licenses	25.00	3,950.64
Uncategorized Expense		275.00
Utilities	2,551.46	2,152.58
VE Session	129.00	215.00
Water	319.95	398.00
Total Expenses	**$17,617.61**	**$24,979.19**
NET OPERATING INCOME	**$10,599.08**	**$1,244.48**
NET INCOME	**$10,599.08**	**$1,244.48**

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

TOTAL

	AS OF JUL 30, 2023	**AS OF JUL 30, 2022 (PY)**
ASSETS		
Current Assets		
Bank Accounts		
B of A Building account - 8795	5,948.61	7,053.93
B of A General account - 4328	50,378.90	13,145.65
CD	0.00	25,000.00
MESH	-500.00	
Money Market	0.00	5,000.00
VE Session Cash	-129.00	
Total Bank Accounts	**$55,698.51**	**$50,199.58**
Other Current Assets		
Uncategorized Asset	-95.00	
Total Other Current Assets	**$ -95.00**	**$0.00**

Total Current Assets	**$55,603.51**	**$50,199.58**
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	**$114,586.51**	**$109,182.58**
LIABILITIES AND EQUITY		
Liabilities		
Total Liabilities		
Equity		
Opening Balance Net Assets	124,400.00	124,400.00
Retained Earnings	-20,412.57	-16,461.90
Net Income	10,599.08	1,244.48
Total Equity	**$114,586.51**	**$109,182.58**
TOTAL LIABILITIES & EQUITY	**$114,586.51**	**$109,182.58**

Buried Treasure

We need your help. On Saturday 12 August, and Sunday 13 August we will be cleaning out the back room of the clubhouse. That room contains a wealth of what when I was a kid we called "Bodacious Boat Anchors" It also contains actual club assets like 6.5Kw generator. There will be folks on hand who are authorized to dispose of treasures. Clearly some items the club will retain, some will be offered for sale and some must just go away. Going away means either off to e waste or you carry them away with our permission of course. If you do carry something away, its yours, you can't bring it back. Since this kind of sorting involves moving things around and the same items may get moved several times we are offering to feed you pizza for showing up. Since we are offering to feed you we need to get a headcount so if you would like to attend please let us know by emailing rsvp@w6sg.net this promises to be a lot of fun and will make for a cleaner clubhouse. Check out the video below to see what the job looks like.

- The board of the Marin Amateur Radio Society

MARS Club History Information Needed

We're leaving this in from last month's issue of the QSA-5 because history, our history, is extremely important. The Marin Amateur Radio Society has been an amateur radio institution in the North-Bay for nearly a century. With its many decades of existence, a rich history has been garnered. It would be a shame to lose that history. Thus, we're asking for contributions!

CQ old timers:
For the last several months you have been spared my rambling musings. For a brief moment, I am back asking your help. In my role as membership chair, I get the contact emails that come in through the website. A recent request came in asking about the history of the club's repeaters. In some ways I guess I qualify as an OM not just because I am old, but because I joined the Amateur Radio Society

back in the late 1960s. I answered what I could, but it dawned on me that there are some of you out there who were in the Amateur Radio Society and the VHF Expeditionary Society before that. Getting to my point I would like to interview any of you who were involved in the early days of the club to create an oral history. We can do this either face to face or by phone or on zoom. Please let me know if you would be willing to help me out. Email me at wa6uds@w6sg.net or call me at 510-290-6069.

73 de wa6uds
Curtis Ardourel
Membership Chair, Marin Amateur Radio Society

Marin Amateur Radio Society News

Dirt Fondo Photographs

The 11th anniversary Dirt Fondo bicycle event was held on Saturday, July 22nd. Riders embarked on a 45-mile journey from the Golden Gate to Mt. Tam and back. There was amazing scenery along the whole route and a good mix of trails, fire roads, and paved paths! There were 4 rest stops on the way out and back, as well as world-class support on the course, including marshals, mechanics, and SAG. The Marin Amateur Radio Society joined in to provide radio support.

It was a great day for everyone! No one got hurt and the last rider rode into Start Finish at 4pm.

The sweeps continue to get ahead of the stragglers but that's not really our issue until they get lost. Tam west repeater worked perfectly, kudos to Mark for his crossband setup at Tennessee. While we had shore power, net control was all solar after a minor hiccup with cigarette lighter connectors from the Jackery.

The temperature on top of Tam was hot as predicted but net control was a pleasant 70. MCBC turned out a great lunch and Tom made an announcement to the gathered bikers in appreciation of our assistance. Bring on the Century in 2 weeks! Here are some photographs from Rob Rowlands:


MCBC


REAL FOOD.
PURE ENERGY.
JAMMIN' TASTE.
slowly
say
hello!


Amateur Radio
Public Service
Communications
w6sg.net
marin
01

RCV News

The QSA-5 hasn't received many updates from the RCV for the month of July. Therefore, we've included an introductory article about the RCV program from last month. The July RCV operators' meeting agenda can be found at the end of this section.

The first article comes from Curtiss Kim and ran in last month's issue. We've included it again so that any new members not familiar with the RCV program can be brought up to speed. Thanks to Curtiss for this article!

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)

SONOMA MOUNTAIN
AMATEUR RADIO
SMRS
PUBLIC SERVICE
REPEATER SOCIETY

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Latest RCV News

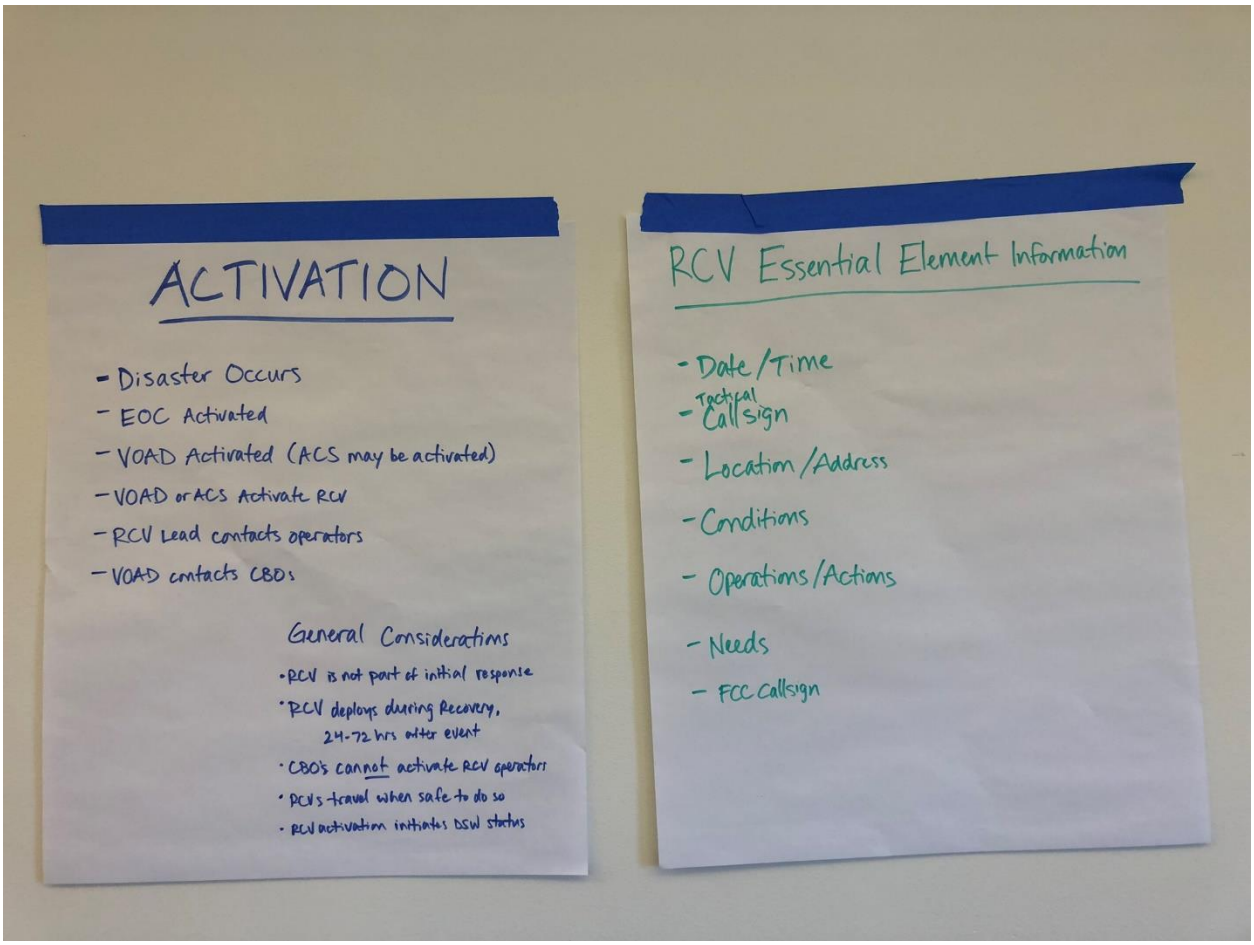
This update was written by Curtiss Kim. It covers what the RCV is working on to date. Photographs follow the article.

Members of the Radio Communication Volunteers (RCV) are updating information on the various Marin community-based organizations they serve. The templates will be compiled and made available to the group in the event operators are deployed to other locations than their assigned agency. The documents spell out vital information needed in the event a major disaster strikes Marin. Besides the location, details on where to set up emergency radio gear, who to contact and vital services are all spelled out. Important resources are outlined for each organization including whether they have a food pantry, childcare, and can offer emergency shelter. Vital radio ops are also incorporated. Does the location have simplex contact with other agencies, the Emergency Operations Center or outside county repeater communication? The data packet may also include photos vital to each site.

The goal of RCV operators is to provide ongoing communication and a structured backup network to organizations that serve the public during a natural disaster or major incident. Utilizing mobile radio equipment, RCV members provide the communication pathways to these agencies allowing them to provide their respective services.

If you would like to be a part of RCV, contact Skip Ferdanzo KJ6ARL@ARRL.net


DIRCK



RCV Operators Meeting Agenda

RCV Operators VIRTUAL Meeting

The monthly RCV Operators meeting took place on Monday July 31st at 17:30. **Primary Agenda items are:**

1. RCV vests will be shipped to us this week. How do you want them distributed?

2. August 19th Joint RCV and RACES exercise. RCV will do a two hour (1300-1500) deployment to CBOs and practice how to pass & relay messages in a purely simplex environment. The exercise plan will be released this coming week.

3. CBO Profiles we've worked are sent to CBOs to add/correct details. We should be receiving their feedback in the next month or two.

4. Work continues on bringing RCV and RACES under a common ACS umbrella. One consequence is we will need a few volunteers to manage shared responsibilities of both, for example:

a. Track member activities (exercises, training, events, etc.)

b. Recruiting new ACS, RCV and RACES members

c. Who has particular skills or work preferences

d. FEMA and other certificates earned, etc.

If you're interested in becoming active in a particular role or activity in the combined ACS team, please let me know.

5. Question: how often each year do you want to meet with CBOs in each of these two kinds of settings:

a. A joint RCV-CBOs group workshop or training, or

b. Visit with each CBO separately in a one-to-one type of meeting.

Next meeting is August 28th 2023 on Zoom. Agenda, relevant documents and Zoom login to follow.

North Bay Critical Mass

North Bay 2m Critical Mass – Sunday July 16th

Here's the agenda for the monthly North Bay Critical Mass event. It took place in the Jury parking lot at the Marin Civic Center, Sunday, July 16th at 10:00 am. Michael, K6MLF, has kindly offered to do the phonetic phun routine as well as writing and sending messages using good old pen and paper or pre-formatted ICS forms. Bring both.

I will be discussing how to program radios in the wild - “Life without Chirp/RT systems”. Every radio, even DMR radios, can be programmed without a computer. We will use the ubiquitous Baofeng UV-5R as an example - I’ve extra to lend if you don’t. Finally, we will look at your radio’s output on a spectrum analyzer. Did the repeater shift go the right direction? Is the radio you’ve tuned up to 146.1MHz for our simulcast also transmitting on 438.3MHz?

Spectrum Analyzer Test

From Rob Rowlands: thanks for braving the heat! I probably skipped much in the time available, so thought I’d summarize what I consider the key points:

1. Every radio transmits at frequencies other than the one it’s meant to. These can be harmonically related or just garbage, termed spurious or spurs. What I hope you saw when I keyed up the orange Radiooddity HT on 2m, Stan was able to hear me on 440! The reason for this is evident in this Spectrum Analyzer display:

The spectrum analyzer handily measures all the harmonics of the fundamental 147MHz carrier, the strongest of which was the third, at 442MHz. Its existence is a given, the problem is its level is only 31.2dB down from the carrier, hence -31.2dBc. The FCC spec requires this to be 40dB or more down to stop us interfering with other users. Luckily this frequency is in another ham band! As you saw Stan could hear me clearly because at 30dB down the transmitted power at 442MHz would be 1000 times less than at 147MHz. Assuming the transmit power to be 5watts, the third harmonic would be a bit less that 5milliwatts.

2. A spectrum analyzer is just a radio receiver that shows numbers. Indeed the Tiny SA can demodulate speech and music, though not very well. The Tiny SA Ultra is the latest version that goes up to 6GHz. For $140 it’s not lab grade, but for ham radio and teaching it’s pretty amazing.

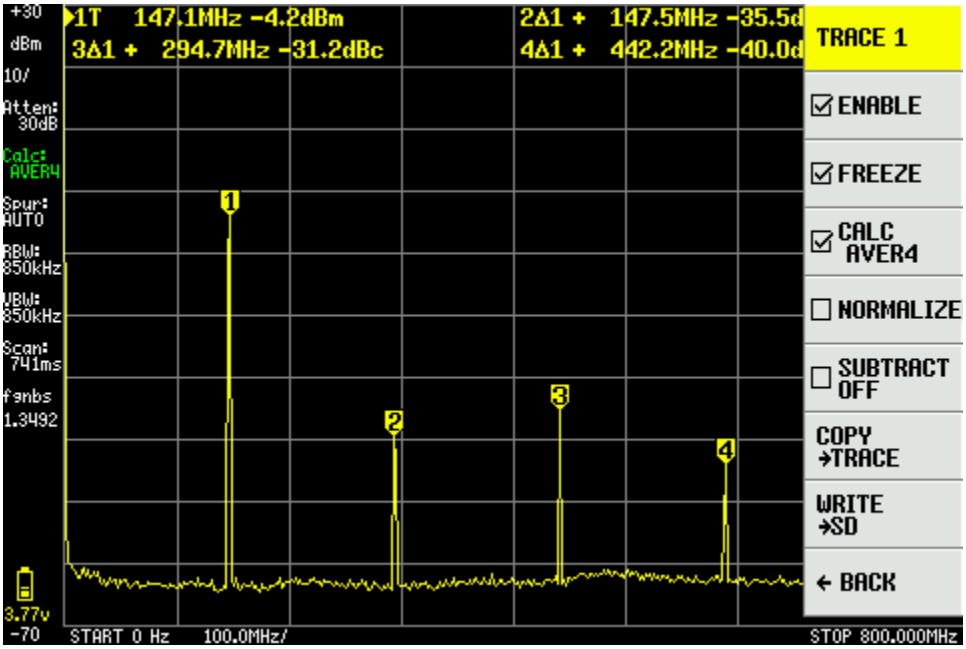
There’s a great wiki at http://tinySA.org

3. The improved Baofeng manual is at http://radiodoc.github.com/

73,

Rob NZ6J 415 849 5667

Below is a tiny SA shot of the analysis.



VE Examination Report

The Marin Amateur Radio Society's VE Program is an extremely important component of amateur radio. The national program MARS is a part of allows member radio clubs to administer licensing tests on behalf of the FCC. What this means to people getting into ham radio is that there are more test locations and a

more flexible schedule for taking the license exam. We have one sign up for the October 14th, 2023, testing date as of our last MARS board meeting.

MARS President, Jen Brown, runs our VE (Volunteer Examiner) program. The MARS VE program has had three of the four scheduled testing sessions. The next test session is scheduled for October 14th, 2023, at 1:00pm. The exam session takes place at the MARS clubhouse: 27 Shell Road Mill Valley CA 94941. Those taking their tests should arrive early (30 minutes) and be prepared. Examinees will be required to bring valid identification and their FRN number. Those examinees who reserve a place on October 14th will be emailed with specific instructions regarding identification and the procedure for getting an FRN number. What is an FRN number? Before getting your ham radio license, you must first register for your FRN. An FRN, or FCC Registration Number, is a ten-digit number that identifies your business dealings with the FCC. The FCC requires a permanent address, so they can reach you if need be.

Here's a link to Ham Radio Prep's article on getting an FRN number. It's easy and is required in order to get your license:

https://hamradioprep.com/how-to-register-for-your-frn/#:~:text=Before%20getting%20your%20ham%20radio,reach%20you%20if%20need%20be.

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 article comes from the UK:

No cellphone? No problem! The vintage radio enthusiasts prepping for disaster: Another reason amateur radio is so important!

https://www.theguardian.com/us-news/2023/may/27/ham-radio-emergency-natural-disaster-climate-crisis

Ham radio operators participate in Field Day: Here's an article regarding what another radio club did for Field Day 2023.

https://www.thesnaponline.com/2023/06/27/ham-radio-operators-participate-in-field-day/

Ham radio operators take to the air at annual field day across Oklahoma: Another Field Day 2023 report. This is from Oklahoma.

https://okcfox.com/news/local/oklahoma-ham-radio-operators-amateur-communication-drill-world-household-electricity-focus-battery-solar-generator-power-nation-country-field-day

Ham radio operators practice for emergency, build community: A nice article regarding the importance of amateur radio.

https://www.southernminn.com/faribault_daily_news/news/ham-radio-operators-practice-for-emergency-build-community/article_c305405c-1446-11ee-9e1c-17bef3ed0921.html

Cal Poly Amateur Radio Club achieves 2,000th License Milestone: Good for you Cal Poly!

https://www.arrl.org/news/cal-poly-amateur-radio-club-achieves-2-000th-license-milestone

Ham Radio Operators, We Need Your Help During Solar Eclipses! NASA is looking for help in their study of solar activity.

https://science.nasa.gov/science-news/citizenscience/ham-radio-operators-we-

need-your-help-during-solar-eclipses

How Far Will A Radio Transmit? This is very useful information to have, and it's well explained.

https://www.radioddity.com/blogs/all/how-far-will-a-radio-transmit

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.

Job Posting: FCC Recruiting Field Agents: In case any of you have wanted to become a field agent. Does it come with a badge?

https://www.arrl.org/news/job-posting-fcc-recruiting-field-agents

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:

https://www.arrl.org/news/the-k7ra-solar-update-788

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/