

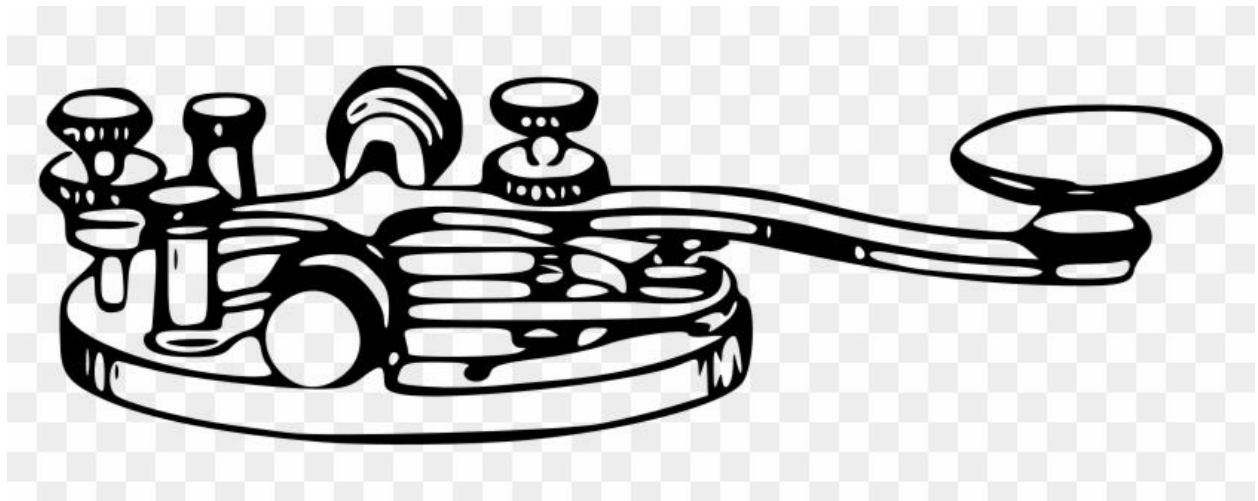


QSA-5

Marin Amateur Radio Society Monthly Newsletter

Established 1933

July 2023



When all else fails, you can count on Amateur Radio

From Our President:

Greetings everyone,

The first half of this year has passed. It is time to celebrate our Freedoms. I wish everyone a safe and happy 4th of July.

MARS Field Day was held at Stafford Lake Park on the 24th and the 25th of June. It appeared everyone that attended had a great time. Planning has begun for next years' Field Day, June 22 and 23, 2024. We would like to see many more operators participate in the 24 hours of Field Day.

MARS Field Day is not only about making contacts, it is also about socializing with other members. The Marin Amateur Radio Society dues paying Membership makes Field Day activities possible. They also make the club picnic possible, the support of public service activities and the other things that the club participates in. The payment of dues and if / when possible, additional monetary donations will keep the club funded.

The participation of the Members is what makes a club the greatest. Attending the General Meetings, either in person at the clubhouse or on Zoom, give you the opportunity to interact with other members and to have input. Responding to and participating in the "Calls for assistance" whether it is for help in cleaning out the storage area or help in painting the interior of the clubhouse.

The Sunday morning "Babble Class" has been open all year. Come to the Clubhouse on Sunday and meet new friends or reunite with longtime friends. Door is open at approximately 10:00 am.

Happy 4th everyone

Ken Brownfield AB6JR

From the Editor:

It's July and summer is in full swing. With the pandemic now a distant blur in life's rearview mirror, we can experience the summers we once knew. I must give a big thanks to Curtiss Kim, who has been so helpful in supplying material for the QSA-5. Not only has he supplied much of the content, but he's written that content as well. Of course, I must thank everyone else who contributed to this month's issue.

Things are moving along smoothly with life returning back to normal for most of us, so there will be more and more club related content within the pages of the QSA-5.

For those of you who are into the Raspberry Pi computers, I'm happy to say that prices have gone down due to an increase in chip production. I'll be adding a DYI news blurb in that section of the QSA-5 regarding price changes in electronic components next month.

Thanks again to everyone who contributed to this month's QSA-5. Your contributions make for better content. Have a great July!

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

June 8, 2023

Call to Order @ 20:07

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

MARS Members Present: Rich. Slusher, Curtis Aderoul, Jerry Foster, Curtiss Kim, Rob Rolands, Milt Hyams, Larry Bradly, Charlie Benet, Mark Klein

Adopt agenda: MSC

Approve minutes of May 11, 2023: MSC

Secretary's Report - Certificate of Insurance from Dipsea organizers received and filed on Google Drive. Certificates of insurance sent to Marin County for Field Day at Stafford Lake.

Treasurer's Report - Published in QSA-5.

Committee and other reports

Membership: Curtis - Presently at 150 MEMBERS, representing 97% of last year's membership. Website member password has not yet been changed.

Facilities: Skip - Nothing new to report. New business has an item for ideas for cleaning out the back storage area. Tenant is hiring someone to clean up backyard.

Public Service: Rob/Pam/Stan - Dipsea this Sunday 6-11, we have a great turnout of volunteers. Then on to Double Dipsea and other events. Pam & Stan are leaving the area soon, possibly the middle of next year. Possible, currently unnamed, replacements are being considered. Public service is attracting people to the club.

Technical: Milt - Mt. Tam Middle Peak new antenna was installed today, improvements should be noticed on the simulcast system. The new antenna radiators have a 4-degree downward angle, and this should improve reception and transmission around the base of the mountain. Coast side improvement remains to be seen. Jeff Young is getting the enclosure for the Muir Beach water tank repeater installation. Steve Toquingo - MARS needs to get a list of all other frequencies in use on Mt. Tam repeater site for Paul Mason to troubleshoot interference problems. Milt noted that we have asked the County for this info, but they were not able to provide them. We do not have a current relationship with the site owner to get the frequencies from them. We would like to get Paul to join us at the clubhouse to bring us up to speed on our repeater system and to brainstorm the possible interference issues in person. Steve Toquinto will attempt to get Paul to do that.

RCV: Skip - Golden Eagle after action report coming soon. Several members complimented Kevin Johnston for his professional looking well formatted reports

of the RCV out of county repeater tests held 4/22/23. Kevin will be working on updating some of the RCV training materials. RCV has scheduled another no notice simplex net test, 7/15/223. Rob Rolands volunteered to participate in the simplex testing.

VE Testing: Ken - Zero signed up for July VE session, unusual for us.

NBAM: Jeff - Great meeting in Petaluma for Sonoma County mesh. They wish to start installing mesh in their EOC's. Cloverdale, Ft. Ross and Timber Cove area also attended. Looking to grow technically savvy mesh people. Appears that the new grant request for NBAM will be approved. This will be for CBO's and for training for mesh use, not for government or other agencies that have available funding. CBO's will need to make a commitment to have trained people to be able to utilize the MESH, including ham licenses.

Education: Curtis - Nothing new at this time.

Old Business

1. Update Field Day 2023 - Several members have volunteered to provide generators, a propane campfire, and other assistance for field day. The committee meeting will be tomorrow evening, invites will be sent to any interested members. Will push back Field Day RSVP to 6/16/23. We will use the club W6SG call sign. Will go out to Stafford Lake tomorrow, 6/9 @ 1300. Park requires 2 names and contact info for emergencies overnight. CAL has expressed interest in assisting with the BBQ dinner. Further details to be determined at tomorrow's meeting.

New Business:

1. Club crank up Tower - Ken Brownfield: This item is precipitated by an email that was sent to the club that said that this person was at the clubhouse on a weekend, some people were working there and saw him "drooling" over the tower and these people asked him if he could take it. Members should not be giving MARS club property away. Discussion of club property and how it must be sold or otherwise disposed of only by Board action followed. Milt: The total cost of the tower including the mounting brackets is approx. \$3000, that the club has actually paid out of pocket. Giving it away is totally unacceptable. The tower is virtually new and is far too valuable to be given away. Could be given away ONLY

WITH A VOTE OF THE BOARD APPROVING IT! It was purchased with a vote of approval from the board in the first place. We cannot have an anonymous stranger who claims to be a club member, including everybody here and everyone who is a member, donating or selling the club's capital property. Discussion followed on whether or not we wish to keep and install the tower or to offer it for sale at this time. It was determined that since we have no offer to purchase it, we will table this discussion until next month. We do have a question and will provide a reply that we are definitely not giving the tower away and ask this person if they are interested in purchasing it. We may in the future put an ad in the QSA-5 newsletter offering it for sale to club members.

Milt also provided an update on an HF antenna for the clubhouse. He has a vertical HF Antenna available, and we must have our facilities manager get an agreement from the tenant for installation in our proposed location as it is near her deck. We will then need someone with modest engineering or construction skills to get an aluminum 20' mast tower designed and installed. Base of antenna on the wall of her deck, as close to the wall as possible. It will not be intrusive or in her line of sight. Milt and Rob will get together and talk with the tenant about this item.

2. Ideas for cleaning out the back storage area and timeline - Need volunteers and a work party - identify a date, get recruits, get a dumpster, for non-recyclable items. Last week in July was proposed. July 22 & 23 is a public service event. Ken and Skip & Rob will pick a date and send out an email blast to get volunteers to help.

3. Member request to park vehicle at Club - Rich Slusher requests to rent space to park his late brother Doug's truck at the clubhouse for 30 days while he sells it. MSC to rent for \$1 for 30 days. Estimated to start on 6/17/23.

Good of the Order - Nothing noted.

Executive Session - Board adjourned to executive session @ 21:25, called by President Ken Brownfield. Returned from executive session 2130.

Adjourn 2130 Hours

Next Membership Meeting July 7, 2023
Next Board Meeting July 13, 2023

Marin Amateur Radio Club

Profit and Loss

January - June 2023

TOTAL

JAN - JUN, 2023 JAN - JUN, 2022 (PY YTD)

Income		
Auction Income		50.00
Donations	1,549.17	118.98
Dues	7,044.75	6,305.00
Income from club activities		90.00
Interest Income	792.77	
Public Service Refund	450.00	450.00
Rent	15,600.00	15,600.00
Sales of Product Income		24.69
Unapplied Cash Payment Income		250.00
Total Income	\$25,436.69	\$22,888.67
GROSS PROFIT	\$25,436.69	\$22,888.67
Expenses		
Accounting	980.00	
Awards	299.99	
Car & Truck	2,306.02	637.04
Car & Truck Gas	194.19	111.43
Total Car & Truck	2,500.21	748.47
Field day	156.97	350.00
Garbage	287.04	287.04
Insurance	1,683.00	3,562.00
Comm Van Insurance	2,444.00	

Total Insurance	4,127.00	3,562.00
Legal & Professional Services		575.00
Other Business Expenses	104.93	
Public Service Expense	1,328.83	3,168.19
Reimbursable Expenses	2,448.73	1,751.12
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	2,118.68	1,757.05
VE Session	129.00	90.00
Water	319.95	398.00
Total Expenses	\$16,393.83	\$20,892.73
NET OPERATING INCOME	\$9,042.86	\$1,995.94
NET INCOME	\$9,042.86	\$1,995.94

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

TOTAL

AS OF JUN 30, 2023

AS OF JUN 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	48,822.68	13,897.11
CD	0.00	25,000.00
MESH	-500.00	
Money Market	0.00	5,000.00

VE Session Cash	-129.00	
Total Bank Accounts	\$54,142.29	\$50,951.04
Other Current Assets		
Uncategorized Asset	-95.00	
Total Other Current Assets	\$ -95.00	\$0.00
Total Current Assets	\$54,047.29	\$50,951.04
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	\$113,030.29	\$109,934.04
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	9,042.86	1,995.94
Total Equity	\$113,030.29	\$109,934.04
TOTAL LIABILITIES AND EQUITY	\$113,030.29	\$109,934.04

LIFE IS SIMPLE



MARS Club History Information Needed

We've 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

RCV News

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 Kim 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)





RCV Monthly Meeting Agenda

Each month, the QSA-5 will provide the RCV's monthly agenda for both members and potential members. Hopefully, this will make it easier to access as opposed to digging through your emails for the agenda:

Agenda RCV Operators Meeting

RCV Operators VIRTUAL Meeting

The monthly RCV Operators meeting is Monday June 26th at 1730.

Primary Agenda items are:

1. RCV Vests have been ordered.
2. Squeezing summer exercises in between vacations, other ham events?
3. Opinions on DMR?
4. "Last Mile" solutions for CBO HQ to satellite offices?
5. Other_____

Next meeting is July 31st, 2023, on Zoom. Agenda, relevant documents and Zoom login.

ACS-RACES & RCV General Meeting

The Marin RCV held their ACS/RACES general meeting on June 10th. For those who missed it, or those interested in joining the RCV program, here's the agenda from that meeting:

AGENDA

ACS-RACES & RCV General Meeting

9:00 AM, 10 June 2023

9:00 Introductions

9:05 Review Agenda

9:10 CRO report – K6RGI

9:15 RCV report – KJ6ARL

9:20 Golden Eagle '23 After Action Report

- > Overview and objectives of ACS-RACES and RCV activities

- > Lessons learned:

- General observations and results

- RACES NCS

- RACES field stations

- Winlink

- RCV NCS

- RCV field stations

- Activity and Comm Log review

9:45 Golden Eagle '23 Improvement Plan

- > Exercise planning improvements

- > Protocol improvements

- > Forms use and training

- > Technology problems

- > Training and exercise opportunities

10:05 RCV "Foreign Repeater Test" 22 April – KJ6ARL, W6KPJ

10:20 HF Go-Box Demo: Field Day, Stafford Lake 24-25 June – WA6BXV

10:40 UHF repeater updates – KM6ASI

10:45 New business for the good of the order

11:00 Adjourn

Next General Meeting –23 September 2023

Latest RCV News

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

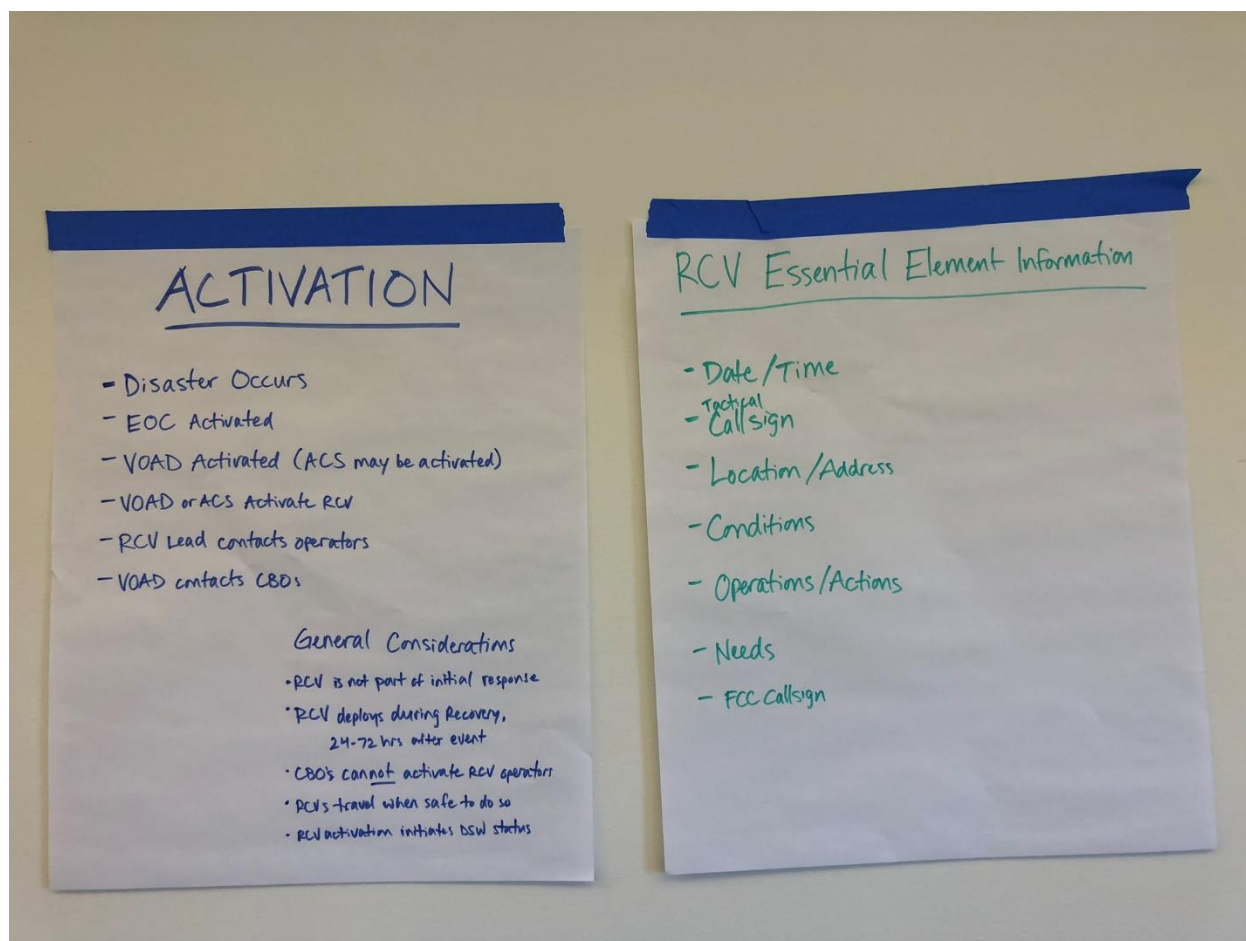
Members of the Radio Communication Volunteers (RCV) are updating information on the various Marin community-based organizations they serve. The templates will be compiled and made available to the group in the event operators are deployed to other locations than their assigned agency. The documents spell 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







Critical Mass

The North Bay 2-Meter Critical Mass was held on Sunday June 25, 2023 at Stafford Lake: 3549 Novato Blvd, Novato. It started at 10:00 and ended at 12:00. Here's what was on the agenda for this monthly event:

The plan is to start with practicing our phonetic alphabet. We'll talk about the fundamentals of coaxial cables and why we use 50 ohms. I'll be discussing how to use a multimeter for general systems troubleshooting and how to measure voltage, resistance, etc. That leads to the difference between resistance and impedance. I'll show how to measure impedance of a coaxial cable with a nanoVNA. And finally, group discussion on DMR basics & questions if time allows.

I believe if you tell the park service personnel that you are there to participate with the MARS radio group, there is no charge (but don't hold me to that!).

If you're a new member of MARS and want to get to know the other members of our club, come on down to next month's event. Here are some pictures from this monthly event.









Field Day 2023

MARS Field Day 2023 brought together over 40 members making contacts across the radio bands. The event, held during the last weekend in June, was staged at Stafford Lake Park outside of Novato. ARRL Field Day is an annual contest held nationwide to see which operators or clubs can make the most contacts in a 24-hour period.

This year's event was different than past Field Days that were conducted in conjunction with the Redwood Empire DX Club. The latest edition was also a change of venue from the Marin Rod and Gun Club in San Rafael to the county park. "This is a perfect time for this event", according to Steve Toquinto, KB6HOH, who spearheaded the effort to put on the activity. According to Toquinto, the average age for a ham radio operator is 65 years old. The veteran operator hopes events like this will encourage the younger generation to take up the hobby. Toquinto also emphasized the social aspect of getting together. Several members even pitched their tents and endured the chilly night to keep the contest going.

Jerry Foster, WA6BXV, fired up his code key in the newly acquired MARS communication trailer donated by the US Army. Foster erected a dipole wire antenna high atop a tall mast attached to the side of the unit. Aside from the contest the event showed the readiness of the club to meet communication needs in the event of a natural disaster. To quote Foster, "any place, anywhere" referring to the club's ability to erect a communication radio station in almost any location even under adverse conditions.

MARS President, Ken Brownfield, AB6JR, was pleased with the turnout that featured three different stations operating across the various bands. Each station featured computerized logging to keep track of the numerous contacts. While some operators kept the airwave busy, others shared stories. Equipment tips and advice on how to navigate unexpected challenges.

Marin County Supervisor Dennis Rodoni stopped by to chat about the county's emergency preparedness. The official whose district includes much of the rural west county was making sure his constituents won't be isolated during a disaster. Also checking in, Tom Jordan, Petaluma's Emergency Program Manager. No stranger to members of the club's RCV program, Jordan served in the Marin County Sheriff's Office of Emergency Services.

As an added feature the Sunday morning RCV's 9:45am and MARS 10am Nets were also conducted from the park site. The monthly Critical Mass gathering also shared the location with the Field Day participants.

There was plenty of time to take a break from the "rag-chew" to enjoy some lunch time pizza, an evening bar-b-cue and Sunday morning pancake breakfast.

Rumor has it preparations for next year's Field Day is expected to get underway soon. Here are some pictures from Field Day 2023:

Picture 1: Bruce Bartel N6BLV looking for anchovies.

Picture 2: Steve Toquinto KB6HOH who spearheaded organizing Field Day is deep into making a contact.

Picture 3: Milt Hyams KM6ASI pauses a transmission for his "Kodak" moment.

Picture 4: Dirck Brinkerhoff KM6VKQ and Gerald McCarthy W6NOV team up to work a contact.

Picture 5: From com trailer to live van the site at Stafford Lake.











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. As of this writing, the July 8th testing session has not received any advanced signups. However, that may change.

MARS President, Jen Brown, runs our VE (Volunteer Examiner) program. The MARS VE program has had two of the four scheduled testing sessions. The next test session is scheduled for July 8th, 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 and be prepared. Examinees will be required to bring valid identification and their FRN number. Those examinees who reserve a place on July 8th 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 fairly 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.>

The last session of the year will take place on October 14th, 2023, at 1:00pm. Here are some photographs from the April MARS VE session:



DMR Event: Monday Night DMR NET

From Michael Fischer K6MLF:

Hello, colleague radio operators—

It was good to see some of you at the MARS Field Day at Stafford Lake earlier this morning!

Check out this notice from Antonis AA6PP about the San Francisco Radio Club's DMR net—now shifted to the NorCal Talk Group. He—and we—are seeking to help make NorCal a more actively-used talk group.

Scroll to the bottom of Antonis' short notice to see the two other weekly DMR nets, including the Marin Amateur Radio Society's net at 6:45 each Tuesday evening—sandwiched between our HF nets (6:15) and our Zello net (7pm.)

Please do your best to check into one or the other of these three NorCal DMR nets each week!

Many thanks,

Michael K6MLF

DMR NET Rebooted

Good evening, everyone.

This month we are celebrating 4 years of having our San Francisco Radio Club DMR Repeater on the air. We enjoyed stellar coverage, we built a nice little digital community and we even run our first public service event, The 2023 Kaiser Half Marathon, on DMR this year!

We wish to continue enjoying this awesome digital mode in the Bay Area and even grow our community going forward. So effective tomorrow, Monday June 26th, we are making a few slight changes to our Monday night 7:30pm DMR NET.

We are moving our NET from our W6PW Talkgroup to the NorCal Talkgroup 31068. Please adjust your radios and join us whether using a repeater or your own hotspot. We are also changing the format of the NET; we will be calling stations in groups of three by prefix and make the NET shorter. We will also leave time at the end of the NET for people who need help or have technical questions to discuss.

So please note:

New SFRC DMR NET

When: Every Monday at 7:30pm/19:30 Pacific

Where: TG 31068 NorCal

Looking forward to hearing you all on the air

PS: Please also note two other local NETs worth participating during the week:

1. Marin Radio Society (W6SG) - Tuesdays at 6:45pm PST - TG: 31068 NorCal
2. NORCAL Net - Thursdays - 7:00pm PST - TG: 31068 NorCal

If you feel that someone can benefit from subscribing to our mail list please forward this email or point them to this page.

If you have any questions, comments, or requests please do not hesitate to contact us by submitting your question via our website or contact us at sfradioclub.org. For more information about the San Francisco Radio Club please visit SFARC.org.

Kind Regards
Board of Directors of the San Francisco Radio Club

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 is about Field Day 2023.

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

FCC Grants an ARRL Emergency Request to Permit Higher Data Rate Transmissions for Hurricane Relief Communications: The FCC has granted an [ARRL](https://www.fcc.gov/newsroom/recordings/call-transcript/20210810) 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>

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-783>

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 its own against this device. The Arduino also has more in the way of open-source 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://grp-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/>