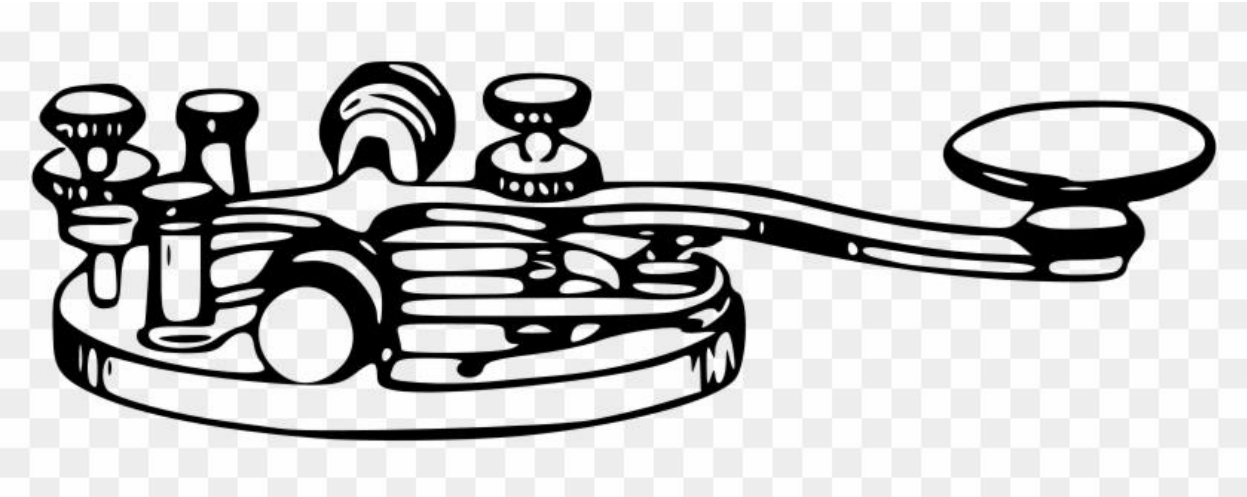
QSA-5

Marin Amateur Radio Society Monthly Newsletter

Established 1933 **April 2024**



When all else fails, you can count on Amateur Radio

From Our President:

Our clubhouse already looks better even though the painting is not quite done. The weather continues to delay completion. Our clubhouse, in financial terms, our greatest asset as for many of us, our homes are. In the case of MARS when we were donated the clubhouse it was with the condition that we cannot sell it. We are only allowed to donate it to another nonprofit organization. However, it is our principal source of income at around $30K per year. Having a clubhouse allows us to gather at the time of our choosing rather than schedule with other users. In the last few years, we have been doing some of the expensive projects that a homeowner has to do. We replaced the sewer lateral, replaced the roof, improved the drainage from the deck, and painted the building. We were able to accomplish all of these tasks without borrowing money and without asking our members to contribute extra. If you look at our February balance sheet it shows that we have more than $60K in the bank. Sounds like a lot. However more than half of that is a grant we received for improving the North Bay Area Mesh network and so is not available for work on the clubhouse. We also have other projects in the planning stages including painting the interior of the clubhouse, improving site drainage, and replacing our aging repeaters. To turn those plans into reality we need to replenish our bank account and to do that I am asking for your help.

It is traditional in fundraising campaigns to use the image of a thermometer as a quick graphic to show progress. We are a radio club and it seemed to me that some other graphic might be more appropriate for us. To that end I have chosen the S meter. While most amateur radio receivers have some display of received signal strength, many of us remember an actual meter calibrated in “S” units which ran from 0 to 9 and then in decibels above the 9. We would give the other station a signal report in the RST format for Readability, a scale of 1 to 5, Strength on a scale of 0 to 9, and Tone again on a scale of 0 to 9 with a perfect signal report being 599. The strength number was read off the S meter. Of course, this was long before the 1984 movie *This is Spinal Tap* with the bit about volume (gain) controls going up to 11. The S meter went over 9 and so you might report receiving a station at 40 over S9 meaning 40 decibels above the 9-mark on the meter. So here we are.

The board has asked me to raise half the cost so that would an S9 but we can hope for that treasured 40 over S9 which represents the total cost. If all our members donated $160 we would reach 40dB over. To donate go to http://w6sg.net/donate-full-width-page.php At this point a mere $500 will get us to S2.

73 de wa6uds

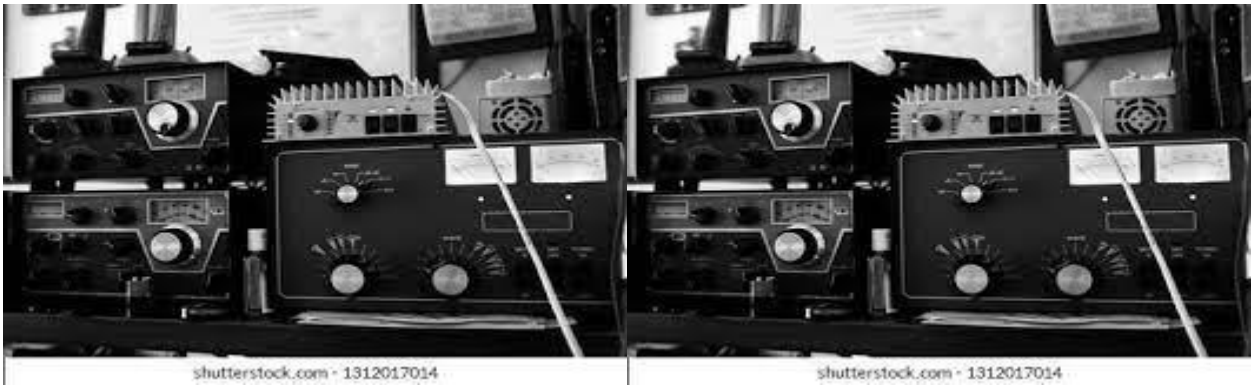
From the Editor:

Greetings Everyone! April is here, which means that summer is just around the corner. It seems as if time is passing at light speed. Spring is in the air and sunny days are becoming more and more frequent. Flowers are blooming and you can feel the sun's warmth upon your face. With summer approaching, and many related radio events getting closer, the Marin Amateur Radio Society is busy preparing to meet the challenges.

Summer is a popular time for running contests. Our club has provided radio assistance with these events over the years. We'll be posting calls for radio support for specific events over the upcoming months. If you have some free time to volunteer for these events, you'd be helping the folks here that provide radio support for marathons and bicycle races, not to mention demonstrating the importance of amateur radio.

The QSA-5 is plugging along. The sailing is smooth thus far. Thanks to the usual suspects for their contributions. I'm finishing my final year of school which means finishing my thesis, so I don't have as much extra time over the next two months to do my editorial duties (some spell checking and a lot of cutting and pasting). Without the contributions of these great club members, there wouldn't be much to read. Because of time constraints, I couldn't include some new material on Chinese radios in this month's issue. I'll include that in next month's issue. With that said, happy April everyone. Enjoy Spring!

QSA-5Editor@w6sg.net



New Members:

Jeff Curry KK6JJZ - San Francisco

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

Marin Amateur Radio Society - Board of Directors Meeting

March 2024

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

Attendance:

President: Curtis Ardourel WA6UDS

Director: Richard Cochran AG6QR

Director: Ed Essick K6ELE

Director: Steve Toquinto KB6HOH

Secretary: James Saltzgaber KM6WWY

Director: Jeffrey Young KM6Y

Treasurer: Bruce Bartel N6VLB

Trustee W6SG: Marc Bruvry KF6VNT

Trustee K6GWE: Brian Cooley K6EZX

Members Present: Rob Rowlands NZ6J, Skip Fedanza KJ6ARL, Oliver Lu KM6B0N, Larry B KK6QPE, Mark B KF6VNT, Milt Hyams KM6ASI

Adopt agenda: MSC

Approve Minutes: of 8 February board meeting MSC

Secretary's Report/Communications: Jim KM6WWY: COI'S automatically renewed with insurance renewal. List will be updated, and unnecessary COIs deleted. Stafford Lake COI and contracts for Field Day & Picnic will be issued and signed when info is received from the County of Marin.

Treasurer's Report: Bruce N6VLB: Our tenant is now current on rent. ATM Visa Card has been issued. Insurance premiums are now on monthly auto pay.

Committee and other Reports:

1. Membership - Curtis WA6UDS: 121 members 73% of last year. At the end of month past due memberships become past due and email reminders will be sent out. Ahead of this point last year.

2. Facilities - Skip KJ6ARL: We still have facilities. Painting should continue with good weather. The fire extinguisher for Sharon has been delivered and Sharon will install it. CO detectors to be installed yet. Andrew Musselman cleaned the west side drain and will clean out lateral inlet. Will also need some work, but neighbor has some part of it. Rob NZ6J: Door is working better because humidity is lower. The front door will need repair or replacing. Bruce N6VLB: Are apartment smoke detectors installed. Yes, Rob has seen them installed.

3. Public Service - Rob NZ6J: We have 2 new assistants for Rob, Don Magdanz KI6MZX & Oliver Lu, but we still need more volunteers. We also have past PS organizers Pam and Stan Witherspoon helping. Kickoff event planning is moving

forward, including food. Content will be similar to last year. 1st event is the following Saturday, Jane Fondo and is Don's first event as organizer. Curtis WA6UDS will send an email blast for kick off event.

4. Technical - Milt KM6ASI: Has continued attempting to contact Randy Larsen, recommended by Andrew Raike, to assist with resolving repeater issues with no success. He has told Andrew Raike that we will not be spending any more time trying to contact Randy Larson. Andrew then recommended Bruce @ Bar-Tech. Steve KB6HOH knows Bruce and will contact him. After the weather settles down, we will be going to Barnabe and Tam to check the UHF link system. Need to put APRS node on Barnabe Fire Lookout. This has been authorized by the Fire Department. Muir Beach is progressing well – Leighton Hills @ Muir Beach says

county microwave is completed, and we are ready to install the UHF repeater on the water tank.

5. VOAD/RCV- Skip KJ6ARL: RCV had a productive meeting last Friday with 7 of 8 of our CBO's. Went beyond expectations from both RCV and CBO's, they did message passing in real time with RCV operators and CBO personnel. Working with Marin County Office of Emergency Management for formal RACES/RCV approval.

They want to see our onboarding procedure to verify that it meets their requirements, as well as deployment methods. Will be doing west Marin radio testing in April or May. EOC is moving forward on the changeover to County Fire. We are a "work in progress."

6. VE Testing - Jim KM6WWY: 2 applicants for the next VE test April 13th. Jim will work with Curtis to fix our website issues on the VE pages.

7. NBAM - Bruce N6VLB: Meeting will be on March 20th.

8. Comm Truck - Jim KM6WWY: Jim has not been able to do much with the truck at this point. We are getting new Public Service organizers Oliver Lu and Don Magdanz, as well as James Renney (for North Bay 2-meter Critical Mass) will be submitted to our insurance for approval to drive the van. We need to have a Comm Truck committee meeting and determine its makeup going forward, do a service check on the van, and orient the newly added drivers to the pre-use inspection procedure.

9. Field Day - Steve KB6HOH: Meeting with Adam Craig Wednesday 20th at 2:00pm at the Area 1 site. The Nesting Bird inspection will be 1 week before Field Day. This determines what trees, if any, we cannot use for antenna support. If the ground is solid enough, we will be able to put comm vehicles on the lawn. Field day committee meets the day before the monthly board meeting.

10. Picnic - Steve KB6HOH: We are confirmed 14th of September at Stafford Lake Area 1. Picnic planning meetings will begin next month.

11. Bylaws - Curtis WA6UDS: We will soon be forming a committee to review and change our bylaws as needed.

Old Business:

1. Paint the Clubhouse Fund - Club website now has a pitch for members to contribute to the Painting the Clubhouse fund. Curtis has put up an old school S-Meter to track the funds progress. Emails will be going out soon to specifically request donations. The donate page will be modified to remove $30 donation increments as some people are confused by it. We have $2,400 donated so far without very much publicity.

2. Approve Amended Bank Resolution - No action needed. The bank accepted our debit card application without amendment of our previous resolution.

3. Clubhouse Cleaning - Curtis WA6UDS, traditionally, we have hired people to clean the club house before events. It has been suggested that we get a cleaner on a regular basis to clean. Various increments were discussed. The consensus was that we do need regular cleaning. Milt KM6ASI suggested monthly, with largest usage, except special events, being general membership meetings. Curtis – Monthly meeting attendance has increased, and we need to keep the clubhouse clean. Marc KF6VNT agreed that monthly cleaning would be a good interval. After discussion, it was agreed that we will get cleaners to bid on cleaning once a month.

Cleaners will be expected to provide their own supplies and equipment, clean bathrooms, kitchen, vacuum, wipe tables off and other normal cleaning tasks, not including window cleaning. Ed Essick and Jim Saltzgaber have cleaners that may be interested, and Rob Rowlands cleaners cleaned up for the Christmas party. We

will schedule walk throughs for interested parties to get bids. No further action this month

New Business:

1. 27 Shell Rent. Last raised as of 3/1/22 to $2600 from $2500 – Curtis WA6UDS-Rent has not been raised in 2 years. Various rent increases were discussed. It was agreed that our tenant has been a valuable tenant all along and we do not wish to alienate her or cause her undue financial hardship. It was also agreed that we do need to increase rent to cover our cost increases. An increase in rent of $100/month would be appropriate. Utilities alone would warrant an increase. Moved to increase tenant rent $100/month effective June 1st , Seconded, and Carried by show of hands. Curtis will send the rent increase notice to our tenant.

2. Revitalizing Babble Class- Curtis WA6UDS-Sundy morning clubhouse attendance has been down. NB2MCM has suggested that alternate months be presentations at the clubhouse. What other programs may be offered to bolster attendance on Sundays. CW practice was suggested as a possibility. Milt KM6ASI noted that nb2mcm will use it for programs that do not require equipment set up and in months that have inclement weather. HF operation demos and nets could be done once we get the vertical antenna up. No further action taken at this meeting.

3. NanoVNA V2 Plus4 - for tech committee- Rob NZ6J: Club needs analyzer to tune duplexer filter cans for repeaters. Rob has been using his company owned analyzer and that will no longer be available. He is proposing that the club purchase a NanoVNA V2 (Attachment-1). Milt KM6ASI endorsed the need for the analyzer, noting that we cannot tune duplexers for new repeater installation without it. He also asked that Rob do a demonstration of the operation and use of the analyzer. Rob also noted that we need a younger volunteer “another Rob”, preferably someone who is 30 not 76, to do the repeater work. Rob will do a write-up and presentation on how to tune a duplexer with the analyzer. Per Skip’s KJ6ARL inquiry: No, there are no standards that this analyzer is certified to. Rob has been in conversation with others who are successfully using this model, and we are buying the best quality offering. MSC by show of hands to purchase the NanoVNA V2 Plus4, NTE- $500.

4. Club budget - Curtis WA6UDS– presented a pro–forma budget for 2024 based on 2023 expenses. Public service budget was discussed separately so that Rob NZ6J would not have to wait until the end of the meeting to present that portion. Largest changes from last year is: Food +$125, Beverages -$100, Swag no delta, Office Supplies +$75, Training Materials no delta, Caps/Vests/Gold Stars +$850 (this will replenish these items for the next several years as we have been working from stock for the last few years), Rent -$500 (We are holding the PS Kickoff in the clubhouse), APRS +$500 (We will be building up our APRS equipment this year) Total increase +$1050 Total PS 2024 budget: $3900.00. Public Service 2024 budget APPROVED MSC by show of hand. Full budget discussion continued to the next regular board meeting.

Good of the Order

Executive Session Not Required

Adjourn MSC @21:20 MSC

Next Regular Meeting 5 April 2024

Next Board Meeting 11 April 2024

ATTACHMENT 1

Hi Curtis and the Board,

For the past several years I have been able to assist Dan Healy, Milt Hyams, Doug Slusher, and others with the tricky tuning of RF duplexers for our repeaters. This requires a network analyzer with enough dynamic range in the stop band to allow tuning that minimizes receive de-sense. Typically, this is 80 dB and above and I've been fortunate to have access to my employer's Keysight FieldFox VNA which we've used for several repeaters that are in service today. As I roll back from working even part-time, I will lose access to the FieldFox at some point. I have three NanoVNAs of various flavors, but none match the FieldFox's performance, their dynamic range being in the 60-70dB range. Thus, I propose that the Club purchase the latest version of the Nano VNA, with supposedly 96dB of dynamic range. The delivered cost of just over $400 is a fraction of the $20, 000 cost of the Fieldfox!

As you know I've been active in technical education for the Club and will continue to do so as long as I am able. However, it may be a good time to put out feelers for a younger replacement? What is needed is someone with good practical experience with sub-GHz RF that can assume ownership of the duplexer testing protocol and thus the new NanoVNA.

I have a quote currently open from the Chinese supplier and have high confidence that this is money well spent. Please see attached.

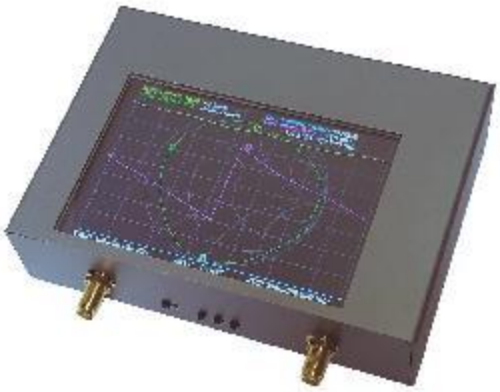
NanoVNA V2 Plus4 50 kHz – 4 GHz Two-port Vector Network Analyzer

Reviewed by Phil Salas, AD5X
ad5x@arrl.net

I reviewed the original version of the NanoVNA Vector Network Analyzer in the May 2020 issue of *QST* and added a sidebar about the NanoVNA-F, which had just become available. The NanoVNA-F then had a 4.3-inch display and covered up to 1 GHz, but the line has since been continually improved. The newest version, the NanoVNA V2 Plus4, has extended its frequency range to 4 GHz.

The NanoVNA V2 Plus4 is a new design, and not based on the original NanoVNA hardware. While the USB interface is similar, it has been reworked to support faster sweep rates and improved data integrity. The NanoVNA V2 Plus4 is fully compatible with the NanoVNA Saver software, which supports Windows, Linux, and MacOS.

The NanoVNA V2 Plus4 is currently available from only a few retail suppliers. Check out the NanoVNA User Group at **https://groups.io/g/NanoVNAv2** for information on where to purchase it (this reviewed unit was purchased from Amazon). As you see in Figure 4, the NanoVNA V2 Plus4 has a pretty spartan appearance; there is literally no labeling on the device! But this was the standard package at the time of this review. Port 1 is on the left, then the on/off switch, then up/enable/down buttons (instead of the jog control on the earlier units), and finally Port 2 on the right. There is a USB-B connector on the opposite side for charging and computer interfacing. Finally, there are four red LEDs on the bottom of the unit that show the battery charge status, in 25% increments.



The NanoVNA V2 Plus4 has a comfortably large 4.3-inch TFT LCD display with a wide viewing angle that is easy to read even in strong sunlight. It includes a 3200 mAh lithium battery, and the internal charger can handle up to a 1.2 A charging rate from higher current USB chargers. Included with the NanoVNA V2 Plus4 are two 13-inch SMA-to-SMA cables, a touchscreen stylus, a USB A-to-B interface cable, a SMA-to-SMA barrel, and for calibration purposes, an open, a short, and a 50 Ω load, all with SMA connectors. Finally, the metal case is well constructed, providing excellent shielding from external RF. Table 3 summarizes the specified performance of the NanoVNA V2 Plus4.

Using the NanoVNA V2 Plus4

The NanoVNA V2 Plus4 comes with no printed manual, but the latest user guide and a menu map can

Figure 4 — NanoVNA V2 Plus4 with supplied cables, adapters, and loads.

Bottom Line

The NanoVNA V2 Plus4 is a true two-port vector network analyzer covering 50 kHz to 4000 MHz. At a price of about $250, hams and electronic hobbyists can easily justify this instrument for their home lab.

2024 MARS Public Service dates

1. Kaiser 5k and half marathon: SFRC Sunday, February 4, 2024 DMR Radio required. - Cancelled due to weather!

2. Public service briefing and lunch: Saturday April 6, 2024, 1100 to 1400 hrs, Location: Clubhouse.

3. Ridge to Bridge: Saturday, April 13 Requesting 16 MARS volunteers: Pam and Oliver organizing.

4. MCBC Jane Fondo Saturday April 27 2024 Women's mountain bike event 18 at aid stations, 3 accompany SAGs, 1 moto, 1 biker Don Magdanz, Event Organizer at Net Control.

5. Miwok 100K, Saturday, May 4, 2024 18 at aid stations, 3 hikers Rob organizing.

6. Dipsea: 113th Annual Dipsea will be run on Sunday, June 9th, 2024 7am-2pm 20 needed (Stinson/County Comm Truck) Rob to organize. Don Magdanz, Finish Truck and Information Tent.

7. Field Day: June 22/23, 2024 Stafford Lake Park 1800z (11am) to 2100z (2pm Sunday) http://www.arrl.org/field-day-rules.

8. MCBC Dirt Fondo: Saturday, July 20, 2024, 6am - 3pm 18 needed (/Fort Cronkite/Comm Truck) Michael Fischer, Event Organizer at Net Control.

9. San Francisco Marathon SFRC Saturday/Sunday July 27-28, 2024.

10. Marin Century: Saturday August 3, 2024, 5:00am-8pm 34 needed (Stafford Lake/Comm Truck) Don Magdanz, Event Organizer at Net Control.

11. Double Dipsea: Saturday August 24, 2024, 6:30am-1:30pm 18 needed (Stinson/Comm Truck) Pam and Stan to organize.

12. MCBC Adventure Revival. Saturday, September 21, 2024 7:30am-3pm. 15 needed. (San Geronimo former golf course/Comm Truck?) Don Magdanz, Event Organizer at Net Control.

13. ZBC Dipsea Hike: Saturday, September 21, 2014 (Comms Organizer TBD) 7am-2pm, 8 needed (Old Mill).

14. Breast Cancer Prevention Partners Peak Hike: Moved to Pacifica in 2023, no MARS radio support required.

15. MDARC Pacificon ham convention San Ramon Marriott October 8-20, 2024.

16. Dolphin Club Escape from Alcatraz Saturday, October 5, 2024 10am-6pm. 8 needed, organizer TBD.

The MARS Public Service team:

Roles, Responsibilities and Duties

December 2023

I. Overview

Fielding a public service program that supports a dozen events each year and which involves the participation of 50+ radio operators is the principal element of the Marin Amateur Radio Society's activities. MARS' excellent reputation for high-quality communications and emergency support to events is well-known. That reputation is demonstrated by the active participation of operators from around the Bay Area. Maintaining that reputation is high on the Board of Director's list of responsibilities.

The MARS Board achieves that duty by appointing skilled volunteers to manage the program, by assuring them of the support required and by providing only that limited oversight to assure themselves that the program is being managed well.

The purpose of this paper is to set out the duties of the Public Service team so that the Board—and the team—understand the scope and nature of the volunteer activities necessary to continue to maintain the standards established over the past several decades. The Board should expect a confidence-inspiring report on the program at every monthly meeting.

II. The Schedule

- Begin working on the schedule in November of the preceding year.
- Meet with legacy event organizers early in their own schedule-making to minimize calendar-conflicts with Marin as well as Sonoma and San Francisco events.
- Be open to—and reach out to—other organizations that might benefit by our support.
- Take the schedule to the Board for approval in February or March
- At this meeting, the Board should review, modify if necessary and approve The Documents (see below)

- Keep Marin County Fire Dept informed of the overall schedule early and as the season progresses; Battalion Chief Brett McTigue is the contact, though he is due for retirement in the near future.

III. The Budget

- Brought to the Board in February or March as a separate item from the schedule of proposed events. There are three separate components to the public service budget:
- The kickoff event: awards, food, door prizes, giveaways related to operating in an event.
- Expenses for equipment to be purchased by the committee: caps, vests, gold stars, banners, radios, antennas, portable repeaters, etc.
- ·Comm truck: This separate budget item should be presented in coordination with the separate Comm Truck committee. While the principal use of the comm truck is for supporting public service events, the Board may well have other projects and programs for the truck with equipment and maintenance expenses beyond those needed for the public service program.

IV. The Kickoff event

- This annual event, held at least several weeks prior to the first event, serves four purposes: 1) to recognize, motivate and reward those who volunteered the previous season; 2) to make explicit MARS' expectations (the position description and code of conduct); 3) to recruit volunteers for all of the events in the season and 4) to provide training for the upcoming season.
- Where will it be held? Clubhouse? Stafford Lake? Marin Rod & Gun Club? Responsible for making arrangements wherever; date and location are items that might require approval by the Board
- Speakers from two or three of the organizations to be supported (this helps to strengthen the recognition that we are part of their event team)
- Awards (gold stars)
- Door prizes
- Handouts to all of items that will be useful in the field, eg clipboards as well as the caps and vests.

- Training—especially the position description and code of conduct but also prowords, emergency protocol; this part should not be pro-forma. Add in the kind of role-playing that Cooley has given the past two years.

V. The people

- Actively recruit and train new operators; use the Critical Mass mailing list and other tactics in this element of the program.
- Actively recruit experienced volunteers for each event, starting (but not ending) at the kickoff.
- Learn which operators are best with which roles.
- Learn which operators can be counted on—and not.
- Be cognizant of potential (or actual) personality conflicts as teams are assembled.
- Constant attention to recognition, praise, thanks, motivation in a variety of ways before, during and after every event.
- Be especially careful in assembling the net control teams—their comportment and competence will be the principal way that the event organizers weigh our performance. Weave less-experienced operators into NC teams as possible, but always carefully and mindfully. Assure that every member of the team knows "The Documents" (see below) by heart.
- A member of the Public Service team should be on <u>every</u> Marin net before and during the season—the Sunday morning net and the several Tuesday evening nets.

VI. The client organizations

- Meet with them in their offices if appropriate at the beginning of the season and again in the weeks before the event. Know the names of staff or volunteers on their side and ensure that they know you.
- Know their organization's mission in detail. Be familiar with their website; in conversation with them, make them aware of your firm grasp of what they are all about—build a close rapport with them.
- Invite several of their spokespersons to the kickoff.
- Be at the start-finish several hours before the start time to help them set up. Help provide parking assistance, pop-up tent erection, unload the trucks…whatever's helpful and appropriate. Again, this is about instilling

confidence, and team building with the organizers—separate from the team building with our own operators.

VII. The events

- Get course maps to post on our website.
- Prepare in advance for the Thursday-before Zoom pre-briefing so that it is succinct, well-organized, gives the volunteers all the information they need and leaves them with confidence that all is well in hand.
- Fashion your draft frequency plan and duty roster well in advance and be prepared to modify it several times up to the night before the event.
- Check with the volunteer list—in the weeks and months since they signed up, their lives may well have changed.
- Request that MARS be named on their event insurance; get a copy of the insurance coverage form and give it to the MARS secretary for filing. If we will be using another club's repeaters, get the same named coverage for them.
- Provide the MARS logo to the event organizer with a request that we be recognized on their website, banners, tee-shirts, etc.
- If they give recognition for in-kind contributions, ask that our name be on that list.
- Make sure the first shift at net control is there a full hour or more before start time to set up and be on the air.
- In addition to whatever reporting the event organizers wish, all operators should keep a record of the time they arrived on station; the time they were set up and ready to transmit; the time the rest stop volunteers arrived and were set up, the time the first participant arrived, the time the last participant arrived (and left) the time the rest stop volunteers departed and the time the operators closed down their station. They should also be encouraged to take photographs of their setup. Any unusual incidents should also be reported.

VIII. The Radios

- Test, test, test the coverage of various repeaters as you drive or hike the course prior to making your frequency plan.
- Use as few repeaters as possible.

- If Sonoma County repeaters are required, get permission well in advance, get their named-insurance certificates.
- Assume that the comm truck's radios will fail or that it will get a flat tire on the way to the event. Make sure the first shift at net control has tables and chairs and a full radio and antenna setup to get on the air without delay.
- Do you plan to use APRS tracking for sweeps and/or SAGs? If so, make sure the equipment is available and the repeaters' coverage is sufficient.
- Similarly, if you propose to use DMR radio for any part of the comms plan, check equipment and repeater coverage.

IX. The website

- Be facile with Google docs to use for the volunteer list, the duty roster and maps to the rest stops.
- Working with the Board-designated webmaster, make sure the public service section is easy to use and inviting (it needs a major overhaul.)
- Be a regular (weekly) visitor to the website to make sure information is up to date and accurate.
- Post photos and maps to assist operators to get to their locations.
- Make sure The Documents (see below) are prominently posted on the website and request that every operator check them prior to each event.

X. The Documents

- The Board should review the following documents at the beginning of each season and make any appropriate changes. The Board should request the public service team to create a special program to assure that all operators are familiar with their provisions and agree to follow them.
- Position description.
- Code of conduct.
- Accident and emergency protocols (Public service team should ask the Marin County Fire Dept to review this each year)
- List of prowords.

XI. After-event duties

- Send an email to all operators with repeated thanks and atta-boys/gals. Describe what went well and what we will work on to make better in future. It's impossible to be too corny in expressing thanks and appreciation—

that's an essential ingredient in motivating volunteers. Call out several operators who did an especially good job.
- Repeat that thanks and appreciation on all Sunday and Tuesday nets following an event.
- Collate/assemble the reports from the operators (see "The Event" above)
- Post photos on MARS website.
- Meet with the organizers for an after-action conversation. Give them the results of the operators' reports on the timing of each rest stop. Discuss any changes they might have in mind for next year. Give them attaboys for a job well done.
- Fill out the ARRL report for each event and send it in to Antonis Papatsaras.

XII. Staffing

Clearly, these duties (yes, 65 bullet-points) are beyond the abilities or time one volunteer leader can devote to MARS principal activity. A team of two and at the most three can do so—and has done so for the past 15+ years. The team needs to have a demonstrated combination of **technical** skills, **management**/organizational skills and **people**/motivational skills. It's the Board's duty to recruit, appoint and support (but not second-guess) a team with a combination of all three.

XII. The role of the Board

1. Set goals for the Public Service Committee.
2. Set specific expectations for the Public Service Committee to:
    a. Prepare and seek board approval for annual public service calendar.
    b. Prepare and seek board approval for a Public Service budget.
    c. Keep the board informed on activities.
    d. Bring any new events to the board for approval.
3. Appoint the members of the Public Service Committee.
4. Understand that the Public Service Committee must have a degree of autonomy and that issues that arise around Public Service Events will be resolved through discussion with the Public Service Committee with the explicit understanding that the board must act in the best interests of the club.

Marin Amateur Radio Club

Balance Sheet Comparison

As of March 28, 2024

	TOTAL	
	AS OF MAR 28, 2024	AS OF MAR 28, 2023 (PY)
ASSETS		
Current Assets		
Bank Accounts		
B of A Facilities Account - 8795	5,370.90	5,917.13
B of A General account - 4328	61,647.21	36,813.50
Cash on Hand		
MESH Grant (deleted)	0.00	500.00
Total Cash on hand	**0.00**	**500.00**
CD	0.00	0.00
Money Market	0.00	0.00
VE Session Cash	0.00	-87.00
VE Session Cash Received	0.00	
Total Bank Accounts	**$67,018.11**	**$43,143.63**
Other Current Assets		
Uncategorized Asset	385.00	-95.00
Total Other Current Assets	**$385.00**	**$ -95.00**
Total Current Assets	**$67,403.11**	**$43,048.63**
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	**$126,386.11**	**$102,031.63**
LIABILITIES AND EQUITY		
Liabilities		
Total Liabilities		
Equity		
Opening Balance Net Assets	124,400.00	124,900.00
Retained Earnings	13,748.91	-20,412.57

Net Income	-11,762.80	-2,455.80
Total Equity	**$126,386.11**	**$102,031.63**
TOTAL LIABILITIES AND EQUITY	**$126,386.11**	**$102,031.63**

Marin Amateur Radio Club

Profit and Loss

January 1 - March 28, 2024

TOTAL

	JAN 1 - MAR 28, 2024	JAN 1 - MAR 28, 2023 (PY YTD)
Income		
Christmas Party Income	640.00	
Donations	350.00	1,517.69
Dues	175.00	225.00
Interest Income		792.77
Rent	10,400.00	7,800.00
Unapplied Cash Payment Income	385.00	
Total Income	**$11,950.00**	**$10,335.46**
GROSS PROFIT	**$11,950.00**	**$10,335.46**
Expenses		
Accounting	180.00	815.00
Awards		299.99
Car & Truck		1,016.59
Car & Truck Gas		60.59
Total Car & Truck		**1,077.18**
Christmas Party	2,970.23	
Contractors	11,000.00	
Field day		122.97
Garbage	148.50	143.52
Insurance	564.50	1,683.00
Comm Van Insurance	1,249.50	2,173.00

Total Insurance	**1,814.00**	**3,856.00**
Meals	76.86	
Other Business Expenses		104.93
Public Service Expense	444.50	1,328.83
Reimbursable Expenses	20.00	2,388.01
Repair & Maintenance	14.71	
Repeater	1,655.17	1,465.08
Taxes & Licenses	4,049.67	
Utilities	1,109.62	997.64
VE Session		87.00
Water	79.54	105.11
Total Expenses	**$23,562.80**	**$12,791.26**
NET OPERATING INCOME	$ -11,612.80	$ -2,455.80
Other Expenses		
MESH Grant Disbursement	150.00	
Total Other Expenses	**$150.00**	**$0.00**
NET OTHER INCOME	**$ -150.00**	**$0.00**
NET INCOME	**$ -11,762.80**	**$ -2,455.80**

LIFE IS SIMPLE

MARS Club News

2024 Public Service Kickoff

Please attend if at all you can! April 6, check your calendars

April 6th, 11am, Marin Amateur Radio Society clubhouse, 27 Shell Rd, Mill Valley.

Here's the
agenda: https://docs.google.com/document/d/12wu9Tw1VWwG1zxkDcjLHsr5tBuVhRMHMMd9suhvM7n0/edit

Here's where to RSVP for:
a free lunch,
to see the kinds of expectations we have for radio operators,
to get some light-handed training,
to sign up for (at least one!) public service event,
to (perhaps) win a raffle prize,
to meet other radio folks in Marin.

Here's where to
RSVP: https://docs.google.com/document/d/1nXczB2l8pUczjGduGx54Ob-m5wLAdFu0Lmnje8K3UAQ/edit

Please add your name if you've not yet done so!

Even if you cannot attend on April 6th, that link is the place to sign up as a radio operator on at least one of the events. This is the perfect next step after regular attendance at our North Bay Critical Mass sessions.

Please come!
Cordially,

Michael Fischer K6MLF
Emeritus Public Service Chair

Silent Key: Alan, WA6DNR

As we grow older, we face the reality that our time on this planet comes to an end. In our later years, we review the life we've led. I've noticed that amateur radio folks tend to have led interesting lives. It takes a special link of person to become a ham! This comes to the QSA-5 from Curtiss Kim:

 Curtiss Kim, KM6GUY on the passing of Alan Bowker, WA6DNR

It was several year ago that Alan Bowker, WA6DNR invited me to his San Anselmo home for lunch. He lived on a hill above the cluster of houses owned by filmmaker George Lucas behind the United Market on Red Hill Avenue. Alan wanted to show me his "shack" which was arranged on a desk just off his kitchen. He dazzled me with his knowledge of satellite communications and his activity on DMR. What was even more impressive to me was what he had stored on the bottom floor of his house. It was a collection of commercial radio broadcast equipment that could rival a

museum. After all, ever since Alan was in junior high school in Casper, Wyoming he was captivated by radio. Too young to drive,

1 Alan Bowker, WA6DNR

his mom had to take him to his first job with station KVOC. He would work remote

broadcasts for the station, usually Sunday morning church services. In high school Alan moved to KATI also in Casper. By this time, he was “on the air”. Guess what his air name was? Alan called himself Don Sherwood. Not sure if he knew of the early morning personality at KSFO in San Francisco but this was in the early 1960’s. Alan was one of the first students to study for a broadcast degree at the University of Wyoming. During summer

1 Alan at his shack

breaks, Alan would come to California to work summer relief engineering jobs at various radio stations including KCBQ in San Diego

and KNBR in San Francisco. It wasn’t until years later that Alan and I ended up meeting. I worked at KNBR Radio in the early 70’s until the mid-80’s as a news reporter and anchor. The only two buttons I could touch on the console were to turn my mic on and off, and the other to put the network on the air. KNBR was owned by NBC and blasting out 50-thousand

watts on a regional clear channel signal. It was the

2 Radio Equipment from Bowker's collection
radio engineer on the other side of the glass that played the music, commercials and worked the

phone lines. That was what Alan did. Alan and I did not work at KNBR at the same time but when we compared notes we had mutual friends. Same for KCBS Radio. It was toward the end of my 50-year career in broadcast news that I worked at the CBS owned station. By that
time Alan had preceded me and had moved on. Alan went into television at KGO TV and later into private consulting in information technology. He also went back to San Francisco State University and earned a master's degree. By the time we had that lunch the cancer had taken hold. Alan was losing weight and endurance.

We attended luncheons put on by the Broadcast Legends, though neither one of us considered ourselves legends by any means. The weight loss was evident, but his spirit never faltered. He attended the MARS picnic last summer and we decided to attend the Broadcast Legends' Christmas Party together. The gathering featured lunch, a re-enactment of a radio script, songs and other entertainment. When I went to pick him up, he was slow getting himself ready but when we arrived at the event he had perked up. He worked that lunch like a politician. Glad handing and posing for pictures with some of the biggest names in Bay Area media including

KGO TV Anchor, Dan Ashley and former KGO Sports

3 On the Road
Director, Don Sanchez. He thoroughly enjoyed meeting his

former partners and shared some stories about his long career in broadcasting. By the time I got him home to his wife Louise, he was tired but buoyed by the afternoon. On the drive back he told me he was going to fight the disease that was ravging his body. I knew what he was going through. My father fought and lost the battle to cancer as well. Alan was proud of his career and his acomplishments. He spent time doing such diverse things as flying his drone to rebuilding old radio equipment and traveling to distant ports of call documenting his exploits with his camera. He kept a keen interest in both commerical and amateur radio over the years. Alan

 *4 Don Sanchez, Bowker, Dan Ashley*

worked at such places as Fantasy Records, North Star Computers and with film director Stanley Kubrick. In 1983 he became Director of Information Systems at Dolby Laboratories for 12 years. Alan was proud of his association with MARS. His

technology knowledge was often called upon and he once took part in a  
Sunday morning Critical Mass explaining DMR (Digital Mobile Radio). Alan passed peacefully at his San Anselmo home on March 8, 2024, with his wife and daughter by his side. He was 75 years old.
5 Alan with wife Louise Fay

2024 MARS Public Service dates

If you're interested in getting involved in the public service branch of our club, here is a list of the events scheduled for this year. Radio communication is the glue that often holds these events together. As with most events, finding enough volunteers is challenging. If you're interested in helping the club, contact Rob Rowlands NZ6J: rowlands47@gmail.com

1. **Kaiser 5k and half marathon: SFARC Sunday, February 4, 2024**

DMR Radio required DMR Repeater (W6PW) Digital channel RX:444.225, TX:449.225 Color Code (CC): 1 Timeslot (TS): 2 Talkgroup(TG) 9

2. Public service briefing and lunch: Saturday April 6, 2024,1100 to 1400 hrs, Location: to be decided

3. Ridge to Bridge: Saturday, April 14 Requesting 16 MARS volunteers:

4. MCBC Jane Fondo Saturday April 27 2024 Womens mountain bike event
18 at aid stations, 3 accompany SAGs, 1 moto, 1 biker
Don Magdanz, Event Organizer at Net Control

5. Miwok 100K, Saturday, May 4, 2024
18 at aid stations, 3 hikers

6. Dipsea: 113th Annual Dipsea will be run on Sunday, June 9th, 2024 7am-2pm 20 needed
(Stinson/County CommTruck)
Don Magdanz, Finish Truck and Information Tent

7. Field Day: June 22/23, 2024 Stafford Lake Park 1800z (11am) to 2100z (2pm Sunday) http://www.arrl.org/field-day-rules

8. MCBC Dirt Fondo: Saturday, July 20, 2024, 6am - 3pm 18 needed (/Fort Cronkhite/CommTruck)
Don Magdanz, Event Organizer at Net Control

9. San Francisco Marathon **Saturday/Sunday July 27-28, 2024**

10. Marin Century: Saturday August 3, 2024, 5:00am-8pm 34 needed (Stafford Lake/CommTruck) Don Magdanz, Event Organizer at Net Control

11. Double Dipsea: **Saturday August 24, 2024**, (Comms Organizer TBD) 6:30am-1:30pm 18 needed (Stinson/CommTruck)

12. MCBC Adventure Revival. Saturday, September 21, 2024 7:30am-3pm. 15 needed. (San Geronimo former golf course/CommTruck?) Don Magdanz, Event Organizer at Net Control

13. ZBC Dipsea Hike: Saturday, September 21, 2014 (Comms Organizer TBD) 7am-2pm, 8 needed (Old Mill)

14. Breast Cancer Prevention Partners Peak Hike: Moved to Pacifica in 2023, no MARS radio support required.

15. MDARC Pacificon ham convention San Ramon Marriott **October ? 2024**

16. Dolphin Club Escape from Alcatraz Sunday, October 5, 2024 10am-6pm. 8 needed (Old Mill) Could certainly use 20, if more folks are interested, please!

RCV News

This article was written by Curtiss Kim, who is a member of the RCV. Thank you Curtiss for this insightful piece on the RCV (and all your many contributions)!

Members of the Radio Communication Volunteers met across the table with representatives of the various Marin County community-based organizations they will partner with during a major incident. The March workshop was the third such meeting in as many years. RCV is still considered a pilot program designed to provide emergency communications to organizations that offer support services to various communities in the county. The agenda included practice activation scenarios, turnaround response times and expectations from both the RCV members and the community-based organizations. "Everybody knows what the right thing is to do. It's nice to have a reminder once in a while. The intent of these workshops is to have a consistent annual touch, "according to Tom Jordan, KG6TCM, Petaluma's Emergency Manager who served as the meeting's facilitator. There are currently eight community-based organizations taking part in the program. They include Canal Alliance, Community Action Marin, Homeward Bound, Marin County Cooperation Team, SF-Marin Food Bank, San Geronimo Valley Community Center, North Marin Community Services and West Marin Community Services. RCV members are not expected to be first responders when a major incident or disaster strikes Marin.

According to Adriana Rabkin, Director of Marin's Voluntary Organizations Active

in Disaster (VOAD) RCV members will be officially called out once the situation has been assessed. “Everybody was very engaged. I think they learned a lot about the process. They understood how they respond in a disaster, when their RCV operators will show up, what types of messages they might want to pass, and how we are all connected,” according to Rabkin. Each participating organization along with their respective RCV members shared their concerns and criticisms during the three-hour meeting. “I think these meetings are good and I see the need to bring these lessons learned immediately to key staff members so they will know how to communicate effectively with the RCV operators,” according to Vivian Alatorre, Office Manager for Canal Alliance. According to Michele McCourtney, Director of Operations for the San Geronimo Community Center, “these meetings are good. I think practice and collaboration and having a cadence is very important for the actual event that can happen.” Other service agencies have shown interest in becoming part of the RCV program and more amateur radio operators are encouraged to volunteer. According to Skip Fedanzo, KJ6ARL, the RCV Lead Operator, “this is a pilot program because Marin County has never been impacted by a major disaster in the lifetime of many Marin residents. We’re not in a hurricane belt, tornado alley, or flood country and we’ve hadn’t had to build a complete response recovery organization.”

1 Tom Jordan, KG6TCM

2 Adriana Rabkin, VOAD

3 Skip Fedanzo, KJ6ARL

Any license amateur radio operator who would like to take part in RCV can contact Skip Fedanzo at KJ6ARL@arrl.net

ACS/RCV Mission Statement

Mission: During national, regional, or local emergencies provide effective backup radiocommunications in support of the EOC/VOAD and Community Based Organizations (CBOs) or other non-public safety agencies within the Marin County OA when requested by competent authority.

Capabilities: Proven ability to establish and maintain radio communications between OA EOC/VOAD and CBOs during exercises including the three annual

Golden Eagle and two Great Shakeout exercises. Ability to deploy and operate portable stations as needed to establish reliable communications in areas that are otherwise out of touch with the EOC/VOAD.

Resources: Develop and maintain the resources that may be needed to support the overall mission:

1. Operators – A corps of trusted radio operators with: (1) basic skills and a commitment to establishing radio communications when needed; (2) ongoing participation, training, and practice in accurately passing message traffic using a variety of basic analog and specialized digital means.

2. Mobile stations – Individual operators routinely test and maintain their own radio transceivers and related equipment including power supplies, which can be deployed to locations otherwise lacking reliable communications with the EOC/VOAD or between two or more CBOs.

3. Relationships – Establish on-going relationships of familiarity and trust between RCV operators and with key staff of served agencies, including EOC and VOAD.

RVC Phone Number Request

In case any of you RCV members missed this email: We're building a web site for RCV. A question has arisen about whether all RCV Operators are willing to have their cell phone number shared by RCV with other RCV members – <u>but not with CBOs</u> or other potential RCV clients.

Please think about this and let me know ONLY IF YOU OBJECT TO THIS SHARING. If we hear no response from you by next Thursday 02/15/2024, that will be interpreted as your assent to share your cell number among all RCV Operators.

Thank you & 73,
Skip Fedanzo KJ6ARL

North Bay Critical Mass Report

The QSA-5 is leaving this in from last month, in case anyone missed this useful information: Among the things discussed at the previous month's North Bay Critical Mass event were tiger tails: a counterpoise for the HTs. Without a "real" counterpoise, when you are holding the HT to push the PTT, YOU are the counterpoise. Nothing personal, but you (and I) make pretty poor counterpoises. Yes, you can purchase a tiger tail (some call 'em rat tails): https://www.ebay.com/itm/152651896663 $15 for a piece of wire? If that offends your sense of adventure, it's awfully inexpensive to make your own. Dan KN6PNA asked for the length to which the wire should be cut: https://www.bridgecomsystems.com/blogs/bridgecom-official-blog/98609031-what
s-a-tiger-tail-how-to-make-one And here's a quirky Brit making one as you watch: https://www.youtube.com/watch?v=5X16I3oHDNM

Here's a YouTube clip that argues for a larger strand of wire than the simple bell wire or two-strand electrical wire: it's 16 minutes long, and he focuses only on a two-meter version.
https://www.youtube.com/watch?v=DMGXGxbn5GU

And here's how to use the tiger tail as a directional antenna: https://www.youtube.com/watch?v=DMGXGxbn5GU Well, another quirky Brit who
doesn't actually know what he's doing--but it's fun to watch him learn.

The major lesson Milt was preaching: it ain't the wattage of the radio that leads to success--it's the antenna! As he said, WWII, the Korean War and the beginning of Vietnam: the radios used to communicate on the battlefield were 1W or 2W! But the antennas were sophisticated, which made all the difference. Now, sophisticated doesn't necessarily mean complicated. An inexpensive Ed Fong up in the tree. A simple magmount on a cookie sheet. An X50 on a painter's pole. A high-gain SMA 24 whip to replace the rubber duck.

Northbay Critical Mass Winlink Report

The North Bay Critical Mass members met on March 17th, 2024, for a special WInlink presentation. The gathering was held at the Jury Parking Lot and the Marin Civic Center. For anyone who doesn't know about Winlink, Winlink, or Winlink Global Radio Email, is a worldwide radio messaging system that uses amateur-band radio frequencies and government frequencies to provide radio interconnection services. Mark Klein KM6AOW gave a terrific presentation on using Winlink. There was a very attentive group on a beautiful sunny Sunday to learn the ins and outs of Winlink from Mark. Thank you to those that attended and thank you Kathy KM6URP for the link (https://wavetalkers.com/) to what looks to be a great WinLink resource. Here's what Mark had to say regarding the event:

"My pleasure! Because of the late notice for me to fill in for Rob, I used slides for a prior class I taught that was meant more for hands on participation than a lecture venue. In talking with Milt afterwards, we think maybe we should rerun this in the clubhouse and give those interested a chance to bring their laptops and participate along. Comments?"

The gathering began with practicing the phonetic alphabet and checking into the Sunday morning net on the Simulcast system, followed by the WInlink presentation. For information on this and other repeaters see https://docs.google.com/spreadsheets/d/1siMlQr4cHAUCq6ybSt6XVpAQWRdJHEwQ_M6ZBMQpAnw/edit?usp=sharing. If you've not already programmed these frequencies into your radio, this might be a good time to revise them. If you need help with this. We can probably do this on the spot on at the monthly meeting.

Here are some photographs from the event:


BIG5


RADIO

The [Information Technology Disaster Resource Center (ITDRC)] hosts a weekly Winlink Wednesdays to practice using Winlink and the built-in templates. It's coordinated by Todd W9GRB. If you participate once you will be in the queue and will receive weekly notices through Winlink on Tuesday evening. I will be posting the weekly notices in the SFRC #winlink channel.

Amateur Radio Volunteer Support Wanted!

From Michael Fischer K6MLF:

BSIM=Big Sur International Marathon—Great radio experience ! Fabulous views! Starts before dawn! Rob and I worked it year before last—now it's your turn.

Think about it,

Michael K6MLF

BSIM 2024 is Fastly approaching, 80 days and counting. BSIM is looking for amateur radio volunteers to support this year's marathon. If you're new to the BSIM and or are interested in volunteering to operate this year's marathon, please respond back.

If you guys have any questions, comments or concerns, please email me in a new email, your questions, comments or concerns. If you know of anybody else that would be interested in volunteering, please forward this onto them and have them email me.

Amateur Radio Volunteer Support Wanted:

Do you want to volunteer for Amateur Radio Support for the Big Sur International Marathon? If you do, please email: Jeff Ackerman—KG6UYZ at kg6uyz@gmail.com for a volunteer form.

Event: Big Sur International Marathon
Area of operation: Big Sur, Ca to Carmel, Ca
Event Date: 4-28-2024
Race Start Time: 0645hrs (Approximate)
Race End Time: 1230hrs (Approximate)
Volunteer Start Time at Position: 0500hrs (Approximate)

Positions Volunteers Staff: Mile/Aid Stations, SAG & Other positions as requested by

BSIM. (Positions Assigned by Event Coordinator)

What do the positions' duties encompass:

SAG: Five Sag operators will ride co-pilot with a driver and vehicle provided by the Marathon that travel the course picking up runners that cannot finish the race for various reasons. Runners picked up by a SAG are dropped off at various drop points along the course. SAG operators and SAG drivers will work together to navigate the course to pick up runners, pickup assignments are dispatched out by Net Control. Sag operators do not drive the vehicle, the SAG will come with a driver.

Mile / Aid Station: Operators are placed at one of 13 or 14 different Mile / Aid Stations where they will be responsible for reporting any kind of race traffic that needs to make it way back to Net Control. Such information could be major medicals, minor injuries, runner pickups, rogue vehicles on the course or any other vital info that may need to get passed back to Net Control or another Mile / Aid position or SAG vehicle.

Equipment Requirements:

- SAG: Operators should bring a mobile radio (dual band) with an accompanying magnetic-mount antenna and cigarette lighter plug. Operators should also bring a portable radio with good batteries to use as a backup radio or when you're out of the SAG vehicle. In the event you should have to operate off of a portable radio in vehicle please bring an adapter cable to connect the mobile radio magnetic-mount antenna to your portable.

- Mile / Aid Stations: Operators can operate mostly off portable radios (there are a few spots that portable do not work or have bad coverage, but a mobile/base radio is also encouraged if available. Mile/Aid station operators will be able to drive to their location on course and park their vehicle at the location. Portable radios should have good batteries that can last long enough for the duration of the event, bringing a spare charged battery is always encouraged.

Food: A buffet style breakfast will be provided early Sunday Morning, To-Go lunches will be provided for volunteers venturing out onto the course. A Marathon Volunteer base wide BBQ is provided to all volunteers of the Marathon after the race finishes, the volunteer BBQ is available until food runs out.

Volunteers will also receive a Big Sur International Marathon Volunteer T-Shirt at check in.

More information is available and can be requested from Jeff—KG6UYZ at the email address listed above.

From Michael Fischer: DMR Event

Michael Fischer K6MLF via groups.io

April 6th, 11am, Marin Amateur Radio Society clubhouse, 27 Shell Rd, Mill Valley.

Here's the agenda: https://docs.google.com/document/d/12wu9Tw1VWwG1zxkDcjLHsr5tBuVhRMHMMd9suhvM7n0/edit

Here's where to RSVP for:

a free lunch,

to see the kinds of expectations we have for radio operators,

to get some light-handed training,

to sign up for (at least one!) public service event,

to (perhaps) win a raffle prize,

to meet other radio folks in Marin.

Here's where to RSVP: https://docs.google.com/document/d/1nXczB2l8pUczjGduGx54Ob-m5wLAdFu0Lmnje8K3UAQ/edit

Please add your name if you've not yet done so!

Even if you cannot attend on April 6th, that link is the place to sign up as a radio operator on at least one of the events. This is the perfect next step after regular attendance at our North Bay Critical Mass sessions.

Please come!

Cordially,

Michael

VE Examination News

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. Ken Brown will be stepping down as Lead VE. Thank you, Ken, for your service and especially for teaching me how to be a Volunteer Examiner. Jim Saltzgaber, KM6WWY, has replaced Ken as Lead VE, effective at the end of the Board meeting.

IMPORTANT NOTE: If you are upgrading to Extra-Class, the new question pool is effective as of July 1st. This means any testing dates after July 1st will use the new question pool. If you've been studying for a test date after July 1st, using an older Extra-Class study guide, you'll have to pick up a current study guide with the new question pool. You're not going to lose the knowledge you acquired through studying with the old book, but you will have to be prepared for the possibility of some different questions added to the new test (the number of questions remains the same). In short, get an updated study guide! From Jim:

The first scheduled testing session was on January 13th, 2024. The test started at 1:00pm. Our first testing session has passed, and we have three more remaining:

January 13th (Completed, we had 7 applicants, 6 successful. 4 new Technician Class and 2 new General Class).

April 13th We currently have 6 registered applicants. Note: **This is the last VE session before the current Extra Class pool expires and is replaced with a new one on July 1st.**

July 13th Third session of the year.

October 13th Fourth session of the year.
All exams are held at the MARS clubhouse. Check in is 1:00pm. Information on Exam Registration is at: Register for the Exam | Marin Amateur Radio Society (w6sg.net)
The application form can be found at: MARS VE Exam Application Form

Jim S. KM6WWY

Are Chinese Manufactured Radios Any Good?

When you say the words "Chinese radio" to amateur radio operators who have been around for a while, they'll often reply with "they're junk," or "I'd never buy one of those." Over the next few issues, we're going to look at Chinese manufactured radios, discussing the pros and cons. I should start this out by saying that there was a time in Japanese electronics history when they were considered cheap and unreliable. The Japanese learned a lesson from this consumer opinion and stepped up their design and manufacturing process. Now, Japan produces some extremely high-end electronics. China has learned this lesson as well and is now starting to produce some decent radios! So, what is the problem (or reluctance when it comes to them) with Chinese radios?

It is not accurate or fair to generalize that all Chinese radios are cheap and unreliable. China is a major manufacturer of electronic products, including radios, and produces a wide range of products with varying quality levels. There are both

inexpensive and high-quality radios manufactured in China, and the reputation of a particular product depends on the brand, manufacturing standards, and quality control processes implemented by the company.

It's essential to evaluate products individually based on their specifications, features, reviews, and the reputation of the manufacturer rather than making broad generalizations about products from a specific country. China produces a diverse range of electronic goods, and some companies prioritize quality and reliability in their manufacturing processes. Still, why are Chinese radios considered problematic?

Chinese radios, particularly budget-friendly models, may face challenges in terms of build quality, reliability, and adherence to regulatory standards. Some common issues include:

1. **Build Quality:** Cheaper Chinese radios may have inferior build materials, leading to durability concerns.
2. **Consistency in Quality Control:** Variability in quality control practices can result in units with different levels of performance even within the same model.
3. **Frequency Accuracy:** Some radios might not adhere strictly to frequency regulations, causing interference and legal issues.
4. **User Interface:** Cheaper models may have less intuitive or user-friendly interfaces compared to more established brands.
5. **Accessories:** Limited availability and quality of accessories like antennas and batteries may be a drawback.

It's crucial to research specific models, read reviews, and consider your needs to ensure you choose a Chinese radio that meets your expectations. Some Chinese manufacturers seem to have the handheld transceiver market under their control. People keep buying these radios, so they can't be that bad? I have several Chinese radios that are great. They're well made, work well, and didn't cost a small fortune. Many new amateur radios operators start off the Baofeng VHF/UHF handheld. However, Baofeng isn't the only manufacturer of Chinese radios. There are a few that own chunks of the sale market for radios. Who is the biggest manufacturer of Chinese handheld ham radios at this moment?

One of the prominent manufacturers of Chinese handheld ham radios is Baofeng. They are known for offering a variety of affordable handheld transceivers and have gained popularity in the amateur radio community. However, other manufacturers like Wouxun, TYT, Quansheng, and Radioddity also produce Chinese handheld ham radios, each with its own product lineup and features. It's advisable to research specific models and reviews to find the one that best suits your needs. Next month, we'll do a deep dive into the biggest issues with these radios, as well as look at the tiny SDR HF transceivers that are flooding the market.

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 the upcoming World Amateur Radio Day:

World Amateur Radio Day is April 18, 2024: Its that time again everyone, so set your calendars!

https://www.arrl.org/news/world-amateur-radio-day-is-april-18-2024

Amateur Radio Operators Needed for Help with Solar Eclipse Project:

https://www.arrl.org/news/amateur-radio-operators-needed-for-help-with-solar-eclipse-project

FCC Wants to Bolster Amateur Radio: The FCC will vote in November on a plan to remove outdated technical restrictions.
https://www.radioworld.com/news-and-business/business-and-law/fcc-wants-to-bolster-amateur-radio

Ham Radio May Speed Up Soon: An interesting piece from a online journal dedicated to advances in technology.

https://hackaday.com/2023/10/29/ham-radio-may-speed-up-soon/

Ham radio operators practice for emergencies, 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

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. Sorry folks, it's been a slow year at the FCC.

FCC to Require Two Factor Authentication for CORES Users: It seems that the powers that run the big show have found yet another fee to tack on to the amateur radio operators ability to operate:
https://www.arrl.org/news/fcc-to-require-two-factor-authentication-for-cores-

users

FCC To Vote on Removing Symbol Rate Restrictions: From the ARRL regarding the digital modes.

https://www.arrl.org/news/fcc-to-vote-on-removing-symbol-rate-restrictions

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-823

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/