

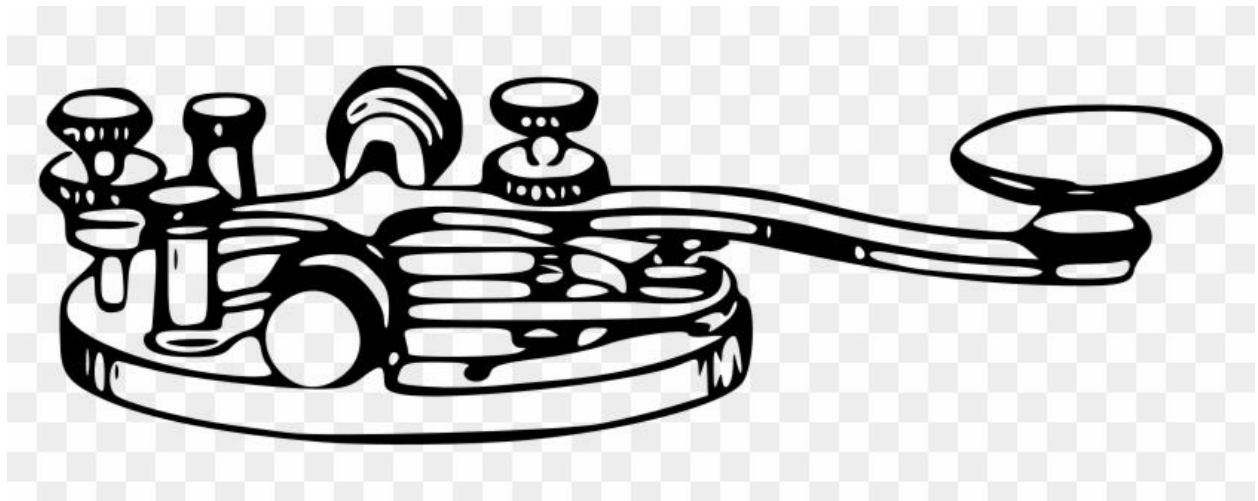


# QSA-5

## Marin Amateur Radio Society Monthly Newsletter

Established 1933

October 2023



**When all else fails, you can count on Amateur Radio**

## **From Our President:**

Fall has arrived. What better time to talk about having a Christmas party than about the time the Christmas commercials will start. We need to hear from the membership if they want to have a Christmas Party this year at the Clubhouse. If we are going to have a party then we will need volunteers to help plan, organize, set up, enjoy, and clean up afterwards.

The Club Picnic will be held on Oct 7 in Area 1 of Stafford Lake Park. Please [RSVP@w6sg.net](mailto:RSVP@w6sg.net) if you are planning to attend. Let us know how many will be in your party and if you want catered food or not.

It is time for the Membership to nominate people to be on the ballot for election to the Board. There are two seats on the Board that are up for election. Members contact the Nomination Committee with the name of the person or persons they wish to nominate. The Nomination Committee provides the names to the board. The Board insures those nominated are members in good standing and then place their name on the ballot.

That nomination committee has not been formed yet. I will be asking for 3 to 5 people to volunteer to form that committee. The Bylaws state "This committee shall prepare a list at least sufficient to fill all vacancies on the Board of Directors and to report the names to the Board of Directors not later than the directors' meeting preceding the annual meeting." To clarify, "the annual meeting" means the November 9th Board of Directors meeting. The Board wants and needs the membership involved in the elections. Please step up and be part of the process.

I want to thank Skip KJ6ARL for his continued service to the Club as its Facilities Chair. I want to give special thanks to Brian Cooley and Mike Green for their assistance in hauling off the residue of the backroom cleanup to the landfill.

I wish everyone a safe and healthy fall season.

**Ken Brownfield AB6JR**

### **From the Editor:**

It's October and fall is officially here! Now we get to look forward to those family holiday gatherings and constant reminders of this year's upcoming Christmas season. Thankfully, we can all hide out in our ham shacks, should the endless stream of holiday parties become too much. Joking aside, with the dropping of foliage due to the cold weather and a great solar cycle, this is a good time to be involved in amateur radio!

Things are moving along smoothly here at the QSA-5. We've settled into a good rhythm of receiving articles and ideas from our readers. You can thank Curtiss Kim for much of the content. He has been a life saver! The QSA-5 is still looking for story ideas, so if you have anything you want to see within its pages email us. With that said, have a great October.

[QSA-5Editor@w6sg.net](mailto:QSA-5Editor@w6sg.net)



### **New Members:**

Paul Fitzgerald KE6FGK - Mill Valley

Christopher Wong N6JGC - American Canyon

Richard Skaff KI6RIQ - Mill Valley





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



## **Marin Amateur Radio Society – Board of Directors Meeting**

**Sept 14, 2023**

**Call to Order:** 1930 hrs.

### **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

**Other Members:** David Sneed WD6L, Skip Fedanzo KJ6ARL, Curtis Ardourel WA6UDS, Pam Witherspoon N6PDW, Larry Bradley KK6QPE, Milt Hyams KM6ASI, Charlie Benet AI6TT

**Adopt agenda:** MSC

**Approve minutes of Aug 10, 2023:** MSC

**Secretary's Report:** The July board meeting minutes in QSA-5, Repeater folders created in club Google drive and current NAARC certificates filed in the appropriate folder.

**Treasurer's Report:** Financial report in QSA-5. Created a new category for grant to NBAM for 2024 projects.

### **Committee and Other Reports:**

**Membership:** Curtis Ardourel - 153 99% of last year's. 1 new member since last month.

**Facilities:** Skip Fedanzo --Nothing new. We need 2 members with trucks to volunteer to go to the dump. There is approximately 2 truckloads of stuff from the garage clean out. Will do an email blast to recruit trucks. Steve T., Winter is coming, where is preparation for flooding and drains, trees, etc.? Skip – we need to clean leaves from west side of building drains. The erosion problem is under control. We do need to weed whack the back.

**Public Service:** Pam Whitherspoon – Saturday Dipsea Breast Cancer Hike and MCBC Adventure Revival. We will be spread a little bit thin but will be OK. We have 2 more events for this season, Breast Cancer Prevention Peak Hike 10/14, and Escape from Alcatraz 10/22. That will conclude the 2023 Public Service season. We have not started planning for 2024 season but will shortly.

**Technical:** Milt Hyams – Dan emailed yesterday, except for patch cord repeater has been fabricated for Dillon Beach water tank. Schedule to be resolved within a week or two. HF Antenna from SR red cross that was earmarked for the clubhouse is now in our club house. It has been stored in the garage until ready for installation. Need to obtain a mast and coordinate with tenant to put up a 20' aluminum mast for it. It will be very helpful if anyone has or can obtain the mast.

**VOAD/RCV:** Skip Fedanzo – RCV Planning meeting tomorrow at Los Gamos to determine RACES/RCV ACS group composition. Will determine where Adriana Rabkin and VOAD will be in activation scheme. Also Collaborating with RACES for Great Shakeout communication drill. RACES will do am, RCV with afternoon deployments.

**VE Testing:** Ken Brownfield– 2 positive, 2 possible (info sent) for next VE Test 10/14.

**NBAM:** Jeff: We have recently finished an NBAM information video, as a charter item in our grant to do a video for high level administration. The video will be shown at our leadership meeting on 9/23. It will be available for any group that wants a presentation. We will discuss whether to put it up on NBAM website or link to it from the website. It is a nice, quick intro to what ARED mesh can do.

Hopefully it will open a door or help an organization get their arms around what it might or might not do. We have an intensive training on October 28th, all day. If you know anyone who would like to be involved with NBAM in implementation at CBO's, Government agencies, whatever, we would like to get people up to speed. Salvation Army in Petaluma will have full blown AREDN mesh site. Hoping that this will kick off activities in Petaluma. Petaluma will probably become the poster child for Mesh. Looking to get Petaluma Fire onboard. And to get more people active to kick up some additional interest. Skip – would like to use Mesh video with Adrian (VOAD) and CBO's. Jeff – it will be available on the web site. Kudos to Brian Cooley for putting the video together singlehandedly. It is excellent and of extremely high quality. Curtis – Need to discuss where on MARS website should be put video. Should we have an NBAM page on our website. Jeff – It would be excellent to have a link to the NBAM website on MARS website. He will send information to Curtis via Email. Ken aired the video at the conclusion of the Board Meeting.

### **Old Business:**

1. No old business to discuss.

### **New Business:**

1. Club picnic Tom – Only one response to help request. He will be contacting people who had roles in last year's picnic to help with this year. Anyone here who helped last year and can help again, please contact Tom after this meeting, he will be more engaged next week. Email notices for both assistance with organizing



and helping at the picnic, and for information and RSVPs were discussed. Curtis – will send email blasts, as appropriate. He will put an assistance request email together. Steve noted that he has been doing picnic announcements on the MARS and RACES nets and will announce our need for more involved members. Tom noted that this can and should be more than just a picnic. We will be hosting some rangers and park staff/management in attendance there. We are hoping to do some measure A oriented Ham radio demonstrations in the future with the Parks department. Ken – we desperately need a head count, attending, and if they are bringing food or eating the catered food that will be provided. Milt added that we need more people to help set-up, break down, and clean-up.

**2. Nominating committee for Board of Directors election:** We need to replace 3 positions. Curtis will determine who will be up for re-election based on last year's elections. Need to get a nominating committee together. Announce the slate of candidates at the November Club meeting. The nominating committee can be regular club members. Curtis will email those board members who are not up for re-election, and they will become the nominating committee.

**3. VE session** Ken Brownfield – info: [exams@w6sg.net](mailto:exams@w6sg.net); next exam: 10-14-23. If anyone is interested in VE exam info, an email to [exams@w6sg.net](mailto:exams@w6sg.net) will be returned with that information. Cram Sessions will only be held when requested by RCV CBO's or other interested attendees.

**4. Bids for Clubhouse painting discussion** Skip – reviewed the two painting proposals that we received. It was very hard to compare them as they did not cover the same things such as pressure wash, primer, etc. Bids were requested to cover painting the building front and east side. One included an additional bid for the remaining part of the building. The low bid contractor had a check list of things that should be included and seemed more complete. Bruce noted that one is a newer contractor and had fewer Yelp reviews.

After much discussion of the project and bids, it was determined that we need additional bids, and have bids for the entire building. Skip noted that he had 5 painting contractors lined up to bid but only 2 came through. McCarthy painting was mentioned as a reputable painting contractor. We also need to include a closer set of specifications in our bid requests so that bids are comparable. Milt felt that the statement of work for the lower bid contractor would be a good ruler

to compare other bids. We also need to set a color scheme. It was decided that more bids must be obtained. And that we need to determine the source of funds to pay for this project. The Board will ask at next general membership meeting if we have a member who is a contractor and can help evaluate these. Possible contractor-members were discussed. Rich noted that we may be pushing this into next year. Consensus was that while important, painting is not an emergency requirement. The painting project was tabled until next month's meeting, and Skip will work on getting additional bids during that time.

### **Good of the Order**

**Executive Session:** Not needed.

**Adjourn:** MSC TO ADJOURN @ 21:46

**Next General Membership meeting on Oct 6, 2023.**

**Next Board meeting on Oct 12, 2023.**

# Marin Amateur Radio Club Profit and Loss

**January - September 2023**

	TOTAL	
	JAN - SEP, 2023	JAN - SEP, 2022 (PY YTD)
Income		
Auction Income		60.00
Donations	1,699.17	130.01
Dues	7,074.75	6,305.00
Field day refund		625.00
Income from club activities		90.00
Interest Income	792.77	
Public Service Refund	450.00	450.00
Rent	23,400.00	23,700.00
Sales of Product Income		24.69
Unapplied Cash Payment Income		250.00
<b>Total Income</b>	<b>\$33,416.69</b>	<b>\$31,634.70</b>
<b>GROSS PROFIT</b>	<b>\$33,416.69</b>	<b>\$31,634.70</b>
Expenses		
Accounting	1,155.00	
Awards	299.99	
Car & Truck	2,327.80	637.04
Car & Truck Gas	258.02	177.39
<b>Total Car &amp; Truck</b>	<b>2,585.82</b>	<b>814.43</b>
Field day	659.26	2,184.67
Garbage	435.54	382.72
Insurance	5,537.00	7,061.25
Comm Van Insurance	2,721.00	
<b>Total Insurance</b>	<b>8,258.00</b>	<b>7,061.25</b>
Legal & Professional Services		575.00
Meals		2,208.00
Other Business Expenses	104.93	

Public Service Expense	1,379.96	3,168.19
Reimbursable Expenses	2,448.73	2,222.86
Repair & Maintenance		1,452.72
Repairs & Maintenance		2,880.00
Repeater	1,567.50	
Taxes & Licenses	25.00	3,950.64
Telephone		94.47
Uncategorized Expense		275.00
Utilities	3,417.12	2,757.05
VE Session	129.00	215.00
Water	797.25	524.26
<b>Total Expenses</b>	<b>\$23,263.10</b>	<b>\$30,766.26</b>
<b>NET OPERATING INCOME</b>	<b>\$10,153.59</b>	<b>\$868.44</b>

## Marin Amateur Radio Club

### Profit and Loss January - September, 2023

#### TOTAL

JAN - SEP, 2023

JAN - SEP, 2022 (PY YTD)

Other Income		
MESH Grant Income	33,500.00	
<b>Total Other Income</b>	<b>\$33,500.00</b>	<b>\$0.00</b>
Other Expenses		
MESH Grant Disbursement	122.96	
<b>Total Other Expenses</b>	<b>\$122.96</b>	<b>\$0.00</b>
<b>NET OTHER INCOME</b>	<b>\$33,377.04</b>	<b>\$0.00</b>
<b>NET INCOME</b>	<b>\$43,530.63</b>	<b>\$868.44</b>

# Marin Amateur Radio Club Balance Sheet Comparison

As of September 30, 2023

TOTAL

	AS OF SEP 30, 2023	AS OF SEP 30, 2022 (PY)
ASSETS		
Current Assets		
Bank Accounts		
B of A Building account - 8795	5,948.61	6,712.46
B of A General account - 4328	82,810.45	13,146.08
CD	0.00	25,000.00
Money Market	0.00	5,000.00
VE Session Cash -	129.00	
<b>Total Bank Accounts</b>	<b>\$88,630.06</b>	<b>\$49,858.54</b>
Other Current Assets		
Uncategorized Asset	-95.00	-35.00
<b>Total Other Current Assets</b>	<b>\$ -95.00</b>	<b>\$ -35.00</b>
<b>Total Current Assets</b>	<b>\$88,535.06</b>	<b>\$49,823.54</b>
Fixed Assets		
club house- 27 Shell Rd. MV	58,983.00	58,983.00
<b>Total Fixed Assets</b>	<b>\$58,983.00</b>	<b>\$58,983.00</b>
<b>TOTAL ASSETS</b>	<b>\$147,518.06</b>	<b>\$108,806.54</b>
LIABILITIES AND EQUITY		
Liabilities		
<b>Total Liabilities</b>		
Equity		
Opening Balance Net Assets	124,400.00	124,400.00
Retained Earnings	-20,412.57	-16,461.90
Net Income	43,530.63	868.44
<b>Total Equity</b>	<b>\$147,518.06</b>	<b>\$108,806.54</b>
<b>TOTAL LIABILITIES AND EQUITY</b>	<b>\$147,518.06</b>	<b>\$108,806.54</b>

# LIFE IS SIMPLE



## Checking in on the DMR nets without a radio

This comes from Curtiss Kim and is a very interesting piece. Curtiss has been contributing a great deal to the QSA-5:

Recently Sandy and I returned from a two-week trip to Europe visiting such places as Lake Como in Italy and traveling down the Rhine River from Basel, Switzerland to Amsterdam, The Netherlands. Whether on the shores of Lake Como near Milan or on the Rhine River moving toward the North Sea I was able to check in on the MARS Tuesday night DMR net and the NorCal-DMR net on Thursday evenings without the use of a radio. How times have changed.

Four years ago, on a trip to Australia and New Zealand I carried my Ailunce HD-1 handheld, a MMDVM modem and a laptop computer to talk on the DMR

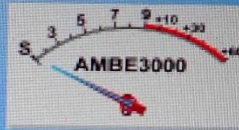
channels. The setup was cumbersome having to program the MMDVM with internet information from every location I transmitted from. Whether a hotel or coffee shop I need the name of the Wi-Fi and the password to program into the modem before transmitting. I was able to talk to a fellow DMR enthusiast in San Rafael from both Australia and New Zealand. Often it was time consuming and frustrating if I couldn't get the Wi-Fi to cooperate. The story was completely different this time around with the BlueDV software and accompanying dongle.

Once logged into the internet I was ready to go. BlueDV was written by David Nieuwegien, PA7LIM, who lives in Utrecht, The Netherlands. Infact Nieuwegien says he wrote the software for fun and is not affiliated with any major radio company or business. The software is downloaded for free off the internet but the dongle you need costs about \$100. Beam up the software program on the laptop, plug in the dongle and you're off and running. The software allows you to program any DMR channel and has a column for "last heard" to keep track of the call sign from the radio operator you are QSO-ing with. To talk, you simply tap the space bar and once again, to listen.

The Viking vessel we were on was using the VSAT Satellite system for the internet. You are forewarned about problems caused by data bandwidth and latency. Infact travelers on the Viking boat rate the ship's WI-FI as lousy to crappy to oh-please. But it worked perfectly with BlueDV. Conversations were digital audio clear, and no interference was detected since the ship was cruising on the water at the check in times. I also made a few DMR contacts while on the Rhine just to logged them as made from a moving boat. One added feature is that you avoid TSA officials asking questions about the handheld radio in your luggage.

Lastheard AMBE BM lookup APRS chat

[help](#)



DMR

31068

G

Error 9123

Fusion

DG-ID 00

☐ VOX

Fusion Gain

hang 3

spk 5

vox 7

mic -5

DMR Gain

DSTAR Gain

spk 3

spk 5

mic 4

mic 5

DMR

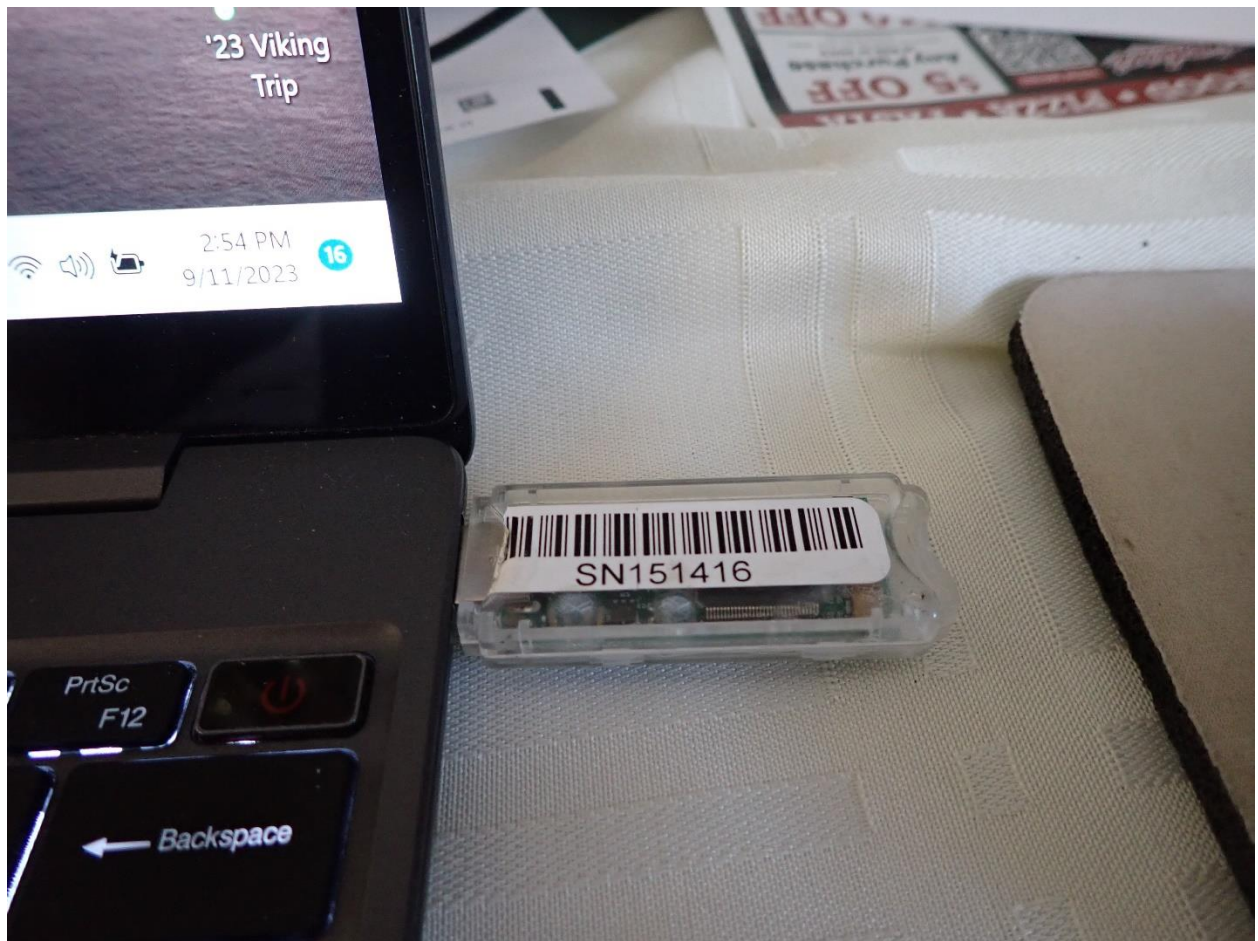
DSTAR

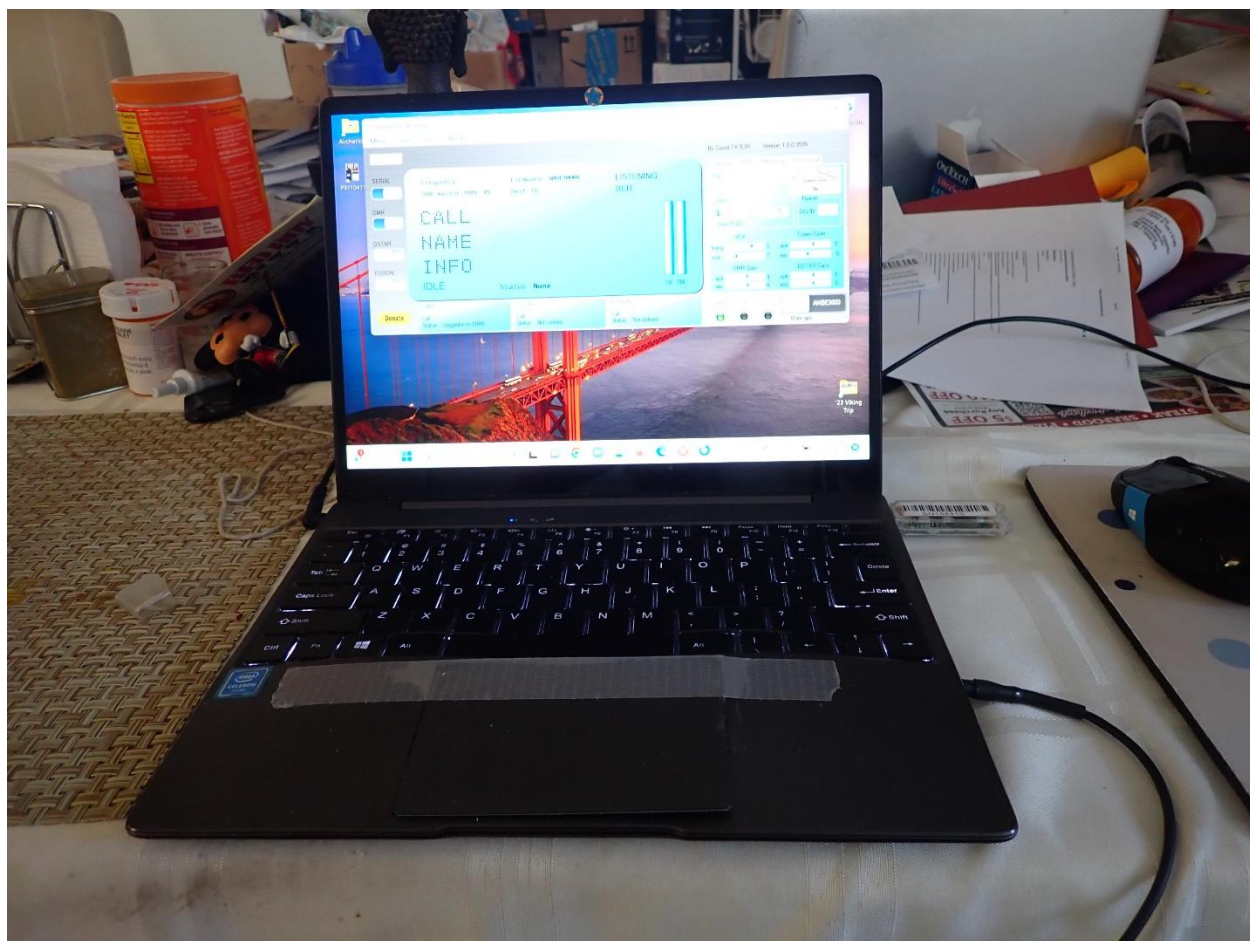
FUSION

AMBE3000

☐ Mute spk











# **Marin Amateur Radio Society News**

## **MARS Club Picnic Saturday 7 October 2023 From 11:00 AM to 5:00 PM Stafford Lake Park Area 1 Novato California**

The Marin Amateur Radio Society will once again be celebrating our annual picnic – and this year we are including a GOTA capabilities demonstration for County of Marin staff. This year we will be at Stafford Lake Park in Novato. We have professionally made Barbeque available, meat and sides (menu and picnic guide document will be provided to those who RSVP). We will also have water and sodas. If you would like to contribute to the food, please email Tom KG6TCM at [Tomj415@gmail.com](mailto:Tomj415@gmail.com). Parking is free; however the park does not allow dogs.

### **What do I need to do to attend?**

We need a head count so we can ensure that we have enough for everyone. Please let us know by emailing us at [rsvp@w6sg.net](mailto:rsvp@w6sg.net)

### **A few words on protocol and etiquette:**

- Do register for and attend the event if possible. Many members make the mistake of thinking these seemingly unimportant events are not useful, socializing with each other on blue sky days will help us all operate better together when it really counts.

- Do wear your club ID badge or one provided at the event.
- Do bring family or non-Ham friends if they are interested.
- Do feel free to grill your own burgers, franks, or whatever – please be prepared to make that process self-maintained.

If you have additional questions, please contact Tom KG6TCM at [tomj415@gmail.com](mailto:tomj415@gmail.com)

---

### **How can I help?**

The main reason for having the picnic is to get together outdoors in the sun and not in little zoom rectangles. It is also an opportunity to meet the Marin community and introduce them to Amateur Radio. We are looking for a few volunteers to help us put this all together. When you RSVP please let us know if you are willing to help in one or more of these categories.

- Radio operators: We are looking to set up and operate a station at the site. We are also planning to set up a mesh node.
- Greeters: We will be inviting the park rangers, local officials, the media, and of course your families. Those who don't already know us will feel more comfortable if someone welcomes and orients them.
- Setup and cleanup. In 2022 we had about 50 people attend the picnic, and we are expecting something near that this year. We need a few folks to come in early and help set up the area. We will also need a few to clean up after so we leave the park as we found it.





## Pickup Trucks Needed

Good news! The MARS backroom cleanup last month succeeded, and we sent several truck loads to recycling. Unfortunately, we still have a couple of truck loads worth of junk and trash to haul to waste disposal (aka “the dump”).

If you have a pickup truck and can haul away at least some of the materials MARS will reimburse you for any disposal fees. Someone will help load/unload the material. We need to get this done before it starts to rain!

We also need a couple of volunteers to help load and unload the pickups.

If you can help, please contact Skip Fedanzo KJ6ARL at [drferret@comcast.net](mailto:drferret@comcast.net).

### **Our mailing address is:**

Marin Amateur Radio Society

PO Box 6423

San Rafael, CA 94903-0423

# RCV News

## 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.



# **RCV Operators VIRTUAL Meeting**

## **Agenda RCV Operators Meeting**

### **RCV Operators VIRTUAL Meeting**

The monthly RCV Operators meeting was held on Monday September 25th at 1730.

#### **Primary Agenda items are:**

1. Great Shakeout 2023 exercise plan is in the works. It will be distributed along with CBO assignments as soon as we hear that CBOs are on-board with message drafting and working with on-site RCV operators.
2. Work continues bringing RCV and RACES under a common ACS umbrella. One consequence is RCV and RACES both need to draft mission statements. A very first draft of RCV's mission statement is attached.

#### **Question: What do you think of it?**

3. At various times members become inactive RCV members for a period of weeks to months.

#### **Question: How long do we keep an inactive RCV member on the roster?**

#### **4. Volunteers needed:**

- a. Help find simplex path(s) out of the Marin City/Sausalito area.
- b. Become the MESH experts for RCV.
5. Other topics?

**Next meeting is October 30th, 2023, on Zoom. Agenda, relevant documents and Zoom login to follow.**

## **Latest RCV Field News**

### **Marin City Communications**

During the August 19<sup>th</sup> exercise we uncovered the considerable difficulty of getting a simplex radio signal out of the Sausalito and Marin City areas. As a result, the consensus was we should try at least two experiments:

1. Try send and receive on simplex with different antennas (Yagi or high-gain verticals) to one or more sites in Central Marin.
2. Clearly establishing whether the MCCT site and some locations in Marin City can reach Fire Station #9's UHF repeater (442.125 +146.2).

So, the question du jour is what days of the week or weekend (and time) are best for you to help with this?

**Stay safe & 73,**

**Skip**

## Marin RCV UHF simplex frequency update

This was sent out from Skip Fedanzo, KJ6ARL, RCV Lead Operator. We are changing today's test UHF simplex from 446.675 (RACES Tac 3) to 446.9000 (Tac 4). Both should be NO PL and preprogrammed. Monitoring this morning indicates repeater traffic on 446.675 is constant. Sorry for the late update...Skip

## RCV Sunday Net Script

### Marin Radio Communications Volunteers (RCV)

**09:45 am Sunday Weekly Roll Call Net UHF 447.175 MHz, - PL=156.7 Hz**

#### **SCRIPT:**

QST QST QST This is the Marin Radio Communication Volunteers (RCV) 9:45 am Sunday roll call on the UHF Big Rock repeater at 447.175 MHz with *negative* offset and PL of 156.7. For information on this program please contact *Skip Fedanzo* at [kj6arl@arrl.net](mailto:kj6arl@arrl.net)

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

This net meets every Sunday morning from 9:45 to 10:00 AM local time.

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

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

*[Handle any emergency or priority traffic]*

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

Net Control Operators rotate each week. If you wish to volunteer for Net Control on any Sunday in [NEXT MONTH], please let net control know the week: 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, or 5<sup>th</sup> whenever you check in to the roll call, **AFTER THIS NET HAS COMPLETED AND SIGNED OFF. DO NOT OPEN OR ATTEMPT TO EDIT THE NET LOG SPREADSHEET DURING THIS NET.**

I will now start the roll call. [Use roll call spreadsheet, log all stations checking in]

**After completing the roll call:**

This concludes the roll call as I have it. Are there any late or missed members?  
[Log all missed and late check-ins.] Are there any Guest check-ins?

[TIME PERMITTING] Does anyone have any RCV news or items for the good of the net?

*[Handle any RCV news or other items]*

With no further traffic, this concludes the Sunday RCV Roll Call Net. The next RCV Sunday net will be at 9:45 am (*date of next net*)

Thanks to everyone who participated in this morning's net, and to the Marin Amateur Emergency Communications Unit (W6ECU) for use of this repeater. This is *your name, your call sign*. This repeater is now returned to normal operations.

## **North Bay Critical Mass**

### **September Critical Mass Agenda**

Sunday, September 17, was our in-person NB Critical Mass gathering at the Jurors' parking lot behind the Marin Civic Center.

It was also the day after a public service double-day: the MCBC Adventure Revival and the Breast Cancer Funds Dipsea Hike. Doughnuts were supplied for the truly committed amateur radio ops.

The agenda:

- Our usual phonetic alphabet practice—this week it'll be your favorite historical character: Nefertiti? Napoleon? Constantine? Washington? Mozart? Tchaikowsky? Up to you. A special prize will be awarded to the person who chooses the longest and most difficult-to-spell name.

- We'll give an introduction to APRS tracking using two-meter radios. If you want to do some advance prep, go to [www.APRS.fi](http://www.APRS.fi) and search for K6MLF, NZ6J or K6DRK.
- We will riff from there to talk (briefly, depending on our attendees' familiarity) about packet digital mode, again using 2-meter radios
- We will practice a reprise of the MCBC Adventure Revival event from the day before, passing both spontaneous as well as written traffic.

Information provided by Michael K6MLF

## North Bay Critical Mass Report

Well, as expected; there were two public service events yesterday and therefore the Critical Mass turnout was light. BUT you should have been there for the phonetic spelling contest! Paul, the winner by popular vote, took home a new Baofeng ht.

Not to worry, we few learned a lot from each other--the principal topic was APRS tracking using 2-meter radio signals to telegraph speed, direction and route of travel to the internet so that it can be displayed on a computer screen--or a smart phone, even.

Trackers; iGates; digipeaters. Doug Kaye K6DRK is working to build all three. Take a look at the photos. And check out this link to APRS.fi to see an example of tracking K6MLF-10, a 1-W Sainsonic APRS tracker:

<https://aprs.fi/#!call=a%2FK6MLF-10&timerange=86400&tail=86400>

When you hover your cursor over each red dot, you can see which iGate received the signal and forwarded it to the internet. Doug's vision: to

build multiple iGates and position them around the county so that those long gaps between red dots can be minimized. Without better coverage, you see that the "grain" of the tracks is pretty coarse--too coarse to be useful, say, in a public service event.

In addition to dedicated trackers, Anytone and Yaesu sell FM and DMR hts that include APRS tracking capability--at around \$400, they seem pricy. But compared to the \$12Gs that the Motorola portable emergency responder handhelds cost, what a bargain! Check out the two reviews in the current QSL magazine.

On a non-radio topic but of interest to those of us who hike the trails of Marin or who go out in the field for MARS' public service events, add this item to your go-box: <https://tickkey.com/> I have used it and OH BOY is it a game-changer.

As you see in the photos, we few were Doug K6DRK, DirckKM6VKQ, Milt KM6ASI, Gerald W6NOV, Paul KM6VBM, James KI6RGP and myself. An estimable group, for sure.













## VE Examination Report

The Marin Amateur Radio Society's VE Program is an extremely important component of amateur radio. The national program MARS is a part of allows member radio clubs to administer licensing tests on behalf of the FCC. What this means to people getting into ham radio is that there are more test locations and a more flexible schedule for taking the license exam. We have two people signed up for the October 14<sup>th</sup>, 2023, session, and two possibles as of our last MARS board meeting.

MARS President, Jen Brown, runs our VE (Volunteer Examiner) program. The MARS VE program has had three of the four scheduled testing sessions. The next test session is scheduled for October 14<sup>th</sup>, 2023, at 1:00pm. The exam session takes place at the MARS clubhouse: 27 Shell Road Mill Valley CA 94941. Those

taking their tests should arrive early (30 minutes) and be prepared. Examinees will be required to bring valid identification and their FRN number. Those examinees who reserve a place on October 14<sup>th</sup> will be emailed with specific instructions regarding identification and the procedure for getting an FRN number. What is an FRN number? Before getting your ham radio license, you must first register for your FRN. An FRN, or FCC Registration Number, is a ten-digit number that identifies your business dealings with the FCC. The FCC requires a permanent address, so they can reach you if need be.

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

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

## **License Renewal Can Be a Hassle**

This was brought to our attention by Ken Cochrane: "License renewal is not for the faint of heart. Kim and I just renewed, and we spent over an hour with the FCC help line. I asked her if everyone had such a hard time and she said yes. Just start early!" We're sorry you and Kim had such trouble with the FCC Ken. Thanks for the heads-up.

# 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 regards Hurricane season:

**Hurricane Lee: Radio Amateurs and Nets Activated:** Another case of amateur radio coming to the rescue when communications are needed.

<https://www.arrl.org/news/hurricane-lee-radio-amateurs-and-nets-activated>

**Solar Eclipse QSO Party Seeks Amateurs and Radio Enthusiasts for Global Experiment:** This sounds very interesting.

<https://www.arrl.org/news/solar-eclipse-qso-party-seeks-amateurs-and-radio-enthusiasts-for-global-experiment>

**Tropical Storm Hilary: Amateur Radio Activates:** This is why it is important to have amateur radio operators.

<https://www.arrl.org/news/tropical-storm-hilary-amateur-radio-activates>

**Devastating Hawaii Wildfires Prompt Response from Amateur Radio Emergency Service:** The ARRL was monitoring the terrible wildfires in Maui.

<https://www.arrl.org/news/devastating-hawaii-wildfires-prompt-response-from-amateur-radio-emergency-service>

**No cellphone? No problem! The vintage radio enthusiasts prepping for disaster:**

Another reason amateur radio is so important!

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

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

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

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

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

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

[https://www.southernminn.com/faribault\\_daily\\_news/news/ham-radio-operators-practice-for-emergency-build-community/article\\_c305405c-1446-11ee-9e1c-17bef3ed0921.html](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. Apparently, there is no FCC news as of late.

**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-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-796>

**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/>