FEEDBACK

The Official Newsletter of the
Georgian Bay Amateur Radio Club

June 2023

President's Message

Marvin VE3VCG

In Canada, Preparedness Week this year, is or was May 7 to 13. I had planned to set up an amateur radio demonstration "booth" at some public venue this week. Regrettably personal matters made doing that all but impossible so I put it aside for another time.

I feel that preparedness week offers our club a golden opportunity to promote amateur radio in general and our club specifically. This official government sponsored event gives us both the reason to talk about amateur radio and nicely produced, professionally printed materials to hand out.

This is also a point in time when we should be reaching out to our community and specifically to local municipal governments, and specifically to those who are responsible for executing their municipal emergency plan.

Every municipal government is required by law to have an official emergency plan. The person who has the ultimate authority for the emergency preparedness in any municipality is the "warden". Typically, this will be the mayor. Each year every municipality is also required to "review" their emergency plan. This is sometimes done by creating a simulated emergency event and walking through each aspect of their emergency preparations and planned response.
These simulated emergency response events are generally table top exercises where department heads and involved staff, report on their readiness to meet the requirements of the official emergency plan.
Because amateur radio communications is part of every municipal emergency plan, local amateur radio volunteers should be invited to participate in these yearly events but often are not invited.

This Month

2023/ 2024 Executive

President …..… Marvin VE3VCG
Vice-President…..... Tex VE3USI
Treasurer……..…Doug VE3DGY
Secretary……..… Dan VA3DNY

Club Constitution

By-Laws

The reason why amateur radio volunteers are often not invited to a municipal Simulated Emergency Test's (SET's) are numerous. At the top of the list is the dominant reason, a lack of understanding about how amateur radio is used in emergencies and what is required to maintain readiness.

It has been stated by various club members that over the last 40 years our local ARES group was never called on to deploy. This is of course understandable given that we live in an area where there are few of the large scale emergency events. This of course is a good thing. However, on the other side of that coin is something not so good, a dismissive attitude about the need for emergency communications.

As I see it, learning and practicing emergency communications develops a skill set that should make us each better operators. The bonus of course is that if we are subjected to an emergency event, we will be ready to just get on the air and work the emergency effectively and with confidence.

Hopefully we'll continue to enjoy the benefits of living in such a beautiful, peaceful safe and secure part of the world. On preparedness week we're told by our government(s) that it is good idea to plan ahead for a time when perhaps the unexpected changes all that and we really are confronted with an emergency. Food for thought.

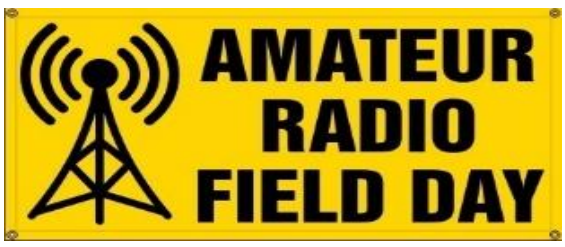
Field Day is a great opportunity to gain good on the air experience in a supportive fun environment. However, you can also get that some kind of experience and support being one of our club Net Controllers. Our club net is on the air on our repeaters VE3OSR (Owen Sound) and VE3GBT (Paisley) every week on Wednesday at 7:30 (19:30) with a 73 round on HF at 3.783.

To volunteer as a net controller please contact the Netmanager . We'd love to have you in our roster of net controllers and you are guaranteed to enjoy the experience. Marvin VE3VCG

Local EMCOMM Directory

Name	Winlink Address	Hamshack Hotline#
Bernie	VE3BQM@winlink.org	
DOUG	VE3DGY@winlink.org	
FRANK	VE0GUF@winlink.org	
MARVIN	VE3VCG@winlink.org	
NORM	VE3NBJ@winlink.org	
RICHARD	VE3OZW@winlink.org	6100000814
ROB	VE3RWY@winlink.org	6100000753
TOM	VA3TS@winlink.org	6100001824

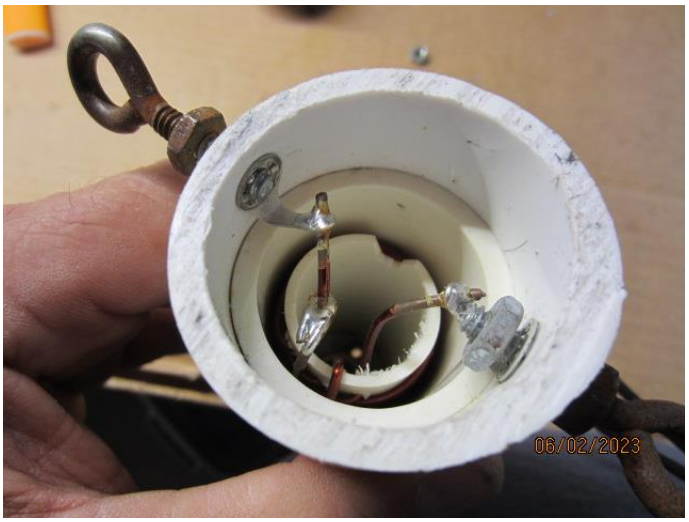
Vara HF Download



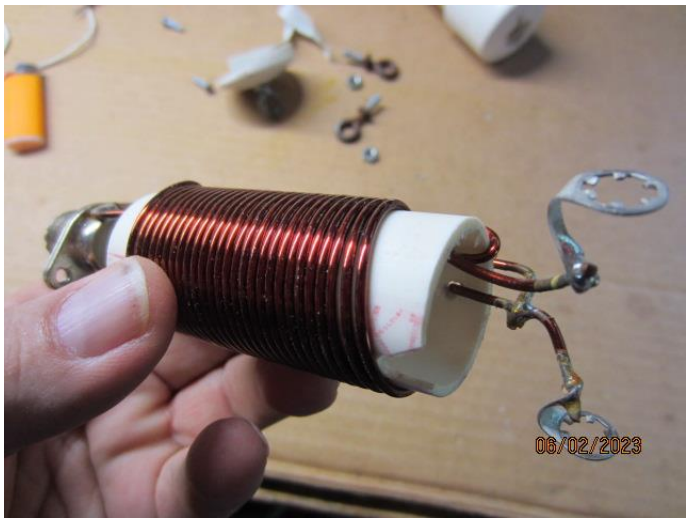
Balun Repair

Tom VA3TS

As I was getting ready for fieldday, I took out the 2 caged dipoles I have and tested them out to see if they were working. It turns out they were but I felt they were a bit too heavy for practical emergency use. So off to the junk box and found a couple of 1:1 balun's which certainly seemed to fit the bill. One of these baluns had something bouncing around inside it. Not sure where I got these, maybe an estate sale or fleamarket or some such, the symptom sure seemed like the internal nut on the eyebolt had come off or fallen off when the eyebolt was turned out. But for whatever reason, the balun is not useable in this condition. Out came the hacksaw and I cut the top off the balun to have a look.



Sure enough, the nut is off the screw and so cannot be tightened. This balun, like most others, are rugged and not prone to failure and so is a good candidate for refurbishment. So, I took all the internals out and it was easy to see that there was no damage to the balun itself



I tested it with an antenna analyzer by placing a 50 ohm carbon resistor across the ring terminals and connecting the other end to the analyzer. The results were good, 1.5 : 1 and a resistance of 50 ohms on all hf bands.

Off to the hardware store and I found 1 1/4" PEX fittings and pipe that are identical to the ones used. About $2.50 for each end cap and about $2 per foot for the pipe. Using the SO239 on the balun I used that as a template to make a new mount in the new cap and likewise on the other end for the ring bolt to hold the balun up in the air. *This pipe would also make a great holder for a line isolator, I have some pipe to spare.*

Here are the end pieces finished. The SO239 on the balun had been threaded with a tap and so nuts were not needed.

This picture shows the end position of the balun in the pipe and now you can determine the final location of the mounting eyebolts

I used a bit of epoxy to position the nuts on the ring terminals to hold them in place during the final assembly. The holes were drilled in the pipe and also the cap, I did a dry run to sight the holes drilled so the eyebolt will screw into the nuts.

This means the whole thing can be assembled and glued together.

Remember, you only have on shot at this so make it a good one by doing a dry run.

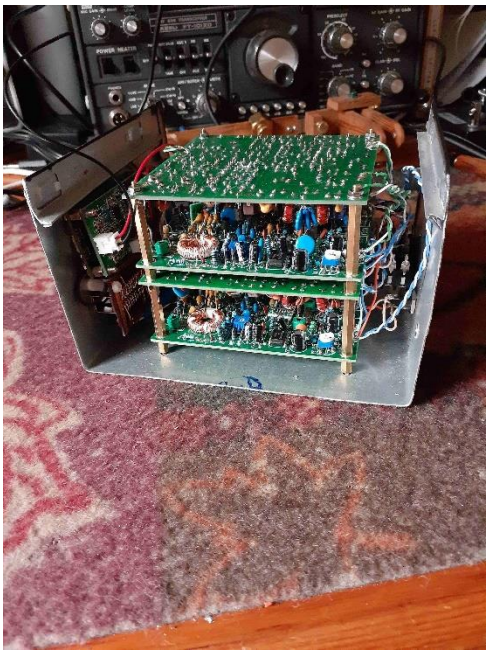
My solution to this issue was to add one more nut to each side to securely fasten the eyebolt to the cap but still allow the antenna wire to be added.

Tip…Use stakons for the antenna wire that will pass through the eye. Since this is a fieldday antenna, permanent connections are not required and will also allow the balun or the wire to find other uses. I spread the eyebolt slightly so the flat stakon could be easily removed… 73

The NorCal 40 by Don VE3IDS

In 1993 the NorCal QRP radio club in California put out a kit called the NorCal 40. It was designed by Wayne Burdick N6KR, who went on to establish Elecraft with Eric Swartz WA6HHQ in 1998. The NorCal 40 was a 2 watt 40 meter CW rig with a vfo, RF gain control, RIT, and crystal filter in the IF and was very popular. The receiver is very good, a superhet not a direct conversion. You can see that the K1 and K2 rigs have their roots in the NorCal 40.

In 2018, for the 25th anniversary, there were a group of hams that contacted Wayne to ask permission to do a group build of the NorCal 40. Wayne agreed and gave his blessing as long as it was not done as a kit or completed build for sale and profit. The group drafted up gerber files which you can use to order printed circuit boards quite cheaply. The project was intended to be more of a scavenger hunt than just assembling a kit. At the time you could get 5 bare boards for $5 and $5 shipping. Not bad, $2 per board for double sided silk screened boards. I ordered the minimum 5 boards and received 6. I have put some of them to use. I built 4 different versions, for 80, 40, 30, and 20 metres. Rather than 4 separate little radios, I made up a switch harness so I could have 4 radios with one set of controls and jacks. I added a frequency counter module as well. It doesn't count the receiver frequency as the local oscillator is different for each radio. I simply sniff the transmitted signal. The vfo range is limited so you can't get out of the band so the TX frequency is all you need for logging. It was a fun project but it took more time than one would think. Gathering all the parts from various sources, matching crystals, and breaking new ground getting the other bands functional was rewarding. I have had QSOs on all 4 bands with it and it sounds quite good on the air. The Gerber's are still available if someone wants to go down this rabbit hole hi hi. I can point you in the right direction for all the files and docs if you are interested.



73 and happy building! Don ve3ids

Things I have learned

1. When one door closes and another door opens, you are probably in prison.

2. To me, "drink responsibly" means don't spill it.

3. Age 60 might be the new 40, but 9:00 pm is the new midnight.

4. The older I get, the earlier it gets late.

5. When I say, "The other day," I could be referring to any time between yesterday and 15 years ago.

6. I remember being able to get up without making sound effects.

7. I finally got eight hours of sleep. It took me three days, but whatever.

8. I run like the winded.

9. I hate when a couple argues in public, and I missed the beginning and don't know whose side I'm on.

10. I don't mean to interrupt people. I just randomly remember things and get really excited.

11. When I ask for directions, please don't use words like "east."

12. Sometimes, someone unexpected comes into your life out of nowhere, makes your heart race, and changes you forever. We call those people cops.

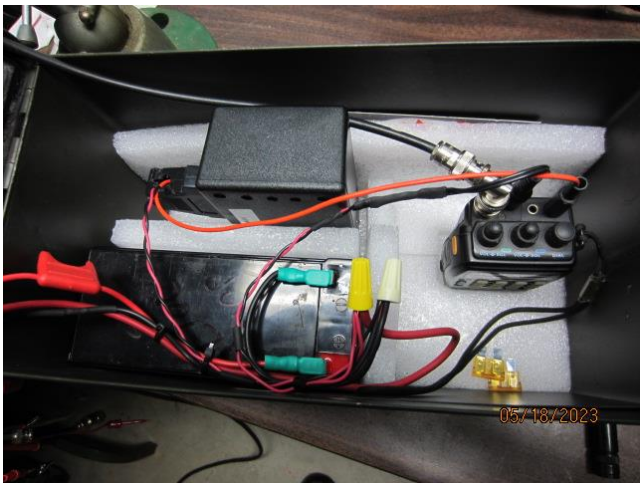
13. My luck is like a bald guy who just won a comb.

Join us for our weekly get together
"On the Air"

The club meets each Wednesday evening on VE3OSR 146.940 T97.4 hz at 7:30 pm local time, and on 3.783 Mhz +/- immediately following.

The FOX Tom VA3TS

This is a fox hunt transmitter. In short, it is a vhf handheld coupled with a HamGadgets controller to produce a CW message on a predetermined interval. The controller is setup to send a 30 second CW message every 5 minutes but this can easily be changed.



The design is a self contained, automatic starting device. It is battery powered which will last a long as any foxhunt we will have. The fox simply installs an antenna, turns the switch to on and can walk away. The hamgadgets controller can be bought as a kit and can also be configured as a repeater controller as well as a cw identifier. Some hams have installed this in the audio path of their HF rigs to auto ID just in case they forget to. Easy to do when tongue wagging. The VHF handy, a Yeasu FT530, arguably one of the best handies Yeasu ever made, is set to a simplex frequency of 146.565Mhz. The transmitter can be set to 5 or 3 watts and the antenna changed to make it more of a challenge to find the fox. The hamgadgets that I have sees double usage as a portable repeater made from this device and 2 Motorola Spectra radios, one as a receiver only and one as a transmitter. The club has an identical device as well.

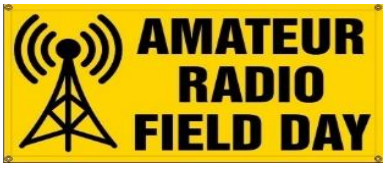
Searching the web will bring plenty of information regarding foxhunting, antennas to use and tips and tricks to reduce signal levels received. A tip from Dave VE3WI is to use the 3rd harmonic of the transmit frequency to reduce signal strength when getting close to the fox ie: 146.565 Mhz = 439.695 Mhz.

The antenna used can be anything form a rubber duck to a yagi beam, hammade or purchased. However you do it, the idea is to have fun. I won't go into great detail here but to get started……

https://www.youtube.com/watch?v=KihdX-8XKIE

https://tamiamiarc.org/basic-fox-hunting-equipment/

https://www.byonics.com/foxhunt

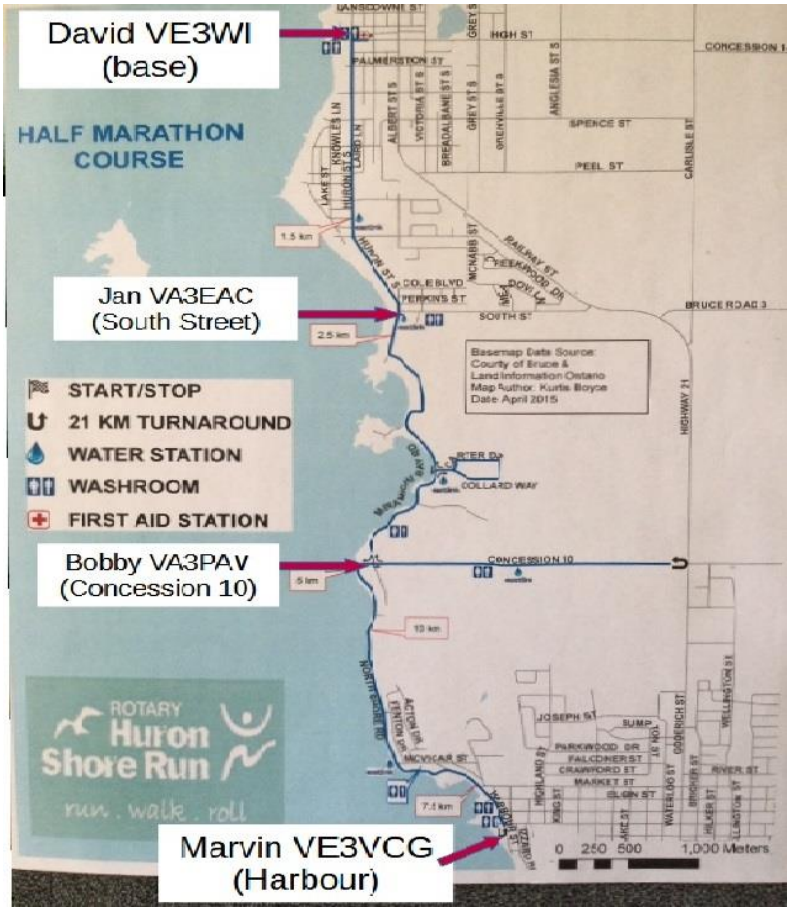


GBARC at the 2023 Rotary Huron Shores Run Marvin VE3VCG

On Saturday June 3rd David VE3WI, Bobby, VE3PAV, Janet VA3EAC and I, VE3VCG worked the Rotary Huron Shores Run. This year the event, which raises money to support the hospital at Southampton attracted over eight hundred runners and walkers.

In May I coordinated with Ian Trotter the head course marshal for the event. He provided a map and confirmed that this years' course would be largely unchanged from previous years.

The long course for this race is a 21 K half-marathon and is sanctioned. The short course is roughly 10 K and the walking course cab be done on either the long or short course.



The start/finish line is on High Street adjacent to Walker House in Southampton. The course roughly follows the lake shore south past the harbor in Port Elgin then returns north via the same route.

David VE3WI was positioned in Southampton near the start/finish line and near to the St John's Ambulance mobile first aid station. Marvin VE3VCG located at the southern turnaround point for the marathon in Port Elgin. Janet VA3EAC and Bobby VE3PAV located themselves at water stations with race marshals in the middle portions of the course.

Our GBARC A frame signs were used to identify each of us as being part of the radio race support team. We used the Port Elgin repeater VE3PER 146.820 – no tone, as our primary communications hub. This machine has excellent coverage across the course and can be reached reliably with an HT.

Our fallback plan was to use 146.520 simplex if needed. David was operating a mobile rig with a directional yagi on a mast pointed south and capable of 50 watts. I used a 5 watt Baofeng attached to a dedicated FM amp putting out 20 watts. I used a roll up J-pole on a 20 foot carbon fiber mast to provide extra some additional reach.

The measured line of sight distance across the course is 6.6 Km. Terrain is flat and obstructions include trees and buildings.

I refer to my 20 watt Baofeng unit as being man portable because it will fits in a plastic ammo can and when packed up can be carried by a single person from place to place as desired.

Jan and I did prior tests of my Baofeng's amplified signal across the course the week prior to the race and found she could copy me in Southampton from the Marina in Port Elgin using simplex. With those tests in hand we were confident of being able to make that distance simplex if the need arouse on race day.

It was a perfect day for a race, temperatures were mild and a breeze helped reduce the risk of heat stroke. As the race progressed runners reported sand in depressions on the path creating traction problems for some. This was reported and investigated by the race marshal and related to the head marshal.

As the last runners and walkers cleared my location a race marshal came to pick up signage and advise that we could shut down our location. My race marshal was kind enough to transport me and my gear up to our net control station in Southampton.

While in transit I monitored and listened as a serious incident unfolded. A long course runner had gone done with a medical emergency. Race marshals on the scene followed their protocol and called 911 then sought out Janet to use her radio to call to St John's Ambulance to assist because they felt the situation was urgent enough to merit a more immediate response.

David, or net controller went to seek out the St John's crew finding them across the street from their vehicle. They advised that marshals on scene call 911 and that St John's would not assist. This message was also relayed back to the marshals on the course via radio.

This was the most serious event of the day. We have no follow up information about the fallen runner.

This was the first time I encountered a direct request for St John's Ambulance assistance during a public event. I had no prior briefing as to what to expect from this volunteer first aid service in an actual emergency situation. Based on this experience I now assume that their function is to deal with minor first aid issues but more serious matters are referred to 911. I will be contacting the St John's ambulance organization for more clarification on their role at such events.

What may be most important in this event is that race marshals attending the fallen runner sought out Janet, the nearest radio support operator to the incident, understanding that she represented a means of providing the means to have rapid two-way communication and to get the help they wanted.

Websites of Interest

http://ohiohams.net/?q=node/225

https://www.sbarc.org/technical-mentoring-and-elmering-net/

https://wfview.org/

Minutes of Meeting

GEORGIAN BAY AMATEUR RADIO CLUB

Minutes of the Monthly Club Meeting 23rd of May 2023

Call to order by Marvin VE3VCG at 7:05 PM

ATTENDANCE

Executive:
Marvin Double VE3VCG President, Dan Mills VA3DNY Secretary

Members:
Janet Double VA3EAC, Jim Reeves VE3JMD, Larry Price VE3WDF, Tom St. Amand VA3TS, Adam Karasinski VE3FP, Bobby Pavlovic VE3PAV, Philip deKat VE3DPB, Greg Larocque VE3RQY, Bernie Monderie VE3BQM, Dave Newcombe VE3WI

QUORUM: No

TECH TALK:

Key and Keyer Show and Tell - Presented by Tom VA3TS
Tom presented each of his keys and a keyer to the group while describing their various features. They were passed around the room for everyone to see up close.
Some of the collection (but not all) included: A bathtub key (British Air Force?), flameproof key, leg mounted key (Cdn military?), Bencher paddles, Vibroplex Vibrokeyer, Heathkit keyer with paddles built in, and a telegraph sounder.

Part 2 of the tech talk was a demonstration and explanation of his Fox Hunt transmitter.
Tom created the "ammo can" fox using a battery, HT and a Ham Gadgets ID-O-Matic controller. It all fit neatly into a surplus steel ammo box and has an external antenna connection.

PREVIOUS MINUTES:

Minutes of the April Meeting were published in the newsletter. The minutes were accepted as written. (Motion: Adam VE3FP, second: Phil VE3DPB)

TREASURER'S REPORT:

Doug VE3DGY was absent, but submitted the report ahead of the meeting. The main transactions for the month comprised of a payment of $500.00 via e-transfer for the repeater, a bank fee of $5.00, and an e-transfer fee of $1.50. The closing balance for the month was $xxxx.00
Currently there are 34 members. The treasurer's report was approved. (Motion: Bernie VE3BQM, second: Jim VE3JMD)

OLD BUSINESS:

Greeting cards and tech talk:
Doug VE3DGY has obtained the 10 greeting cards with the club information on them to be used as needed.
He has also created a tech talk schedule and there are already 4 scheduled ahead for upcoming meetings.

Field Day:
We had a follow up discussion on field day plans. Some of the points made:
The stations should be spread out more to avoid interference like we experienced last year.
The same version of N1MM must be used by all stations or they won't work together. Please update your software the Thursday before field day.
We should have 3 stations and divide up operations on 80, 40, 20, 15, and 10 M plus Marvin VE3VCG will provide a WinLink GOTA/public station.
Greg VE3RQY will look into tents and chairs for the event.
Dave VE3WI may have a generator for the event.
Port-a-potty will be arranged prior to the event.

Other old business:
Bernie VE3BQM will pick up the portable repeater from Frank VA3GUF to keep it more available.
Executive meetings will be scheduled as needed prior to regular meetings. Skype or Google Meet can be used to save drive time.
Tom VA3TS has added an email link on the Meetings website page for members to email the Secretary with new business.

NEW BUSINESS:
Marvin VE3VCG will request that the Treasurer (absent from meeting) provides an up-to-date email list to the executive.

Jim VE3JMD informed the club of donations made by the wife of a SK (Wayne) to be sold or used as needed. A partial list was provided but not everything has been tested by Jim yet.
Some of the list included test equipment. Dave VE3WI and Marvin VE3VCG suggested perhaps the club could use some of it to establish a library of test equipment for members to utilize.

Bernie VE3BQM is looking for who has control over the club QRZ page (VE3OSR)? He suggested that it could be updated to provide current information.

Adam VE3FP provided an example of his new QSL cards. He recommended QSLconcepts.com and suggested that the club consider getting some to hand out or send out. They could be more generic and have check boxes on the back for specific events. Tom VA3TS pointed out that the outgoing RAC Bureau can be used for RAC members.

Meeting Adjourned at 8:30 PM
(Motion: Janet VA3EAC, second: Bernie VE3BQM)

Exploring the Early Days of QRP Radio

QRP initially meant something akin to “you are overloading my receiver, please reduce transmitter power” but now means “operating radios at extremely low power levels”. There’s been some debate in the amateur radio community over the years over what power level constitutes a QRP operation, but it’s almost certainly somewhere below 100 watts, and while the radios in this video have varying power levels, they tend to be far below this upper threshold, with some operating on 1 watt or less.

There are a few commercial offerings demonstrated here, produced from the 70s to the mid-80s, but a few are made from kits as well. Kits tended to be both accessible and easily repairable, with Heathkit being the more recognizable option among this category.

To operate Morse code only requires a single transistor which is why kits were so popular, but there are a few other examples in this video with quite a few more transistors than that. In fact, there are all kinds of radios featured here with plenty of features we might even consider modern by today’s standards; at least when Morse code is concerned. via Blog – Hackaday
https://hackaday.com/2023/05/10/explorin...qrp-radio/

The Last Word

Thank You to those that contribute to this newsletter by submitting news stories or interesting web links or ideas. If you have something to appear in the current month’s newsletter, send it by the 3rd Tuesday of the month. Newsletters are not published in July or August.
Please do not format anything, just text or image files.

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Membership for details regarding membership in the club click here: *Membership*

The next newsletter will be in September 2023.

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