October 2022

The Messonger 2.0

Volume 3 Issue 3

Blackstone Valley Amateur Radio Club's Quarterly Newsletter

W1DDD.org

ONE BIG HAM PARTY

2022 FIELD DAY

BY MICKEY CALLAHAN — K1WMC

Field Day 2022 was once again held at the Chop Mist Hill Road site in Scituate, R.I.

Approximately two dozen hardy members from the club were on hand throughout the 3-day event that started with the erecting of two, fan dipole wire antennas on Friday, June 24, prior to the official start on Saturday the 25th at 2p.m., running for 24 hours straight and ending at 2 p.m. on Sunday the 26th. Thanks to Jim Johnson, K1GND, for having the foresight to locate some trees and place ropes in them so we could easily hang one of the fan dipoles prior to field day.

Shelters and operating positions were set up Saturday morning with the intent of having two dedicated HF radio stations working both SSB and CW primarily on 20 and 40 meters. In addition, a third HF radio was setup to act as the Get-On-the-Air (GOTA) radio station. The two HF radios were club owned IC-7300's that were set up to operate off one fan dipole with the help of three, band pass filters (40, 20 and 15 meters) and a triplexer. This

Field Day Continued On Pages 2 & 3

* NOTICE *

BVARC XMAS PARTY

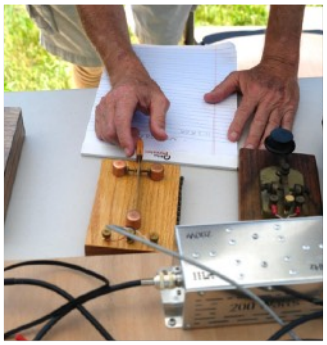
Tickets will be available at the regular meeting on October 31 and on November 7th at the Consortium.

Please Pay by Check.

Tickets are $25 for members & $32 for guest

Hurry, deadline for purchasing the tickets is November 28th

MORSE CODE •–



set up was designed to allow two r
work simultaneously on the same a
but on different bands. Unfortunate
fan dipole antenna presented some
problems and was ultimately repla
Saturday afternoon with an
off center-fed dipole that
had trouble working off the
band pass filters and
triplexer.

The GOTA station consisted of Mickey Callahan's, K1WMC, QSO-a-Go-Go trailer equipped with an IC-7300 and portable solar power. This station was part of the club's welcome and hospitality tent adjacent to the parking lot. It was connected to the second fan dipole antenna that allowed 20- and 40-meter SSB operations. Two generators were used to power both the HF and GOTA positions. However, GOTA also demonstrated the use of battery power and solar charging.

In addition to the club's radios operating SSB and CW on HF, Paul Fontana, KC1IEN, along with his RV and portable antenna in place, setup a VHF digital station augmented with limited QRP HF CW operation using his newly acquired IC-705 radio. Mike Kenny, K1ETA and Buddy Kinniburgh, K1CYQ, also setup QRP CW HF stations adjacent to the parking lot. Coupled with Mike and Buddy was Bruce Wood, W1BRU, who had his satellite tracker/radio ready to go but was not able to make a satellite contact due to not having a convenient satellite position for our location and time.

However, Bruce, Mike and Buddy provided the group with a couple of great educational programs that helped contribute to our total point score. Mike and Buddy demonstrated their QRP radios

and novel portable antenna designs and ease of setup and take down. As usual, Bruce's satellite rig perked a lot of interest amongst many of the members.

It was unfortunate that Ann and Jim Johnson, K1GND, could not be there for the event due to Ann's illness. Ann had originally volunteered to make and provide sandwiches for the Saturday luncheon. However, in stepped Teri, W1PUP, to save the day by making delicious sandwiches for many of our hungry members and guests. Once again, a big round of applause for Teri. Many thanks for being who you are.

Despite the extremely hot weather over the weekend, members enjoyed a potluck dinner Saturday evening, which also welcomed many additional family members. I honestly have to say that our members know how to eat from the extensive array of dishes and food that was made available. Once again, thanks to Ginny Jones for the great, festive table center pieces.

We were fortunate not to have any rain to dampen our spirits but given the heat (mid-90's) both days, I'm sure we would have welcomed a few sprinkles to cool us off. By noon Sunday, it was decided to break camp and put another field day into the books.

Judson Mitsock, W1JMZ, volunteered to tally all our contacts, bonus points and total our score for submission to the ARRL. I believe we scored around 1800 or so points. We've done better but that's not really the point. Did we have fun doing it and will we try to come back smarter and stronger in 2023?

Did everything go as planned? No. Did we learn some things from our mistakes and hiccups? Yes. The Field Day Committee worked hard to make the event a success. Could we do better? Yes, without a question. As always, the club needs your support and enthusiasm. It's what makes it all worthwhile.

As I've already announced, I will be resigning as Field Day Committee Chairperson. Although I'll remain on the committee, Mark Hofstra, KA1YQC, has graciously volunteered to take the reins. To all the Field Day 2022 committee members, I want to say thanks for a job well done. Let's keep the momentum going.

Mickey Callahan, K1WMC

From our President

Hello Fellow BVARC Members,

For anyone who has lived in New England for more than a year, a fact of life in these parts always goes back to that old saying, “If you don’t like the weather, just wait a minute”. This year is proving to be no different. From summer highs in the mid-90’s to a deep plunge into the 40’s we can all tell without looking on a calendar that Fall has arrived and, with that, the monthly BVARC meetings have once again begun. Earlier this month we once again gathered together along with 33 of our fellow BVARC members in attendance. That is about one-half of our entire membership. While a very good turnout, I would really like to see a few more members on a monthly basis.

Once again, this time of year begins our own individual annual push to get in a few last minute adjustments to antennas and other outside maintenance activities completed before we are all covered in snow within the next couple of months. What a gloomy outlook. If anyone requires help in these efforts, please consider asking other members of BVARC as to how they have completed their maintenance activities in the past. You may find an easier way to do something or even get someone to assist you!

This is also that time of year where we get ready for our annual Christmas Party. Once again the Christmas Party Committee has worked with Bella’s Restaurant to fashion an enjoyable evening for all of us. Please be sure to get your tickets early from Ray and Patty Vilnit or Bob and Ginny Jones as soon as possible. A final head count needs to be given to the Restaurant by November 18th. Tickets are sold at each of our monthly BVARC meetings and at the Consortium classes. Checks are the preferred payment method made out to BVARC. The Christmas party is a great time to meet with the BVARC membership and their spouses or significant others. This year, we are also asking that if anyone wishes to contribute to the door prize table, we will be accepting your donations.

I would like to take a moment to thank Mickey Callahan, K1WMC for his years of service to the BVARC Field Day Committee as its chairman. Under his direction this annual event has grown and developed into what it is today. Without doubt, a lot of hours of behind the scenes work were devoted to organizing this very busy weekend. Thank you Mickey! Taking over as BVARC Field Day Chairman is Mark Hofstra, KA1YQC. I know we will all support Mark with his plans for Field Day 2023.

As November approaches, it is that time of year where we all elect certain BVARC officers based upon our bylaws schedule. As this is an even year, the following positions are up for election. The election winners will serve a 2-year term in office.

President of BVARC

Treasurer of BVARC

In order to solicit new ideas, at our next meeting on October 31st, we will be asking if there are any members interested in running for these positions.

Then, at our November 28th meeting, we will conduct a formal election where candidates receiving the most votes will be announced and take office officially on January 1, 2023.

Let’s also begin to think about what specific activities we want to do during 2023. Hopefully, Covid is fully behind us where we can continue to venture out doing more together. In small groups or with the entire club, it only matters that we work together to find a few new things we can do together. So give it some thought. Make a suggestion. Throw out a few ideas. Get involved. Run an event or tour to somewhere!

If everyone does only one thing, there won’t be anything left to do but to have fun!

73,

Ken Trudel – N1RGK

President & CEO, BVARC

W4EII

BY MARSHALL CROSS— W1HK (EX DL4KV)

The Seventh Army signal officer slides a letter across his desk toward me and says "I need you to take care of this right now." The letter is from Lt. General Theodore (Ted) Conway, the incoming commanding general of the U.S. Seventh Army, saying he is a ham radio operator and will need help in obtaining his German license and installing a Mosley Tri-Band yagi antenna at his quarters (a mansion on a hill in Stuttgart, Germany). Why me? Because I'm the only ham in the Seventh Army Headquarters Signal Section.

So it's off to the Deutsche Bundespost Office via helicopter to "hand-carry" the general's application and license in time for his imminent arrival. We also send trucks from Stuttgart to Rhein Main airbase in Frankfurt to pick up his ham rig (Collins S-Line, 30L-1 amplifier and antenna/rotator, etc.). I then arrange for the Army Headquarters' 97th Signal Battalion to get ready to plant a 40-foot telephone pole and install the Mosley tri-band yagi at the General's quarters.

"Captain Cross, General Conway's aide, is on the phone" says our office secretary. I'm told to come to the "Head Shed" (army lingo for the headquarters building), because General Conway wants to talk with me. I am

General Conway

ushered in through a waiting room full of colonels and generals into a large dark room with a big table in front of a fireplace. All I can see sitting behind the table are six shiny stars, three on each shoulder of a older-looking man, wearing a hunting jacket. I come to attention, salute and stammer: "Captain Cross, DL4KV, welcome to Germany Sir. I have something here for you!" He returns my salute, I whip out his German license from my pocket and hand it to him. He opens it, grins and says "I hope you didn't go to any trouble doing this, Captain." Nah, just routine sir. We then discuss where to place the telephone pole and how he wants me to help him meet German hams. The pole, with approval from Mrs. Conway, gets planted in their garden and I arrange and attend several parties with local hams at his mansion.

After a year or so he gets his fourth star and is off to his terminal assignment as Commanding General of the Strike Command (now called SOCOM) in Tampa, Fla. He and his wife Eleanor send Christmas cards to us for several years. I learn that after retiring in the late 60's, he went back to school, ultimately earning his Ph.D. from Duke University at the age of 75, then died several years after. As far as I know, Ted Conway is still the only person to have held every rank, from private to four star general in the U.S. Army (he was enlisted before being appointed to West Point) and the oldest to receive a Ph.D. from Duke.

Auf Wiedersehen
Mein General!

A Field Day Story - 2022

BY LLOYD MERRILL - W1LBM

After a few years of not attending Field Day because of the Pandemic, I had every intention of being part of this year's BVARC Field Day activities. I always enjoy the camaraderie and I always come away learning something new. The constructing and assembling of the antennas and setting up radio positions is something that I love to do. I get more enjoyment in the building than I do in operating.

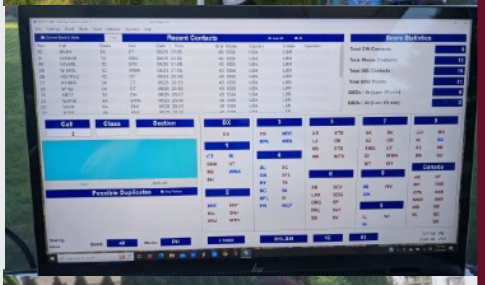
A week before Field Day, a situation came up with the family that was going to require me to hang around the house that weekend. While I had to stay at home, I decided that this wasn't going to deter me from participating in Field Day. It would also afford me the opportunity to do what I enjoy the most and that is building something. In this case, I had to construct an antenna and an operating radio position.

I wanted to operate outside the confines of my existing shack so I had to consider my options. Looking at the radios I had available, my Yaesu FT-991A was the most logical. It serves as my backup rig and my primary VHF/UHF radio. I didn't relish the thought of disassembling this but it was my best and probably the only option. I knew that this radio could do everything that I wanted it to do, which was SSB and FT-8/FT-4.

Operating in my backyard presented my next obstacle. I needed an antenna to hook up to. My shack has two antennas, an endfed halfwave, and a fan dipole in the attic. Using either of these two was out of the question and I didn't have any portable antennas to use.

One of the things that I wanted to accomplish during Field Day was to operate on 20 meters during the day and 40 meters at night. In my collection of stuff, I did have some parts to build one if not two antennas. A while back I bought some equipment from a local ham, and he had included two MFJ-1620T 20-meter HF HamSticks. I had also purchased the MFJ-347 connector/mount which would couple these two in an opposing position to make a mini-dipole. I found two 10-foot wooden poles, which I lashed together and mounted the mini-dipole to it. Now I had my 20-meter antenna. After some tuning, I was able to achieve a 1.5 SWR in the middle of the 20 meter band. This was well within the capability of my FT-991A internal tuner. I'm sure that Buddy, K1CYQ, is shaking his head reading this. This was a great feeling of accomplishment!

Next, I wanted to build a 40-meter antenna. A few years back at the last Boxborough Ham Fest I won a DX Engineering dipole kit. It had everything that I needed except for the antenna wire. Making a quick purchase on Amazon allowed me to complete that build. After repeated tries, I was able to tune this antenna to have an SWR of 1.5 in the middle of the 40-meter band. Once again I considered it another project completed and a success!



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I wanted to make logging as easy as possible on my laptop. Having a logging program that would interface with WSJT-X/JTAlert for FT-8 QSOs was my prime objective. I spent quite a bit of time researching my options and settled on N1MM. There was a lot of information on the Internet about installing this software and configuring it to work with JTAlert. I spent many hours over multiple days to get this to work with no luck.

Field Day was approaching and I wanted to get something up and running for logging. The second piece of software that was available was N3FPJ. I downloaded that and had a viable working system ready within a few hours. Everything that I read online worked without a hitch. I had a logging solution for recording SSB QSOs and an automated way to do FT-8/FT-4.

Next, I had to figure out how to power my equipment. Running on street power was not an option for me. I wanted to use a combination of both battery and a gas generator. I did have a sealed lead-acid battery which I used to run my telescope mounts in the field but I didn't know how long it would last running my radio outputting 50 to 100 watts of power. Initial testing showed that the battery was adequate for some amount of time.

My second power source was going to be an old Honda 500-watt generator I've owned for years. I start this generator a few times a year but have never really used it to power anything. It was running a little rough so I connected a power meter to it and discovered that the voltage and AC cycles were all over the place. This unit was not an option for me, but I was able to call my son-in-law and borrow his newer Honda unit.

Because this was going to be an at-home setup, I at least wanted to have some feeling of separation and remoteness from my home shack. I selected a spot in the backyard with trees on either side to put up my 40-meter dipole. I also wanted to operate into the night as long as possible so I thought I'd use the family camping tent that has a screened vestibule to keep the bugs away. Sounded like a good idea at first but later became an issue.

Friday came and I retrieved the tent that had been stored in my garage attic for the last 10 years. It took a long time to remember how all the fiberglass poles went together and what sequence had to be followed. A few sweltering hours later I had it up and staked.

Next came putting all the gear together. This turned out to be the easiest part of the process. I had kept the number of pieces of gear to a minimum to keep the station straightforward and simple. I made a few test phone and data contacts on both 20 and 40 meters and updated the logging software as expected. I was ready to go.

So Field Day was here and I was ready for it. As the day went along the heat and humidity steadily went up. The tent was centered in the middle of the backyard and was in direct sunlight. The screened vestibule which I thought was going to be great to keep bugs out might as well have been made out of glass. It didn't allow for any air circulation.

It was getting very hot! I found that both the 20- and 40-meter bands were very busy. I would work SSB a band getting as many contacts as I could. I would then jump to FT-8 and then do the same. Once I had made as many contacts as I could, I would move to FT-4. I would then move to the other band and repeat the same process.

JTAlert helped keep track of FT-8/FT-4 QSOs to avoid duplicate contacts which was very helpful. Even as hot as it was, my bulldog Gus kept me company. I put in as much time as I could throughout the afternoon and evening.

After breakfast on Sunday, I returned to the tent to continue. I didn't find the bands that busy but I used the same process as I had used the previous day, alternating bands and modes. Once again, I put in as much time as I could.

And here are my humble results for running as Class 1E with a preliminary total score of 760. I made a total of 164 OSQs. Surprisingly, this was a split of exactly 82 contacts on each of the two bands. Another look at the breakdown is 23 SSB and 141 Digital. The contacts also consisted of 35 states and provinces.

All in all, I was very satisfied with the results I achieved. I had checked off all of my objectives and felt great satisfaction in having the chance to build and integrate my existing equipment with very little extra expense. Next year I am hoping to get back with BVARC and participate in the full Field Day activities.

From the Bench of NA1Q Kit Buiding

BY MATT PENTTILA — NA1Q

Well it's been a busy year for me. Let's start with I came down with Covid around Christmas 2021, and spent two-plus months out of work due to it. And between the initial 18 days in the hospital and 10 weeks on an oxygen line just to stay alive, it was a rough time.

Then I returned to work and ended up working alone again six days a week as my coworker got a promotion and transfer closer to home a couple days after I returned.

But I didn't let it get to me. I found things to do, one was I started building some kits for the shack. WARNING: This gets to be addictive!

First one built while recovering from Covid was the Phaser 40 FT8 digital transceiver. Now these kits are 5 watts out, and no longer in production, but occasionally you'll see one pop up in either kit form or a finished version for sale. They were made in every HF band at one time, but the 40-, 30- and 20-meter kits were the most abundant. Only five watts out, I made a few QSOs with the Alex Loop antenna in the living room.

In May I was one of the first to order from QRP Labs a couple QDX transceiver kits with optional enclosures. Hans sells various kits and will assemble the QCX and QCX+ CW transceivers for a fee, but there is a waiting list for months. Building it yourself is a quicker way to get it in your hands. BTW shipping time was almost one month from order to having it in my hands from Europe.

Then there is the buildathon classes at the hamfests and ham conventions. If you get a chance, go to them and participate. You'll be surprised what you'll learn and sometimes come away with some really cool gear or gadgets for the shack.

I had the pleasure of working with W1REX from QRPme.com at the QSO Today Virtual Hamfest and attended two of his buildathons that weekend.

We first built the QSSA Station Accessory Kit which consisted of a small straight key, a keyed with sidetone oscillator and a tuner for a W3EDP Antenna. Note it's 83-foot radiator plus 17-foot counterpoise off the board mounted tuner. Neat part about this build is it's all Manhattan style soldering for the majority of the build. Only a couple through hole soldering components. The rest are soldering tab to tab.

On the second build, we built the QSST 40-meter CW Transceiver. This was all traditional through hole component soldering. After both were done, all I had to do was add a power supply and headphones for a complete QRP 1/2w station.

Now let me tell you kit building is a bit addicting.

On Sunday, Sept 25, 2022, I built the second QDX Transceiver kit. I had to wind the torroids, but the plus side is Hans puts out an excellent instruction manual that explains in detail with plenty of pictures and drawings how to wind torroids and parts placement. In total, it took me three hours from start to finish to build the second QDX.

Following the club meeting, while waiting for my laundry to dry in the dryer, I pulled out that old Pixie kit and started on that.

Problem is One, it didn't come with an instruction sheet. Two, the kits

varied depending on who boxed what, so parts could be there or not. Three, because I bought these back years ago, eBay no longer has that seller or purchase information on their site.

But that's what makes this hobby fun. I started installing components from what I knew went where and now will have to figure out where the rest of the parts go.

So stay tuned....more to come

Across THE Spectrum

BVARC SIMPLEX NET

Every Wednesday at 7 p.m. on 146.565.

RI SWAP AND SELL NET

Net: Saturdays 9 a.m. on the NB1RI repeaters

Website: RISWAP.NET

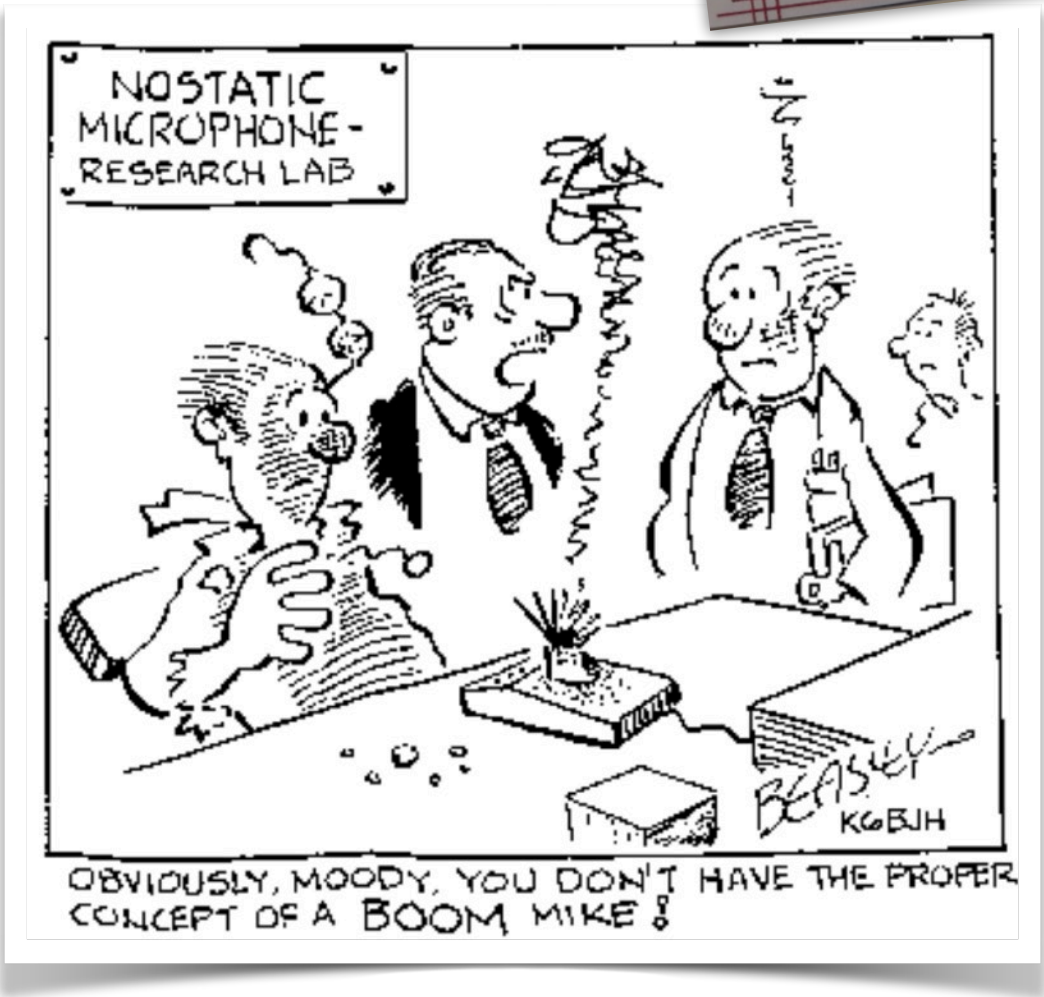
A place where RI amateur radio operators can swap and sell items free!
The net runs on Saturday mornings at 9 a.m. on the NB1RI network.
Weekly listings of VE sessions, club meetings, nets on the air, bulletins, flea markets, used and wanted ham radio equipment for sale and weekly ARRL audio news.

BVARC CHRISTMAS PARTY AT BELLA RESTAURANT

Tickets will be available at the regular meeting on October 31 and on November 7th at the Consortium.

Please Pay by Check.

Tickets are $25 for members & $32 for guest
Hurry deadline for purchasing the tickets is November 28th



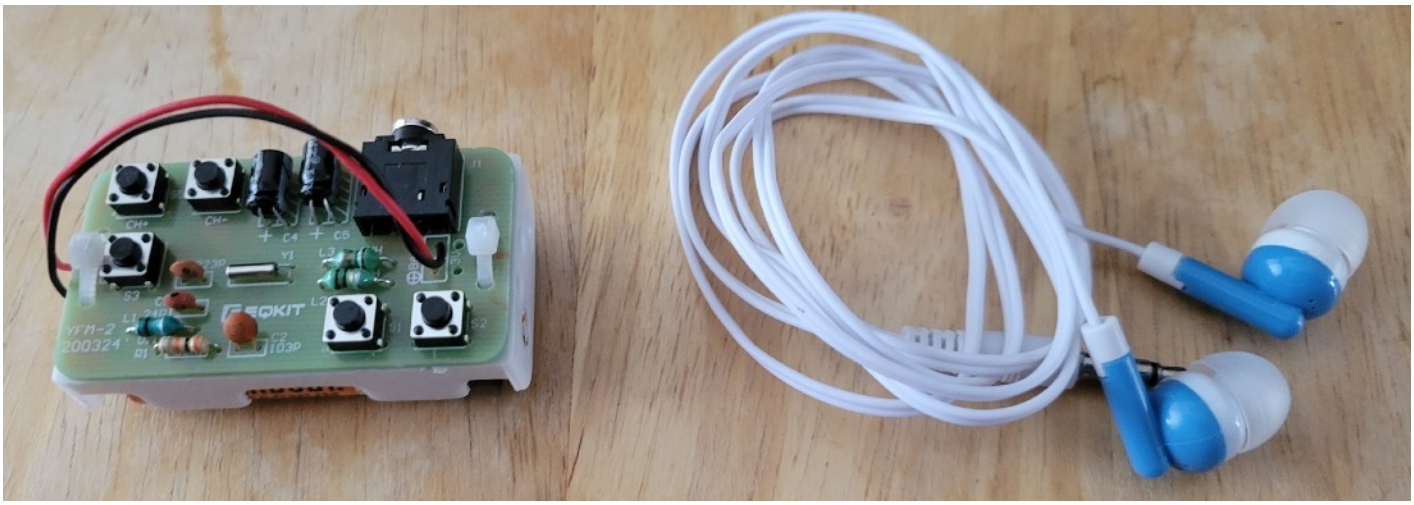
KIT BUILDING CLASS

BY MATT PENTTILA — NA1Q

Hi everyone.

As we all know that part of the fun of the hobby is building your own equipment.

Well, I'm proposing we have one kit building session one afternoon or evening this winter to help with the boredom and cabin fever that usually kicks in.



Time frame for this will be probably January or February, location TBD.

So if anyone is interested in doing this, email me (NA1Q@ARRL.NET) or see me at at the October club meeting. The first kit we will build is going to be a small FM Broadcast Receiver. I've attached a picture of the finished kit with earbuds, which runs on 2 AA batteries. It will require soldering the components in, and you'll also learn how to solder a Surface Mount Device without using a soldering iron. (It's witchcraft the old timers would say.)

NOW FOR THE Q AND A.

1. *Do you need to know how to solder?*
   It helps, but no, because we can help you learn to solder.
2. *Can I bring my own soldering equipment?*
   Yes, I'll have a couple of soldering stations set up but the more the merrier.
3. *How long is the build session?*
   That depends on how many folks sign up and show up. Usually plan between two to four hours at most.
4. *What will I learn?*
   Similar to going to the Consortium, there are various aspects that you can learn from anything you participate in. Plus side is as a group, you'll have help and guidance which often building at home can get frustrating due to needing a second set of eyes or advice to clarify something lacking in the directions.

Now for the nitty gritty part: Biggest thing is I'll need a head count to order kits, cost should be $10 per kit.

Depending on how this goes and group interest, maybe we can do some more kit building sessions through the year, like building a QRP transceiver or station accessories to use around the shack.

Now for the final warning. Kit Building can be addictive. Since HamXposition, I've attended the QSO Today Ham Radio Buildathons and built the QRPme QSSA Station Accessory Kit and the matching QSST 40 Meter CW Transceiver, a second QRP Labs QDX Transceiver, and currently building a old Super Pixie QRP Transceiver kit I ordered off eBay back probably seven years ago that got accidentally tossed into a junk box.

Keep your iron hot and tips clean.

73, Matt NA1Q

HF Portable Continued On Page 12

SUBMITTED BY PATTY VILNIT — W1AUT

RSGB "Special" Special Event Stations were activated from the four UK Home Nations and three Crown Dependencies. The call signs were: GB70E England, GB70M Scotland, GB70W Wales, GB70I Northern Ireland, GB70J Jersey, GB70U Guernsey and GB70D Isle of Man.

The UK regulator, Ofcom, licensed a series of special call signs that were active only during June 2022, including from 2-5 June 2022, which was the Queen's Platinum Jubilee Bank Holiday weekend in the UK.

Jubilee Weekend Activation

For the Jubilee Weekend, operation was on multiple bands and modes by one or more clubs operating from each of the seven nations/ dependencies. These were Special Event amateur stations run by teams of club members and several were open to the public – go to **GB70.co.uk** for full details.

Except from https://rsgb.org/ website

Forwarding DX QSL cards through the ARRL

BY BOB BEAUDET—W1YRC

If you are a BVARC member and an ARRL member, you may send all your DX QSL cards out, to countries that accept mail these days, at no cost to you. The ARRL Outgoing Bureau http://www.arrl.org/outgoing-qsl-service forwards your cards for a small fee, but BVARC will cover that for you. There is no quantity limit, 10 cards or 100,000 or more. But, they must all be DX bound, no US cards will be forwarded. None must be to any of these entities/ countries:

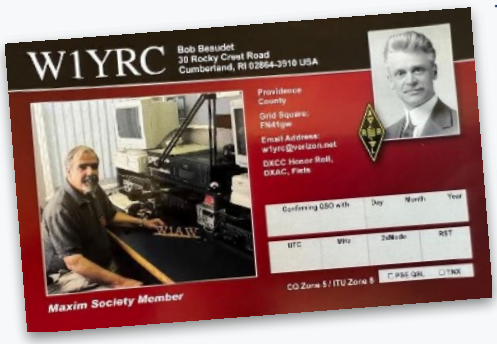
3B	Agalega, Mauritius, Rodrigues	D2	Angola	T2	Tuvalu
3C	Equatorial Guinea	D4	Cape Verde	T3	Kiribati
3C0	Pagalu Island	E3	Eritrea	T5	Somalia
3DA	Kingdom of Eswatini	E4	Palestine	T8	Palau
3W	Vietnam	E5	North & South Cook Is.	TJ	Cameroon
3X	Guinea	ET	Ethiopia	TL	Central African Rep
4J,4K	Azerbaijan	HH	Haiti	TN	Congo
4W	Timor-Leste	HV	Vatican	TT	Chad
5A	Libya	J5	Guinea-Bissau	TU	Cote d'Ivoire
5R	Madagascar	J8	St. Vincent	TY	Benin
5T	Mauritania	KG4	Guantanamo Bay	V3	Belize
5U	Niger	KH0	Mariana Is.	V4	St. Kitts & Nevis
5V	Togo	KH1	Baker & Howland Is.	V6	Micronesia
7O	Yemen	KH4	Midway Island	VP2E	Anguilla
7P	Lesotho	KH5	Palmyra & Jarvis Is.	VP2M	Montserrat
7Q	Malawi	KH7K	Kure Island	VQ9	Chagos Diego Garcia
8Q	Maldives	KH9	Wake island	XU	Cambodia
9L	Sierra Leone	KP1	Navassa Island	XW	Laos
9N	Nepal	KP5	Desecheo Island	XZ	Myanmar
9U	Burundi	P2	Papua New Guinea	YA	Afghanistan
9X	Rwanda	P5	North Korea	Z2	Zimbabwe
A3	Tonga	PZ	Suriname	ZA	Albania
A5	Bhutan	S0	Western Sahara		
A6	United Arab Emirates	S7	Seychelles		
C2	Nauru	S9	Sao Tome & Principe		
C5	Gambia	ST	Sudan		
C6	Bahamas	SU	Egypt		
CN	Morocco				

Gather up your cards, answering QSLs that were sent to you via the bureau or any other DX cards for which you are not in a hurry to get them delivered. Sort them as directed and get them to Bob W1YRC as soon as possible. He is putting a group package together now. You must be a member of BVARC and ARRL. Thanks.

The Consortium's New Home

The Consortium started as a very informal gathering of anyone, licensed or not, who wish to learn more about the basics of radio, antennas, operating procedures, etc. It is a monthly independent program that was created to serve all Amateurs, especially those licensed in the last twenty years. The Consortium held its first session sixteen years ago in the Lincoln Public Library, moved to the Patriot Diner for more space, then to the Asia Grille. Now, the Consortium holds its programs in the spacious Manville Sportsman's Club. This opportunity is made possible through the courtesy of BVARC member Norm Doura, KD1NJD who is also a member of the Sportsman's Club.

Jim K1GND and Bob W1YRC support and conduct the program, drawing heavily on their own experience to show attendees best ham radio practices and best choices in equipment and illustrate why we must do things in the necessary manner to achieve best results.



The Consortium is presently scheduled for the first Monday of every month through May, 2023 to be held in the Manville Sportsman's Club. Topics are chosen by K1GND and W1YRC who also provide financial support for the program.

HF Portable Continued On Page 13

THE CARRINGTON EVENT –

Will it Happen Again?

BY MICKEY CALLAHAN — K1WMC

As hams, we've been anxiously waiting for Cycle 25 to take hold with increased sunspot activity and improve RF propagation across the globe. However, with an increase in sunspot activity also comes the risk of more solar flares that are also known as coronal mass ejections (CME).

When such outbursts occur, the Earth's magnetosphere is hit with high-speed gusts of superheated plasma clouds, which contain intense magnetic fields embedded within. The Earth's magnetosphere, a shell surrounding the planet, traps this plasma in its own magnetic field where it can flow down the Earth's magnetic field lines as the plasma collides with molecules in the atmosphere, resulting in beautiful, but mysteriously looking auroras.

However, solar flares can also trigger intense electrical currents in the magnetosphere which can potentially generate electromagnetic disturbances in and on the ground on Earth. If these disturbances are large enough, they can produce electrical currents and voltages in long stretches of conductive materials, such as power lines, telecommunications cables, metal pipelines, as well as wireless radio links to satellites and yes, ham radio too.

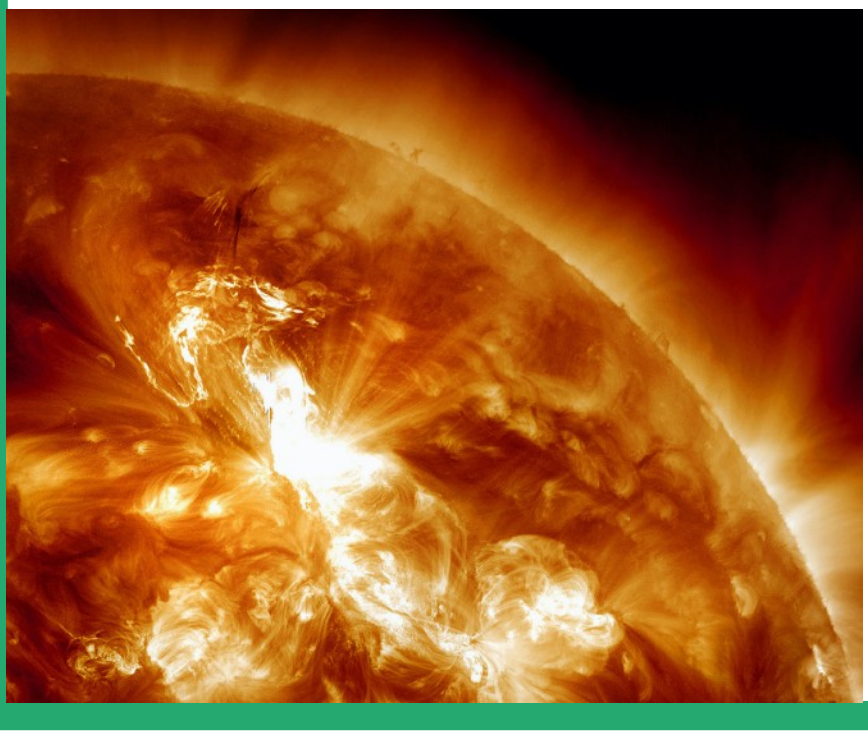
So what does this all mean? What would happen to us on Earth if it was to experience a direct hit from a massive CME?

Well, one did actually happen, in 1859 when British astronomer, Richard Carrington, observed an intense blast of white light on the surface of the Sun during his routine study of sunspot activity. What happened next over the course of several days was a dramatic increase in and expansion of extraordinary auroras seen at both the North and South Poles and as far south along the equator.

It also caused major disruptions to many of the telegraph lines from Paris to Boston. Many stories exist of sparks jumping off telegraph wires during the period. What Carrington didn't know at the time but today it's believed that he was the first to observe the largest recorded solar flare ever recorded. Today, scientists and historians simply call it the Carrington Event.

Compared to the world in 1859, humanity is far more dependent on electrical energy today. Everything from microwaves to cell phones, personal computers, electric lights, transportation, etc. If a CME as large as the Carrington Event occurred today, it would no doubt have the potential of wrecking the modern world.

Consequently, we need to ask some hard questions. How would the world's electrical supply grid handle the excessive amount of induced current that would likely occur?



Much of our electrical infrastructure would be potentially damaged or destroyed and it would likely take months, if not years, to replace. As a result, large areas of the planet would be without electricity. Thus, no lighting, no heating, no mass transit just to name a few disasters.

As humans, we wake up every day without really giving much thought to our natural surroundings. We sort of take it all for granted and yet nature has a way of biting us in the butt every now and then.

To clarify for those who think I'm proclaiming that the world is about to end, I'm simply sharing a fascinating bit of history. As any serious ham operator and DXer will admit, knowing how the sun behaves and its effects on radio propagation is an important aspect of our hobby. It's simply out of curiosity that I write this. I hope you'll want to explore more like I did.

A QRP CHRISTMAS

BY JEFF DAVIS — KE9V

An early Christmas Gift

Hi All:

I had sent a Tweet to Jeff Davis, KE9V that it was time to re-publish "A QRP Christmas" which is a favorite of mine - no .... it would be fairer to say it is THE favorite Amateur Radio Christmas story of mine.

Jeff surprised me by granting me permission to share it with all of you. Perhaps you've read it before - it's so very worth reading again. And perhaps there's a new bunch of QRP'ers who have never read this before. It is presented here, as KE9V sent to me to share with you! Thank you, Jeff!

Happy New Year and 73,

Bob W1YRC

https://w2lj.blogspot.com/2020/12/an-early-christmas-gift.html

"A foot of new snow and it's still falling, this is getting bad," Tom muttered to no one in particular. Just then Stella walked in with a sad look on her face and Tom knew right away.

"The kids aren't going to make it, are they?" he asked. "No," she answered, "I just got off the phone with them and the roads are all closed."

Great! Two days before Christmas, and the world had come to a halt.

Tom gave his wife a hug and said, "Well Mother, we might as well get over it, nothing much we can do now but wait this thing out." In the 50 plus years since the couple bought the house they had weathered many winter storms, but this would be the first Christmas without the kids and, now, the grandchildren. Nature could be cruel, but at least they had plenty of food and firewood, and there was ample gas for the generator in case the power went off. "I think I'll go see if the repeater is still on the air," Tom said as he headed to his ham shack over the garage. Being a radio amateur had its advantages, and emergency communication was one of them. He fired up the VHF set, and--sure enough--the local repeater was alive and busy. Several folks in the community needed assistance, and snowmobile deliveries were being organized accompanied by hams to maintain communication.

As with many things, people take communication systems for granted until they're suddenly unavailable. Two years earlier, with the proliferation of cellular telephone technology, Middletown decided it no longer needed Amateur Radio to assist during emergencies. A few months later, the river overflowed its banks during a massive rainstorm. Lightning wreaked havoc on the power grid and even cellular telephones were overloaded or knocked out altogether.

With one loud clap of thunder Amateur Radio was back in the disaster communications business in Middletown. The Town Council went so far as to give the Middletown Amateur Radio Club access to a county building to serve as a communications headquarters and monthly meeting spot.

Stella walked up the stairs to the radio shack with a hot cup of coffee for Tom. She figured he'd be spending quite a lot of time on the air during this snow emergency. She was wrong. Tom wasn't all that fond of 2-meters, really. He'd always been a CW op. In fact, for years he never even owned a microphone for his HF gear. To him, ham radio was and would always be, CW.

His high school print shop teacher had convinced him to get his ham license in 1939. A few years later, Uncle Sam took note of his radiotelegraphy talents and made him a Navy radio operator aboard the USS Missouri. He served from 1941 until the end of the War and even was present aboard the Missouri for the formal Japanese surrender.

Not long after the War, he married his high school sweetheart, Stella, and started what would be a 40-year career at the telephone company. They had three children and still lived in the very house they'd bought brand new as a young couple in 1947.

Tom was a tinkerer, and he'd built several transmitters and even a few receivers. But he was a serious brasspounder and could handle 30 to 40 WPM with

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ease. His station was always as clean as his signal, and any piece of equipment he built was a work of art. It wasn't good enough just to work and look good--it had to be perfect. Other members of the local radio club poked fun because Tom had a habit of making sure that even the screw slots on anything he built were aligned in the same direction.

He didn't buy his first commercially made gear until 1961--a Hallicrafters SX-140 receiver with a matching HT-40 transmitter. That was the only store-bought equipment in his shack until over a decade later, when his best friend died suddenly. His friend's widow gave Tom all the equipment in her husband's shack, including a complete Collins S-Line. That gear took a special place in Tom's heart and shack, not so much because it was the "ultimate station," but because it had belonged to his closest friend.

After retiring in 1986, Tom quit building equipment. He maintained several skeds with on-air friends from around the world. Saturday nights were his favorite, for it was then that he met with a large number of old Navy radio ops on 7.030. He really enjoyed those rag chews! But, one-by-one, the gang started to dwindle as more and more of his buddies became Silent Keys. It depressed him so that when his main receiver quit working in 1993, he didn't bother to fix it. K9NZQ was off the air for the first time since World War II.

Stella was worried enough about her husband's depression that she told the kids about the problem. They chipped in and bought him a brand new 2-meter FM radio for his birthday thinking that would cheer him up. Tom listened to the local repeater every day, but he rarely transmitted. It just wasn't the same.

She had hoped that having all the kids and grandchildren at the house again this Christmas would perk Tom up and chase away the lingering blues but now the weather had ruined that plan.

"I think I'll go out and make sure the generator still starts," he said as he passed through the kitchen. "The power lines are beginning to ice up."

Once he was out the back door, Stella took the opportunity to quickly and carefully wrap her gift to him. One of his friends had suggested to her that she buy Tom a kit for Christmas. Taking his suggestion, she ordered a small QRP CW transceiver kit he'd recommended. She didn't know if he would like it, but with this weather she was especially glad it had a arrived a few days earlier. Like it or not, at least he would have something to open on Christmas morning.

Day turned into evening and somehow the power stayed on. More snow was falling outside. The TV was calling it some sort of record snowfall for central Indiana. When Tom said he was going to bed and it was only 6:30 PM, she decided it was time.

"Let's go ahead and open our presents now, and not wait two more days" she said, handing him the gaily wrapped box. He didn't really want to open presents, now but he didn't want to disappoint Stella, knowing that she was still upset about the kids.

"All right, let me go get yours first," he agreed. In a few minutes they were opening their presents. She seemed to really like the bread making machine. He was more than a little surprised as he opened the little QRP kit.

"There now," she allowed, "that will give you something to do for a few days and it will keep you out of my kitchen." Tom knew he'd been underfoot lately. "You're sending me to my room without pie?" he said with a smile.

"Go on with you. I'll bring pie up to you as soon as the coffee quits brewing," she said as he headed back to the shack with the little box in hand.

By the time she walked in the shack, pumpkin pie in one hand and hot coffee in the other, Tom had unpacked the box, sorted the parts and was halfway through the instructions. She was happy to see he at least looked interested and left the room with her fingers crossed that this might cheer him up.

He didn't leave the shack until nearly midnight. By then, he had half of the components soldered to the main board, and he had wound several coils. "If the power doesn't go out," he muttered, "I could have this thing running by Christmas!"

The next morning he awoke at 7:30 AM, two hours later than usual. Stella already had the bacon frying when he walked into the kitchen. A quick look out the back window revealed yet another foot of fresh snow had fallen last night. He was glad to see blue sky and sunshine and hoped that meant the worst was over. After breakfast he was back in the shack, soldering pen in hand.

Tom was genuinely impressed with the little kit. The instructions were clear, and it looked to be of high-quality. He had already convinced himself, though, that he would never make a contact on 40 meters with less than 3 W. Nonetheless, he was happy to have something to keep his hands and mind busy. And it was a good thing that he'd kept up that dipole so he could see if this radio actually worked.

By 7 that evening, the kit was nearly finished. He was ready to apply power and begin initial testing. Stella knew that her decision to buy the little kit was a good one when he asked if she'd mind if he ate supper in the shack. By 11 PM Christmas Eve, the kit was finished. He plugged in the headphones, hooked up the antenna connection, and applied power.

The noise level jumped, and he knew things were working when he moved the VFO ever so slightly and instantly heard a QSO in progress. "Now, that's a good sign," he said to himself. He pulled off the headphones and headed upstairs to tell Stella the good news. But she was fast asleep. It was midnight. No point in waking her up now. He slipped back to the shack and put the headphones back on.

73 ES MERRY XMAS OM DE W5WBL he heard as one QSO completed. Tom moved a little higher in the band until he heard a strong station in QSO with a VE6 in Vancouver. He was more than a little impressed with the sensitivity of the receiver. After listening to a few more QSOs he continued moving up the band until suddenly, he heard a familiar call sign.

CQ CQ CQ de XE3HHH XE3HHH XE3HHH K. Tom almost couldn't believe it. Here was his old friend Miguel in Mexico calling CQ. He listened as Miguel called several more times with no reply. Thinking it silly to even try, Tom grabbed an old straight key and plugged it in. It was the first time in years that he had even touched a key. "This will never work" he thought as he tapped out XE3HHH XE3HHH de K9NZQ K9NZQ HW CPI OM?

Tom's jaw dropped when almost instantly Miguel came back. K9NZQ de XE3HHH FB OM I THOUGHT YOU DIED HI HI MERRY CHRISTMAS AMIGO. The two chatted for nearly an hour until Miguel had to go.

After the final 73, Tom sat back in his chair and rubbed his chin. He couldn't help but smile when he thought of just how much fun this day had been. Building the little kit and actually working an old friend just seemed to make his day complete. He would have bet half his retirement pension that there was no way to work Miguel with less than 3 watts. He knew some guys who worked QRP regularly, but he had always assumed that actually making contacts was a pretty rough and risky business. At least he never thought it would be that easy.

He was about to shut down the rig and go to bed when he heard a loud CQ just off the frequency where he worked Miguel. It was KL7DD. Tom reached for the key figuring he'd get in another quick QSO--or at least make the attempt--then go to bed. KL7DD turned out to be Joe in Point Barrow, Alaska. Joe also was ex-Navy, so the two hit it off right away. What started off to be a "quick" contact turned into a two-hour QSO. Joe only had trouble hearing Tom a couple of times. The little QRP rig was holding its own and making a believer out of Tom in the process.

Four contacts later, Tom was exhausted. About the time he shut things down and headed for bed, Stella walked in. "Merry Christmas!" she exclaimed. "What time did you get up? I didn't hear you get out of bed?"

Tom wasn't sure how to tell her he had been up all night 'playing radio' so he just replied, "early."

"Well, I've got breakfast ready," she said as she walked back down the stairs. He was still thinking about the contacts he made last night when he sat down at the kitchen table. "You know Mother," he said with a smile, "this might have been one of the very best Christmas's we've had in a long, long time. After breakfast, let's call the kids, but then I need to be back in the shack by noon because I told a guy that I would meet him on 40 meters to help him check out his new antenna..."

No doubt about it. K9NZQ was radio active once again.

A QRP Christmas by Jeff Davis, KE9V

72 de Larry W2LJ

QRP - When you care to send the very least!