

March 2022

The

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Messenger 2.0



Blackstone Valley Amateur Radio Club's Quarterly Newsletter

W1DDD.org

All Wired Up Over Homebrew Projects

BY MATT PENTTILA—NA1Q

Seeing I've been home requiring oxygen during COVID-19 and pneumonia, and everyone knows I can't just sit still and watch TV all day, I decided to put together this kit I bought back on July 6, 2020.

The kit is a Phaser FT8 digital transceiver with optional case for 7.074 40-meter FT8 frequency.

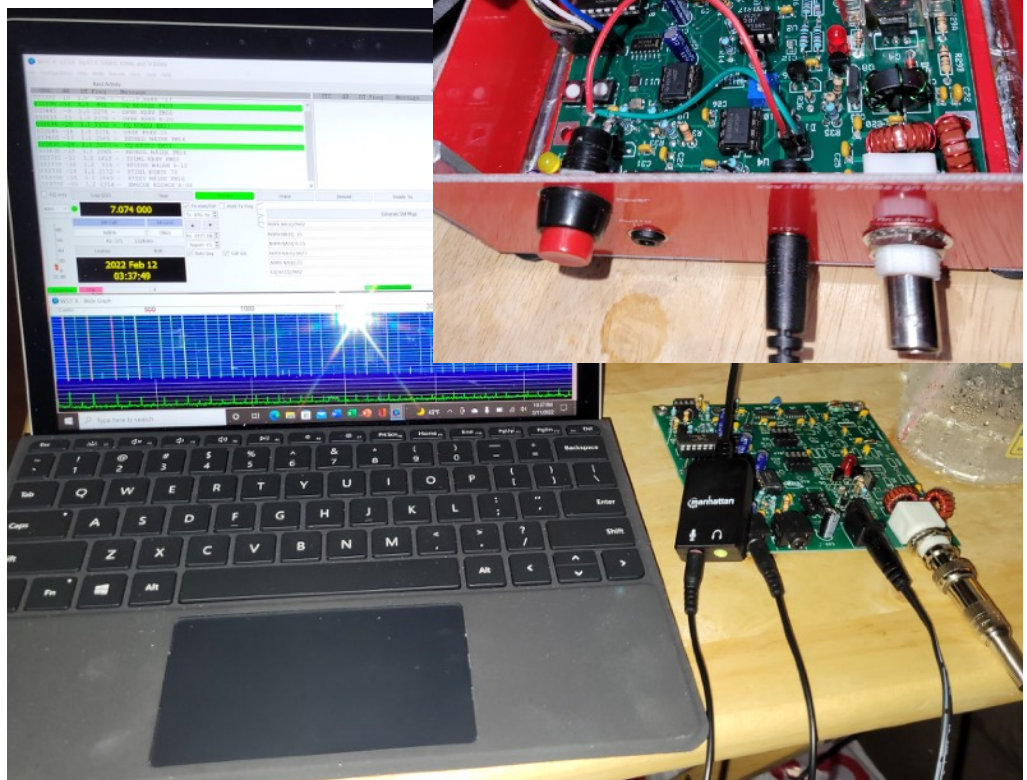
The kit puts out approximately 4 watts at 12V and works with WSJT-X and JS8CALL software, requires just a PC or tablet with a soundboard.

So far I've built the enclosure, and assembled and tested the power source, local oscillator and receiver. I still have to solder in the transmitter side of things, I should have it ready to go by the February meeting (I work on one section a day and test that before retiring for the night)

Seeing it is snowing out this

Sunday, I decided to keep going on the Phaser 40m FT8 Transceiver. I left off finishing and testing the receiver.

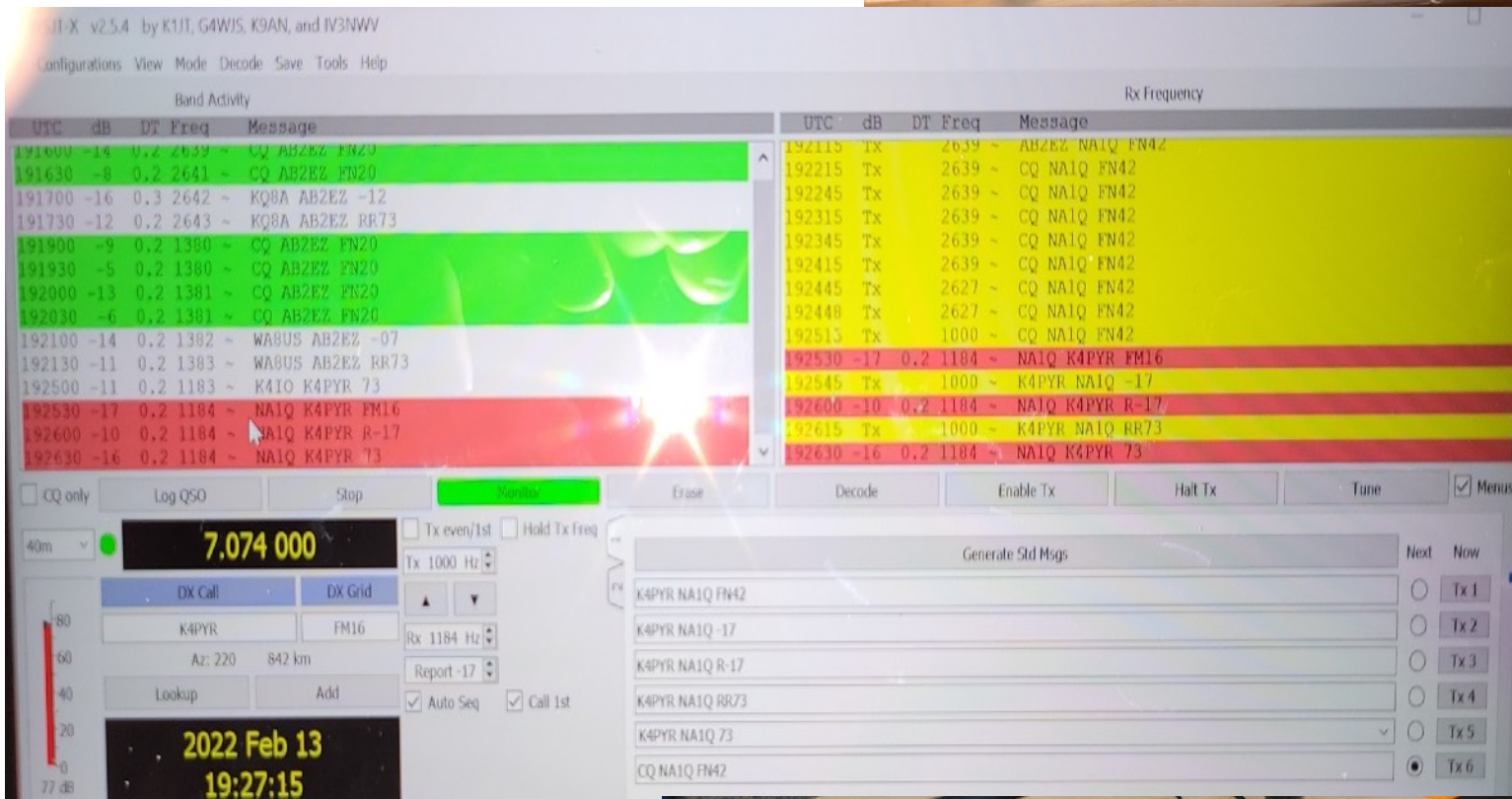
Now I've completed soldering the 4 watt sideband transmitter, and installed it in the enclosure after attaching the power switch and jumpers from the front panel to plug J5, which is a pain because it doesn't go 1 to 1, 2 to 2, but 1 to 1, 2 to 6, 3 to 5, 4 to 3, 3 to 4 and 6 to 2. Messed up but it works, so who am I to argue.



Continued On Page 2

Fortunately the cable plugs are individual so it made it easier to reroute the wires at plug J5.

As for the testing, I used the AlexLoop Hampack antenna, with my Microsoft Surface Go2 tablet and a Manhattan USB-C Audio Adapter, a couple 3-foot 3-conductor 1/8 inch stereo patch cords, and hooked a 2.1mm ID 5.5mm OD 12VDC 1A wall wart, and the station is complete. Firing up WSJT-X the screen lit up and my first QSO was with K4PYR in FM16 with -17db which isn't bad considering I'm using the magnetic loop antenna inside the living room of my house.



Across *THE* Spectrum

BVARC MEMBERSHIP MEETING

Monday, February 28th we will have our monthly BVARC Membership meeting beginning at 7:00pm at Our Saviors Parish located at 500 Smithfield Rd, Woonsocket, RI.

CONSORTIUM

March 7th @ 7:00pm at the Manville Sportsman's Club , 250 High Street, Lincoln, RI

BVARC SIMPLEX NET

Every Wednesday at 7 p.m. on 146.565.

AMATEUR RADIO LICENSE TEST SESSION

It will be held at Our Saviours Parish, 500 Smithfield Road (146A) on March 12th, at 9:00am. Pre-registration preferred and Pre-completed 605 form required. For more information, contact Bob Jones at bjones949@gmail.com. Complimentary coffee and donuts available at 8:30 a.m.

The current test fee is \$15.00. The exact amount would be appreciated or a check made out to the ARRL/VEC.

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.

The pac 17 antenna after the blizzard of 2022.

BY BUDDY KINNIBURGH—K1CYO

Set At 40 Meters, all the feedpoints and the radials are under a foot of snow or more. Made more than a dozen contacts during and after the blizzard.



From our President

Hello Fellow BVARC Members

Another full year has come and gone. While we were all struggling with conflicting COVID restrictions, as a group we have done remarkably well having ended the year with all of us still together. While some of us may have been under the weather for a few weeks or more with COVID, the flu, or other medical conditions we should all be very thankful that we are all still together.

When I look back on 2021 I see a year that was a success for BVARC. We were finally able to hold a good old fashioned Field Day including raising a tri-beam antenna and holding several educational presentations from QRP to a satellite demonstration. We had awesome food to perfect weather and absolutely awesome participation from many of our members. We couldn't have asked for more. Our year also included a trip to the ARRL in Newington and several individual QRP setups around the area and ended with a fabulous Christmas party.

Additionally, in 2021 the officers and Board of Governors were able to finalize a new set of bylaws and present this document to the membership for your input and comments. These new bylaws have been a work in progress since first discussed during the February 2019 meeting followed by a board meeting in May 2019 when the first draft was presented or consideration. A lot of hard work went into this document for almost three full years reaching the point where a final vote by the membership was held. And

as you all know by now, the bylaws were unanimously approved during our monthly meeting on January 31, 2022.

As I look ahead to 2022, I'm very optimistic that we will again have an exciting year. With everyone's continued participation we can organize another successful Field Day, participate in the 250th anniversary of the burning of the HMS Gaspee on June 12th, organize and participate in small daylong field trips to various local sites and even challenge



ourselves with longer tours. Some suggested ideas include a daylong trip to the Vintage Radio and Communications Museum in Windsor, CT, a walk up Mt. Wachusett Mountain, with a QRP transmit from the top, an amateur radio demonstration at Capron Park in Attleboro, MA, and going to South Wellfleet to visit the site of Marconi's transatlantic communication and the Marconi Maritime Center in Chatham, MA. Whatever y'all want to do we can if we have just a little help to plan and set it up ahead of time - and NOW is the time to start setting up these adventures. So please let me know if you can help or have another idea and I'll do what I can to help get it done with you.

73, N1RGK
Ken Trudel
President, BVARC

REVERSE BEACON NETWORK

Helps You Determine Where Your CW Signal Is Going

BY BOB JANUS—KA1EMH

The reverse beacon network is a group of volunteer ham stations located throughout the globe that listen for stations calling CQ on CW, rty, psk31 or psk63. The detected CQs are posted in near real time on the network's website, www.reversebeacon.net.

Each posting indicates the call letters of the listening station and the station calling CQ, time of detection, frequency, transmission mode and signal strength. The website also provides a world map that displays lines that radiate from the location of the transmitting station to each of the spotting stations that have detected the operator's CQs.

With this arrangement a ham who is on the air can see if their signal is being received by any of these spotting stations. So even if no one is returning your CQ you can check the reverse beacon network to see if you are being heard.

Here is an example from my station, KA1EMH, working CW on 20 meters.

The screenshot shows the website interface for the Reverse Beacon Network. At the top, there's a browser window with the URL beta.reversebeacon.net/main.php. Below the browser window is a world map with several red dots representing spotting stations and purple lines radiating from a central point in the United States, representing the signal paths. Below the map is a control panel with a color-coded legend for frequencies (530m to 2m), checkboxes for transmission modes (cw, rty, psk31, psk63), and a search box for call signs. The search box contains "KA1EMH". Below the search box is a table of detected CQs.

spotter	spotted	freq	cq/dx	snr	speed	time	seen
W4KAZ	KA1EMH	14044.1	CW CQ	22 dB	12 wpm	1330z 29 Oct	3 months ago
VE6WZ	KA1EMH	14044.2	CW CQ	5 dB	11 wpm	1330z 29 Oct	3 months ago
KD7YZ	KA1EMH	14053.5	CW CQ	20 dB	12 wpm	1323z 29 Oct	3 months ago
KV4TT	KA1EMH	14053.5	CW CQ	16 dB	12 wpm	1322z 29 Oct	3 months ago
W3OA	KA1EMH	14041.3	CW CQ	23 dB	12 wpm	1314z 29 Oct	3 months ago

To access this map feature from the initial web page, click on "Try it!" that is in the first paragraph of the highlighted box. On the next page that is displayed click on "beta.reversebeacon.net" that is highlighted in the top box. When the map appears click the CW box and your operating band. Then type your call sign in the "Spotted" box. Additional information is available on the website.

CW CORNER

BY BOB BEAUDET—W1YRC

The FCC, sometimes called the friendly candy company, dropped all Morse code proficiency testing from any of the Amateur radio exams administered after Feb. 23, 2007. Understandably, some rejoiced but some were disappointed because they wanted to learn code and use it on the air. At the time, some interpreted FCC's action as ending all use of CW. Of course, that was never FCC's intent.

Shortly after that date, there rose a small demand by some to learn CW after being licensed with a General or Extra class license. Responsible clubs that always try to provide service to their members and the community in which it resides, developed classes and taught Morse code to Extras and Generals who wanted to know and use the code. The classes also facilitated obtaining code practice material and keys. Statistics taken from submitted logs indicated strangely that the use of CW increased by about 15% nationwide in the years following FCC's dropping the code exam requirement. We're not sure why.

BVARC organized its third CW class in January, 2022 and unlike past classes, BVARC's instructor, Bob W1YRC selected those who were "high pots" or high potentials to fill the class. On Feb. 16th, the fourth weekly class session was held in Bob's kitchen. The actual learning of the Morse alphabet and numerals, together with a few prosigns and punctuation was learned at home by each student after the initial session which set down the format and expectations. Bob explained that there is no possible way that he can learn the code for the

BVARC CW Class

students. It's like learning basic verbs in French or Latin. There's no possible way that the teacher can learn it for the students.

However, once the 26 letters, 10 numbers and about 10 prosigns and Q signals are learned. Bob worked on the students' smoothness in sending code. To add interest to the classes, the second half of each session is used to "show and tell" related topics; code keys, oscillators, QRP radios, dummy loads, etc. In order to maintain the students' energy and interest, fresh baked apple, blueberry and pumpkin pies are usually offered along with a variety of other good things. I apologize for the few added pounds that seem to make their way into the CW bag. All our students are very happy that they have added a valuable tool to their tool box, a tool that will help them add plenty of DX to their log.

Students in the latest class are: Joe Campbell KC1OPD, Marc Caouette W1MCX, Mickey Callahan K1WMC, Mike Kenney K1ETA, Byron Kinniburgh K1CYQ, Patty Vilnit W1AUT and Ray Vilnit KC1HQB. All are now able to copy and send at least 10+ wpm. They need more practice to smooth out their rhythm and feel more comfortable at the key. At least half participated in the recent ARRL CW DX Contest.

If there is interest, another class will be formed and run through the program. Remember, accuracy transcends speed.

The 1,000 Point Challenge

BY JIM JOHNSON—K1GND

As a seasoned “Ham Radio Operator” my hobby objectives consisted of making contacts with operators in the USA and foreign countries. I had no personal objectives as far as receiving awards for numbers of contacts. That quickly changed when a friend encouraged me to take a look at the ARRL DXCC Challenge Award. This happened in 2018. Let me explain first what the DXCC challenge is.

The DXCC Challenge Award is earned by working and confirming at least 1,000 DXCC band-points on any Amateur bands, 160 through 6 meters (except 60 meters). Certificates are not available for this award however, there is a distinctive wall plaque available to display your achievement. Points are awarded for working a new country (DX) once per band from 160 to 6 m (excluding 60 m).

Because I foolishly discarded all my paper logbook entries when I moved from Florida, I had to start from scratch with a new logbook and new call sign. Being just a casual operator, I had little knowledge of computer logging and to further diminish my chances of achieving awards, the ARRL had determined that logging was no longer necessary. I always thought that it was an ARRL mistake to do away with logging but being lazy I took advantage of the change. To further complicate the attempt at meeting the Challenge Award, the sun spot activity was heading toward the lowest level in the then current eleven-year cycle.

My radio station at the time consisted of a 100-watt transceiver and several homemade wire antennas - a very modest station by all measures.

Coupled with that, I had begun to explore integrating a computer into the mix. Logging contacts became much easier (than using paper logs) and although it was not automatic, it did simplify the recording process. Along about this time (2010) I discovered a program written by Simon Brown HB9DRV. The program was “Ham Radio Deluxe (HRD)” and is currently under the ownership of WA9PIE Mike Carper, PhD. I also rejoined the ARRL and began using “Logbook of The World”. There are many logging programs available and without any knowledge of the other logging programs, I made the decision to go with HRD.

During 2010 I decided to look for a radio club to join and with the help of N1GKE Myrt, got accepted by the



Blackstone Valley Amateur Radio Club (BVARC) and met up with W1YRC Bob who is a world class dx'er. I was offered an opportunity to join Bob as a co-instructor for the Consortium. Listening to Bob I became interested in chasing ARRL awards. It was there that I learned about the DXCC Challenge. Over time I learned that HRD had tracking programs to handle the recording of QSO's. I am not a contester and fortunately for me, HRD is not a contest logging program.

Shortly after 2010 the emphasis of radio contacts switched from SSB and CW to a new mode named FT-8 (W1JT Joe Taylor) digital. Using the three above modes, I began to notice the number of my contacts in the LoTW logging program climbing. It wasn't until 2018 that my Challenge numbers got into the hundreds that I decided to see if I could really make it to the threshold -1000. My objective was to make the required band challenge points using only LoTW and without physical QSL cards although I did acquire some (“hard copy”) along the way. Fast forward to February 2022. On the 20th an 80-meter CW contact with radio station G0CQZ, Nigel became my 1000 Challenge contact. My station now is a “little” more sophisticated and my computer skills have improved quite a bit.

Moral of the story, set some goals, get in touch with an Elmer, be an active member of a club, learn CW, choose a logging program that helps accomplish your objectives and last but not least “DON'T GIVE UP”.

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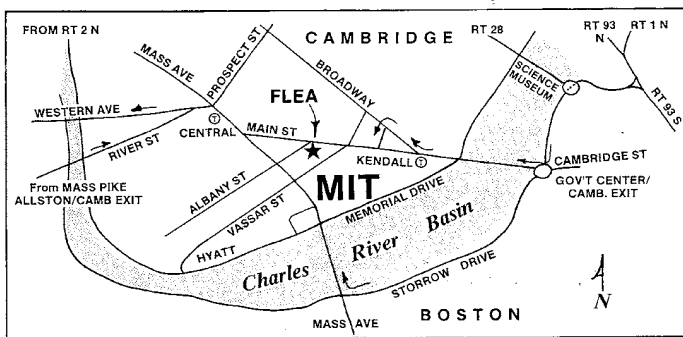
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