



Winter Field Day 2024

BY MARK HOFSTRA—KW1X

We started out on an overcast Saturday around 12:00 setting up the club's 80 meter doublet. By 1:00 the antenna and station were set up and operational. Simultaneously Peter, K1AV, was busy setting up his station which included a tent and heater which turned out to be a great idea. Something to think about next year. Peter did his own write up so I will only be reporting on my station.

Martin, AA1ON, Randy, K5ZD, and myself, KW1X, started operating at 2:00 using the club callsign W1DDD and 2O RI exchange. 2O is two transmitters outdoors for those who are wondering. The event started out slowly but seemed to pick up after the first hour.

We were using a Yaesu FT-450 transceiver, a WinKeyer for CW, a LDG AT-1000pro II auto tuner and N1MM software all being run from Peter's generator. I started off the first hour with 31 CW QSO's. Martin stepped in for the next hour with 50 CW QSO's and Randy finished us off with 64 CW/SSB QSO's. We ended up with 145 contacts for the three hours we operated. Combining the two stations we had a total of 209 QSO's.

At 5:00 we had had enough of operating out in the cold and were wishing that maybe we brought a heater as well! Breaking down the stations took all of about 30 minutes and by the time I got back to Franklin I was getting some feeling back in my fingers and toes!



I was impressed by the number of club members that showed up throughout the afternoon to observe. I'm wishing that we could get more members on the air. This particular event encourages people to bring their portable or mobile setups so hopefully in the future we can get more people on the air using their own stations. Perhaps people will feel more comfortable using their own setups.

All in all it was a fun time for all and a great primer for the upcoming field day in June.

Mark - KW1X

Reflections From a First Winter Field Day Experience

BY PETER SICHEL – K1AV

At BVARC Summer Field Day 2022 I got to play with Mike Kenney's, K1ETA, Elecraft KX3 and was bitten by the portable/QRP bug.

I've always loved CW, and being able to hear and make contacts from such a tiny radio was inspiring. Soon after I had the crazy idea it would be fun to operate portable during an upcoming trip to Aruba. I had dreamed of going on a DXpedition someday and Aruba could be a first taste of what it might be like ([see P4/K1AV in Aruba](<https://www.qrz.com/db/P4/K1AV>)).

By Winter Field Day (WFD) 2023 I had my own portable station with Aruba and some POTA activations under my belt, but I had no idea how BVARC organized WFD. My entire station fits in a modest knapsack so I gathered my gear and showed up at the club's WFD location, Our Saviour's Church, 500 Smithfield Road, Woonsocket. When I arrived the QSO-a-Go-Go trailer was largely set up and a couple other hams were setting up to operate from their vehicles. I enjoyed talking with the crew and seeing what everyone was doing. I took a turn operating SSB and logging from the QSO-a-Go-Go station. It was fun but after a while many of us were cold. The on air period starts at 2 p.m. and by 4:30 or 5 p.m. the team were ready to pack up and head home.

As an Eagle Scout, I'm used to winter camping so as WFD approached this year, I wanted to set up my own portable station in a tent with a heater. I



reached out to Mark Hostra, KW1X, WFD committee chairman, asking to attend the WFD planning meeting. There were only a few of us at the meeting and I volunteered to bring my little portable station, a tent, and a generator. The WFD committee was totally supportive and encouraging. We would operate as "2O RI" (2 transmitters, Outdoor from RI).

I arrived Saturday morning about a half hour early (11:30am) and people were just starting to set up. I checked in with folks, surveyed the site for where to put my antenna, and then set up my family's camping tent accordingly.

My plan was to set up a 40m EFHW (End Fed Half Wave) as an inverted L using an arborist throw kit to set a rope over some branches. I had read the inverted L configuration was very effective

Continued On Next Page

combining vertical and horizontal polarization with a low take off angle. For the corner of the "L" I would use a 1.5" nylon pulley that opened to accept the wire.

To make the top of the inverted L flat after I hoisted the pulley I would need a clear path to a rope in another tree. I didn't want to drag the premium antenna wire over branches directly. With a little practice it's easy to set a throw line over a tree at 50', but harder to target a lower branch with a clear path toward another tree. It took three throws to set the pulley rope and another two for the far end. Then I threw a line over the antenna wire to help guide it past some low branches. The beauty of the throw kit is that it's small, portable, and quiet.

For the other station, Mark set up a generator and air compressor and then used a "potato gun" to fire a line over the treetops. When I first heard the noise I was worried I might have to relocate to operate. I was relieved to learn it was the air compressor making most of the noise. This would not be good for POTA. Even throwing ropes in trees is questionable unless you get permission and are careful to leave no trace. This is why the quarter wave 20m vertical on a mini-tripod has become so popular for POTA. Twenty meters is open most days and the setup can be quick with minimal impact.

With the EFHW in place, I set up my station in the tent. A small table, two chairs, the IC-705 transceiver with Micro PA50 amp and LDG Z-100Plus tuner. The station is battery powered but I wanted the generator to power an electric space heater. BVARC is a friendly crew and as people arrived they were glad to help. It was fun to see the antennas and stations come to life.

I tuned up the station on 20m and everything seemed to work well. It was now 1 p.m. and a good time for lunch. I checked with Mark and we agreed they would start on 20m and I would operate on 15m. When I switched my station to 15m a little before the 2 p.m start time, I had an unexpected problem with the automatic antenna tuner and EFHW. The antenna wouldn't tune and the radio kept switching the tuner off. After a few failed attempts, I decided to set up my POTA vertical. I knew from experience the setup could be ready in less than 15 minutes. As the



other crew began operating I was outside setting up a second antenna. With 18 radials and a full quarter wave on 15m, the antenna was easily tuned to an SWR of under 1.2:1. The radio and Micro PA50 were now happy.

The problem I encountered with the tuner and EFHW turned out to be a combination of unexpected behavior and operator error. The IC-705 has a radio interface to the tuner which will automatically re-tune, if the SWR goes above 1.5:1. By inserting a 50-watt amp between the radio and the tuner it confused the radio. I now believe what happened is that the amp didn't fully bypass even when the amp was turned off so the radio didn't see the SWR come down and switched the tuner to bypass mode.

It worked on 20m because the amp was last used on 20m with the corresponding LPF selected. When I switched to 15m it confused the radio. The work around would have been to disconnect the tuner from the radio, or to physically disconnect the amp before tuning from the radio after switching bands. As an emergency exercise it was a good experience. I'm just sorry I missed the opportunity to compare the two antennas side-by-side.

Once on the air, it was great fun. My station was getting out and I was making contacts easily up and down the band. WFD is much less crowded than regular FD. After working the stations I could find on 15m in about 30 minutes I began running stations by calling CQ WFD. I used HAMRS on iPad to keep my WFD log and it was often hard to keep up. I ended with 65 entries but two were dupes (63 unique calls).

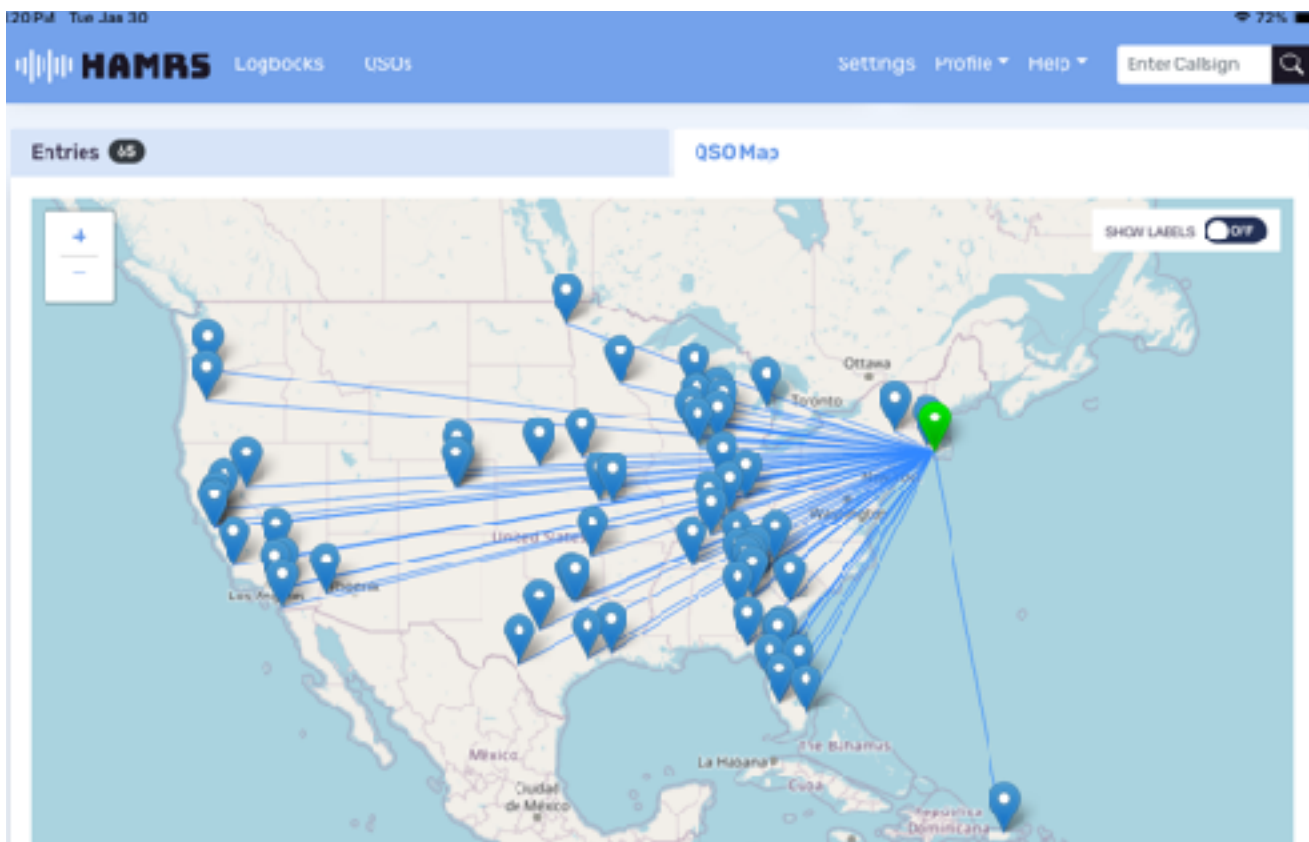
Between the tent and heater I was quite comfortable. People were enjoying sitting in the

second chair to warm up. I encouraged others to operate but I seemed to be on a roll and they were glad to let me continue. I was calling CQ at 22 WPM. When Randy Thompson, K5ZD, stopped by he suggested I would get more responses if I sped up. I hadn't thought of it that way but he was right. I bumped up the speed and got more stations calling after each QSO.

As the sun began to set, we started packing up to go home. It was nice so many people stayed to help until everything was safely packed in our vehicles. I can imagine leaving the tent and antenna setup up overnight and returning Sunday morning to make more contacts, if we had a suitable site.

Thanks to Mark for organizing our WFD effort. I had a great time. At its heart, WFD is an emergency communication exercise and opportunity to help each other have fun. I hope next year more of the club will consider bringing some field gear they'd like to try out, and perhaps take a turn at operating. It's easy. Think about what experience you'd like to have and ask ahead to find others who might join you.

Mark teased me that I could be the WFD chairman next year. With enough warm tents, I think we could set a new club record.



JOIN US AT THE LIBRARY

The Blackstone Valley Amateur Radio Club will conduct an amateur radio demonstration Sat., April 6, from 10 a.m. to 3 p.m. at the Bellingham Public Library, 100 Blackstone St. The club will operate two radio stations outside the library as an introduction to ham radio.

An indoor display will feature the history of ham radio, its purpose, the benefits of the ham radio hobby and the public service hams render during national emergencies

and natural disasters. Some vintage radio equipment will be displayed as well as a continuous Morse code demonstration.

Experienced hams will be present to welcome visitors, explain the day's proceedings and answer questions regarding their hobby. The demo is in conjunction with National Library Week.

Questions may be directed to Mickey Callahan, K1WMC, at mickc@comcast.net



Welcome Aboard

BVARC has welcomed several new members to its roster since the last newsletter. If you meet them at club meetings or functions, please say hello.

Stephen Swenson—KC1LAC

Steven Serapiglia—N1OSI

Anthony Fascia—KB1JLV

Welcome Back to Bob Elliot—K1RI

*The Messenger*²⁰

*The Messenger Is Produced
3 Issues a Year
End of February,
Beginning of June,
And Beginning of November*

*Editorial Contributions
Are Done by our Members*

Edited by Ronald Blais

Produced by Teri Diiorio

From our President

Hello Fellow BVARC Members,

My hope is this message finds you and your family happy and feeling well.

Now that the January blues are behind us, what a wet month, hopefully you're looking back and feeling good about yourself in that you took the time to make a lot of contacts, given the bands were quite cooperative at times. As many of you know, back in late January I was contacted by my contractor that, given the lack of snow, it would be a good time to get ahead of the planned early spring start on the land clearing I have been planning, and it would be best to take down all my antennas now so they don't get hung up on any of his larger pieces of tree cutting and earth moving equipment. So, last weekend I took everything down. Rolled up the coax and tucked it away for safe keeping. Less than 24 hours later, a snowstorm was predicted for this week and my contractor called to say he wasn't coming if it snows. Understandable, but the timing of the snow wasn't on my side at all. So here I sit, with no antennas waiting for the snow to melt.

As I write this letter in the middle of February, we're in the midst of what is "supposed" to be a foot or more snowstorm. More results on that later. The typical psychic word salad from the local and national weather prognosticators that "direct us" to stay inside and hunker down after we buy our ration of milk and bread proliferated on every TV station. Just once I'd like to hear them tell everyone to go outside and build a snowman, snow-woman, or snow fort and shovel a neighbor's walkway. Seems we're getting more and more comfortable with staying indoors instead of going outside to enjoy the snow. Even if for just a few minutes, to walk or sit in your yard enjoying the snow brings back a lot of great memories of days long gone. Try it if you can. It helps to clear your mind especially if you bring a hot cup of chocolate or coffee with you.

By the time this letter is published we will have had two membership meetings already. As you already know, we are beginning our annual planning for Field Day 2024 and we're invited back to the Bellingham Library's Business Expo. I think we might even be reconsidering a trip to Cape Cod to visit the Marconi

Transmission Site and the Marconi-RCA Wireless Museum in Chatham, MA. By the way, if you're a train buff, you might also take in the Chatham Railroad Museum. It's a small former railroad station but worth a couple of hours of your time if you enjoy old trains and memorabilia from yesteryear. It might be worth spending one night on the Cape to take it all in and have a great time together. We are also looking into participating in the Jamboree On The Air 2024, which helps Boy Scouts earn their radio merit badges. Great memories come from our personal experiences, which you can't get just sitting at home watching the world go by.

As a reminder, all of these events take time and effort to be conducted properly and the individual chairmen of these events need your help, NOW!! We all want to do things when the weather is favorable but the planning is done while there is snow on the ground. So PLEASE, let the chairmen know you're interested in helping and lend your full support. I promise, you will have a better time if you help in the planning no matter how small.

One last reminder from last year. It helps the BVARC leadership to better understand how active you want BVARC to be, and whether we are doing the kinds of things you want to participate in. What I don't want to happen is to see or hear that we are not fulfilling your expectations and you get frustrated. So send us an email, call us on the phone, or talk with us at meetings. All we want is to hear from you in order to make BVARC even better in 2024!

The Last Word: That 12 to 16-inch snowfall prediction turned out to be less than 6 inches.

"If everyone does just one thing, there won't be anything left to do but to have fun."

73, N1RGK

Ken Trudel

President & CEO, BVARC



BVARC CHRISTMAS PARTY

BY RAY VILNIT—KC1HQB

The annual BVARC Christmas Party was held on December 2nd at the Bella Restaurant located in Glendale, RI. Sixty members and their guests attended this club event. The Christmas Party committee would like to thank all those people that attended this event and for making it an overall fun evening.

In addition, thanks to all the individuals that provided donations for the raffle, and those that worked at the event in various capacities to make the Christmas Party a huge success.

We have tentatively reserved our next Christmas Party for Saturday December 7, 2024. We hope to see you there.



A Big Thanks to The Christmas Party Committee:

Bob Jones (WB1P),
Ginny Jones (N1WWG),
Patty Vilnit (W1AUT) and
Ray Vilnit (KC1HQB).



HOMEBREW



and gadgets

FROM THE WORKBENCH
OF MATT PENTTILA, NA1Q

BY MATT PENTTILA — NA1Q

Well it happened. I sat in awe of this nifty little QRP transceiver which was designed by Manuel Klaerig, DL2MAN, and Guido (no second name available) PE1NNZ, as an all mode AM/FM/SSB/CW version of a QCX Mini CW QRP transceiver. And you can get it as a kit or fully assembled.

Now the catch. Klaerig and Guido were shooting for an under \$50 kit, but due to the "computer chip shortage" prices are now around \$85 to \$90 for the bare two-board board kits and assembled just under \$140 off AliExpress.com.

So let's delve into the (tr)uSDX. I purchased mine in the safety hunter orange case with black raised printing. They offer several case colors, and also offer the 3D print files to roll your

truSDX Review



own, if you have a 3D printer, or know someone with one.

Now also through software upgrades you can choose between classic OEM bands of 80m/60m/40m/20m/15m, or the upper bands of 10/15/17/20/30 meters or the lower bands of 160/80/60/40 meters.

There is an issue of bandpass filtering outside of the traditional bands though and, surprisingly, they offer an optional bandpass filter board for the upper bands, but this

will require disassembly of the (tr)uSDX and swapping one board for another.

For those who are seasoned kit builders, and want to try

it and save some cash, I recommend purchasing the kit and have a go at handwinding the torroids for the bandpass filter board and a bit of soldering.

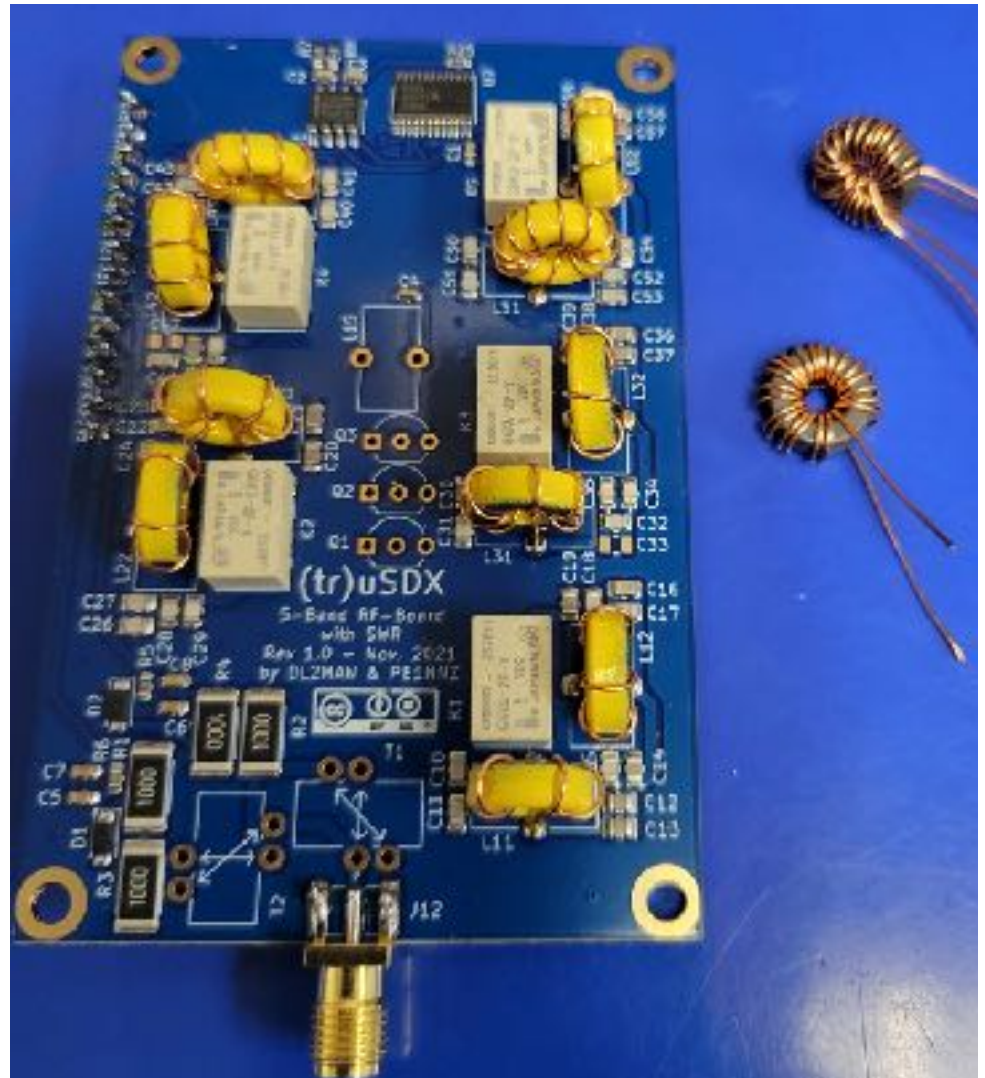
The instructions aren't great, however. You'll need to be able to read a schematic and figure out the layout of the components on the boards. Most involve soldering in thru board style, but you will need to remove two surface mount device capacitors off the LCD display board before installing.

Now for performance. This isn't going to be top quality audio like your Icom, Kenwood, or Yaesu thousand-plus dollar base

station, but it will get a decent .5 to 5 Watt QRP signal out.

The idea is the (tr)uSDX uses a Class E amplifier design and the goal is 80 percent to 85 percent efficiency, which is well within its design.

For further information about the (tr)uSDX transceiver check out DL2MAN'S website at: www.dl2man.de for information, videos, and links about the (tr)uSDX project.



Across THE Spectrum

BVARC FIELD DAY

June 22 and 23, Location tentatively set for grounds of the Scituate Senior Center, Route 102, Scituate. Set up day, Friday June 21, noon

NORTHEAST HAMXPOSITION 2024

August 22-25 at the Best Western Royal Plaza in Marlborough, MA.

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.

SKYWARN:

Every Wednesday at 7:30 p.m. on the NB1RI repeater network.

Website: <http://www.wx1box.org>

RI ARES NETS

Repeater net every First & Third Tuesday 7:30 p.m. on the W1RIA repeater network.

VHF Simplex is held every second Tuesday on 147.420 starting at 7:30 p.m. The Digital net is held the Fourth Tuesday of the month at 7:30 p.m. Check RIARES.org for details of the digital net

ARRL audio news can be heard each Sunday at 8 a.m. on Woonsocket radio station WOON 1240 AM and 99.5 FM.

ARRL Rhode Island Monthly Newsletter:
[ARRL RI Section News](#)

RADIO EXAM SESSION DATES

LOCATION: our Saviours Parish,
500 Smithfield Road,
Woonsocket, RI 02895

TIME: Sessions Start at 9:00 A.M.

Here Are the Dates for 2024:

MARCH 09, 2024

MAY 11, 2024

AUGUST 10, 2024

OCTOBER 12, 2024

DECEMBER 14, 2024

FOR INFORMATION, PLEASE
CONTACT BOB JONES, WB1P AT
401-333-47
OR BGJONES49@VERIZON.NET

Or on the Website at:

[HTTP://WWW.W1DDD.ORG/EXAMS.HTML](http://WWW.W1DDD.ORG/EXAMS.HTML)



HAWKS ON AN ANTENNA
SUBMITTED BY BOB BEAUDET

SPRING IS FOR SATELLITES

BY BRUCE WOOD—W1BRU

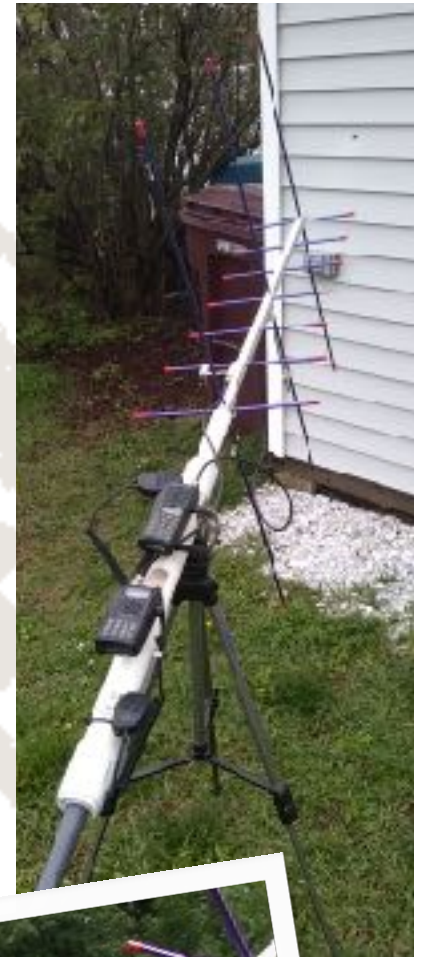
Spring is edging closer. That means it's time to think about working some FM satellites.

I didn't get on as much last year as I had planned because I had so many projects going on, and the awful heat pretty much kept me indoors. Hopefully the upcoming season will be better.

I came very close to making a satellite contact at last year's field day, and will try my best again in June. There are not that many active FM satellites out there as in previous years, so one has to be vigilant in order to get through the pile ups, and, of course, the short time window makes it more challenging.

I checked the Amsat website for an update and learned AO-91, SO-50 and a couple of the TEVEL satellites have been active recently. That could change from day to day so it's best to check the schedule daily to get an idea what activity has been posted.

I have been busy revamping my satellite setup, making it a little lighter to transport. I also removed a couple of gadgets that are not really needed. The simpler the better I say.



ARRL DX QSL

BY BOB BEAUDET—W1YRC

Did you receive some DX QSL cards from the bureau? When you return your card, you should use the BVARC outgoing QSL service. It's free and easy. Just fill out your cards normally and write the DX station's call in plain block letters on the back where you would write the address.

Then, sort them according to the guide in ARRL rule: [ARRL RULES](#)

Note in the rules that several countries do accept cards or don't have a bureau. Please do not send cards for these countries. Get your cards to Bob, W1YRC. They will be merged with cards from other BVARC/ARRL members and sent to ARRL HQ for processing. This is done at no cost to you, It is a benefit of being a BVARC member. There is no limit to quantity, so send out as many as you wish. You must be a valid ARRL and BVARC member.

Along with your cards, you must supply a copy of a recent mailing label from QST or some other mailing from ARRL that shows your membership number.

The volume of cards is down significantly because of LoTW, but many still prefer the paper QSL. The service is free with your labor being the only cost. You were going to answer those cards from the bureau, weren't you? They may need a RI QSL.



What A Difference 40,000 Feet Makes November 333HK

BY MARSHALL CROSS—W1HK

The delivery office at Gulfstream in Savannah, GA, called to ask me to choose a tail number for our new Gulfstream III corporate jet that would carry some experimental adaptive frequency hopping 2 to 88 MHz (HF/VHF) and VHF meteor burst equipment and antennas.

All aircraft tail numbers in the united states must begin with the letter N, spoken phonetically as November. My first answer was: how about N1HK? When they called back to say that N1HK was not available, I told them to try N333HK, where 333 is my street address and HK the last two letters in my ham call.

When talking with control towers or air traffic control our call sign was

Gulfstream November 333 Hotel Kilo or after initial contact just Gulfstream Triple Three Hotel Kilo.

In the photograph taken in the mid 1980s, the HF/VHF probe antenna can be seen protruding from 333HK's tail. The VHF meteor burst antennas were in the winglets. A tail-to-fuselage wire antenna, not clearly visible in this photograph, was also used for both the adaptive HF/VHF and VHF meteor burst modes. When not testing I would pass time operating aeronautical mobile.

Having your antenna at 40,000 feet does make a difference!



Members Awards And Certificates

LLOYD MERRILL – W1LBM

Well, it's not New Year's anymore; however, I did have fun working the WWA January month-long event. I almost forgot to log in after the event was over and pick up my certificate. It's not a high score, but it was fun while it lasted.



MIKE BRAGG – K1VI

**IT WAS FUN
HERE TOO!**



MATT PENTTILA – NA1Q

Received this today also, guess if you work the required number of parks either as a Hunter or Activator this weekend you will earn this certificate / award.



Simplicity, adaptation can equal big gratification

BY MATT PENTTILA-NA1Q

Since my forced retirement, I've been trying to keep busy passing the huge chunk of free time between dialysis and doctor appointments, which used to be my hours and days at work.

Now those hours are filled with the "honey do" list at times, but the majority is spent surfing the bands hunting Parks On The Air (POTA) and the ever elusive DXCC and Worked All States (WAS).

As of this writing, I have over 112 parks logged for POTA, seven parks activated for POTA, 83 countries toward DXCC and completed my WAS Mixed, WAS Digital, and WAS FT-8.

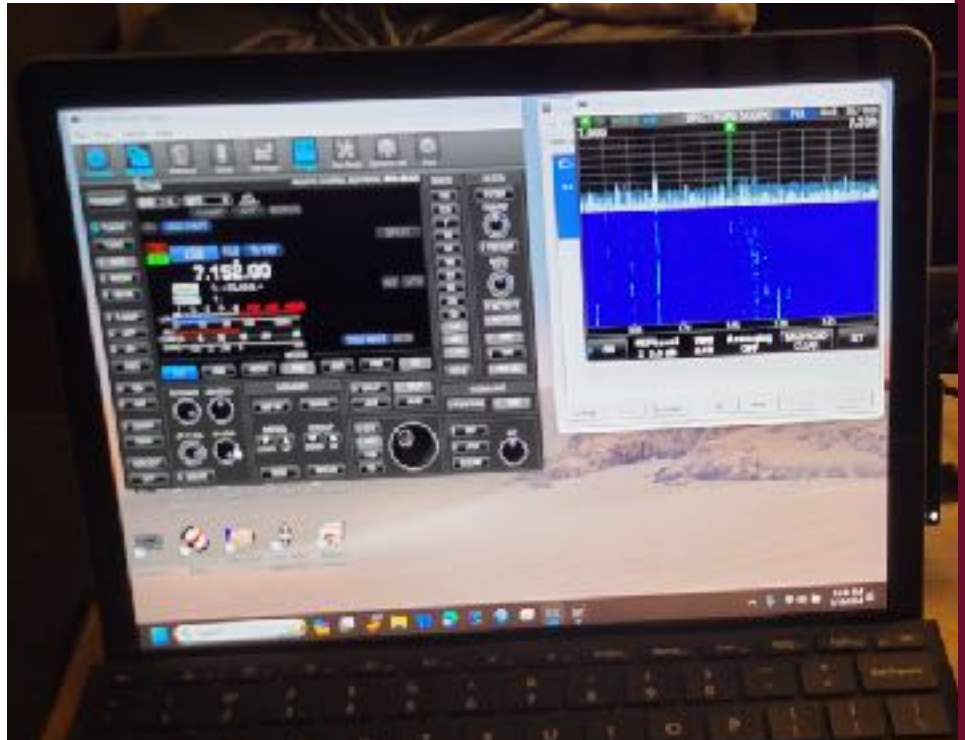
These milestones were accomplished with no fancy beams, no fancy towers, no amplifiers, but only a bunch of digital modes, an entry level 100-Watt HF Rig, and an end-fed wire antenna.

Here is the backstory and how I got here.

Simplicity and adapting to the situation are key to my operating. I wish I could say I have an ideal operating location, but that's a big no.

When I first started dating my wife she was in an apartment in Blackstone. No outside antennas and no ham radio equipment allowed, partly due to the landlord and partly because my girlfriend didn't want me operating from the apartment, which was a huge faraday cage from which no RF got in or out.

So I had to operate out of my truck or at my ancestral home in Charlton MA, sometimes running into QRM from the other station in the



house, my dad, K1GTC.

Then in 2015 my girlfriend and I bought our house, the same year I had my motorcycle accident, requiring 10 weeks of recuperation.

My dad and I convinced my girlfriend that I would need to have something non physical to do. She agreed to allow my shack in the house, at first in the sunroom. She also agreed to antennas, as long as they weren't too visible.

Under these parameters, I knew I needed an HF antenna and a VHF/UHF antenna for the local repeaters and simplex nets. So off the rear deck up went 15 feet of tv mast and a homebrew dual band J pole for 2m/70cm made with the same dimensions as the Arrow Antenna Dual Band J Pole using cut Stainless Steel 102" whips instead of the solid 3/8" aluminum rods the Arrow Antenna uses.

Now the HF antenna got trickier. The lot my house is on is only 75' wide by

100' deep with only one tree in the front yard.

After some research, I decided to build an EARCHI End Fed 40-6m antenna. This is a basic end-fed 30-foot wire with a 9 to 1

UnUn fed by 50 feet of RG-8U coax. The LDG Tuner would tune any excessive SWRs to 50 ohms, and I worked some HF on SSB that summer along with checking the 2-meter nets during my recovery.

Then the shack moved to the basement for winter operation from October 2015 to August 2023, using the same two antennas. The only change was going from 30 feet to 67 feet with rerouting from house to shed corner to back corner of the yard so it would fit.

The first thing I noticed was that the SWR would fluctuate on some of the bands, then I could only use 10-and 20-meters. Cutting the wire from 67 feet to 53 feet got me 10, 17 and 20 meters. Heck three bands versus two, I'll take it.

Then I decided to change antennas to a new PAR EndFedz EF-80-10-JR-KW 80m to 10m end fed antenna with a 49 to 1 UnUn instead of the 9 to 1.

My health issues restrict my physical capabilities. Fortunately, my neighbor is a contractor specializing in roofs and siding, and agreed to assist me in taking my old antenna down and putting the new one up.

I was happy when the old antenna came down, as I discovered a burn mark on the back of the 9 to 1 UnUn enclosure and a black scorch mark on the siding of the house.

It appears that after eight years in service, with the last couple months of running FT-8 at 90 watts, this created some serious RF Energy converting to heat causing the hand-wound UnUn to heat up, melting the wire insulation and melting the plastic outlet box creating a mess and resulting in burn marks. Luckily the coax wasn't affected at all, and the tape job I did back in August 2015 kept the PL-259/SO-239 connection like new.



How's the new antenna working out?

The SWR is 2.8 to 1 or less on all the bands with exception of 30 meters where the SWR is 3.7 to 1, still nothing the Icom 7300 internal antenna tuner can't handle.

But the proof is in the QSOs. I have over 1,125 QSO records on LOTW with 677 confirmed QSLs. And of those QSOs, 1,032 of the 1,125 were on FT-8 between 08/23/2023 to 10/23/2023. All on a wire and less than 100 Watts.

Also add that I have Worked All States Mixed, WAS Digital, WAS FT8, CQ WPX Digital, CQ WPX North America Digital and 84 countries for DXCC. See you on the bands.

