



December 2021

Volume 60 Issue 12



<http://www.w1mv>



[https://www.facebook.com/w1mvmara /](https://www.facebook.com/w1mvmara/)



<https://twitter.com/search?q=Massasoit%20Amateur%20Radio%20Association&src=typd>

## **I hope that you all have a wonderful holiday season see you in January KB1TEE Rick**

Next meeting is January 18<sup>th</sup>, 2022 Social hour 1830 meeting at 19:00pm. Talk-in is on 147.180+ Meetings are at the Mt Prospect school 166 Mt Prospect St Bridgewater MA. Entry in the back of the school park and walk from the left side.

ON THE AIR Tuesdays 4<sup>th</sup> 11<sup>th</sup> 25<sup>th</sup> 2000 news line and conversation

Presidents Notes

MARA Facebook page: Our Massasoit Amateur Radio Association Facebook page with club events, meetings, photos, etc. are occasionally updated so that it may be another resource for us on which to spark interest in our club, amateur radio and keep members informed of what we are doing outside of our club meetings and in our community. We are in need of a newsletter editor and club secretary.

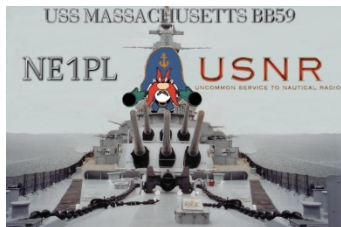
HAPPY HOLIDAYS and we look forward to a healthy New Year!

Allen wa1bee  
President MARA

## EVENTS:

### WINTER FEST 2022

Saturday January 15, 2022 0900-1300 Whitman K of C hall Rt 18 \$5.00 entry fee visit [WA1NPO.org](http://WA1NPO.org) for more information.



### NE1PL USTNR

We will be on the USS Massachusetts April 23<sup>rd</sup> 2022 we will be remembering The Doolittle Raid, also known as the Tokyo Raid, was an air raid on 18 April 1942 by the United States on the Japanese capital Tokyo and other places on Honshu during World War II.



### RADIO IN THE PARK

So you already have some HF gear, but have not yet made the effort to take it out to the field to operate in a portable environment. Check out all the fun many of us have been having activating as POTA stations. During the warm weather months it's pretty easy to head outside wearing tee shirt and shorts to fire up your radio with a temporary antenna, etc. During these upcoming first months of 2022 it could prove to be more of a challenge, but still very exhilarating and rewarding. Check out - <https://parksontheair.com>



### Great Hill Gang

Great Hill Gang / K1USN Swap Net Fridays at 20:00 hours (8pm) On the Marshfield repeater, 145.39 MHz with PL 67.0 EchoLink NEW-ENG 2 node on 9127 — IRLP Reflector 9127 Net Controllers: NA1XX -Mike & K1UVH-Mike Listings as of Dec. 15, 202

## **How amateur radio fanatics launched the world's first private communications satellite**

More than 50 years before the first CubeSat, a group of amateur radio hams built the world's first, small, private communications satellite. Lance Ginner There are more than 1,600 CubeSats in orbit around the Earth, with more than 1,000 of those launching in 2020 alone. But while these inexpensive small satellites have made space more accessible to university classes, small companies, and more, their forerunners stretch back to the beginning of the Space Age. Meet OSCAR 1 — the first small private satellite in space. Groups like the Radio Amateur Satellite Corporation (AMSAT), an international confederation of ham radio operators, have been flying small private satellites for years, well before the first CubeSats flew in 2003.

“CubeSats actually started with AMSAT, but they didn’t get a lot of credit for it, unfortunately,” former Lockheed satellite technician and ham radio enthusiast Lance Ginner tells Inverse. Ginner would know. He was there at the very beginning, 60 years ago, for the design and launch of OSCAR 1, which was history-making in a few ways. It was: • The first smallsat • The first private, non-government spacecraft • The first spacecraft to hitch a ride on another launch It took a while, entire professional lifetimes, but virtually everything that enabled the commercial small satellite industry of the 2020s was there in an embryonic form on a Vandenberg Air Force Base launch pad on December 12, 1961.

## **DIY \$4 QRP Multiband Endfed Half wave ultra simple + lightweight 40/20/10**

Today’s topic is an end fed half wave antennas. This one is an extremely cost-effective, lightweight and easy to build QRP version from DL1DN of QRP Lifestyle on YouTube. You all know me, so you know I wouldn’t waste your time. This operator explains it so well and makes it look so easy, I could get interested in building these antennas myself.

More information go to: <https://oh8stn.org/blog/2021/12/06/diy-4-qrp-multiband-endfed-half-wave-ultra-simple-lightweight-40-20-10-30-17-12/>

# Ham Radio Gets Brain Transplant

by: [Al Williams](#)

Old radios didn't have much in the way of smarts. But as digital synthesis became more common, radios often had as much digital electronics in them as RF circuits. The problem is that digital electronics get better and better every year, so what looked like high-tech one year is quaint the next. [IMSAI Guy] had an Icom IC-245 and decided to replace the digital electronics inside with — among other things — an Arduino.

He spends a good bit of the first part of the video that you can see below explaining what the design needs to do. An Arduino Nano fits and he uses a few additional parts to get shift registers, a 0-1V digital to analog converter, and an interface to an OLED display.

Unless you have this exact radio, you probably won't be able to directly apply this project. Still, it is great to look over someone's shoulder while they design something like this, especially when they explain their reasoning as they go.

The PCB, of course, has to be exactly the same size as the board it replaces, including mounting holes and interface connectors. It looks like he got it right the first time which isn't always easy. Does it work? We don't know by the end of the first video. You'll have to watch the next one (also below) where he actually populates the PCB and tests everything out.

Posted in [Arduino Hacks](#), [Radio Hacks](#) Tagged [arduino](#), [ham radio](#), [icom](#)

More info go to <https://hackaday.com/2021/11/27/ham-radio-gets-brain-transplant/>

## Every Ham Needs This App | HamAlert

Never miss a station you are trying to work again with the HamAlert App. This app is a companion to the HamAlert web site ([hamalert.org](http://hamalert.org)) and lets you receive push notifications from HamAlert. HamAlert is a system that allows amateur radio operators to get notifications when a desired station appears on the Reverse Beacon Network, SOTAwatch, the DX cluster or PSK Reporter.

Spots can be filtered by various criteria, including:

- DXCC (both actual and callsign home DXCC)
- Callsign
- SOTA summit reference
- CQ zone
- Continent
- Band
- Mode
- Time and days of week
- Source
- Spotter callsign and DXCC

### Download APP:

[https://play.google.com/store/apps/details?id=org.hamalert.app&hl=pt\\_BR&gl=US](https://play.google.com/store/apps/details?id=org.hamalert.app&hl=pt_BR&gl=US)

<https://apps.apple.com/us/app/hamalert/id1200759798>

# My QCX-Mini Field Kit

December 8, 2021 Thomas Witherspoon



So I just finished putting together a dedicated, compact field kit for the QCX-Mini. I'm planning to do a SOTA activation tomorrow, if the stars align. Hopefully, they'll align! Everything in the photo above, save the throw line bag, fits in my [Spec-Ops Brand Op Order Pouch](#).

## QCX-Mini Field Kit Contents:

- - [QRP Labs QCX-Mini](#) (20M version)
  - [Spec-Ops Brand Op Order Pouch](#)
  - [PackTenna Mini EFHW antenna](#) & [PackTenna 20' RG-316 BNC/BNC](#)
  - [Muji A6 Notepad](#) and [Koh-I-Noor 2.0 mm Mechanical Pencil](#) (*affiliate links*)
  - [N0SA SOTA paddles](#)
  - [Bioenno 3 aH \(9V\) LiFePo Battery \(Model BLF-0903W\)](#)
  - Mini Arborist throw line kit: [Tom Bihn Small Travel Tray](#), [Marlow KF1050 Excel 2mm Throwline](#), and [Weaver 8 or 10oz weight](#).
  - Earphones

One of the newest products in this kit is my high viz 2mm x 50M Marlow throw line. I learned about this throw line from Mike (W4MAF)—thank you, Mike! It is much less bulky than standard poly throw line and fits in my Tom Bihn small travel tray. We'll see how well it works tomorrow. First impressions from having used it at the QTH once was very positive.

Again, with any luck I'll have this kit in the field tomorrow on a summit. If you've nothing better to do, look for me on the [SOTA Watch spots page](#)!

Massasoit Amateur Radio Association Executive Board  
President - Allen Hiltz - WA1BEE  
Vice President Jeff Lehmann – AJ1L  
Secretary Wendy White – KC1GTR  
Treasurer: Phil McNamara N1XTB  
Call Sign Trustee: Phil McNamara N1XTB

2M Repeater 147.180+ (Tone 67.0)  
440 Repeater 444.550+ (Tone 88.5)  
APRS Node Node 144.39 W1MV-1  
Packet BBS 145.09 N1XTB-4  
Packet Node Brockton 145.09 W1JOE-7 (BROCK)  
MARA Web Page <http://www.w1mv.org/>  
Facebook <https://www.facebook.com/w1mvmara/>  
Newsletter Editor [kc1gtr.mara@gmail.com](mailto:kc1gtr.mara@gmail.com)  
ARC Web Page <http://www.wa1npo.org>  
Qsl via [www.eqsl.cc](http://www.eqsl.cc)  
Skywarn <http://wx1box.org> and  
[www.powersrvcs.org/w1gmf/skywarn.htm](http://www.powersrvcs.org/w1gmf/skywarn.htm)  
Mailing Address P.O. Box 428 Bridgewater, MA 02324

Monthly meetings are held the 3rd Tuesday of each month, for time being, Tuesday Night  
Zoom meeting will be at 7:00pm. Allen will advise if we can go to in person for next month's.

Our Meetings-On-The-Air are held all other Tuesday evenings at 8PM on 147.180+ and includes the Westlink News Report with the latest news about happenings in the world of Amateur Radio.

The South Shore Skywarn Net is held every Saturday evening at 8PM local time on 147.180+ and is open to all hams.

VE Exams are held the 2nd Saturday of every month, in Braintree contact Steve Cohen, W1OD via email [w1od@arrl.net](mailto:w1od@arrl.net). Walk-ins are no longer permitted. We will be hosting VE exams at 8:45 at the Watson building. If you know of anyone planning to take an exam, please have them drop a note to Steve to confirm a reservation.