



The Maury Amateur Radio Club

September 2023

The Maury Amateur Radio Club BOX 1871 Columbia, TN 38402 w4ggm@qsl.net

from the President...

It looks like we will finally get a little bit of a break in the 90+ degree weather we have been enjoying over the past couple of weeks! I hope everyone has been able to stay cool.

I hope everyone that was able to go to the Huntsville Hamfest had a great time. I ran into a few MARC members and talked to a couple on the radio at the event. It seemed like a very good crowd. I didn't make any major purchases this time around - but I saw a couple of items I'm going to be asking Santa for this year.

Our annual club elections were held at the August meeting. Everyone ran unopposed and were appointed by voice vote. The club officers for 2023 are:

President: Travis Henry, KO4HUO
Vice-President: Justin Killen, K4LEN
Treasurer: Paula Thompson, KK4WVO
Secretary: Joe Duncan, N4JW

I want to congratulate Travis and thank him for taking on the President job. I know he will make a great president! I also want to thank Jay Montgomery, KK4FHS for his years of service as Secretary.

Our September club meeting will be held at the Annual Club Picnic, Saturday September 9th. More details are elsewhere in this newsletter. The Club will provide hamburgers and hot dogs; everyone is asked to bring a side dish, chips, colas, or dessert. Also please search through your shacks and bring items to contribute to the Club Auction! All proceeds from the sale of the auction items will go directly to the club to pay for regular expenses, repeater maintenance, and club activities.

And this will be my final newsletter article as MARC President. But not my final article for the newsletter! I have a couple of ideas for future articles. I want to thank Bill, K4BX for putting up with my submitting articles at the very last minute (like this one!) and for correcting my various spelling and grammatical errors. He does a really great job with the newsletter!

I want to thank each and every one of you for your support over the past few years. I really do believe that the MARC is one of the best amateur radio clubs around, and it is all due to the members... YOU make the club great!

The signup sheet for the club picnic is on our [groups.io site at: https://groups.io/g/MauryAmateurRadioClub/table?id=39362](https://groups.io/g/MauryAmateurRadioClub/table?id=39362)

if folks could enter their name if they plan to attend and what they intend on bringing, so we make sure we have enough food and we don't have people bring too much of any one item.

*Thanks & 73,
Joe N4JW*



From the incoming President...

Well August sure was a hot one! We did have a few nice days there where I enjoyed going topless and doorless in the Jeep but by the end of that nearly two week dry spell, it was just too hot for that!

As I write this, it's 73° out here on the back porch and it makes me long for fall weather!

I want to thank the club for the opportunity to serve as your president. I have only ever been named president of one other great group of folks and that was the Harding University Concert Choir way back in 2000-2001. I am very new at this and look forward to learning from this experience and I'm sure I'll learn a lot from many of you!

We had a really great turnout for the Fox Hunt on August 5th! It was a lot of fun and I quickly became aware of my limitations with my radio equipment. While I suppose I was awarded the win, it wasn't without help from Justin (K4LEN) and a little nudge from Andreas. That nudge sounded something like this:

"Whoever is in the green Jeep, turn around." - Andreas (KJ4JEK)

Thank you Andreas for putting that together and for providing the fox for the hunt! I look forward to the next opportunity which is scheduled for October 28, 2023. More details to come.

Jonathan (KQ4ATG) and I have been talking a bit about having an antenna party. He has acquired enough parts to build eight or nine EFHW 10-40 meter antennas. We'll discuss in more detail at the club meeting/picnic on September 9th, and then send out more information on the reflector.

I guess that's about it from me in my first-ever post to the newsletter. Please share with me any ideas that you have for what you would like your club to be in the coming year!

73, Travis - KO4HUO



July 2023 Meeting Minutes

Called to order at 7PM by Joe, N4JW

Motion to accept minutes from the previous meeting:

1. Rick, K4PKA
3. Everett, WA2BHS

Motion passed

Motion to accept the financial report:

1. Keith, KQ4FXD
2. Jonathan, KQ4ATG

Motion passed

Regular Business:

Fox Hunt - special thanks to Andreas, KJ4JEK. Next fox hunt scheduled for 10/28.

Annual Club Picnic - set the date for Sep. 9th. The September club meeting will be held at the picnic.

Chickasaw Trace bike classic to be held Sep. 16th

Club Elections were held. The following ran unopposed and were approved by voice vote:

*President: Travis Henry, KO4HUO
Vice-President: Justin Killen, K4LEN
Treasurer: Paula Thompson, KK4WVO
Secretary: Joe Duncan, N4JW*

Jonathan, KQ4ATG announced he has a DMR hotspot available for use on 434.600.

Motion to Close:

1. Rick, K4PKA
2. Buford, W4HVW

Motion passed

Attendance: 19 in person, 2 on Zoom.



Club Picnic/Meeting/Auction

September 9 Chickasaw Trace Park



SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
					1	2
3 ARES NET 8:30 PM	4 MTEARS NET 8PM	5 Newbie Net 8 PM	6	7 Club NET 8 PM	8	PICNIC 9 Experi- menters Net 8PM
10 ARES NET 8:30 PM	11 MTEARS NET 8PM	12 Newbie Net 8 PM	13	14 Club NET 8 PM	15	16 JAILBREAK TRIATHLON
17 ARES NET 8:30 PM	18 MTEARS NET 8PM	19 Newbie Net 8 PM	20	21 Club NET 8 PM	22	23
24 ARES NET 8:30 PM	25 MTEARS NET 8PM	26 Newbie Net 8 PM	27	28 Club NET 8 PM	29	30

Something new to try.... **SlowScanTeleVision**

Have you ever received SSTV pictures on 14230 Mhz? If you have your HF rig setup for any of the digital modes like PSK31 or FT-8, you are all set to give it a try. For software you will need to download MMSSTV from <https://hamsoft.ca/pages/mmsstv.php>. It's a free program by JE3HHT Makoto Mori. He is also the author of MMTTY which is the best RTTY program out there.

The only setting you may need to set is the soundcard. In my case it used the correct soundcard (USB Codec) which is in my Icom radio. When I leave the shack (for dinner or a nap) I pit the rig on 14230 and run MMSSTV. All the pictures received are stored in the history folder C:\Ham\MMSSTV\History. After a few hours I'll check the History folder and see what I have. You will get more bad pictures than good ones but you will be surprised at some of the pictures you will receive from DX stations. Below are some of the pictures I've received in the last few days. Activity seems slow recently or propagation not good, or everyone is playing FT-8!



Stray Cats *from Everett WA2BHS*

Adapting HC-49 Crystals for Use In FT-243 Sockets

In a past Stray Cats I covered taking apart FT-243 crystals and hand grinding them for use on higher frequencies. This is a time consuming process and suitable donor crystals are getting harder to find.

The 4SQRP group offers small circuit boards that are designed to adapt HC-49 crystals for use in FT-243 crystal sockets. This conversion will save you time and money over buying surplus FT-243 crystals and grinding them to frequency. A FT-243 crystal manufactured at the start of WWII would now be 81 years old. Quartz crystals age over a long period of time and tend to degrade and will not oscillate as well. Using new HC-49 crystals will guarantee that the crystal specifications and tolerances will be met.

Bill of Materials

HC-49 crystals of the bands you operate

Cajun Crystal Adapters www.4sqrp.com

K&S 3/32x .014 diameter brass tubing from Hobby Lobby

A small K&S tubing cutter from Hobby Lobby

Soldering Iron and Solder

Needle Nose Pliers

Nippers

Home made assembly JIG or a good steady hand will do

HC-49 Crystals from www.qrpme.com Please check for availability from this source.

AF4K is also a source for crystals

Amazon and Ebay

Instructions

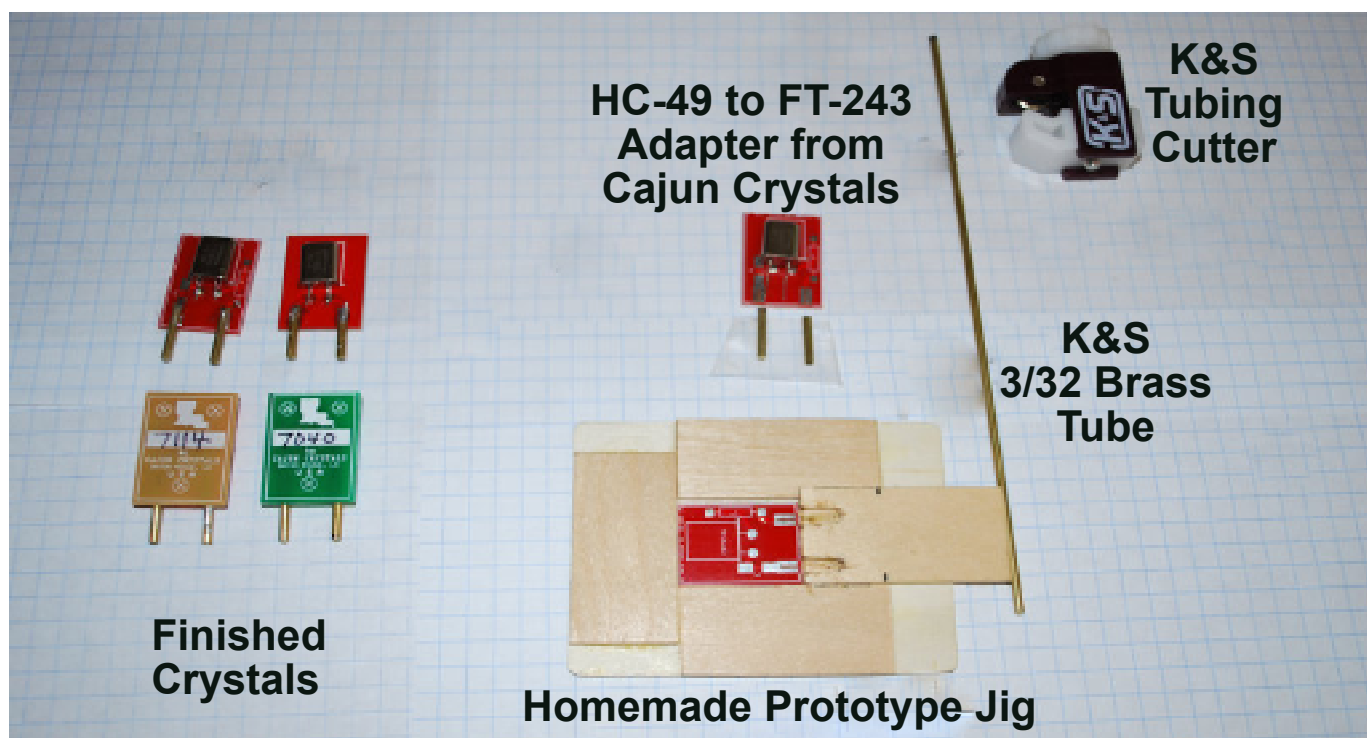
1. Cut 2 pieces of tubing to 0.6 inches in length. Tin each alignment pad of the CAJUN CRYSTALS adapter. Then solder the tubing on to each pad while holding the tubing steady with needle nose pliers or tweezers. Check to make sure pins are parallel and have 0.5 inch center spacing on the CAJUN CRYSTALS adapter.

2. Bend the wires on the crystals as shown in the picture. Solder the leads to the round pads and cut off the excess.

3. Mark the frequency of the crystal on the front of the adapter in Kc.

4. Plug it into your favorite crystal controlled QRP rig and you are on the air.

The CAJUN CRYSTAL adapter boards were designed by Jim Giammanco N5IB. Jim is also one of the Co-designers of the Bayou Jumper kit for sale at www.4sqrp.com.



3 Canes and a Vertical



3 men with canes (Paul, Everett and ED) plus Ed's son to do the heavy work installing the Hustler Vertical

On August 19th I had the pleasure to join Paul Kemp, WB0CJB, and Guy Johnson at the home of Ed Johnson W4EWJ. We were there to finish the installation of the Hustler 6BTV for ED..

Ed had his son already had the tilt base and antenna mounted with the 12 and 17 meter modifications installed. Ed had measured and preset the tubes and traps to the recommended specifications. The four guy anchors were in place and the guy ropes were pre-measured and ready for use.

The antenna was walked up and Paul with his trusty Vector Network Analyzer or VNA, started checking the SWR. All the SWR measurements were very close to 1:1 except the 75 meter was way off and required us to walk the antenna down and remove 4 inches from the stinger. This adjustment solved the problem. Next the 12 and 17 meter wires were tested and trimmed as needed. We put the antenna back up and attached the guy wires. We were done.

Today I heard that Ed has been Working DX stations on 10 meters.

Now an explanation of the title. Paul, Ed, and I were all on canes. The only able body there was Ed's son Guy and he did Yeoman's service.

This is a example of Hams helping Hams and if you are a new or old ham and need help please ask for it. We older hams are here to help you.

73 Everett WA2BHS



HOA challenged?? GET STEALTHY!

When I lived in Wichita in the early 2000's my apartment was part of a complex consisting of 4-plexes and were built in the 1950's and 60's for the local air force base.

As I didn't want to draw unnecessary attention to myself I strung up a wire loop along the upper walls of my living room. If I had not tried this I would have gone crazy being off the air. The antenna was made of 18 gauge stranded speaker wire and was fed with coax and a small SST T-2 tuner. I found that the antenna tuned up fine on 20 meters and it got me on the air, until the band closed in the evenings. Encouraged by this I constructed a 20/15/10M dipole and strung it up along the walls of my kitchen and dining nook where I had my Kenwood TS-520S set up. It worked very well, allowing me to operate on 15 and 10 meters as well. During the ARRL CW DX contest in February I was able to work Burkina Faso on 15 meter CW (I was running 80 watts). Although I didn't have any antennas for 80 or 40 meters it still allowed me to listen to both bands in the evenings.

A few weeks ago I had been wanting to finish my Worked All States (WAS) on 17, 15, 10, and 6 meters. My main antenna is a Hustler 6BTV vertical. It is a 6-band antenna and operates on 80,40,30,20,15, and 10 meters. It will operate on 6 meters as well and I have modified it in the past for 17 and 12 meters. The antenna performs great and I have worked many states and countries with it, using QRP as well as 100 watts. At the present time I do not have the 17/12 M mod installed.

A vertical antenna has a low "take-off angle", meaning that it is better suited for faraway states and DX. For close by states (LA, MS, KY, AR, AL, etc.) an antenna with a higher take-off angle (dipole, random wire, EFHW) is needed.

With the extreme heat and my need to work MS, KY, LA I decided that I needed to use a different antenna. I took a 25 foot piece of zip cord and unzipped it, soldering it into a 55 foot single wire. Using plastic headed pushpins I tacked the antenna along the wall of my shack, down the hallway, and laid the remaining wire along the floor of our bonus room. The tuner I am using is an old Harris RF-302 longwire tuner that I was given by my dad, KW5T (SK). I had used it at the 2018 FD but since then it had been shelved. To minimize any stray RF I connected a 17-foot counterpoise wire to the tuner's ground and ran it along the floor of my shack. I did not use a balun as the tuner is able to tune the antenna without any difficulty.

My first contact was with OK1WCF (Czech Republic) on 17M FT8. I was running only 12 watts as I wasn't sure if I would be interfering with any home electronics (I wasn't). My next 2 contacts were with WA and AK (both with 25 watts).

The next day I worked Indonesia, CA, ID, WI, Belize, AZ, MS, SK (Canada), and PR, again all on 17M FT8. Since then I've worked: Samoa, KY (10M), Hungary, Estonia, Belgium, UK, Crete, Denmark, Germany, and FL (12M), and FL, ID (20M).

My wife gave me a quizzical look the first time she saw the antenna (*I call it my "mad scientist" idea*) but never said anything more. But it can either be tacked up along the walls and ceiling using insulated wire that matches the wall color. An alternate solution can be to tack it around the rafters in an attic and tune it with a long-wire tuner if your radio's internal tuner won't. Some attic spaces have the aluminum backed roof insulation. Whether or not that will completely block your signal is unknown. But all you can do is try it out and see what your results are. Hams have always been known to come up with strange or unusual antenna ideas and have worked well.

It's an unusual idea but it will get you on the air. Granted you may not be able to run a full 100 watts but you will be heard.

Some good books you might look into:

Stealth Amateur Radio by Kurt Kleinschmidt NT0Z
Small Antennas for Small Spaces (ARRL Online store)

See you on the air!!!
73 Paul WB0CJB



The Harris RF-302 tuner



ARRL has partnered with HF Kits to bring you this easy-to-build 4-band antenna kit: an end-fed half-wave (EFHW) antenna. We built it in the ARRL Lab, set it up outside, trimmed the wire for the lowest SWR, and got it on the air. Now it's your turn!

The advantage of an EFHW is the ease of construction, it's versatility in a variety of installation configurations (sloping, horizontal, L, etc.), no tuner is needed, and this one works on 4 bands: 10, 15, 20, and 40 meters. We chose a 250-watt rated antenna so you can comfortably transmit the full output power from many off-the-shelf HF transceivers (typically around 100 watts).

Building the kit is easy. You'll drill, fasten, and solder (a small amount). Most everything goes into the included weather-proof box. Admire, then deploy!



Who needs this antenna?

New licensees. Build something, and you're no longer a licensee...you're a ham!

New HF operators...and anyone seeking an antenna that covers the bands that will become increasingly active with Solar Cycle 25.

Experts...because you'll appreciate a quality kit, and you'll end up with a great antenna you can take with you anywhere (think vacation).

Radio clubs seeking a perfect kit for your next project building night!

Specifications

Bands: 10/15/20/40

Power rating: 250 W PEP

Impedance network type: 49:1 with included ferrite toroid

Wire antenna length: includes approx. 66 feet of strong, flexible, and low weight wire

Coaxial cable feedline sold separately

Required assembly tools (you supply): drill and drill bits, pliers, wire cutter, sharp knife or sandpaper, soldering iron and solder, screwdriver, marker

Assembly instructions: arrl.org/end-fed-half-wave-antenna-kit

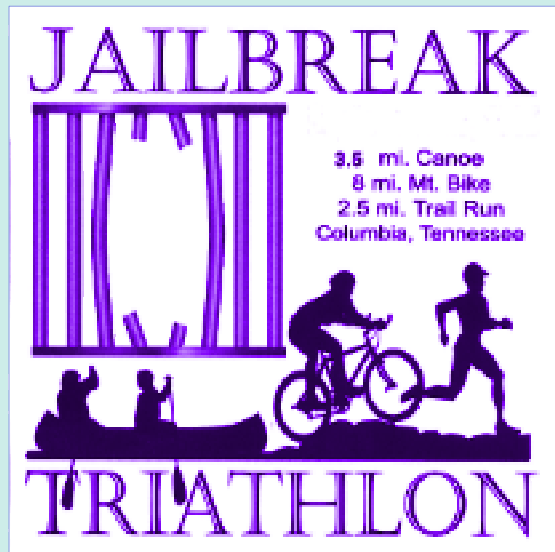
Check out ARRL's [YouTube EFHW antenna 3-part series](#).

This QSL is an older one, but it brings back memories. In the 1990s I owned a computer store. One of my vendors held a get together for his clients aboard the Queen Mary. in Long Beach California. I was fortunate to be able to attend. My wife and I spent the weekend in one of the staterooms aboard. I visited the radio room but was unable to operate it because I did not have a copy of my license with me. It was a great experience otherwise.

73 Buford W4HVV



KQ4AZN Kurt in Giles County shared with me this very cool [VHF/HF Propagation](#) website today as we discussed repeater interference that has been occurring today. There is a button on the top right that toggles between VHF and HF maps. For HF, you can type in your grid square to see propagation from your location's perspective. It's a little slicker way to visualize propagation versus what I have figured out using PSKReporter. I hope someone finds this useful.



Columbia Cycling Club is hosting The Jailbreak Triathlon on September 16th. We have been invited as always to set up around the course to provide communication should any of the competitors become injured or have mechanical issues. They always appreciate us helping out and provide lunch for us. We meet at the Hanson Pavilion at 8:00 AM to set up and get our positions.

Needed or suggested items are:

Spare HT Batteries	Rain Gear, WX dictating
Extra ant. if desired	Camera if desired
Umbrella or tarp	Folding Chair
Insect Repellant	Water
Duct tape	Snacks

OK Marconi...
The contest is over and
I hear the lawn calling...



The 4sqrp London Calling exercise

The 4sqrp group sells a kit called the Bayou Jumper. This kit is based on the Waddon MK. VII spy radio known as the "Suitcase Set" It was used by SOE agents during WW2. These brave agents would parachute into Nazi occupied territories to spy on them, and support the underground's war against them. These brave agents would radio there reports back to London Home stations and many were killed doing this.

The 4sqrp group has found a way to honor and teach us about the men and women who were members of the SOE, Free French, and those who supported the Norwegian Underground.

How do we run the London Calling IX event? We set up high power stations in different parts of the country to operate as a fixed SOE home station in Britain.

For The London Calling event the following stations were Home stations.

0000-0030 N4DR "Marc"
0030-0100 AC0BQ "Johnny"
0100-0130 N5IB "Jim"
0130-0200 N4DR
0200-0230 AC0BQ
0230-0300 N5IB
0300-TBD W7GDP "Larry"

The London station sends out a coded message for us to decrypt. Please note that this is not transmitted over ham radio frequencies as the FCC rules absolutely forbid this. The decimation of of the coded message is accomplished by sending us the audio files to our groups.io account.

The Mission

Decrypt the message using double transposition cipher.

Do the spy thing to gather the intelligence (there are no rules here).

Contact London and send a signal report plus the chosen word. Please remember all this is done in plain text. This is a FCC thing.

Our Specific Mission

1. discover the title of the tune to whose melody the bawdly lyrics have been set
2. research the origins of that tune including the

significance and reason for its title
3. decide on a single code word that will convince the London home station that you have been operating while captured.
The message from London as copied at 10 WPM.

VVV VVV VVV
NIB 100944 VV
CK 11 3863 3863 X

THOGL AXOEO AOUHY NYRNS ALAIA

TTHRX XTBRE EGLLG LSMXL SONBT

WEEIH X

AR

My note: I will try to decipher in the morning. I am not very good at this and may have to check in with London reporting only a signal report.

I had No Success deciphering.
These are two lines from a real bawdy pub singalong song sung during WWII.

Hitler only has one ball
Goering has two but they are small XX

The Security check anomaly was the misspelling of Goering. The 7th word of the plain text. So Had I figured it out my report to the home station should read.
"RST 579 7 Golf" as my indicator.

73 Everett WA2BHS



Rambling from the editor... Bill K4BX k4bx@arri.net

Picnic/Meeting/Auction I think our annual Picnic has become an even bigger event than Field Day. Hopefully we will have good weather on September 9th and have a big crowd. In Joe's article he mentioned things you can bring. A few other things that go over big is water and ice. If someone has access to an ice machine it would be great.

To me the best part of this event is the auction. If a hot item shows up it's fun to see a couple trying to outbid that other. Anyway, I bet if you look in the closet, you'll see things that have been gathering dust for a long long time. Try to donate something. It really doesn't have to be ham radio related. All proceeds will go into the club treasury to pay for the club expenses throughout the year.

If you have not been to Chickasaw Trace Park it's out on highway 7 (Santa Fe Pike). Leaving Columbia it will be on the left side of the highway and it's easy to miss because trees a brush. One you enter the park you will have to go to the left to enter the park. After you drive by the log cabin on the right, go to the second pavilion on the left. It's the same place we gather to do the bike Races.

The Fox Hunt I think you guys had a blast with the Fox Hunt. I enjoyed listening to what was going on. I'm sure that most of you that played noticed that when you got close to the Fox, it was hard to pin point due to the signal being so strong no matter which direction you aimed the antenna. This is where the attenuator comes into play so you can weaken the signal so your beam will show a peak.



About a year ago Jerry N4EO had really bad RFI that was so bad he couldn't even play on HF. The noise would be 20 over S9 on the meter on all bands. He bought something from MFJ to track down noise and we drove all over his part of town and it was just so strong everywhere. It's another case where an attenuator would have helped.

Jail Break Triathlon Charge up your extra HT batteries and spend another day (Sept 16) out at Chickasaw Trace Park helping Bill W4WRR do Emergency Comms for the big event. Bill would appreciate it if you let him know you are coming to the event.

Propagation Have the HF bands been crappy or not. Sometimes there are very few signals on the bands but the FT8 will be going strong. I have a schedule with a friend up in Ohio at 9AM weekdays and we have been having a hard time with signals. We normally used 40 meters but it got so bad we went to 30 meters which wasn't much better. The higher bands (20-10) seem to do much better than the lower bands.

Anyway I haven't put many contacts in my log during August. I did do the NA QSP Party CW but only did 100 in that. Otherwise I've just done some FT8 and CW. Ohhhh.... I also finished my Worked all States on POTA! My last state was Maine. I swear, these POTA guys are keeping ham radio alive! I work them on FT-8 as well as on CW. Hopefully as the weather cools down, ham activity will go up. I know it usually does in this shack.
Mowing grass = Less radio. 73 Bill K4BX



Keith KQ4FXD found enough material around the house to build a beam for the Fox Hunt