SKYVIEW
Skyview Radio Society, K3MJW
K3MJW
2335 Turkey Ridge Road
New Kensington, PA 15068

# Q5er – The Official Newsletter of the Skyview Radio Society

## Getting Started with Parks on the Air (POTA)

Parks on the Air® (POTA) started in early 2017 when the ARRL's National Parks on the Air special event ended. A group of volunteers wanted to continue the fun beyond the one-year event, and thus, POTA was born.

General information about the program is available at parksontheair.com, so we highly recommend checking out the information there. You may also want to join the POTA Slack Channel or the POTA Facebook group.

Getting started with POTA can happen via one of two paths — as an "Activator" who heads out into the parks or as a "Hunter" who is trying to contact someone in a park. The easiest way to participate in POTA is as a Hunter, so we'll start there.

**Getting Started for Hunters**

Hunters are the individuals located anywhere, who contact the activators in the park. As a Hunter, the rules are few and simple :

Follow the law. Follow the DX Code of Conduct. Follow the Golden Rule.

The first place to start as a Hunter is to head to https://pota.app. The home page you land on will be the spotting page, which lets you know who is on the air, what parks they are in, and what frequencies and modes they are currently operating on. Spin the dial, and answer their call if you can hear them. If you make a contact, you've officially started in POTA! That's all there is to it!

While at https://pota.app, click the "sign up" button to create an account, which will let you see your progress towards certificates and awards based on the logs that the activators you contacted submit. POTA is on the honor system, based exclusively on activator logs, so as a Hunter, you don't have to lift a finger (Other than the one that hits your key or PTT!).

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The above was extracted from the pota.app website. Lots of Skyview folks are already POTA participants. Both as Activators and Hunters. As stated above, being a Hunter is extremely easy : find an Activator, call him, and exchange signal reports. POTA Activators do all of the POTA Logging, making being a Hunter painless.

Unlike SOTA (Summits on the Air) where most Activators tend to travel light and use QRP CW, most POTA Activators tend to use SSB. Most of the POTA Parks are 'drive-ups', making it very easy take and setup much heavier, more powerful stations, and better antennas. So most will produce a pretty good SSB signal. I have worked a lot of POTA Activators while using SSB at just 30 watts.

As we head in to PA Wintertime, becoming a POTA Activator may not be so attractive. But you can be a POTA Hunter from the comfort of your warm shack. Give it a try—it is good way to fill your Wintertime days.

Jody—K3JZD

**2022 is Skyview's 62nd Anniversary !!**

**December 1, 2022**



**The Sunspots Are Here !!!**

**Time to exercise the 10-12-15-17-20 meter bands**

### Inside this issue:

## The Skyview Radio Society Clubhouse is the "Every Tuesday Place" . . .

Something is going on at 'the joint' each and every Tuesday evening, from about 1900 hours to whenever.

See the general schedule of Tuesday events on the Skyview Web Page: http://www.skyviewradio.net

For the latest up-to-date plan, check the Groups.io Reflector at : https://groups.io/g/K3MJW

Directions are on: http://www.skyviewradio.net Guests are always welcome !!

## From the Editor

Not much to say this month. I padded this issue with an article about how my 3D Printing hobby has complemented my Ham Radio hobby.

It would be nice to hear from some other members who have some other hobby that complements their Ham Radio hobby.

Seems like those who enjoy woodworking or metal-working as a hobby should have some stories to tell about how those hobbies have been complementary

Jody - K3JZD

Remember: The number of people older than you never increases., it only decreases

## From the Treasurer

Be sure and read what Tom - AB3GY has setup for Dues and Donations. It is that time of the year again.

The accessibility to the Skyview radio facilities is a fantastic membership benefit. After completing one year of membership, Skyview members may request to have access to the Skyview facilities at any time. The radios and the antennas that are there get the job done.

As you all know, energy costs have increased. In spite of that, we have been able to keep our 2023 Dues at the same level. If you do go to Skyview to use the club's radio facilities over the Winter months, contributions to the orange Propane Fund container are always appreciated.

Looking forward to having you with us in 2023.

Jody - K3JZD

**Ham Radio is a Contact Sport**

**Use the Skyview Facilities At Your Own Risk.**

Follow https://groups.io/g/K3MJW for COVID updates.

**Skyview Radio Society is recognized by the Internal Revenue Service as a charitable non-profit organization under Section 501(c)(3) of the IRS Code. Donations to Skyview are tax deductible to the extent permitted by law.**

Here is another issue. . . . . .

Not saying it is the last one that I will publish. But it could be . . . . Jody - K3JZD

***We can't plan life. All we can do is be available for it. – Lauryn Hill***

## September Business Meeting Minutes

de Don - WA3HGW

**Monthly Business Meeting – November 1, 2022**
**Call to Order:** 7:30 PM by President Scott Gliebe, AC3GB.

**Attending** – 32 members and 1 new Associate Member: N3WMC, K3JAS, NM3A, K3STL, WA3KFS, W3CDW, NJ3R, W3IU, WA3HGW, N3TIN, N2MA, W3BUW, KC3LHW, K3JZD, KG4JBB, AB3GY, KC3UIJ, AC3IE, WQ3Q, AG3I, K3FAZ, AG3U, KC3UZI, AJ3O, AC3GB, WC3O, WA3LCY, W3RRK, W3RRK, K3WM, K3RAW, KC3PXQ, W3UY and associate member Charlie Baldwin

**Prior Meeting Minutes:** The minutes of the October 4, 2022 meeting were distributed for member review. A motion to accept the minutes as presented was made by N3WMC and seconded by K3JAS. The motion passed without objection.

**Treasurer's Report:** Treasurer Jody, K3JZD, reviewed the Financial Report of 31 October 2022 (Attached). It was a quiet month financially. Fixed expenses are good for the remainder of the year. Income was from the business meeting 50/50 drawing, VE Exams and sale of an antenna. Expenses were two $100 gift cards for the repair of our 2 meter repeater. A motion to accept the Treasurer's Report as presented was made by WA3LCY and seconded by K3JAS. The motion passed without objection.

**Membership Report:** Tom, AB3GY, advised there are two new member applications this month. AB3GY made a motion to open the membership rolls. WA3KFS seconded the motion. The applications are from:
**Paul Fischer**, K4PDF, an Extra class from Pittsburgh. AB3GY made a motion to accept which was seconded by WA3KFS. The motion passed without exception.
**Charles Baldwin**, not yet licensed. AB3GY made a motion to accept the application as an associate member which would revert to full member once licensed. The motion was seconded by KG4JBB. The motion passed without objection. AB3GY made a motion to close the membership rolls which was seconded by KC3UIJ. The motion passed without exception. Membership now stands at 162. AB3GY noted the club now has membership applications available for download on the club web site at http://www.skyviewradio.net/. We also have membership electronic renewal available on the web site under the *Members* tab. Access to the membership application is also available on this page of the web site. The members at the meeting thanked Tom for his efforts at streamlining this aspect of club membership.

**Radio Officer Report:** All radios are in good working order and available for member use. The main repeater has been repaired and is back on the air. There are still some adjustments needed for best operation, and these will be completed soon. The replacement 10 meter vertical antenna was installed on the repeater tower and is operational. It still needs some tuning, but is useable for the Breezeshooters net. Bob, WC3O, thanked the ground crew volunteers who helped with the antenna work. Some problems continued with the club weather station. Tall Guy, K3STL, figured out the main problems were caused by a Windows automatic update!!! The weather station is now working well.

**Kitchen Report:** Bob, WC3O, transferred $200 to the treasury with the new kitchen balance about $100.. Kitchen supplies are good with plenty of soft drinks to carry us through the rest of the year.

**VE Report:** There were 5 candidates for the October VE session. All passed their Technician class exams with 3 or fewer errors. Bill, N3WMC, noted this shows they were very well prepared. The next exam session is November 19. No one is signed up for testing at this time.

**Newsletter:** The October issue of the *Q5er* is out. Jody is looking for newsletter submissions by November 15 for the December issue.

**Facilities:** N3TIN reports that the ladder to the clubhouse attic has been repaired. He thanked KC3LHW and AC3IE for their assistance.

**Building Committee:** Marty, AG3I, reported that we are still on target for fall. They continue to pull together the supplies and manpower needed to get Phase 1 of the project underway.

**Calendar of Events:**
November 5-7 – ARRL November Sweepstakes CW.
November 19-21 – ARRL November Sweepstakes Phone.
December 10 & 11 – ARRL 10 Meter contest CW & Phone.
January 7 & 9 – ARRL RTTY Roundup. Club will be operating.
January 21 – Annual Skyview Banquet. Save the date!
January 28 & 29 – Winter Field Day. Details at https://winterfieldday.com/.

**Old Business:**
Nominations for officers were made at the October business meeting. They are:
Vice President – Brian Manley, K3ES
Board of Directors 5 year term – Wayne McCullough, K3WM
Board of Directors 5 year term – Marty Newingham, AG3I
No additional nominations were received. WA3KFS made a motion that if there was no opposition to electing the nomi-

nated officers and directors, that they stand elected. KG4JBB seconded the motion. The motion passed without objection.

**New Business:** There was no new business.

**Weather Night**: On November 8 at 7:30 PM, Luc, KC3MBM, will present a talk on understanding the physics of weather for the layman. Upcoming Weather Night events:
December 3 – Skywarn Recognition Day. Details at https://www.weather.gov/crh/skywarnrecognition/
December 13 – Winter weather Skywarn training at 7:30 PM.
February 14 – Skywarn river ice training.
To be determined – Tour of the National Weather Service facility in Moon Twp.
K3FAZ reminded us that the NWS is always looking for additional CoCoRAS volunteers.

**Elmer Night:** Possible talk on making a "speaker wire" dipole antenna.

**Net Report:** The check-in numbers are running over 40 per night. John, K3STL, is scheduling the rotating net control stations. If you want to volunteer, contact K3STL or WC3O. It's easy, and all of the volunteers have been doing a great job as net control.

**50/50 Drawing:** The total collected was $43. The winner of $21.50 was Chip, KC3LHW.

**Meeting Adjourned**: A motion to adjourn was made by KC3PXQ and seconded by AL3O. The motion passed without objection. The meeting was adjourned at 8:12 PM.

Respectfully Submitted,

Don Stewart – WA3HGW
Secretary; Skyview Radio Society, Inc.

## A SOTA Minimalist : Fred - KT5X

***Ed :*** *Fred is well known for traveling light while doing his SOTA Activations. If bottles of water could be made lighter, he would have done that by now.*

My MTR5 has a built-in TinySWR (DK3IT) indicator, seen as LED's on the left A Velcro attached 350 mAH LiFePO4 battery is on the right (good for two activations). The acorn nuts at the bottom right are a built-in touch paddle. The log sheet support at the bottom folds over and covers the delicate plastic switches during transport - that cover is secured by magnets (shown here holding a paperclip). The yellow plug-in at upper left is a tunable (AA5TB style) impedance matching transformer which my EFHW wire plugs directly into (no feedline is used). The pink straw at the bottom holds my tethered space pen during transport.

Add collapsible fishing pole and antenna wire for a complete SOTA station set-up that weighs just under one pound.

Operation can be performed and usually is, standing holding the radio in one hand and operating with the other, no sitting down (think mud, or snow, or cactus, or crawling critters, or carried chair).

## QRP-Labs QCX Alignment Note

**de Jody** – K3JZD

This article is for the QRP-Labs QCX Transceiver builders. Since several in the club have an interest in and use these QCX Transceivers, I thought this is worth sharing.

This article discuses the QCX "Reference Frequency" setting. It is very relative if you have used the 27 MHz crystal that comes in the kit. It is probably not so relevant if you use the optional TCXO (Temperature Controlled Crystal Oscillator) Board instead of that 27 MHz crystal.

This was my sixth QRP-Labs QCX Transceiver build. A problem surfaced with this build that I had never encountered in any of my previous builds. My Transmitter Frequency was not synchronized with my Receiver Frequency. Working Split without knowing that you are working Split is not a good thing.

The Alignment steps in the QCX Assembly Manual (3.45 Adjustment and Alignment) gloss over the need for you to ever fine tune the Default "Reference Frequency". The setup instructions simply say to set the Reference Frequency to the fixed value that is provided. Later on, Section 3.45 of the QCX Assembly Manual, it does say:

> Other items in the alignment menu relate to the calibration of the 27MHz reference oscillator of the synthesizer, and the 20MHz system clock oscillator of the microcontroller. These adjustments can be made manually, or by connection of a GPS module such as the QRP Labs QLG1 GPS receiver kit. However, since this calibration is a lot less urgent than the Band Pass Filter peaking and unwanted sideband cancellation, they are left until the description of these menu items in the operating manual.

To me, that "less urgent" statement has always been taken very literally – I have read right through that paragraph and have considered my alignment to be complete. I have never gone to the separate Operating Manual to follow up on this 'later' stuff. Like most, I have just fired up my new QCX, set my necessary operating parameters in the Menu, hooked it to an antenna, and began to use it. So, naturally I did the same with this build.

This time, however, I was not getting any responses to my CQs and I was unsuccessful whenever I answered anyone else's CQ. My wattmeter showed me that I was getting the expected RF output power from this new sixth QCX build (which was a 20m QCX Mini). But I just was not getting any on-the-air results with it. I could not even get any responses in the area of the band where I can usually scare up some brief SKCC (Straight Key Century Club) QSOs just to obtain some signal reports. Unusual, but then 20m can also be unpredictable at times. I tried later on. But I still had no luck at all. Strange.

My next step was to check the RBN (Reverse Beacon Network) web page to see what kind of signal reports the RBN Monitoring Stations were giving me. I found a quiet spot at 14042.00 KHz and made a few "Test" transmissions. I put my call out a dozen or so times to get the attention of several RBN Monitoring Stations.

Well, that got me a decent number of RBN reports. And my reported signal strength was pretty much as expected for QRP power. But, then I noticed that the RBN Monitors were all reporting that I was transmitting at 14040.50 KHz. That was 1.50 KHz below what I was tuned to. If I was getting any replies from my previous CQs, they were probably at that frequency. Since that frequency is way outside of the QCX's 200Hz receiver filter, I never would not have heard any of those replies. And whenever I was answering the CQs from others, I was not transmitting on their calling frequency. That will no longer work. Especially when using QRP power.

I then spent a lot of time in the QCX Assembly Manual looking for a reason as to why this was happening with this particular build. But I could not find anything in the QCX assembly manual or its troubleshooting section that covered this specific unintentional split operation situation.

Some searching in the QRPLabs Groups.io forum eventually led me to some chatter about this "Reference Frequency". It was not exactly about the situation that I

was dealing with, but it gave me a clue as to what to look at.

I went into the [Menu] à [8 Alignment] à [8.5 Reference Frequency] selection and made a change to the Default Value that the QCX Assembly Manual had said to use. After a new set of 'Test" transmissions, the RBN Monitors were now showing me that my Receive to Transmit Frequency still had a differential, but it was now a different differential. Bingo!! I was on to something.

I kept at it in a trial and error fashion until I had my "Reference Frequency" adjusted to a value where the majority of the RBN Monitors reported that my Transmit Frequency now matched my Receiver Frequency. I ended up having to change my "Reference Frequency" from that Default value of of 27,004,000 to a new value of 27,006,800. I guess the tolerance on the 27MHz crystal that was supplied in this sixth QCX kit was much worse than it had ever been for the crystals in my first five QCX kits. Maybe Hans had to get them from a new crystal supplier? Now, whenever I call CQ, and I'm transmitting right on my Receiver Frequency, I get replies.

But I was still puzzled as to why my changing this "Reference Frequency" only affected the transmitter, I went back into the QCX documentation. The description of the QCX circuit is very detailed and very thorough. But the details which described how the oscillator circuit worked to establish the Transmitter Frequency and how it also worked to establish the Receiver Frequency was a little bit over my head. How this "Reference Frequency" setting plays into it is probably only documented in the QCX firmware. But that is not Open Source code. I wanted to know why this only affected the receive frequency.

Eventually, I found myself back at that paragraph from the QCX Assembly Manual that I had quoted above. I then "followed instructions", and I went to the QCX Operating Manual to see what was there. There, in section "4.5 Alignment Menu" of that document, I found what I was I was looking for:

> Reference Frequency
>
> The reference frequency for the Si5351A synthesizer chip. If you set this to the actual oscillation frequency of the 27MHz crystal, then the output frequency of the radio will be accurate.
>
> Usually the 27MHz crystals oscillate between 3 to 5kHz too high. This is the reason for the default setting of 27.004MHz (4kHz high).

There was my answer – I interpreted that statement as saying that this "Reference Frequency" setting was only affecting the Transmit Frequency. That validated what I had done.

I do not have a GPS unit available to precisely set this "less urgent" fine tuning adjustment the way that the QCX Operating Manual suggests. And I'm not really sure exactly how I would use a GPS to measure the transmitter frequency. I suppose that I could have used one of my newer transceivers which have pretty accurate receivers to show my QCX transmitter frequency. But I had already effectively used the Reverse Beacon Network to accomplish what was needed. And by doing it that way I got some a lot of signal reports as a bonus.

I did some further on the air testing by calling CQ during a SKCC WES (Weekend Sprintathon). That got me enough replies to convince me that my QCX 20m Mini Transmitter and Receiver were now totally in sync.

Next, I think I will go back and check my first five QCX transceivers. Apparently the 27 MHz crystals that were in each of those kits must be much closer to that default "Reference Frequency" of 27,004,000 because they are all still using the default setting . And I have made plenty of QSOs with each of them while running a frequency. But, I'll bet that I'll find that each of them will be off by just a little bit. So I think that that each of them will probably benefit from my finally getting around to making this "less urgent" fine tuning adjustment. Getting my Transmit Frequency and Receive Frequency 100% synchronized on all of my QCX units should reduce the need for me to use my RIT (Receiver Incremental Tuning) control.

Jody – K3JZD

## Falling Together

**de Cooky**– WC3O

I forget where I heard it. Someone once said that if you get your name in cut out wooden letters and line them on a table up to spell your name, you've spelled your name. If you pick those wooden letters up and drop them on the table over and over they will never line up to spell your name again, unless you arrange them to do so. The idea being that things tend to fall apart. Rarely do they ever "fall together".

This is a story of something that fell together.

In 2018 we installed an IMAX2000 CB antenna, tuned for 10 meters, up 90 feet up on the 120 foot repeater tower. It's fed with 1/2 Heliax cable for low loss. The purpose of installing this antenna was to help provide net control services for the Breeze Shooters net on 28.480 on Monday nights at 9:00pm.

Since the net is handled via ground wave over a large, hilly Western PA area, it is difficult to hear everyone that checks in. When this antenna was first installed it worked GREAT. Rarely was there anyone wanting to check in that we could not hear, and everyone could hear us. It was wonderful.

The IMAX2000 is a light duty antenna. We took this in consideration and top supported the antenna to minimize flexing in the high winds. The wind is strong up at 90 feet! When I install something like this I like to apply what I call "Bob's 10 year rule". I like to try to make whatever I install something I don't need to worry about again for at least 10 years.

That didn't pan out with the IMAX. It lasted four years. Bugger! The IMAX just wasn't meant to live up at 90 feet. It is too flexy and the fiberglass deteriorates badly in the sun. With hindsight I would ruggedize the antenna before installing one of these again.

Nothin's easy

I discussed the problem with numerous people and decided to replace the IMAX with a Hygain Super Penetrator SPT-500 5/8 wave ground plane antenna. It will handle 1500 watts and is well built. This all sounded great, but MFJ stopped production of the antenna with no return date in sight. I looked at other alternatives, but there was nothing that I thought would work as well AND handle 1500 watts. After a considerable amount of time I got a notification from DX Engineering that the Super Penetrator finally was available again! Skyview purchased one.

This, not being my first dance, I decided to ruggedize the antenna before installation. We had some aluminum tubing around the clubhouse so we double-walled all of the joints on the antenna and cross-drilled everything together. All joints have Jet-Lube SS-30 anti-seize applied and all connections were taped to help keep the weather out.

We had a spare "Station Master" antenna clamp to attach the antenna to the tower side arm. The factory mount on the antenna will not accommodate a 2-inch mast, which is what is on the tower side arm. We had some black iron gas pipe at the clubhouse so I cut a section off to use as a go-between, between the antenna mount and the side arm/Station Master clamp.

Even the gas pipe was slightly too large and the factory U clamps would not fit around the gas pipe. So I used my disc grinder to cut enough of a slot in the pipe to run the U-clamps though. It worked!

Between the section of iron pipe and the Station Master clamp there was much more weight at the bottom of the antenna than there would be otherwise. This worked as an advantage because when we roped the antenna up the tower, the antenna naturally "Wanted to" keep vertical!

<u>A miscalculation:</u>

I used a 2-inch aluminum section tubing as a side-arm to locate a pulley over the top of the side arm mast, around two feet out from the tower. I figured that the antenna is light, even with the additional weight at the bottom, and this tube would be strong enough. I was wrong. The tube eventually folded over the cross member of the tower. Luckily it did not break, but it meant some additional wrestling once the antenna arrived at the top.

Luckily it is not too hard to capture the Station Master clamp over the side arm mast and all was right with the world. I reused the top support from the old antenna to keep the new antenna steady in strong winds. Even with the double wall element and cross drilled sections, I love having even more overhead. I REALLY don't want to think about this antenna again for a long time!

Now the sad part:

In my bucket of tools that I brought up the tower was my antenna analyzer and a short piece of coax. We tuned the antenna on the ground, but this is not on the ground now. It is too close to the tower, we have steel guy wires nearby, one radial is very close to our 2 meter APRS antenna and another radial is very close to our 80 meter dipole.

With all of these additives nearby, the SWR looked like crap! The sweet spot was up at 28.7 and it was 2.4:1! My big smile flipped upside down. Grrrrr. By this time the sun was getting low in the sky. My arms and legs were well on their way to becoming rubber. I yelled a couple of words that you can't say on TV, connected the feedline and sealed it up. It's as good as it gets. We'll just have to use a tuner, damnit. I then worked my way back down to terraferma. It was REALLY nice to be off the stick.

It was getting late and I needed to get home. I left the joint knowing that the project did not work out well, but it should still work OK. My wife wisely demanded that I take some Advil before going to bed. It wasn't until the next Tuesday that I was back up to the joint. After folks cleared out I waddled over to the radio to see just how bad the SWR looked from there. Oooof

WHAT THE? 1.2:1? Holy crap! It fell together!

Let's look at what you actually want. You want the SWR at the antenna to be near 1:1. 50 ohms of resistance. You want a good feedline to maintain that 50 ohms of impedance (Which we have). You want all of your antenna switches and other gadgets that are inline to maintain that 50 ohms. You want everything in your antenna system to be 50 ohms. Simple. Well, our antenna is not 50 ohms of resistance. I didn't look at the complex impedance of the antenna while I was up on the tower.

The fact that it sucked was good enough for me. Well, a pinch of capacitive reactance over here, and a teaspoon

of inductive reactance over there, plus some improvement from the long run of feedline and BINGO BUCKO! (Those impedance changing items being two antenna switches, a lightning arrester and an antenna tuner that was designed before maintaining a constant impedance was important)

Again, all of the impedance mis-matches along the way is not what you want. There will still be feedline losses above what they should be. But do you know what? I don't care! The radio is happy. The amplifier is happy. I'M HAPPY! Turn that frown upside down!

Hopefully this antenna will surpass Bob's 10 year rule.

Hopefully this antenna will serve the Breeze Shooters net well.

And that my friends - is that!

MANY thanks to my ground crew. They did a great job.

Check on in to the Breeze Shooters net Monday nights at 9:00pm on 28.480

de WC3O - Skyview Radio Officer

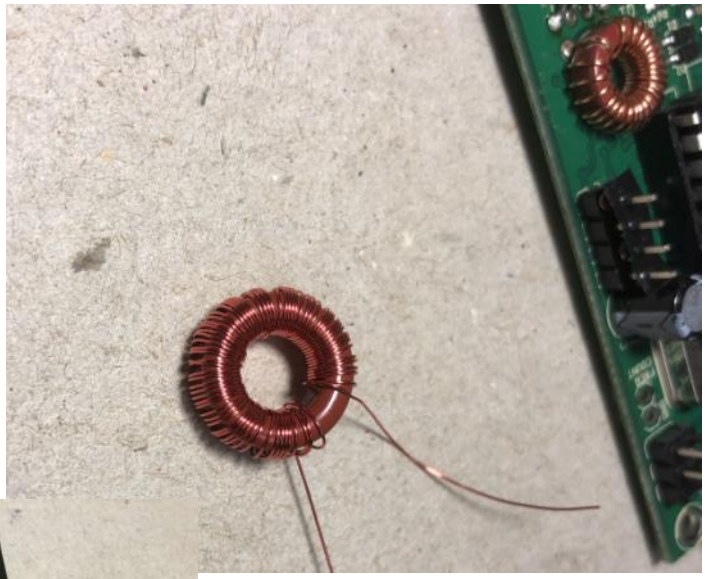
## Converting a QCX From 60m to 80m

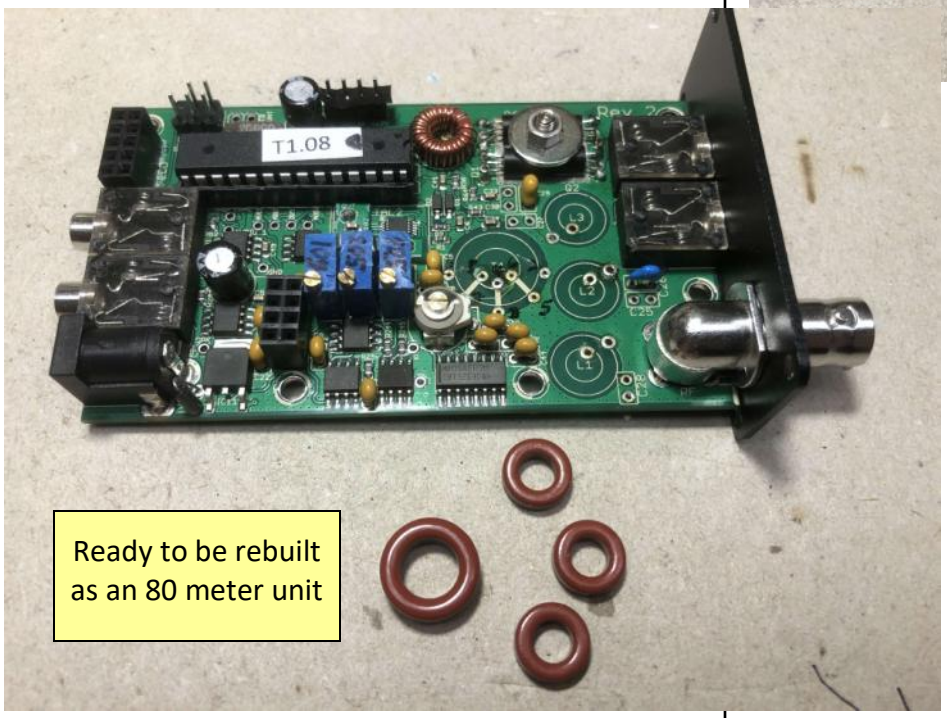
**de Dan** – NM3A

I'm a big fan of QRP Labs. I've built lots of their kits. I've been very pleased with all of them. However, the QCX-Mini I built for 60 meters just wasn't very useful. It works perfectly well, but it is not very useful for POTA or SOTA outings, which is where I use my QCXs and QDX mainly.[i]


So, I decided to redo the kit for 80 meters instead. It seemed a rather simple change. Simply change a few low pass filter toroids and capacitors, rewind the band pass transformer, recalibrate and it's all done. Jack, K3JAS, gave me a couple of needed capacitors that I lacked and I was all set. (Note also the 20-turn blue pots. They were too high to allow for proper fit in the case. So I had to shave off about a half millimeter. The values were then re-labeled by hand.)

Desoldering the old parts was a little harder than I expected, but I got it done. Winding toroids[iii] is always tedious, but not difficult.

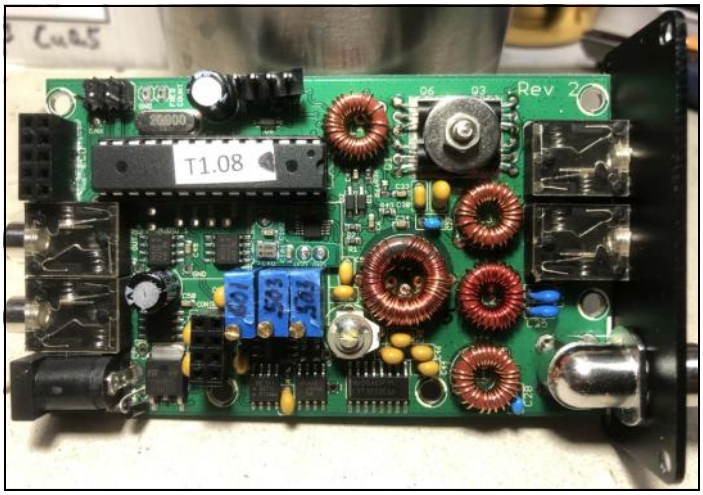





Ready to be rebuilt as an 80 meter unit

Calibration went well, but I had low power output of 3.2 watts. (Expected power out is 5 watts.) I found I had a little too much inductance on the LPF toroids, so I removed a few turns from each. Power then came up to about 3.5 watts.

As I was not sure I wanted to risk desoldering/resoldering again, I decided to leave well enough alone. A dB or two is not going to make a big difference for contacts anyway.




**The Finished 80m Conversion**


Getting it on the air, I found receive sensitivity to be excellent and I expect it to be a nice addition to my POTA and SOTA kit.

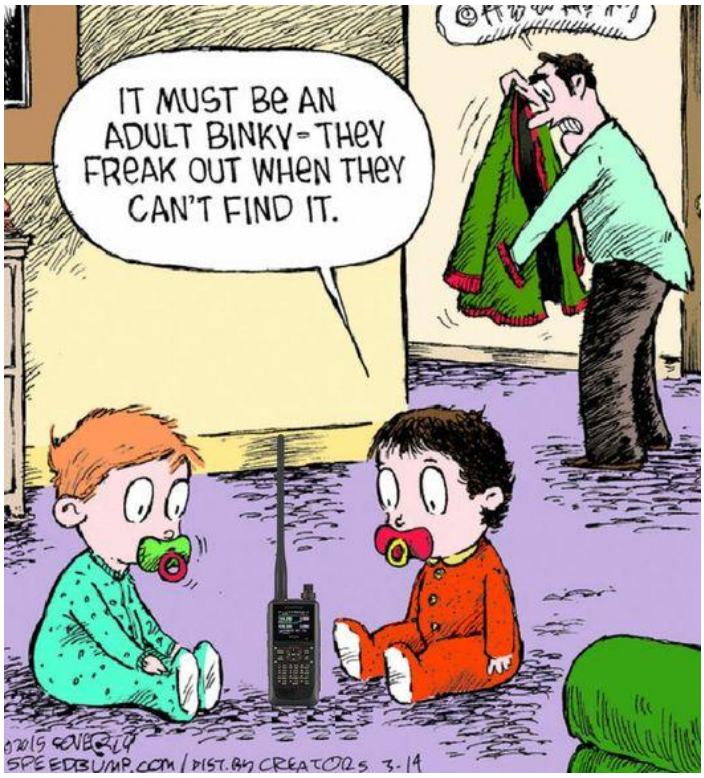
Forty, 30 and 20m are the best bands, but it's nice to have an option for 80m early in the morning or evening[v]

Dan, NM3A

See the QRP-Labs Mini here.

http://shop.qrp-labs.com/qcxmini

They are available as a kit or a pre-built ready to use unit.




**It's Membership Renewal Time!**

Another year is coming to an end and once again it is time for all Skyview members to renew their commitment for 2023.

Membership packets have been mailed to all active members who did not receive one in person or request one via e-mail. For most people, your packet consists of a membership renewal form and a banquet invitation.

However, if you joined as a new member at the August Swap 'N Shop or anytime between then and now, you are already renewed. Your packet consists of a renewal confirmation and a banquet invitation.

If you haven't received your renewal packet yet, send an e-mail with your name and callsign to me at membership@skyviewradio.net and I can reply with your packet as a PDF attachment.

In addition to cash and check, we now have electronic payment capability through PayPal. Go to the club website at http://www.skyviewradio.net/members and scroll to the bottom of the page for payment buttons, or pay directly to @SkyviewRadioSociety from your PayPal account.

Why renew? Because Skyview Radio Society has something to offer all hams who want to be involved in the hobby. Here is an abbreviated recap of 2022:

The clubhouse was busy with weekly Tuesday evening gatherings including business meetings, social events and Elmer nights. Our weather special interest group rebooted this year and now meets regularly on the second Tuesday of each month. Many of the club gatherings were simulcast on Zoom for those who could not attend in person.

New hams got their ticket at a monthly Skyview VE session and jumped right into club activities, contests and POTA and SOTA activations along with regular members. We hosted two Field Day sites, multiple contest weekends, the yearly Swap 'N Shop, and a pilgrimage to K3LR and DX Engineering. Individual members improved their CW skills, activated parks and summits, participated in ARES and SKYWARN events and helped with road and trail races throughout the region.

So, whether it is operating, contesting, personal enrichment, public service or just plain fun, Skyview has something for you. The variety of offerings reflects the diverse interests of its members. In other words, your participation is what makes this club great! Renew today.

Tom Kerr AB3GY

Skyview Membership Chair

## A Solution Waiting For a Problem

**de Jody** – K3JZD

Say what? Not a terribly descriptive title is it?. OK, I'm talking about a 3D Printer here. I have had mine since August 2019 – a little over three years now. And it truly has become a solution waiting for the next problem.

I guess my 3D Printer purchase was partially driven by curiosity and partially driven by the number of ham radio related 'things' that I had been seeing online. Most of the ham radio related things were free to download and 'print'. I purchased a prototype mini 3D printed straight key from Dave - KØMBT (ADØB now). He was looking for comments, so I had a some back and forth emails with him. I talked him into making me a lightweight mini-mini straight key that I could use during the Spartan Sprint.

Eventually Dave suggested that I probably should just get my own 3D printer. The prices for the hobbyist quality 3D Printers had come down to where they were more justifiable. So why not?

A lot of research led me to purchasing a Creality Ender3 Printer. Last I time that I looked. Amazon was advertising this printer for $189.00. I would describe the Creality Ender3 Printer as a 'semi-kit'. Some assembly is required. The assembly is basically just mechanical. All of the wiring harnesses are there and they are already terminated with connectors – they just need to be plugged in. There are several good Ender3 YouTube videos which describe (1) what parts should be swapped out for better quality parts, (2) items to pay particular attention to during the assembly, and (3) the proper alignment and testing techniques. I purchased all of the additional recommended better quality replacement parts for around $30 or so and used them during my assembly.

Like everything else, there is a learning curve. Successful 3D printing requires a perfectly aligned printer. That just takes a little time to achieve. After I downloaded some "STL" data files for various items that others have made freely available, I then found that I had to process those STL files with some "Slicer" software on my computer. The Slicer software converts the data that is in the "STL" file to a "GCODE" file that contains the instructions for your specific printer. Once my GCODE file was created, I then put that file it onto a micro SD Card, and put that micro SD card into my printer. There are several free "Slicer" programs available. I use the "Ultimaker Cura" Slicer.

If all you want to do is 'print' objects from the "STL" data files that others have made available, then all you need is your aligned 3D Printer, some "Slicer" software, a micro SD Card, and a spool of "3D Printer Filament". There are various types of Filament – I use the "PLA Filament" which is inexpensive, 'prints' well, and so far has met all of my needs.

Have I made it sound too easy? Perhaps. My goal here is not to create a tutorial. Go look at some of the YouTube Creality Ender3 Printer videos to get more information.

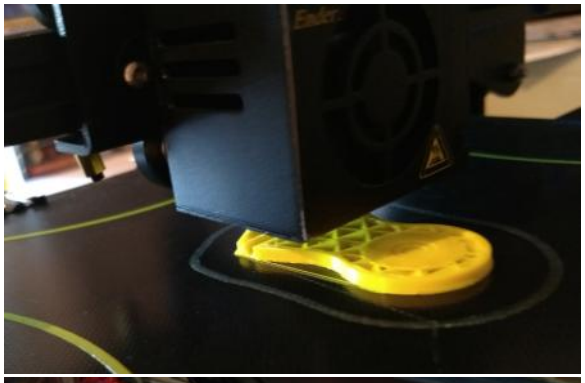
Once I had mastered 'printing' the stuff that others had designed and made available as STL files, it was time to think about designing things by myself to suit my specific needs. Doing that requires some more computer software. There are several different free software programs that will allow you to design "3D Objects". I found that each of these different programs uses a slightly different approach to creating the custom 3D image which you then save to a "STL" data file. You have to try a couple of these programs to see which one makes the most sense to you.

I ended up choosing the "Autodesk Fusion 360" software. A free version of Fusion 360 is available for personal, non-business use. That free versions has a few things locked out and it has a few usage limitations. But I have found what is in the free version is adequate for my needs. Yes, there is a whole new learning curve with any of the 3D object design programs. But once again, there are lots of YouTube tutorials available.

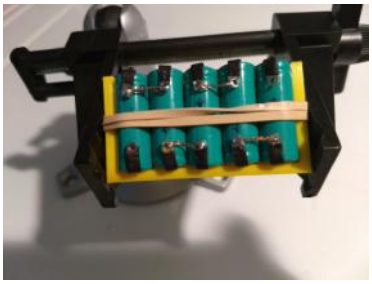
Once I got enough rudimentary knowledge on how to use Fusion 360, I was ready to go. Things that I had previously fabricated from wood or from metal were being analyzed to see if I could now fabricate them as 3D Printed Objects instead. Where I had previously scrounged for project cases, and often had to adapt

something that was close to what I wanted, now I see if I can create a custom case design as a 3D Printed Object. If so, then I can create exactly what I want, in the exact size that I want, and not have to settle for something that is close. Once I began to create these self-designed custom "3D Objects", then my 3D Printer truly became a 'solution waiting for a problem'.

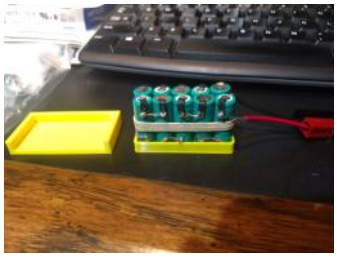
Some of my custom designed solutions are pictured here. Nothing shown here was just downloaded from the Internet and printed. Mostly ham related stuff. But also a few other examples that show the utility of the 3D printer. None are works of art. Sometimes there are more 'graceful' shapes that I would have liked to produce in Fusion 360, but they are beyond my ability to successfully accomplish. I guess if I were to go back and look at some of the more advanced Fusion 360 tutorials, I might become more knowledgeable in how to create more polished complex shapes. But who has time to go through all of the instructions? So, I often end up with functional objects rather than polished works of art.

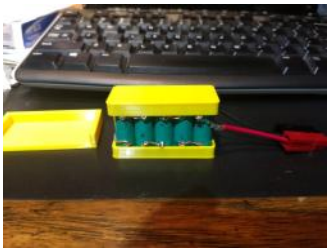


A shorter, wider Lever for my KØMBT Mini-Mini Straight Key - Gave it a better feel that his longer Lever did (the white Lever in the second photo)



A temporary Fixture to hold five batteries in place while soldering the cell to cell jumper connections





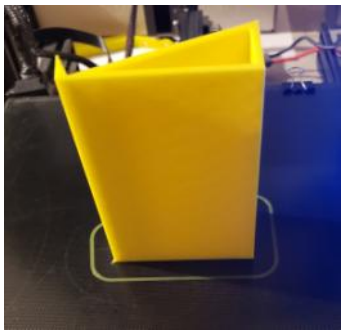
A Case for my finished 10 Cell NiMH Battery Pack

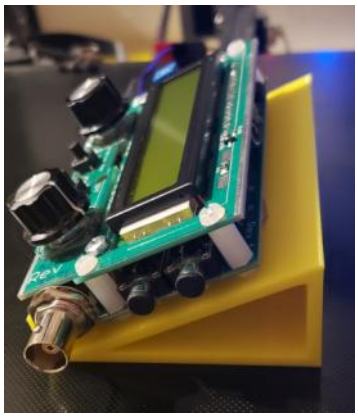
A Case for my ESP32 Remote Plant Moisture Monitor

A stand to orient my Xiegu G90 at a convenient working angle on my desk. This is three separate printed sloped pieces, with two small printed struts. Super Glue holds it all together.

Adapters to allow adding Rope Cleats to my Push-Up Flagpole holding up my Dipole. (Cannot use screws to install Cleats with a Push-Up Flagpole.)

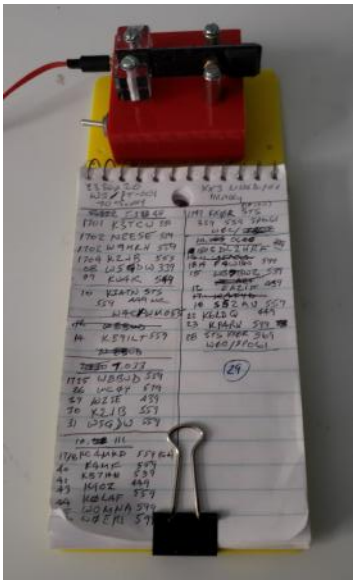
The Rope Cleats eliminated the mess I previously had with the rope wrapped around the flagpole and tied.



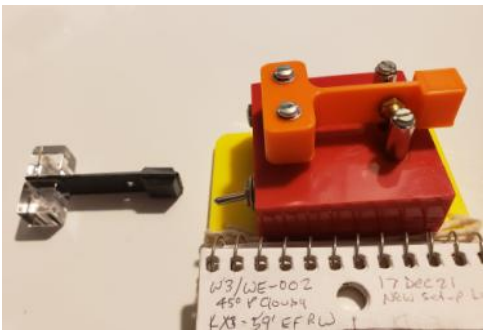


A stand to hold my QCX - Mini Transceivers at a convenient working angle on my desk. (I built them as 'naked units' to keep them light for use in the Spartan Sprint)

A Gutter Strap - Eliminated a trip to the store

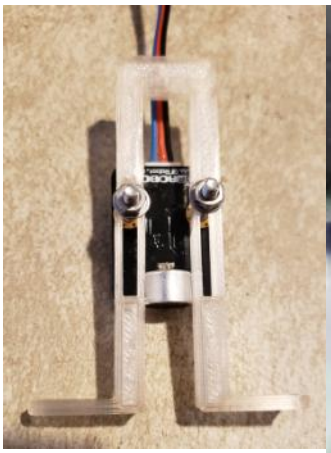
A simple. but effective SOTA Aid. Velcro holds the key on. I'm on my One-Legged Stool here - it is too wet to sit on the snowy ground. The string is around my neck holds up this simple "Shelf" that is holding my key and logbook.



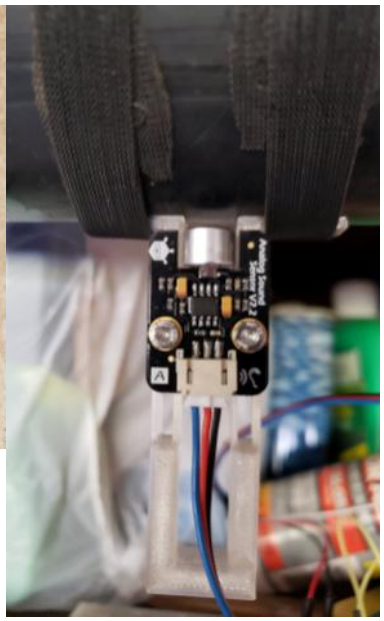
A replacement arm for my SOTA key. I had broken off two of them in the past and this third one was cracked.

A Mounting Bracket for a sensor. I was chasing an intermittent water problem - needed to monitor the drain.


A Small Parts Storage Rack

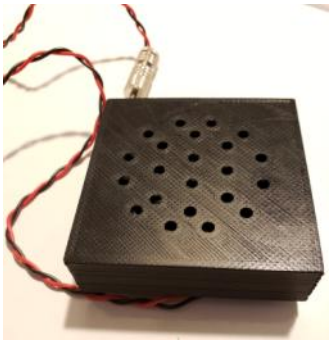



Another Mounting Bracket for a different sensor. This one allowed an adjustable positioning.

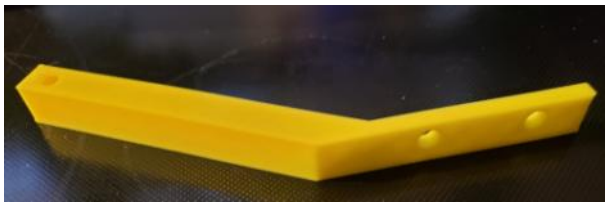




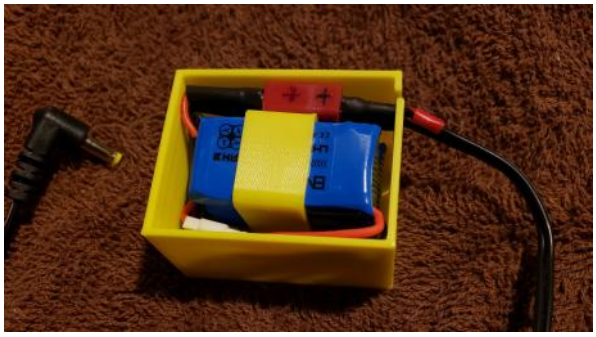
A 12v DC Pin Connector to Power Pole Adapter for an Elecraft PX3 Panadapter. Someone was making and selling these for the Elecraft KX3, but were not making them for the PX3. So, I made my own for my PX3



A Quick and Dirty Speaker Case for the small amplifier that I added to my PicoKeyer Code Practice Oscillator



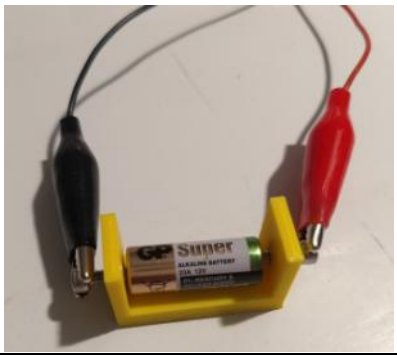
A Custom Bracket to hold a Camera that allows me to remotely watch my 3D Print Jobs. It works with a Raspberry Pi that sends the video output to my computer



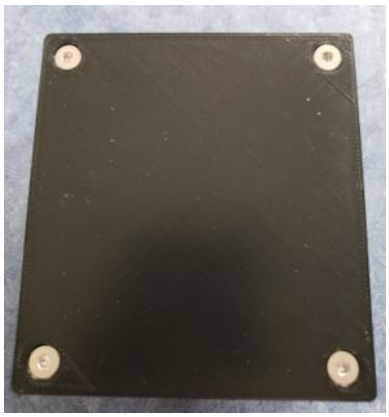
A 'Matchbox" style Battery Case for a small battery pack that I will use with my MTR-3B transceiver

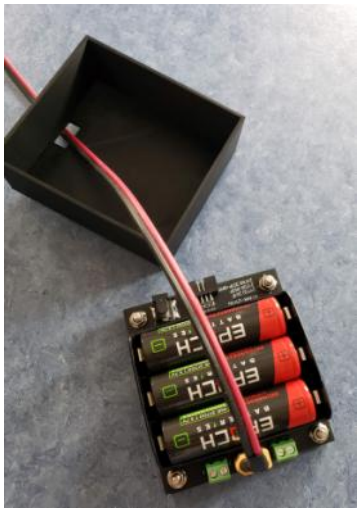

Another 'Matchbox" style Battery Case for an even a smaller battery pack that I will use with my MTR-3B transceiver. These battery cases attach to the MTR-3B with Velcro.


A Safety Cover for a repurposed Power Supply with 120VAC screw terminals at the end



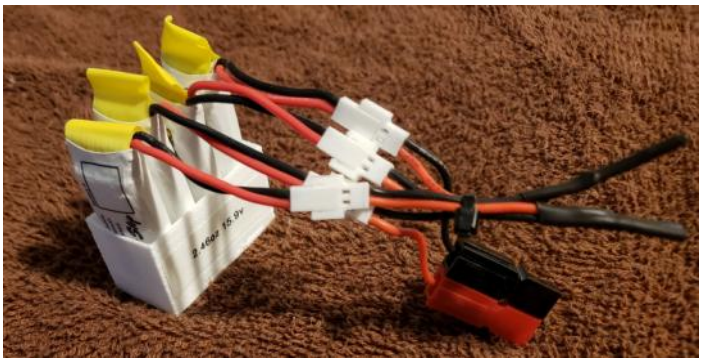

A Quick and Dirty Battery Holder for us with an experimental breadboard circuit





Case for a FT-817 External Battery. The purchased Battery Management Board uses three 3.1v 5000 mAH 21700 Lithium Ion Batteries. That's enough voltage to run the FT-817 at full power. But it came as a bare board that had traces on the back of the board. So I had to figure out how to design a case for it to allow taking it out to the field.


A 'Corral' for Fish Food. Keeps it in one place instead of floating all over the place and going down the skimmer



A simple light weight box to contain my small lightweight Spartan Sprint Battery Pack

A Bracket to hold up a Motorola Speaker

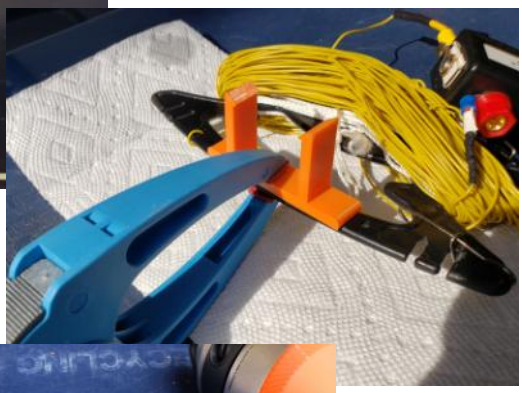

Some Stencils

A Measuring Cup for dispensing liquid laundry detergent


A Case for a Small WiFi TTGO NTP Local/UTC Clock



A Bracket to hold a Cell Phone on a bookshelf. This cell phone stays here all of the time—it replaced a landline. Previously it was held up with a piece of plywood with a couple nails driven in it to hold the phone upright. This bracket works much better

A simple. but effective Clamp to hold my SOTA Unun to my antenna windier while transporting it. It is glued to the winder. This went from "I Need Something" to Designed, Printed, and Glued to the Winder in about 2 hours

My 3D Printer, and the time that it took me to learn how to setup and use the printer and the software, was a good investment

My 3D Printer will often just sit there for weeks, or sometimes months, just gathering dust. But it is a great tool that is just waiting to provide a solution to my next problem.

If you are looking for something new to tinker with, as you just saw here, a 3D Printer complements our ham radio hobby.

I just showed you pictures of many of the items that I have created from scratch to fill some need. There are dozens of other useful ham related things that I have downloaded from the Internet as STL Files and just printed. Google sometime on "3D Printed Ham Radio Projects". Be prepared to spend a few hours looking over what people have designed and have made freely available.

Jody – K3JZD


**Creality Ender 3 3D Printer**

# Extend the Range of Your Car's Key Fob

***ED—Here's a 'hot tip' from Family Handyman Magazine. I will leave it to the reader to decide if this is a good idea or not.***

This one sounds like an urban legend, but apparently it truly works! By holding your key job against your chin and pushing the unlock, lock or panic button, you can increase the range of your key job. "That's because behind the scenes—or, rather, inside the scenes—the fluids of your head act as a conductor," notes tech critic David Pogue, who has a video to prove it. "Your body becomes part of the antenna—a much bigger one. If you're old enough to remember when TV sets had "rabbit ears" antennas, you may recall that you sometimes got the clearest picture when you were touching the antenna. Same principle here."

Here are some interesting looking 3D Printed Objects.

I did not design these - someone else did.

I just printed them from someone else's data files.

I'm not using these myself - someone else will be.

Maybe a future Skyview Newsletter will show how these were used for a Ham Radio Application.

## QDX Cool Mod

de Dan - NM3A

The QDX from QRP Labs is a 5 watt, directly synthesized digital transceiver for 80, 40, 30, and 20 meters.


While designed mainly for WSJT-X modes, it can be used for any digital mode that only transmits a single tone at a time, such as RTTY. (There is an exception for CW/Morse as it is not designed to limit key clicks in that mode.) It has a Tayloe IQ receive detector and an internal sound card. So it only needs USB, power, and antenna connections.

Due to its unique synthesis of the transmit frequencies, virtually no tedious set up levels are necessary.

It is great for portable use with minimal cords. The only difference for me from CW is I need a computer instead of a key and a one foot USB cable instead of a one foot paddle cord. I have used it very successfully for our recent POTA club outing. It got a number of hours of constant use on 40 and 20 meters with no issues. Its receive sensitivity is excellent and its clean transmit signal means it is pretty well picked up by others despite its QRP power level.

The QDX was designed for 9 volt power, but can be modified to use 12 volt power. As it was designed for 9 volts, that is what I built it for. However, I was concerned that I might accidentally power it with 12 volts and also did not want to have a separate power supply for it; either in the shack or when portable. So, I purchased a 1.5 amp 7809 and modified the QDX to take 12 volts input and supply 9 volts internally. The case is used as its heatsink.

This works great, but I noticed that the unit gets rather warm when in constant use.

I got out my trusty Harbor Freight infrared thermometer and checked. After a long transmit session, the case was warm at 104 F (40 C), but not excessively so. However, when I opened the case after a long FT8 session, the final transistors (BS170 FET x four) were 170 F (77 C) and the associated T1 output transformer was 160 F (71 C)!


This seemed rather excessive to me, especially since the TO-92 transistor case does not conduct heat very well. The junction can take up to 150 C, but the hotter it is, the shorter its life is likely to be, especially if ambient temperature is high as well. In addition, the BS170's power dissipation is derated above 25 C.

Leaving the case open did not appreciatively lower (~10 F) the temperature. I put a fan on the unit and things were then 20-30 degrees F cooler. The fan was rather large though and not very practicable for everyday use. So, I found an old 12 volt CPU cooler in my junk box that was much smaller (1.6 x 1.6 x 3/8 inch).

I decided to modify the QDX case and permanently mount the CPU fan. To accomplish this, I marked the case and the outline of the fan air flow area. Holes were drilled for mounting the fan as well as holes to permit air flow into the case. This would let air flow directly over the finals and the output transformer. The end plate of the QDX also had holes drilled into it to allow air to exit from the case.


The fan was bolted to the top half of the case over the T1 output transformer.

I decided to power the fan from 9 volts rather than 12 to decrease the current draw and decrease noise from the fan. This reduced fan current draw from nearly 40 mA to about 25 mA. (The 1 W rating is maximum draw. Normal running draw is about ½ W at 13.8 V and 300 mW at 9 V.) This mod slightly increases the QDX receive current draw from about 100 mA to 125 mA. There is a negligible decrease in operating time as the limit for operating time from any particular battery is determined mainly from the transmit current, which is about 1 amp. The fan power cord was run into the case and soldered onto the output of the 7809.

This allows easy disassembly of the case when needed to work on the radio.

The final appearance of the QDX gives a slightly taller dimension and there is some audible noise from the fan. However, that noise is minimal and not particularly annoying. Here is a very short video clip to show how noisy it is :

**[Ctrl] + Click Here to see the Video**

The biggest benefit is the marked reduction in temperatures of output transformer T1 and the four BS170 finals. The following table shows the improvement with pre modification temperatures for receive only, constant transmit temperatures (at maximum FT8 duty cycle) over a prolonged period and post modification transmit temperatures over a similar transmit period. All these temperatures were measured running 4.3 watts output on transmit on 40 meter FT8 into a well matched antenna. Ambient temperature was 70 F throughout.

— See the table Below —

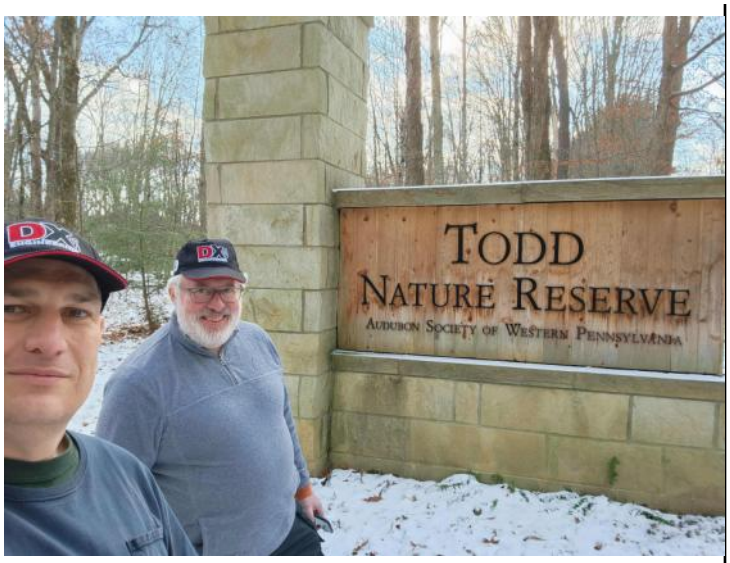
This is a dramatic decrease in temperatures. Unexpectedly, it is much greater than the test fan's decrease. The post mod case temperature on prolonged receive is 74 F. There is a significant temperature gradient from the BS170 junction to the case. So, I do not know how much this decreased the junction temperature in the finals during transmit, but it has to be much lower than before. Power output from the rig remains unchanged. Success with FT8 QSOs remains excellent and I am very happy with the results. Long live my finals!

Dan -- NM3A

| Area▼ TEMPS► | Rx Only Pre Mod | Tx Pre Mod | Tx Post Mod |
|---|---|---|---|
| Case | 85 F | 104 F | 84 F |
| Finals Bolt/washer | 90 F | 170 F | 90 F |
| T1 transformer | 90 F | 140 F | 90 F |

## K3FAZ, K3STL, and K3ES POTA in the Cold with a Bonus

de Brian - K3ES




### K3ES Perspective

Saturday November 19 dawned clear and cold in northwest Pennsylvania, but the truth is that I was up well before dawn. The third Saturday of each month, I try to make the 2 hour drive south to help with Skyview Radio Society's monthly Volunteer Examiner (VE) testing session for new or upgrading licensees. Clear skies (which matched the forecast) meant that road conditions would not be a problem. So, shortly after 5 am I pointed the truck south.

One of the creature comforts I appreciate about our VE session is meeting for breakfast before the test. It was obvious on arrival at the restaurant that the VEs would greatly outnumber the test candidates, but many hands make light work. Coffee and an omelet definitely helped fuel the effort. Since the test sessions normally last less than 2 hours (and that held true this time), three of us VEs had made plans for post-test session POTA.

Before launching into the field report, let me acknowledge that K3STL's photography was instrumental in providing a report with visual appeal. Personally, I almost always forget to take the pictures.

### POTA Plan

The plan for the day was to attempt activation of two POTA sites, Beechwood Farms State Conservation Area (K-0620) in suburban Pittsburgh, and Todd Sanctuary State Conservation Area (K-0621) about 20 miles further to the northeast.

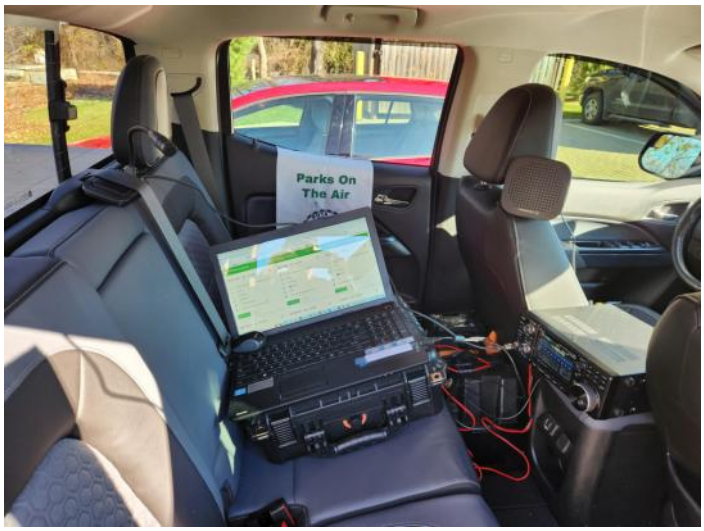
John "Tall Guy" – K3STL and Brian – K3ES would do a short activation of K-0620, then meet Steve – K3FAZ at K-0621 for the rest of the afternoon.

Knowing it would be a cold day for mid-November (temperatures peaked for the day just barely above freezing), each of us made plans to adjust for operating from our vehicles. That meant that we would be doing parking lot activations at both locations.

While we each normally activate with slightly different operating styles that are suited to outdoor POTA operations, some tweaks made it possible to have wind and weather protection for this outing. In hindsight, it was a perfect choice.

## Operating Methods

K3FAZ operated his treasured Kenwood TS-50 using SSB mode with an EFHW antenna in a tree. Rather than setting up with a table and chair, Steve configured his station to fit in the front seat of his SUV.




K3STL operated his ICOM 7300 using SSB and FT8 modes with a selection of hamstick antennas on a magnetic base. Instead of using the tailgate of his truck for a desk, the Tall Guy moved his passenger seat forward and found enough room to set up and work his station from the truck's back seat. Unfortunately, K3STL found it difficult to take a selfie while operating.

I operated an Elecraft KX2 using CW mode with a Tufteln 35 ft random wire antenna with 17 ft counterpoise suspended vertically from a tree branch. My radio and logging clipboard fit neatly on the console of my truck, with the antenna feedline running in through the door seal. I felt positively decadent operating from a seat with lumbar support instead of sitting on the ground.

The QRPer may ask: “With those QRO rigs in the area, was it still possible to complete a joint activation?” The answer is emphatically yes. Given a few precautions, joint activations using multiple radios and different power levels can be successful. Think Field Day. During this outing, we discovered that with 40 ft separation between antennas, and radios operating on non-harmonically related bands, there was very little RF interference between stations.

At the second location, the separation between antennas was less than 20 ft. Operations with QRP CW on 30m alongside QRO SSB on 20m caused no problems on either frequency. Late in the activation, I moved over to 17m for a couple of contacts, and found that the KX2's automatic attenuation function kicked in during the 20m FT8 transmit cycle. A problem? Yes. Avoidable? Yes. To answer another question: we did have band pass filters available, but did not have enough issues to cause us to install them.

I committed to activating on the 30m band to minimize interference between stations, because it is not harmonically related to other amateur bands commonly used for POTA. I found during this outing, as previously, that 30m is a reliable band for completing CW POTA activations at QRP power levels. As the results show, avoiding the 40m and 20m bands was not a handicap.

## Activation Results

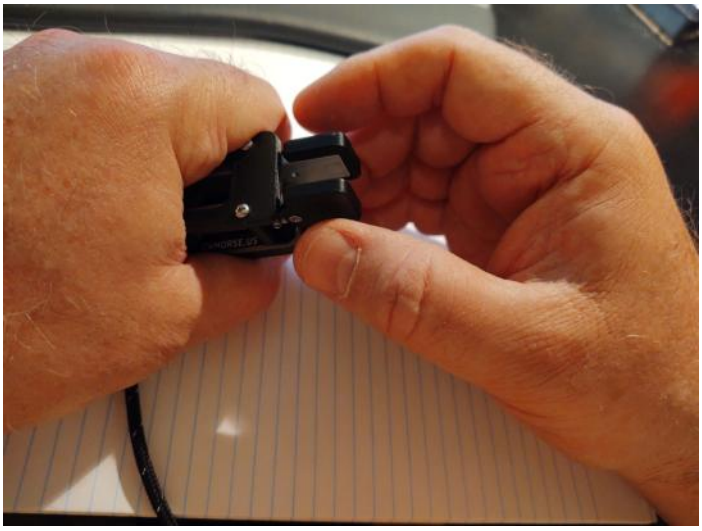
In 30 minutes on the air at K-0620, K3STL made 36 SSB contacts on 20m, and I made 23 CW contacts on 30m. At K-0621, we spent 2 hours on the air, packing up as the temperature began to drop with the sinking sun. K3FAZ made 50 SSB contacts on 40m. K3STL made 45 SSB and 17 FT8 contacts on 20m. I worked all CW, making one contact on 40m, 48 contacts on 30m, and finished with two contacts on 17m.

For a cold day in November, where we might otherwise have decided against activating, all had a great time. Each of us improved our operating capabilities to accommodate otherwise inclement weather, and yes, we will be doing more cold weather activations!

## Bonus Gear Report from K3ES

Besides enjoying time activating two new POTA entities, I had another objective for my outing. I had just taken delivery of the new CW Morse/N0SA SP4 paddles. I wanted to try them out during an activation (or two). The paddles worked splendidly for most of my activation time, but I started having difficulty sending accurately at the end of the second activation.

I traced this problem back to my over-tightening the magnetic return tension screw. After backing this adjustment off a bit, the problem disappeared completely. Apart from that, I am really pleased with the feel and the operation of these new paddles.



I think it is great that CW Morse's production capacity can put N0SA-designed paddles in the hands of more field operators. I expect those operators will be pleased with these paddles, too. Just don't make my mistake trying to adjust the return tension too far.

Brian - K3ES

## A Noise Cancelling Headset Microphone

**de Bob - WC3O**

For contesting, using a set of headphones with a boom microphone makes a big difference. At the clubhouse we use the usual Heil headsets. The mics are great for what we do, and the headphones are comfortable. They are durable, re-buildable and have served us well over the years.

However, Heil does not make a headset with noise cancelling. If you have never experienced a good set of noise cancelling headphones, you're really missing out on something. For everyday working on the radio they also make a big difference. A/C noise - gone. Furnace noise - gone. Amplifier fan noise - gone. Other noises around the shack - gone. It's just you and whatever signal you are trying to hear. It really makes a BIG difference. For multi-op contesting they are invaluable.

A few Q5ers back I wrote an article about the Bose Quiet Comfort (Noise cancelling) line of headphones. I specifically like the QC25s, but they are all good. (You would need to buy the QC25 set used, as they are no longer made) The problems with these headphones, and other nice headphones is that there is no provision to add a boom microphone, let alone one that works well for amateur radio.

Enter the Antlion ModMic.

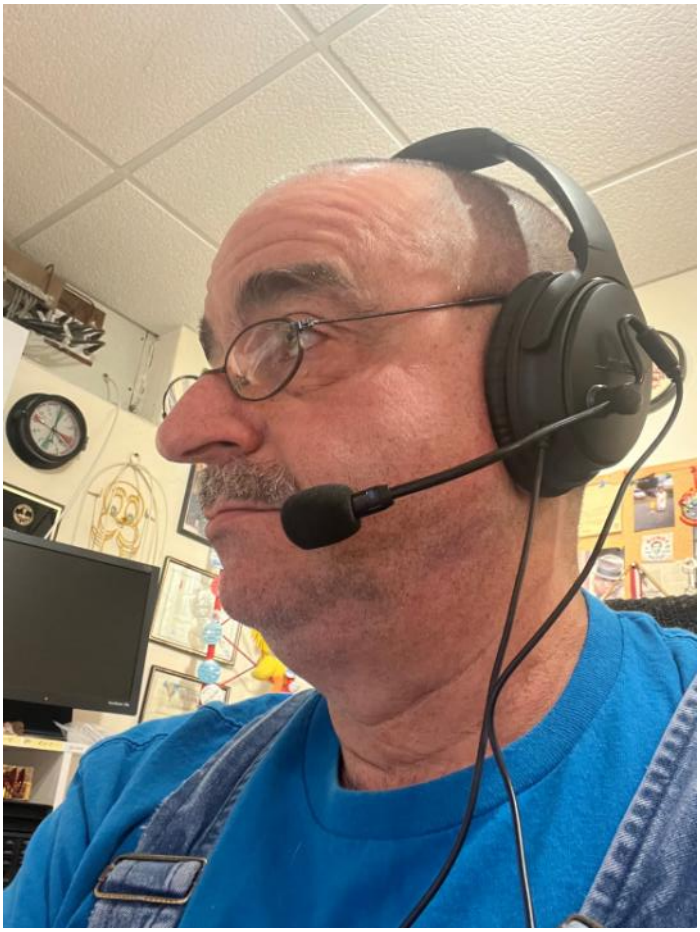
The ModMic was developed mainly for gaming. There are a few different models to choose from. One is USB. One uses Bluetooth with a low latency USB soundcard. One is made for Podcasting and one is made more for office type work. The last one is likely the one we are most interested in as radio operators.


All of the ModMics attach to any set of headphones using a small, adhesive mounted, powerful magnet. The magnet easily holds the boom mic in place. There are lobes on the magnet that allow you to flip the boom mic up out of the way when it is not needed. You can also remove the boom mic completely.

The ModMic we are looking at is called the "Uni" because it is unidirectional and has noise cancelling. While the mic is not specifically designed around ham radio, the frequency response is not bad.

Any down sides?

Well, yes. When using the ModMic you will have two cords rather than just one. The ModMic comes with little clips to bundle the two cords together. A little more cumbersome. Not bad, though.




You will need to adapt the ModMic to your radio. There are a couple manufactures out there that specifically make adaptors for the ModMic. I don't know the specific details, but for some reason the Heil adaptors don't seem to work with ModMics. I'm sure with a little research a home-brew adaptor would be easy enough.

Marty, AG3I found HAMDAPTOR. They are available on Ebay. As of this writing it appears that the owner is away for a little while.

It took some searching, but I also found an adapter at PileupDX.com :

https://pileupdx.com/product/modmic-to-icom-8-pin-adapter/

I have adaptors from both companies. The ones from PileupDX are built a little heavier duty. The adapter link I've provided a link for is for ICOM, but they have ones for Yaesu, Kenwood and Elecraft too.

They ship from Europe, but the shipping time is not bad.

Using the ModMic on the ICOMs and Yaesu radio has worked well. I've found that you need to turn the mic gain way down. Pay attention to your ALC meter when adjusting your mic gain. The audio sounds great, but a little wide for contesting. On most newer radios you can EQ that down.

I was using one at the club and had issues with the mic picking up other people around me. But I think that I had accidentally brought up the ModMic that was made for podcasts. I don't think that the Uni will have that problem.

Other than a few minor downsides, the advantage of being able to use good noise cancelling headphones is well worth the tradeoff. Going forward hopefully Antlion sees the market potential of amateur radio and develops a ModMic specifically for our needs.

We have two sets of Bose QC25s at the clubhouse. Give them a try. You'll be blown away by the difference that they make. Just one thing - PLEASE remember to turn them off when you are not using them! We go through more batteries that way... We'll have ModMic UNIs and adaptors soon.

Thanks to Marty, AG3I.

Bob - WC3O

# Welcome New Members !!

Welcome the following Skyview Radio Society Members who have joined us since publishing the October 2022 newsletter:

**KC3UZI - Dave Brady - Export**

**KC3RMN - Dallas Leonard - Jeannette**

**KC3RIL - Brandy Lockwood - Wendel**

**K4PDF - Paul Fischer - Pittsburgh 15235**

***[TBD]* - Charlie Baldwin - Greensburg**

Remember that something is going on up at 'the joint' every Tuesday. Sign up for the K3MJW Groups.io Reflector to get the latest news and event announcements by email.

If you are a reader who is interested in becoming a Skyview member, then go to: http://www.skyviewradio.net/ for information.

If you are a reader who is not yet a ham, and you are interested in becoming a ham, , then go to: http://www.skyviewradio.net/ for information.


## Skyview Radio Society Roster as of 30 NOV 22

| | | | |
|---|---|---|---|
| NM3A | WB3HFP | KC3MIQ | I2RTF |
| N3AFS | WA3HGW | K3MJ | KD3RVR |
| KB3APD | KB3HPC | K3MRN | KQ3S |
| NA0B | KA3HPM [SK] | N3MRU | K3SBE |
| WI8B | K3HSE | KS3N | KC3SDJ |
| N3BAH | KB3HXP | G4NFS | KC3SKX |
| W3BUW | AC3HZ | KB3NSH | KC3SNZ |
| KF3C | AG3I | AJ3O | KB3SOU |
| KC3CBQ | AC3IE | WC3O | K3STL |
| W3CDW | KC3IIO | WO3O | KC3STS |
| K2CI | AB3IK | KC3OCA | KC3STV |
| K3CLT | WB3IMB | KC3OCB | KB3SVJ |
| K3DCG | W3IU | KC3OCC | KC3TEX |
| K3DWS | K3JAS | K3OGN | WV8TG |
| KC2EGL | KG4JBB | N3OIF | N3TIN |
| KC3EJC | N3JLR | KB3OMB | N3TIR |
| K3ELP | KA3JOU | KB3ORO | W3TLN |
| AB3ER | ND9JR | NK3P | N3TTE |
| WA3ERT | N4JTO | K3PC | AG3U |
| N3ERW | K3JZD | K4PDF | NS3U |
| K3ES | KC3KEI | KC3PEM | KC3UIJ |
| KB3EYY | WA3KFS | KC3PIM | N3UIW |
| AC3EZ | KB3KHR [SK] | K2PMD | W3UY |
| WB3FAE | AC0KK | KE3PO | KC3UZI |
| K3FAZ | K3KR | W3PRL | KX3V |
| KC3FEI | W4KV | KC3PSQ | K3VRU |
| K3FH | KC3KXZ | KC3PXQ | N3VXT |
| K3FKI | WE3L | NU3Q | W3VYK |
| KC3FWD | WA3LCY | WQ3Q | N3WAV |
| AC3GB | KC3LHW | KC3QAA | K3WM |
| N2GBR | W3LID | KC3QIR | N3WMC |
| AC3GE | WB3LJQ | KC3QWF | K3WWP |
| KC3GIL | KB3LND | NJ3R | N3XF |
| KC3GIN | K3LR | K3RAW | KB3YJQ |
| KC3GPM | KC3LRT | KC3RIL | W3YNI |
| K3GT | AB3LS | K3RMB | W3YNX |
| AB3GY | KC3LZH | KC3RMN | WA3YWU |
| KC3GZW | N2MA | KC3RPE | K3ZAU |
| NC3H | KC3MBM | KC3RPP | W3ZVX |
| NY9H | N3MHZ | W3RRK | |

Notes: Only Call Signs are being published. Refer to QRZ.COM for more information. (Unable to publish those without Call Signs. )

## Kul - Links

Jody - K3JZD

There is lots of stuff out on the Internet… Some of it can brighten your day. Some of it can educate you.

I can't really copy and past it all in here. But, I can point you at some of it . . . . .

***- Nothing This Month -***

I'll consider any Kul - Links that you find.
Email then to me at: K3JZD AT ARRL DOT NET
They might just end up in the next issue

## Previous Issues

Previous Issues of the Q5er are available at

http://www.nelis.net

**Next Newsletter will be February 1, 2023**
**Closing Date For Submissions : Jan 15, 2023**
K3JZD AT ARRL DOT NET

## Become Well Known Publish in the Q5er

**The Q5er goes to other clubs and is available to all on our web site.**

**Submissions to : K3JZD AT ARRL DOT NET**

## >>>>>> WARNING <<<<<<

An Alarm System has been installed up at the joint. Do Not go in there on your own until you learn how to disarm and rearm it.

## **** Skyview VE Testing ****

**For Testing Dates, See :**
http://www.arrl.org/find-an-amateur-radio-license-exam-session
**Time:** Usually 8:15 AM

**Location:** Skyview Clubhouse Meeting Room
2335 Turkey Ridge Rd
New Kensington PA 15068-1936

**Contact:** Bill Dillen
(724) 882-9612
**Email:** bdillen@comcast.net

**Please E-Mail or call to register!!!**
While walk-ins are accepted, the exam session may be cancelled if no candidates are scheduled.


Q5er Editor & Publisher: Jody Nelis - K3JZD

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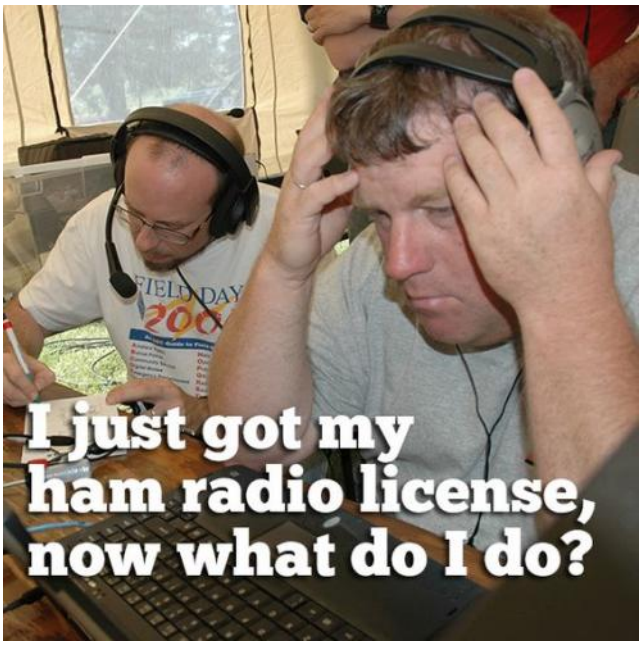
email your comments and article submissions to: **K3JZD AT ARRL DOT NET**




**That's Easy . . . .**

**Come up to the Skyview Clubhouse on any Tuesday and ask !!!**

**And See : https://tinyurl.com/y79tqsr8**

**All General Information about the Skyview Radio Society is at http://www.skyviewradio.net**

Subscribe to K3MJW **groups.io** reflector for All Current News & Activities : https://groups.io/g/K3MJW
If you want to keep up with what is going on NOW, that is the place - have it forward msgs to your email


**Is this how your dining room looks ??**

**Send in pictures of your Ham Shack**