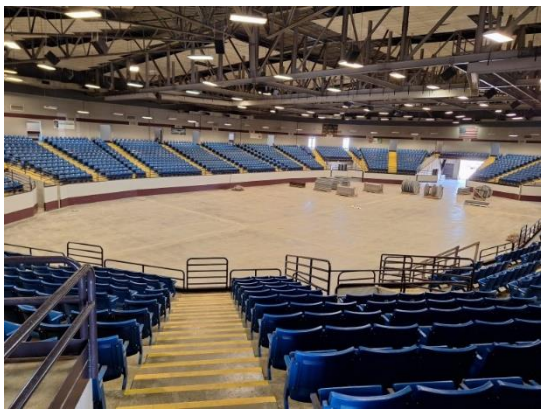
Ozark QRP Banner

The Official Newsletter of the Four State QRP Group

WQ5RP

August 2025 Edition

In This Edition: ARRL Midwest Convention, SCOTA, Tuned CW Speaker, Ocon Prize Winners' Kit, SLQS Field Day, Members FD Reports, Conquering Ben Nevis, for Portable Use,



ARRL Midwest Convention – at the Missouri State Fairgrounds, in Sedalia, Mo. October 10 – 11, 2025. The **4S QRP Group** will have a display table to promote our club. We will need some volunteers to help with the table.
Sedalia is convenient to many areas. Located just East of Kansas City and a bit South of I-70. Not far from St. Louis, about 180 miles and should be a nice drive from Arkansas, Oklahoma, Kansas, Iowa, Nebraska, etc. For more information on the Convention visit: https://spark-con.org/about.htm

KIT Announcements:

- A new analog power meter is in the beta build stages. A release is expected later in the year.
- The famous and popular Hilltoppers are being updated to include an internal display. Expect a release later this year.
- Retiring: The Bayou Jumper will be retiring. There are a few kits left.

SCOTA

Shipping Container on The Air de WG5F

For those that attended OzarkCon 2025, this will not be new information… but to those that didn't attend or missed the presentation, here's a brief look at The WG5F/W5KKM operation from Lake Hudson, Oklahoma.
I'm sure you've heard of Parks on the Air (POTA) and Summits on the Air (SOTA), but do you know what SCOTA is?

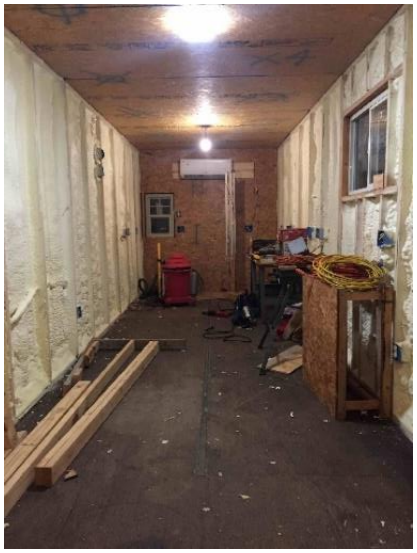
SHIPPING CONTAINER ON THE AIR!!!

I'd been looking at shipping containers on the internet and Facebook Marketplace for several months.

I found a 40' container with two windows, a passage door, 28 feet of studded, wired and walled "conditioned" space and 12 feet of open storage area. It had been wired with lights and outlets. It'd been used as an overnight bunk house/hunting/fishing lodge on another area lake (about 70 miles from my location.) It was a little beat up and smelled like the woods… but I figured that was to be expected, and I negotiated a deal.

We got the site prepped for the container and moved it to our property. Then we started airing it out and cleaning it.

A lot of cleaning and planning ahead.



I priced closed cell spray foam insulation and selected a spray foam contractor. With that scheduled, I had to get moving and finish out the wiring.

The original wiring was not very extensive. Maybe 6 duplex receptacles, 3 overhead lights and one exterior spotlight.

I decided to install quad outlet boxes for the operating and test bench positions. Then I figured I'd install double-quad's… (why not?)

Eventually I used about 400' of 12/3 Romex to a 12-position breaker box.

(Pro TIP: TAKE PICTURES OF EVERYTHING INSIDE THE WALLS AND CEILING BEFORE YOU SPRAY FOAM.)

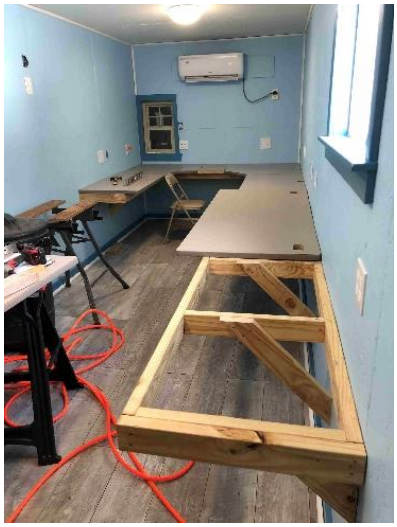
I also pulled Cat5 ethernet cable to each operating position and the test bench (I used Cat5 because that's what I had left over from wiring my house 20 years ago…) My current internet solution is a T-Mobile hotspot in the lake property mobile home, with an ethernet cable run underground to the SCOTA's router, so it's not the best. Hopefully, the local REC-Utility will follow through with their promise of Fiber to the Home within 2 years. That would eventually make for a much more robust remote station situation.
I did NOT plan for 220V ham equipment. This is, after all, a QRP SCOTA operation.

After all the wiring was compete it was time for the spray-foam guys to do their thing.

After the spray foam milestone was accomplished, the next major hurdle was to get the OSB wall board re-installed. It had been stored in my shop building for months and was covered in mud-daubers and spiders. (Yuk!) I got all the wallboard and ceiling boards re-installed but I probably should have better cleaned (and sanded) them before I re-installed them…

I spent several days with a random orbital sander with 80 grit paper cleaning the interior surfaces of the OSB. It was very tedious work. Especially the overhead sanding.

We added a DIY Mini-Split HVAC unit and it has been great for regulating the temperature in the SCOTA. The Mini-split is WiFi enabled, and we have a separate wireless thermometer, so we can remotely check the temperature and humidity and control the mini-spilt operations.



For paint, we used 4 primer coats on that thirsty OSB, and two coats of color leftover from our Kitchen remodel in Tulsa.

We found vinyl click-loc flooring at a local freight damage outlet and installed that.

We recycled some baseboards and trim for the windows and door from scrap that'd been removed from a local Junior College.

For operating desks, we bought several used office cubicle desktops, (corners and straight pieces.)

We ran our first SCOTA Field Day from a folding table with the feedline snaked thru the doorway.

We then later set up temporary desktops on sawhorses to get the feel for what we wanted.

Eventually we settled on a design and built the desktop framework from 2"x4" lumber. Installed and fastened the cubicle desktops and voilà, we have an operations center!

We are allowing room for 2 operating positions and a test bench.

We're still developing plans, so our current operating positions are very sparse. Shelving, hutches, etc are still in the dream stage.

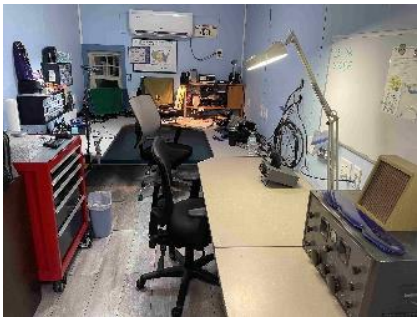
Coax, control cables and ground wire, fed-thru the SCOTA wall with Hoffman enclosures outside feeding underground conduit to the tower(s).

Upper and lower wall cabinets were from the local Habit for Humanity ReStore outlet.

We've used the SCOTA for several things including:

A storm shelter, Field Day, Remote office work, Kit building, CQWW, ARRL Sweepstakes, ARRL 160M CW, POTA hunting on FT8/FT4, CW & SSB, Second Sunday Sprints, CQWPX, Wednesday Night nets and general DX'ing and operating.

Our biggest challenges will revolve around organization, de-cluttering, and setting up the operating positions for our individual tastes.



More to come on those projects.

So, it's been a long road. But it's not yet reached the end.

You can check out the SCOTA photos from OzarkCon at my YouTube channel:

EdMeyer3170: https://www.youtube.com/@edmeyer3170

Ahhh, finally get to relax and Get on the air

A Tuned Speaker for CW

From the beginning of continuous wave (CW) there has been a desire for clear sound. Many attempts at building audio filters have been designed. But for simple audio filtering a tuned speaker can fill the need. The tuned speaker does not work as well as a good CW filter but does fill a need. When using a tuned speaker, the tone will peak and undesired audio from lightning, band noise/QRN will be reduced considerably as well as nearby signals that are out of the speaker frequency range. There have been many designs throughout the years but a few stand out. Some made of cardboard tube, several designs using PVC pipe of various sizes and shapes. Below is a review of two speakers and as technology has advanced a new designed you can build.

The Skytec, a vintage 'Specialty Speaker' from the 1970s. "Designed expressly for reproducing CW. It has good 'single frequency' selectivity, yet has a most pleasant tone quality, a real boon to lengthy CW operation.

The CW-1 combines an acoustic filter resonant at about 750 Hz with a loudspeaker in a small enclosure. A sleeve in the unit's output opening may be extended to lower the resonant frequency as desired, down to about 600 Hz."

When you look at the pictures that show the front of the Skytec speaker that smaller 'pipe' sticking out the front (in the middle of the dark plastic 'surround') is the inner portion that provides the acoustic resonance. The inner pipe is built with the same (roughly) 30 degree 'bend' upper section just like the outer pipe; the inner pipe is concentric within the outer pipe but I don't believe that has any effect on performance.

The outer ('fat') PVC pipe has a 3-1/2 inch outer diameter (OD) and the inner (resonant) pipe has a 1- 7/8 OD (inside diameter is about 1-3/4 inches). The actual electrical speaker is sitting down at the base of the inner 'pipe' (pointing straight up).

The Skytec speaker is tuned by adjusting the length of the inner pipe - the portion that sticks out the front (in the midst of the dark 'surround') is a sliding piece that fits tightly inside the portion that is just protruding out from the dark plastic 'surround'.

The Solo Cup Speaker; Designed by Rick Littlefield, K1BQT in 1989. Rick found that the acoustical value of the 16-ounce cup was about 700 Hz +/-. Matched with a small speaker that peaked at 700 Hz made a perfect combination. When tuned to a CW signal the room fills with a near perfect tone. This speaker is not adjustable as the Skytec.

In the early 90's, the St. Louis QRP Society copied Rick's design and produced a kit. Fortunately, they were able to locate a few of the same speakers, enough to produce kits for the members.
(*Attached later is the original article*)

Advance 35 years or so to 2025

The latest tuned speaker that is adjustable and that you can build. Let's call it the St. Louis Cannon Speaker. Designed and engineered by NØSA. The enclosure and base are 3D printed. An inner tube slides in and out allowing the adjustment of the tone. The speaker is from Amazon.

Tube Removed

Base

Speaker-rear view

An important part is that the speaker that needs to match the size of the of the resonant cavity for best results. Review the specifications and find a speaker that the frequency peaks at or around 600 to 800 Hz. Amazon has several types so review before you order.
If you would like to experiment with the size of the cavity adjustments can be made on the 3D printer.

To build the speaker you will find all 3D files and speaker information on the Groups.io site under files. Good luck.

Final comments: All three speakers work well as an audio filter. Almost eliminating static or white noise and makes for comfortable listening. However, the Solo Cup Speaker does have a little more kick than the other two speakers.

Editors note:

Here is an original article on the Solo Cup Speaker. Several years ago the SLQS put together a kit reproducing the speaker shown in this article. The kit was a big success. A few of us still have the original speaker. The driver cannot take a lot of power and some have failed due to being over driven. The combination of the speaker and the resonance of the 16 ounce Solo Cup makes a great combination. If you have heard one of these speakers attached to a receiver you will be amazed at the performance.

The critical component is the driver (speaker) which has a peak audio frequency response around 700Hz. Unfortunately trying to locate speakers that meet this frequency response is difficult to find. Members have attempted to find them with no success.

If you come across one of these small speakers that meet the specifications please let us know. If the club can purchase a quantity of the speakers this would make a great future kit.

de KCØPP

THE WEEKENDER

Solo-16 Acoustic CW speaker

When operating CW, I find even high-quality headphones become uncomfortable at times. They also accentuate wideband receiver noise — a prime source of operator fatigue. To get a break from this, I decided to make a speaker especially designed for CW reception. I first tried the familiar trick of mounting a small transistor radio speaker on the end of a toilet paper roll. This "resonant tube" approach provided some acoustic selectivity, but I decided to explore the concept a bit further.

Design

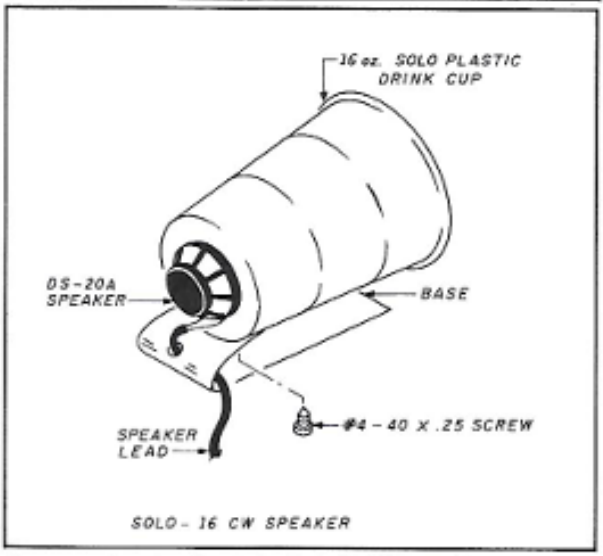
While looking through catalogs, I came upon a Star Micronics ultraminiature 20-mm speaker that specified a free-air resonance (F_s) of 700 Hz. I reasoned that coupling this particular driver to a horn-type enclosure with a corresponding resonance (F_c) of 700 Hz should result in a very high Q (frequency selective) speaker. After ordering a sample of the Star Micronics driver, I began the search for an inexpensive household item to serve as my horn. One of the first items I tested was a Solo® 16-ounce disposable plastic drinking cup. As luck would have it, this proved to be self-resonant to within 10 Hz of 700 Hz!

Construction and performance

When my sample arrived from Star Micronics, I carefully cut a hole in the bottom of the Solo cup and mounted the tiny driver in place with a super-glue adhesive. I then wired on a speaker cable and plug, and patched it into my homebrew QRP rig. (See **fig. 1**.) Listening to a busy 20-meter band, I observed that

By Rick Littlefield, K1BQT, Box 114, Barrington, New Hampshire 03825

FIGURE 1

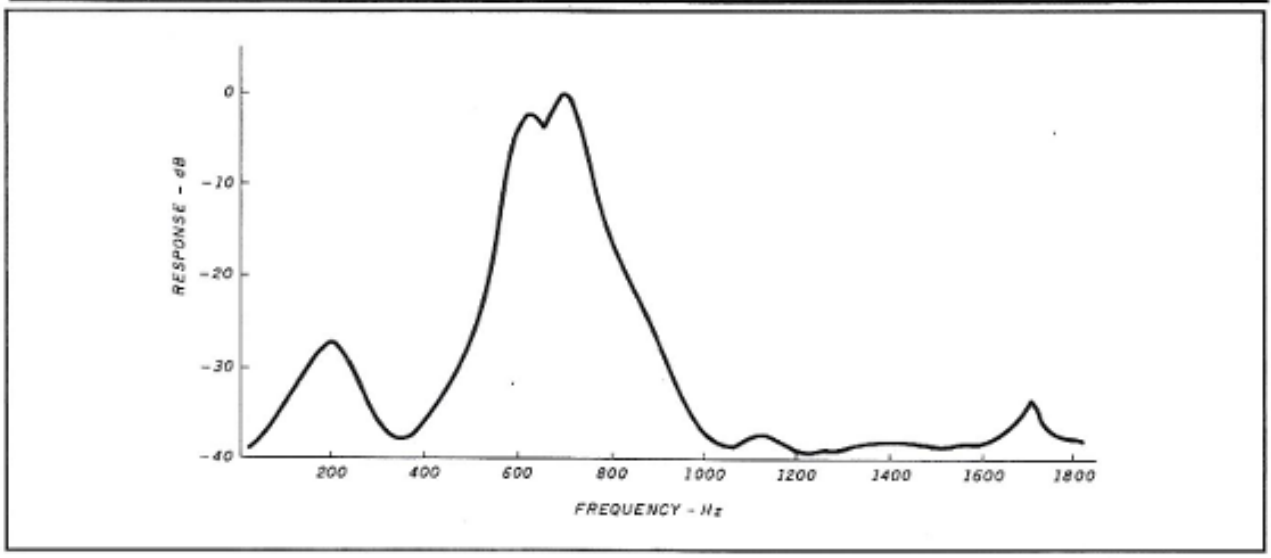


Construction details of the Solo-16 CW speaker.

There's only one precaution. While most commercial transceivers can deliver up to 5 watts of audio, the Star Micronics driver is only rated for 100-mW continuous tone (200 mW peak). To prevent driver damage, I suggest plugging into the transceiver phone jack (which is usually attenuated), or making an attenuator pad from fixed resistors. Don't worry about 100 mW being loud enough — the resonance and directivity (gain) of the horn will more than make up for any power reduction!

To complete my speaker, I made a triangular base from 1/32-inch aluminum, and attached the cup with no. 4-40 hardware. The acoustic dispersion pattern of the Solo-16 is quite directional, so I suggest adjusting your base to angle the horn directly toward your favorite operating position. This will provide the best audio path, and greatly reduce the annoying effects of phase distortion caused by room echo.

FIGURE 2



Audio frequency response of the Solo-16 CW speaker.

wideband noise had become virtually inaudible, while selectivity seemed dramatically improved. Signals were also a lot louder than through the transceiver's built-in 2-inch speaker.

To get a more quantitative measure of what I was hearing, I connected an HP-3311A function generator to the speaker leads and positioned a Scott 451 sound-level meter 1 foot from the horn opening. **Figure 2** illustrates the resulting response curve. The −3 dB passband was approximately 150 Hz wide, with response dropping very sharply on both sides to nearly −40 dB. Most transceivers — especially those without dedicated CW filters — could really benefit from these numbers!

Conclusion

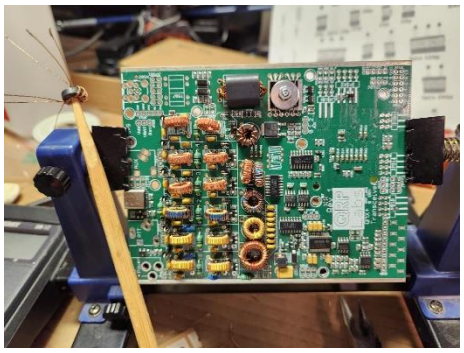
Over the past two months, the Solo-16 has proven to be a great accessory for CW reception. It takes the pressure off tired ears, puts a "final filter" on audio amplifier noise, and significantly improves the selectivity of most rigs. Best of all, the Solo-16 is simple, inexpensive, and incredibly easy to make. Give it a try!

Both the speaker driver ($3.50 plus $2.00 shipping and handling) and the complete kit ($10.00 plus $2.00 shipping and handling) are available from the author. *Ed.*

Article B **HAM RADIO**

OzarkCon prize winner enjoys his new rig!

A real nice build project but a coil winding marathon for sure. I've built V1.0 QCX and QCX-Mini so was familiar with Hans' build approach. The feature extensions on the QMX+ from these early radios are rich and very useful.



Took the QMX+ for its maiden outing at Lake Ray Roberts nearby the QTH. Here is a photo of the QRP setup using the QMX+ with the Bioenno battery (another Ozarkcon winning) and Antenna (home brew vertical with elevated radial for 20M). I logged 17 Qs for the activation. Since the QMX+ requires 12 VDC I built a voltmeter and regulator combination that you see in the photo. The 4SQRP tuner was a purchase at this year's event. The paddle I built last year in the build-a-thon.

Outing was not without issues. I was going to use a 20 Dipole on the same pole but left without a BNC coupling I needed to connect coax to the operating position. Switched to the vertical with elevated radials. Then, there was a visitor, KC4EEL (took the photos) that I turned on the QMX+ initially to demonstrate. When I turned it off to finish the setup I must have bumped the switch knob momentarily changing the mode to SSB - I didn't know this until I setup the radio again at home. When I was ready to operate there was no output while keying the radio. Not wanting to do damage the radio I disconnected and used another radio I had in the setup (I hadn't this radio on it's initial outing - RS-918).

What a pleasant operating site - until the crowd started to gather. I arrived early, 06:45 CDT, so the sites were all available for me to pick. When I started packing up around 09:30 CDT the place was already packed. Ray Roberts is a large camping and picnicking site, actually more than one site on the lake, near the DFW multiplex - no wonder.

There were three of us operators out there - Tom, KE5CW, at another picnic site on the lake (KX2 and fan dipole); Jordon, W1JMG, On the

other side of the picnic area I was in (the new FTDX1 Optima, his first outing) and myself. Jordon left before I did so I don't know how he did, yet. Saw Tom for a bit. His setup was to test his new Explorer mast with the fan dipole - Did really well in the wind.

Thanks again to the Ozarkcon team and Kent for the QMX+ donation. Loads of radio fun.

73,
Ken
KD2KW

Who originated the symbol 73?

We learn from archives that it was veteran telegrapher James Douglas Reid, who called it a Symbol of Fraternity.

Reid was born in Edinburgh, Scotland on March 22, 1819 and emigrated with his family to Toronto, Ontario.

He was a close personal friend of Professor Morse and worked as a telegraph operator and later a Superintendent of several small telegraph companies. These were subsequently absorbed by Western Union, which Reid served in several official capacities.

He employed Andrew Carnegie as a messenger boy in Pittsburgh. As is well-known, Carnegie became a telegrapher, rail official and later a steel magnet.

[The above was adapted from an article in *The Railway Dispatch*, St. Augustine, Fl., March 1961]

for Portable Use

By Wes Spence, AC5K

When I did my presentation at OzarkCon 2025, I mentioned a few of the projects I was working on at the time. One was rebuilding and modifying an old high quality magnetic antenna mount I found for a good price at a hamfest in very poor condition.

I use two different antenna set ups for POTA field activations. One is an all band inverted L fed through a 9:1 UNUN and the other is a big Outbacker Outreach 500 vertical on a mag mount on the roof of my car.

While operating using the mag mount and vertical, I noticed that if I touched the antenna connector (or the case of the radio), the SWR went very high. This of course was an indication that the antenna system was not happy. Since I was using a separate battery to power the KX3 radio, I knew the radio was completely isolated from the car body ground.

Not wanting to modify the mag mount in a way that I could not still use it mobile; while rebuilding it I just added a stainless-steel bolt (threads up) to the ground plate of the mount to allow me to add a jumper wire from that bolt to the car body when operating portable. The best place I found to ground it on the car is the latch on the car body that the car door locks in to. It is not painted, and very well attached to the car body for safety reasons.

This immediately stopped the sensitivity of the SWR when the connector is touched, and even though I have not done A/B testing with the jumper on and off, it is highly likely the antenna works better with the jumper.

I will continue to experiment with this, and would welcome hearing from others that try this modification.

72, Wes, AC5K

Field Day 2025

St. Louis QRP Society has a successful Field Day NØA

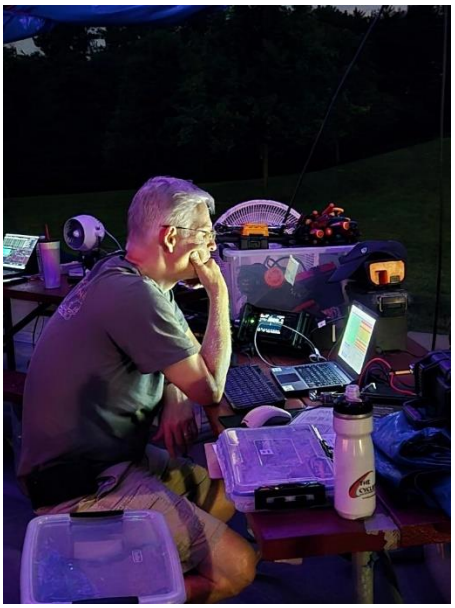
Eighteen members and fourteen guests attended Field Day this year. KTØAA and KB5YZY had untold energy and enthusiasm organizing and setting up our FD. But as always there were many other members jumping in and helping.
There were 4 stations on the air at any given time so our category was 4A-Mo. All QRP, mostly CW with some SSB and FT8 operations. Some batteries were charged by Solar Panels. Plenty of guests stopped by including a member of ROTC, the Red Cross and Park Ranger. There were also visitors from the neighborhood. Some of the guests got to sit behind the radio and work some SSB.

Antenna Farm:
Antennas consisted of a dipole at 50 feet for 80 meters, a half square for 40 meters at 45 feet, Delta Loops were used om 15 and 20 meters. A parallel dipole was setup for 40-20-10 meters. On 6 meters there was a halo loop, and a vertical on 144 and 440.

Food:
Yes, as normal there was plenty of food and drink. *What Hams do best, eat…* Donut were provided for the early crew setting up the antennas. Our head chef, KØFHG cooked hot dogs with all the trimmings for lunch. Dinner time we had BBQ Pork Steaks, Potato Salad and Corn on the Cob. Bob does a great job on the grill. Several members provided sweet treats, cookies, etc. And to keep hydrated in the heat there was plenty of cold water.

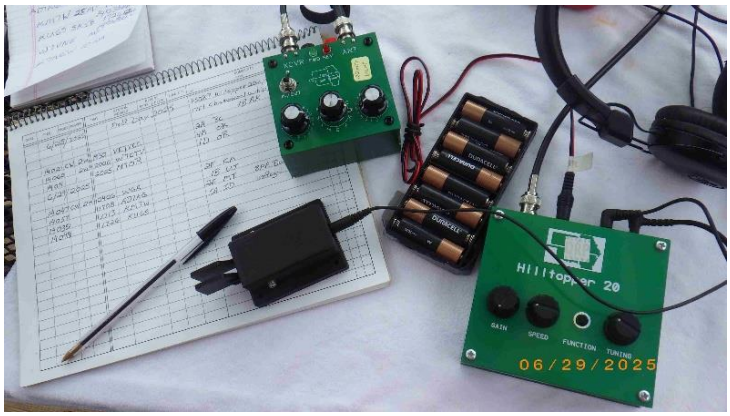
Wx:
Not too bad for June. *KTØAA convinced Mother Nature to give us a break from the heat wave.* High temperatures around 90° with a slight breeze most of the time. We had to take a break for about 30 minutes due to lightning in the area but did not experience any heavy rain or severe weather.

Safety:
KCØPP and NØWL verified that safety was observed. The antenna farm had caution tape around it and all the guy lines were identified. All electrical circuits were protected by GFCI's and as were many of the power strips. There was a fire extinguisher provided near the cooking area. And as stated above, all stations shut down while there was lightning in the area. Cell phones provided weather radar and updates.



Operated from Eagle River, Ak both Saturday and Sunday. Had two antennas, a tripod, some counterpoise wires cut for a quarter wave on 20 mtrs. Used a 17ft Chameleon telescoping whip throughout the event, had a backup Outbacker Perth standing by in case the winds started gusting.

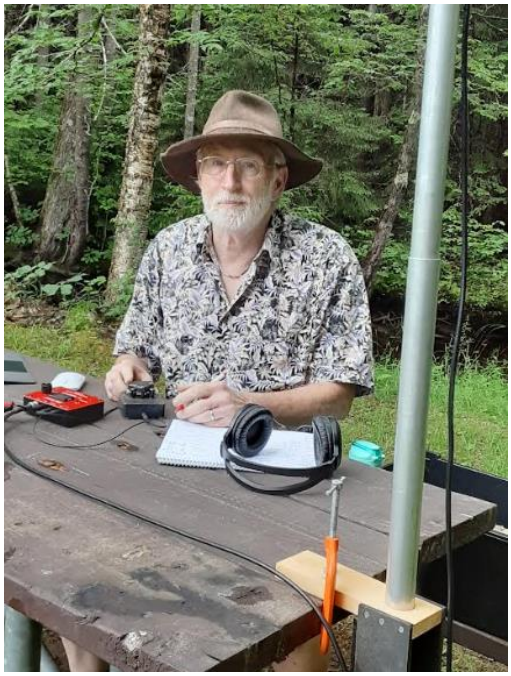
Band conditions were a challenge, but kept stalking the stronger stations, instead of calling CQ myself. Most of the stations I heard were in the west, another fun weekend.



Thank you to the crew at 4SQRP for these outstanding QRP rigs we can enjoy!

72/73

AL7JK, John



I ran a pair of pair of souped-up 'OF' transceivers on 40 and 20M. Homebrew superhets with W7ZOI filters. I operated 40M exclusively on Saturday and early Sunday to the tune of 80 contacts. The antenna was a inverted-Y in our meadow- the top at 43 feet.

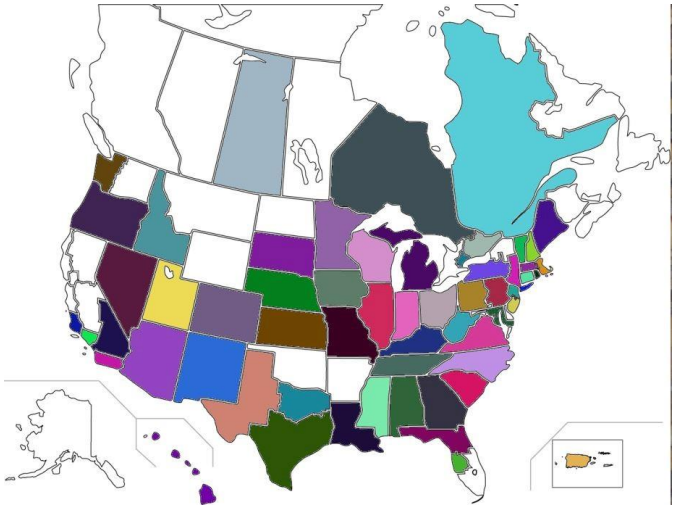
Sunday's session was at an area State Park for a POTA 'two-fer'. Despite a predicted 82F high, it proved to be in the upper 60s, breezy and overcast. My tropic-weight shirt and shorts proved inadequate, and I was chilled after a 2-hour operating session on 20M.

The 20M antenna is on a 12-foot aluminum mast- another inverted Y. I use a Hustler 54" base section and 20M 'Resonator' for its vertical element and it works pretty well. I run strictly resonant antennas for portable use, so I can leave the SWR bridge and Tuner at home. Fewer boxes and cables to bring along- or forget. 30 contacts with a modest antenna and a heavily-wooded site. I was working only the stronger stations.

All in all, though, a success with 5 Watts for a 1B-Battery activity and 5 hours of operating time.

72-Dave, K1SWL

Results for WG5F during the 2025 Field Day Ham Radio emergency preparedness exercise.



We operated 2 transmitters from the SCOTA (Shipping Container on The Air) at our Lake Hudson, OK location with 100% battery power on CW, FT8/FT4, and SSB.
We submitted logs claiming a total of 221 contacts and a "score" of 2,200 points. Better than last year. Operators were Ed, WG5F, Karen, W5KKM, and Youth operator Lainey, LA1NEY. (Granddaughter Lainey made about 60% of the digital contacts.) The map shows the areas we contacted. We used the KX3 @ 5 watts on CW & SSB The QMX+ did the digital work at 3 watts. We did list 4SQRP as our club. Hopefully others did as well for aggregate scoring.

72,
-Ed, WG5F-

I participated in Field Day with the Dekalb and Jackson County Alabama Amateur radio clubs. We set up on the campus of Northeast Alabama Community College in Powell Alabama.

I am new to QRP and CW and operated as a 1B - Battery. There was a tremendous amount of QRM. Apparently from campus facilities. It affected voice, digital and CW. I finally found a location Sunday AM that was interference free.

My setup is a QRP Labs QMX 60-15, QRP Guys Z-match tuner with a 36-foot wire sloped to a 24-foot fiberglass pole. Also have a QRPoMeter. The wire tuned to less than 1.5 SWR on most of the CW part of the 20-meter band.

I used a CW Morse single paddle and started hunting. Only got 2 contacts. One in Eastern Mass. and one in South Texas. But considering my code skills I was happy

Attached are photos of my Field Day station. Take note that the QRPoMeter is in SWR mode. I forgot that there is a 6db attenuation with it on. So, the contacts were at 4.5 Watts -6db. A bit over one watt. OOPS

Hope everyone had a great Field Day.

73, John Danner, KY4WW

ADØYM – 2025 FIELD DAY AFTER ACTION REPORT

Family commitments found me in NW Iowa on field day this year. I wasn't sure if I would be able to participate but had my "Go Box" radio kit with me. I was able to be on the air Saturday afternoon. One of the advantages of being on the other side of the weather front was enjoying a balmy 82 degree afternoon. I used a modified Wolf River Coil SOTA special antenna set up in family's back

yard. The modifications included two-foot legs for the tripod and using a 102-inch whip in place of the 78-inch one that comes with the kit.

I operated from family's screen porch using Search and Pounce due to the likelihood and then reality of interruptions. I had internet, so I watched RBN for NØA, but could not get the timing down to try a QSO. My QSO count was down over other years, but I suppose making contacts with 16 sections across three bands (15m-5, 20m-7, and 40m-13) was a reasonable showing. If I had thought about it, I would have operated on battery power instead of on the grid, but I had hoped to be on the air longer than two hours I actually operated. This is not what I had planned, but I did get to play radio for a while for Field Day 2025.

73, Mike – ADØYM

Support OzarkCon – *What a perfect time to build a new kit, while it is too hot for any outdoor activities.*

Hi-Per-Mite

CW-Vox

Conquering Ben Nevis

de MM/KKØU

There are majestic views from the peak of Ben Nevis, the highest mountain in all of the United Kingdom. It can extend to 120 miles in any direction, and one can even see into Northern Ireland.

I wouldn't know – by the time we summited, it was 38°F and pissing rain. But we'll get to that. . .

As part of our usual trek to Germany to visit with the most above-average granddaughter on the planet, the Loverly Jeanne suggested a side trip to Scotland this year. She is the consummate trip planner and tour guide, and I am happy to follow her, so I only throw in one or two suggestions along the way. This time my suggestion was Ben Nevis – highest peak in the UK, definitely accessible, close to where we were staying (Oban), the round-trip time fit within a day, and it was a 10-point SOTA peak!

The day dawned with typical lovely Scottish weather – misting, overcast and about 55°F. By the time we arrived at the trailhead, it was about 60° and sunny. A perfect day for a hike! Brad (my hiking buddy and bourbon blender) and I hit the trail at 0900 local time (0800Z). From the first step, it was uphill, and it never relaxed.

Brad and I have hiked together quite a bit, having done loops at Buford and Bell mountains in Missouri, and a big trip out to Glacier National Park last year. We know how to prepare, what gear we need, what extra weight not to bring.

Since the Loverly Jeanne and I flew in from Hamburg and didn't want the hassle of a checked bag, bringing along trekking poles or an antenna mast was out of the question. Fortunately, Decathlon (a sporting goods chain much like Dick's) had a lovely telescoping fiberglass fishing pole for twenty pounds, and aluminum adjustable trekking poles for six pounds each. Those were purchased in London before we traipsed off to Scotland.

For radio gear I had the aforementioned fishing pole, my QMX, a 20m EFHW, 49:1 transformer, 25' of RG-174 coax, Modern Morse key, earbuds, pencil/paper and associated interconnection cables. My plan was to only operate on 20m, fill my log with QSOs, then leisurely hike down.

Conquering Ben Nevis

About a third of the way up, we hit the cloud layer. Note that Ben Nevis is 4400 feet of climbing over 4+ miles to get to the peak. Once in the clouds, we donned our raincoats and continued to huff and puff our way up. The "trail" was mostly softball sized rocks, haphazardly strewn about in an almost staircase fashion, liberally accented with granite scree. It was slow going, especially for me. I was in pretty decent shape when we left St. Louis, but three weeks of walking around flat Hamburg and London didn't really maintain my fitness.

To say that this hike was the most relentlessly uphill hike I've ever done seems like a massive understatement. Apart from the cloud picture, it was much like climbing uneven stairs for four miles.

We enter the clouds.

After four hours of this, we finally could see the cairns that guide you the last several hundred meters to the peak. At this point, it was about 35°F, windy and raining steadily. Brad looked at me and asked "how long is this broadcast going to take?" "Twenty minutes tops." was my answer.

I found a spot in the lee of an old stone weather building, and quickly deployed my fishing pole and EFHW. As the pole was only 22' long and EFHW is 33', some of the antenna lay on the rocks. I attached the 49:1, hooked all my things up, and prayed for a cell signal. Luckily, I was able to spot myself on the SOTA spotter web page, I listened for a free frequency, and called CQ SOTA.

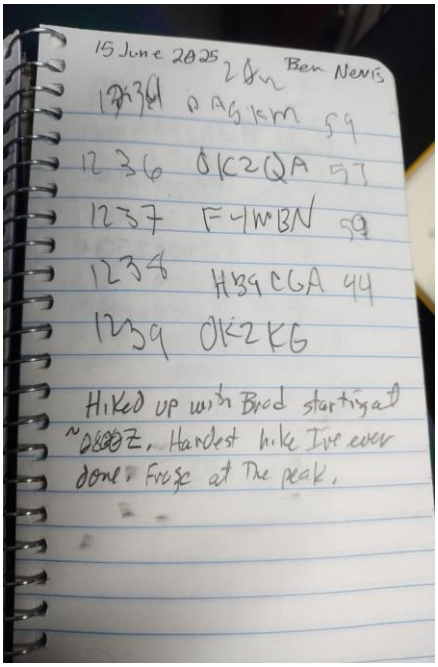
Let's just say that being on Ben Nevis must add about +10dB to one's signal. With one CQ, I had a big pileup of stations all over the European continent. I worked the loudest stations I could copy, while my hands were still functional. Almost immediately my hands were so cold I could barely send, and I noticed ole Bradley's lips were a most winsome cerulean hue. Counting 5 QSOs (four are needed to complete a SOTA activation), I sent QRT QRT QRT as best I could, and shut 'er down. My originally neatly packed gear was mostly just tossed into my bag. Brad and I pulled out our sandwiches, wolfed them down, we split a massive bar of chocolate, downed a bunch of water, and began to stiffly make our way out.

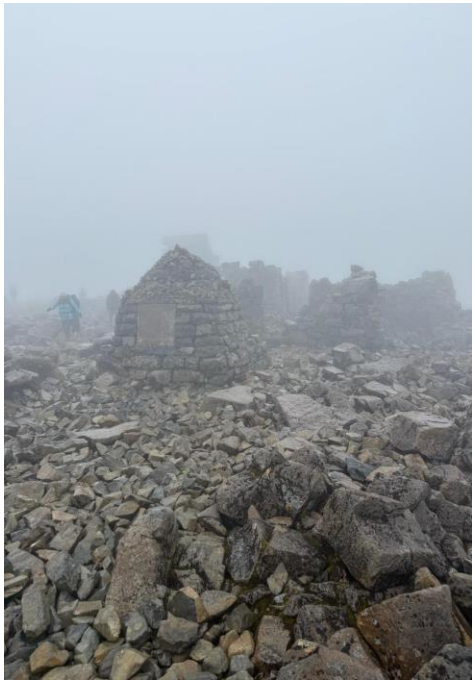
Conquering Ben Nevis

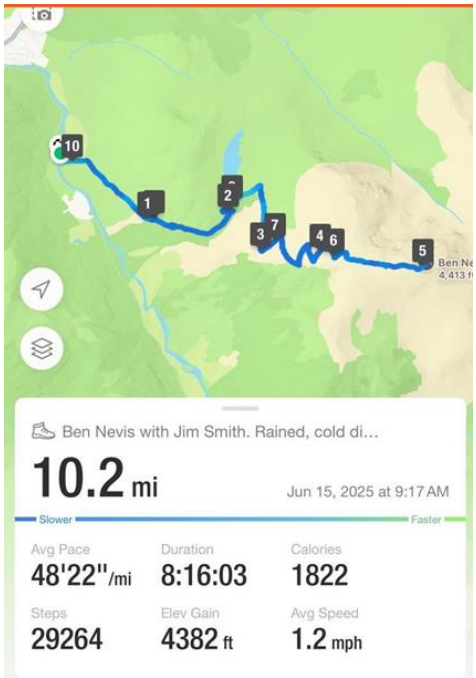
It took us just as long to make our way down as up. I discovered that my temporary hiking boots were worthless on wet granite (my regular hiking boots, left home to save space, are great in wet conditions). I slipped and fell four times making our way down the mountain. While they were all slow-speed wipeouts, the aluminum trekking poles bore the brunt of it – they are quite "aero" now, and no longer retract. Oh well.

At the peak, we were knackered. Once we got back to the car, we were *completely* knackered. The next day neither of us could make it down a flight of stairs without the assistance of dual handrails, and it was a week before our legs were free from aches and pains.

In the end, I made 5 QSOs in 3 minutes, and it only took us 8+ hours to complete. While we were both happy we did the hike (very much Type II fun), we won't be doing *that* again.







Four State QRP Comfortable Nets

Meet each Wednesday night beginning at 20:00 Central Time. Add anything to the exchange that you wish, temp, rig, ant, etc.
Checking into all sessions is encouraged. We call it the "Clean Sweep".

CW - 8:00 pm Central time - 40 Meter Net on 7.122 +/- QRM ACØBQ/NCS

CW - 8:30 PM Central time - 80 Meter Net on 3.564 +- QRM ACØBQ/NCS

DMR - 9:00 pm Central time - DMR Net on Talk Group 31654 NØYJ/NCS

JS8 Net - 1700 UTC until 0030 UTC, NYØJ

Currently there is no PSK31 Net

Everyone is welcome to join in!

DMR Voice Net

Wednesday evening DMR Voice Net will be at (Thursday) 0300 UTC (9:00PM Central Time Wednesday/) Four States QRP has a Brandmeister DMR Talk Group (TG31654). Join us to discuss QRP, ask questions, or just ragchew. The Wednesday net is a directed net but any other time you may use the Talk Group to chat with other QRPers. Net Control operator is Bert NØYJ.

For information and help, check out the DMR subgoup on 4sqrp.groups.io

https://4sqrp.groups.io/g/DigitalFM

Second Sunday Sprint

Occurs on the second Sunday of each month, 7 to 9 PM Central
Any mode, any band (except WARC & 60 mtrs) -

- Suggested frequencies: standard calling freq. plus 7122 and 3564 (CW), and 3985, 7285, and 14285 (SSB).
  as well as the usual QRP watering holes.

QSO's with the same station on different bands are allowed. CW and SSB portions of a band count as two bands.

- Calling CQ is suggested to be "CQ 4S"
- Exchange is "RST, SPC, member number (power if non-member)"
- 5 Watts max CW, 10 Watts PEP max SSB.

The station with the most contacts each month will be emailed a certificate. Furthermore, the top three stations with the most SSS contacts during the year will also receive certificates via email.
Scores are submitted via the grpcontest.com/4sqrp website (compliments of W8DIZ).
For full details, please download the complete rules (PDF) here.
For questions, please contact Walter (K5EST):
SecondSundaySprint@4sqrp.com

Thursday Morning

The Four State morning CW Net has been convened for members who like to start the day on the air.
We meet each Thursday morning at 8:00 AM Central on 7122 kc.

7122 has become the Four State 40M hangout frequency, and often members can be found there on any morning.

Editor's Note:

Articles are needed to make every Banner issue successful. If you have something of interest, please send it to the editor at the email address below. You do not need to send a finished article. You can send some comments, notes, etc. and I can put it all together for you. Pictures are always of interest. I prefer articles in **Word** format, that works the best, but I will try to work with what you have as I can. Some of the items of interest would be outings and/or operating events by yourself or a group, construction projects, radios, antennas, accessories, QRP Field Day, SOTA, etc. Anything QRP is welcome.
de KCØPP

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