



## Q5er – The Official Newsletter of the Skyview Radio Society

### Skyview Country



**Skyview is a  
Four Seasons Club**

**(Although an AWD  
Vehicle is handy,  
the lower end of  
the lot is always  
reachable)**

**I know that nobody  
in WPA really wants  
to see pictures of  
snow. but this pic-  
ture of the Skyview  
Digital Snow Gauge  
that was on the  
Skyview Facebook  
page was too good to  
pass up.**



**You do check the Skyview Facebook page to see the pictures of the  
latest Skyview happenings, don't you?**

**2025 is Skyview's 65th Anniversary !!**

**February 1, 2025**

- 
- Meet W1MP
- 
- VE Testing
- 
- Interesting QSL Card
- 
- WEARSfest 2025
- 
- 

**Sunspot Numbers  
Peaking**

**Time to exercise  
the 10-12-15-17-20  
Meter bands While  
They are Hot**

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**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

**NOTICE :** All articles in this newsletter reflect the author's usage, experiences, viewpoints, and/or opinions. While some may be, there is no requirement for an author to be a subject expert. The Editor/Publisher does not do any fact checking. Rebuttals and/or Corrections may be submitted and will be published if they are civil and constructive.

Nice variety of articles from our authors. Enjoy.

Jody - K3JZD

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

### From the Treasurer

If you itemize on your Income Tax Return, your Donations to Skyview may be claimed as a Charitable Contribution.

If you make a QCD (Qualified Charitable Donation) to Skyview, your Donation is 100% Tax Deductible even if you do not itemize.

If you made any Contribution to Skyview in 2024, and have not already received a Receipt Letter, and you need to have a letter on file with your Income Tax Return information, contact me.

Jody - K3JZD

*ADVENTURE: The respectful pursuit of trouble.*

**Ham Radio is a Contact Sport**

**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.**

**Continue Use the Skyview Facilities At Your Own Risk - It is Not Really Totally History Yet.**

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

*The book to read is not the one which thinks for you, but the one which makes you think. - Harper Lee*



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## September 2024 Business Meeting Minutes

de Don - WA3HGW

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### Skyview Radio Society

#### Monthly Business Meeting – January 7, 2025

**Call to Order:** 7:30 PM by President Jerry Lasalle, W3UY.

**Attending** – 25 Members: WA3HGW, AC3IE, W1MP, K3ES, K3JAS, NM3A, WA3KFS, K3STL, K3FAZ, N3DRB, KC3PXQ, W3UY, WC3O, AC3Q, KE3IF, AB3GY, KC3VNB, K3JZD, AG3I, KB3ZFC, W3BRL, N2MA, KE3Z KC3CBQ and KB3DVD.

**Prior Meeting Minutes:** The minutes of the December 3, 2024 meeting were distributed for review. They were also published in the December 2024 issue of the Q5er. A motion to accept the minutes as presented was made by KC3PXQ and seconded by KE3IF. The motion passed without objection.

**Treasurer's Report:** Treasurer Jody, K3JZD, reviewed the Financial Report of 31 December, 2024 (attached). Jody noted our Allocated fixed expenses funds finished the year with a cushion to forward to 2025 expenses. Income included a \$500 grant from the Wachter Foundation plus a \$1,000 anonymous cash donation. These donations were earmarked for the Skyview weather group towards the purchase of an emergency AC generator for the club.

Unallocated income was from the 50/50 drawing, with the winner donating proceeds back to the club. Expenses include new trash cans for the meeting room and bathrooms, POTA kit updates, a replacement battery for a UPS system, medical computer system and parts for the crank-up tower repair. A motion to accept the Treasurer's Report as presented was made by AG3I and seconded by K3ES. The motion passed without objection.

**Membership Report:** Tom, AB3GY, advised there are no new membership applications for December. Membership now stands at 173, which is a record for the club. There were two Silent Key members, but we also gained 22 new members in 2024. So far, 2025 membership renewals are at 75%, with more still coming in. Tom noted that the high renewal rate, along with the

high number of new members indicate the club is healthy, so we must be doing things right.

**Radio Officer Report:** Bob, WC3O, reported all radios are working well. Problems continue with the crank-up tower repairs. We received the upgraded pulleys and hardware, but adverse weather is preventing outside work for the time being.

Bob also noted half of the high 80 meter dipole came down from 80 feet on the repeater tower. It is tangled in the Hi Tower. The Hi Tower may need to be lowered to retrieve the wire so it can be reconnected to the balun on the repeater tower. Bob commented that we still have the 80 meter phased vertical array and Quad antennas, so all bands are still available for use in the radio room.

Those antenna repairs are also being held up by the weather. On a positive note, the new computer is up and working well in the radio room.

**Kitchen Report:** Bob, WC3O, said there is \$194 in the kitchen fund. Some of that will be transferred to the treasury. The kitchen is well stocked.

**VE Report:** There were no license applicants in December. Next VE testing is January 18.

**Newsletter:** The December issue of the Q5er is out with 24 pages. Get your thinking cap on and write something for the next issue of the outstanding Skyview Q5er. Jody is looking for submissions by January 15 for the February 2025 issue.

**Facilities:** No report.

**Building Committee:** AG3I is asking for any comments on temperatures in the bathrooms. He noted that there is a diverter installed for directing heat into the rooms. Also, the water is cold, but the piping is insulated, so there should not be a freezing problem.

**Operating Events Recap:** No report. There was no ARRL RTTY Roundup operations at the club this past weekend due to the antenna problems previously reported.



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### Calendar of Events:

January 11 – Smoke & Solder Saturday with guest Don Friend, WA4MCM, with his Watt/SWR meter.  
January 11 – WASH 2 meter simplex contest.  
January 18 – Skyview Banquet.  
January 25 & 26 – Winter Field Day in the clubhouse.  
Possible outdoor Field Day/POTA activation by the club.  
February 22 – WASHFest 2025, Home Economics Bldg., South Park.

**Old Business:** Nothing to report.

**New Business:** WC3O reported that he and AG3I were recruited by K3LR to join the North Coast Contesters. More information forthcoming.

**Weather Night:** K3FAZ said the National Weather Service Pittsburgh appreciated all the reports sent in over the last few weeks on winter weather, especially the snow reporting.

He noted that while we might not like the harsh winter weather, snow is an important part of helping to replenish our area's aquifer.

January 14 – Winter precipitation and measurement of snow and ice accumulation.

January 25, 26 – Winter Field Day. Because of the bitter cold last year, we will operate indoors this year.

February date TBD - Skywarn® net control station training

March date TBD – Spring severe weather training.

April 26 – National Weather Service Intercommunications test. This year will expand to include State College plus Wilmington, OH and Charleston, WV NWS offices.

**Elmer Night:** January 28. WC3O on his special method of soldering PL-259 connectors.

**Smoke & Solder Night:** Don, WA4MCM, attending the Saturday session on January 11. He will be bringing the GM-102 watt/SWR meter kits which were ordered by club members. Also he will show his 4 port and 8 port remote antenna switches.

**Net Report:** Check-ins averaged 42.5 in December. NCS Bob, WC3O had the most check-ins at 45. Total net check-ins for 2024 averaged 42.

**50/50 Drawing:** The 50/50 total collected was \$50. The winner of \$25 was Jody, K3JZD. Jody donated his proceeds back to the club.

**Meeting Adjourned:** A motion to adjourn was made by K3FAZ and seconded by AC3Q. The motion passed without objection. The meeting was adjourned at 8:02 PM.

Respectfully Submitted,

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



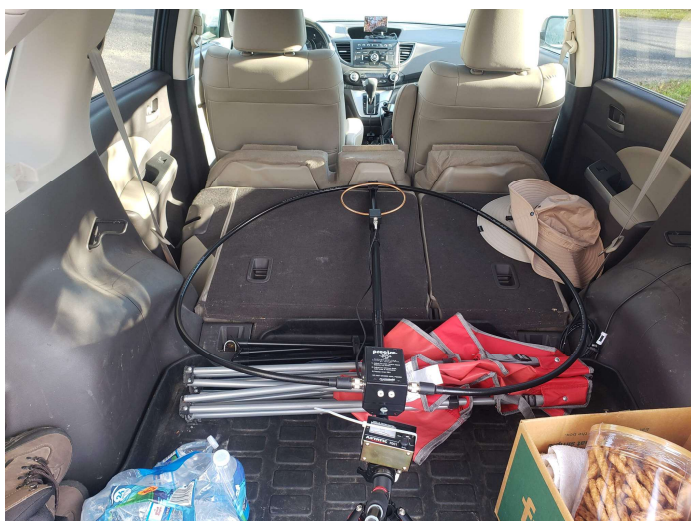
## Magnetic Loop Antenna in Action

de Jody - K3JZD

A few issues ago, I discussed my new PreciseLoop portable Magnetic Loop Antenna (MLA). At that time I described how I got acquainted with it and the various ways of tuning it that I explored. At the end, I had concluded that the simplest way to tune it was by placing an analog SWR bridge right at the antenna.

My approach is to disable the auto-tuning in my Elecraft KX3, activate the KX3 "Tune" mode to generate a steady 2.5 watt carrier, and then tune the MLA capacitor until I see the minimum Reverse SWR on the SWR Bridge. Most of my testing at that time was done from inside of my wood framed vinyl sided house. As I reported then, it did surprisingly well for an indoor antenna.

In the Spring of 2024 I took my portable MLA out to do some Summits On The Air (SOTA) Activations. While this particular loop disassembles and packs into a large laptop bag, it fits into my Honda CR-V SUV very nicely while it is still fully assembled. I was going to do some drive-up SOTA Summits, so I just left it assembled to save some time once I got there.



The first SOTA location that I tried using this loop was W3/PT-008, which is in the Forbes Forest on Skyline Drive. Skyline Drive is off of US Route 40, in the mountain range that is East of Uniontown. This SOTA location is at a high spot, but it does not really stand out much from its surroundings. Being apprehensive, I used 10

watts rather than my usual 5 watts. The bands were just so-so, with a lot of QSB. 10 meters was pretty much dead - I only made one California QSO on 10 meters. During the 2 hours that I was there, I made my other 36 contacts on 15-17-20-40 meters

I had some tuning issues due to my old analog SWR bridge acting up, so that caused some down time. While I was on 20 meters, I worked F4WBN in France. On 17 meters I worked DL1HBT in Germany. And on 15 meters I worked EA7GV in Spain and HB9HBT in Switzerland. I have to admit to being surprised that I was working DX with this loop.



On my next SOTA outing, I took my MLA to the top of the WISP Ski Resort in Maryland (W3/WE-001). That location overlooks Deep Creek Lake. That SOTA location has a clear view in all directions. And the bands were in pretty good shape that day. I went back to using my typical 5 watts CW. And I had a new analog SWR Bridge this time. Starting out on 10 meters, right away I worked F4WBN in France, MW0BC in Wales, OK1KT in Czech Republic, EA2BD in Spain, SQ9IDE in Poland, and M0CQE in England. Moving to 12 meters, I worked G3VXJ in Eng-



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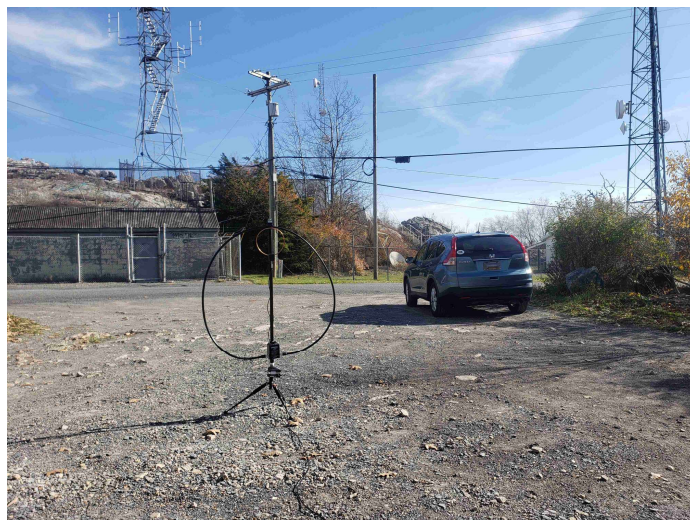
land, DL1FU in Germany, and PG4I in Netherlands. On 15 meters, I worked DL2DXA in Germany and SM4CJM in Sweden. 20 meters was all US stations, with many of them on the West Coast. In the 1-1/2 hours that I was there I made 36 QSOs.



After leaving WISP. I went to Dan's Rocks (W3/WE-002). That Maryland SOTA location overlooks Cumberland. It is chock full of commercial communication towers. There is also a ham repeater there. With all of that RF concentration, and the air conditioners and generators used at the equipment buildings, it is periodically S9 noisy.

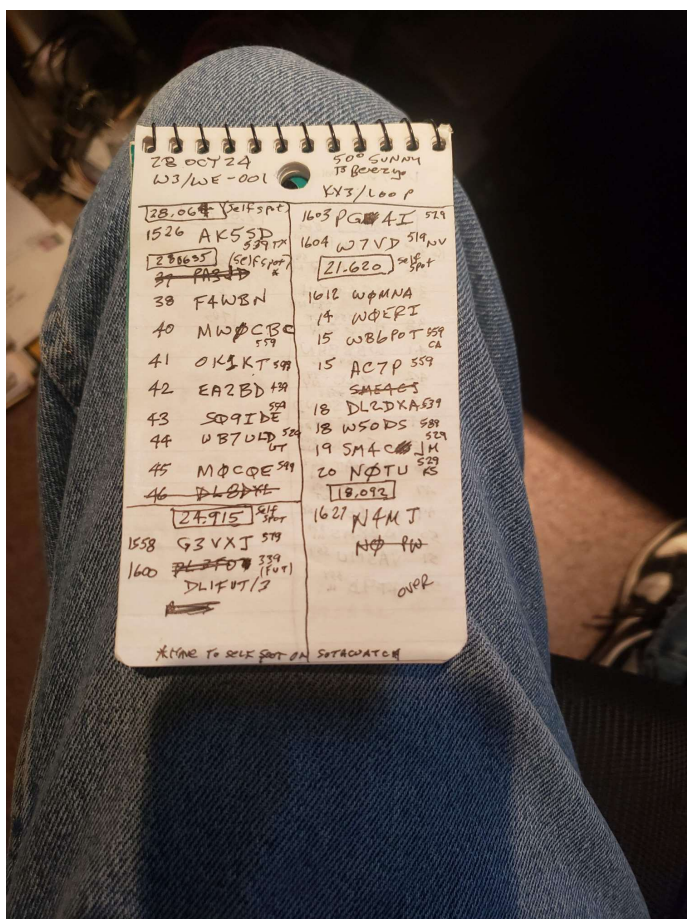
The actual SOTA Summit is up on top of the rock formation. But there are a lot of tourists climbing around up there, so I setup in a parking area which is well within the SOTA Activation Zone.

It was getting late in the day for Europe, but I still had a few DX contacts : F4WBN in France and PY2VM in Brazil on 10 meters; EA2LU in Spain on 12 meters; and EA7GV in Spain on 20 meters. In the 1-1/4 hours that I was there, the QRN quieted down often enough to allow me to make 29 QSOs. Three of them were Summit to Summit QSOs with other Activators who were in CA, AZ, and CO.



On my third SOTA adventure with my MLA, I went to Blue Knob Mountain (W3/SV-001). Much like the WISP Ski Resort, the Blue Knob Ski Resort location has a clear view in all directions. It was 60 degrees here, but it was 42 degrees there, with 20 MPH winds. I knew it would be cooler there, but I wasn't dressed for that weather. But, since I had made the drive, I decided to bite the bullet and get it done.

I elected to just use the 10-15-20 meter bands since I did not want to be there for long. I started on 10 meters





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again, and quickly worked F6CEL and F5JJK in France, HB9CGA and HB9CBR in Switzerland (HB9CBR was a Summit to Summit QSO), SQ9IDE in Poland, EA7GV and EA3BV in Spain, OK1KT in Czech Republic, and DL1HBT, DL3HXX, DJ5AV, and DL8DXL in Germany. On 15 meters, I worked SM4CJM and SM5LNE in Sweden, and GOOBK in England. On 20 meters I worked F4WBN in France. I lasted 1-1/3 hours before the cold and wind got to me. All together I made 42 QSOs from there.



After leaving Blue Knob. I went to Rager Mountain (W3/SV-008). That SOTA location is on Laurel Ridge, East of Armagh and North of Johnstown. It is accessible from Route 22. It is more of a plateau than a peak. There is a large underground natural gas storage facility there, which had some kind of a 'bad situation' reported a while back. There were a lot of construction workers there making changes and/or repairs. That was not encouraging. The SOTA site is beyond that facility, but it is still over top of the large underground natural gas storage area. There is a very large Activation Zone there, so I went back into the woods to the State Gameland that is back in behind the gas storage and pumping facilities.

The weather was not as bad as it was at Blue Knob, but it was windy and just 52 degrees there. I tried 10-12-15-20-40 meters there. Not much was happening on 12 and 40 meters. It, was getting late in the day for Europe, but 10 meters netted me : F4WBN in France, EA4R and

EA7GV in Spain, CT1HIX and CT2IWW in Portugal, and ON3UA in Belgium. Overall, I made 28 QSOs in my 1-1/3 hours at this site



I think that all of these contacts that I made from these five SOTA Summits, particularly the DX contacts, pretty much prove that a small Magnetic Loop Antenna can work surprisingly well, even with QRP power. While a MLA is directional to a degree, a lot of my US QSOs were not in the direction that I had it pointed.

**Disclosures:** We are at the top of the sunspot cycle. I was at high elevations. My signals were not rocking the bands. Many of my signal reports were in the 339 to 559 range. I would not be working all of this DX with this compromise antenna if I were just going out into my back yards and calling a general CQ.

SOTA has a spotting network. Once I am spotted on the network, SOTA Chasers know where I am and come looking for me. Just about all SOTA Activators are using QRP power. So SOTA Chasers are adept at working very weak QRP CW signals. POTA is similar, but many POTA Activators use much higher power and many POTA Hunters will not do a deep dive to pull in weak QRP signals.

### Summary

Once I get to a SOTA location, it only takes me a few minutes to check my compass and then take my assembled MLA of out my SUV. And only a few minutes to put it back in there whenever I leave. Beats the heck out of the 30 minutes or so that it often take me to find a suita-

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ble tree and deploy my sloped EFRW antenna. And it can take nearly that long to take my EFRW back down and wind it back up. And some locations, like Blue Knob, do not have a suitable tree to use to hold up the end of an EFRW. So my loop was ideal at Blue Knob.

Due to its weight and bulk whenever disassembled and packed into its laptop case, I am not likely to ever use my MLA for any SOTA location that requires some walking or hill climbing. I will most likely continue to use my lighter and easier to carry EFRW wire when I am at those locations. But there are plenty of drive up SOTA Summits where my MLA will certainly see future use.

Bottom Line: My Magnetic Loop Antenna gets the job done - it is a keeper.

72, Jody - K3JZD



**“Mother, I’m positive he’s having an affair with another woman. I just heard him say Juliet. . .Sugar. . .Hotel. . .Whiskey. . . Two. . .Love.”**

Recent Skyview VE Testing Results are reported later in this newsletter.

Near the end is information regarding how to sign up for one of Skyview’s Monthly VE Testing Sessions.

Here is Summary of the Skyview 2024 Testing Results

SKYVIEW VE TEST SESSIONS FOR 2024		
		TOTAL TAKEN
JAN	NONE	NONE
FEB	2 TECH 1 GEN 1 EXTRA	4
MAR	1 TECH 1 GEN 2 EXTRA	4
APRIL	1 TECH	1
MAY	1 TECH	1
JUNE	2 TECH 2 EXTRA	4
JULY	1 GEN	1
AUG	2 TECH	2
SEPT	2 TECH	2
OCT	1 TECH 1 GEN FAILED	2
NOV	2 TECH 1 GEN FAILED	3
DEC	NONE	NONE
TOTAL TESTS TAKEN BY CLASS		
14 TECH 5 GEN 5 EXTRA		

de Bill - N3WMC



## Kind of Where I've Been and How I Got Here

de Linda - W1MP

I remember wanting to learn code as far back as a 4 yr old, I think inspired by family returning from WWII (yeah, that long ago). But I didn't actually get my license until December 1994 so now officially a ham for 30 years.

My OM N1MR (SK) licensed first but he was always the tech side of the hobby and rarely on the air although we sometimes contested together and sometimes I just contested using his call sign when he got his Extra. .

He encouraged me to get my own license when I would ask why he wasn't answering 2M/440 calls while mobile. Well encouraged, I think his actual words were: if you want to talk so badly on the radio, get your own license.

It was quite motivating.

I started as a Novice with the call KB1BMO (dubbed Big Mouth Operator) thanks to not passing the tech exam.

And fast forward about 3 years, 5 written exams, 3 code tests, I got my Extra in 1997.

Dropping the code requirement was looming and I had come this far and felt a sense of completion when I passed the 20 wpm code test.

The OM and I used to talk about all the facets of ham radio, something for everyone, every age. A hobby for a lifetime. And moving into my new life without him, eventually relocating from Call Area 1 where I was born and raised and never intended to leave, but taking my W1 call with me, here I am in Call Area 3 enjoying



everything the greater Pittsburgh area & beyond has to offer that interests me.

Ham radio is very alive and well here and my radio club, Skyview Radio Society has fostered and supported everything I have wanted to do.

My club is very active with POTA and CW, my 2 main interests and I regularly use the club's POTA kit which is a complete setup for activating.



My other interest, keeping it simple, learn to solder. One of the club's activities, Smoke & Solder night was regenerated and I've now built one kit, Dummy Load, working on 2nd and I'm now building my own SWR analyzer along with a group of club members.

For me, Skyview is the community I've been seeking since I moved to Pittsburgh to be closer to one of our kids.

Everyone finds their community, I have found mine.

**73 Linda W1MP/3**



## Somebody Call a Doctor !

de Cooky - WC3O

The birth of the "Handy computer" up at the clubhouse

So there I was. In one of the rooms in an Urgent Care (I think) waiting to see a doctor. Not much to do while sitting there waiting, and waiting. I was looking around the room and noted the wall mounted computer that the doctor uses to input all of the



information. It wasn't currently being used, so it was all folded up against the wall. I got to thinkin... Hmm

Back story:

I've operated contests up at the club from all of the 3 (4) station positions. I've often found myself wanting to look something up on the internet. So on the logging computer I needed to open a web browser to perform the task. Then I would hit F1 to send CQ in the contest, only to open a WINDOWS Help page... What went wrong? I forgot that I took focus away from the logging program and moved it to the web browser. If you hit F1, you land up opening WINDOWS Help.

So I quickly close out the help page and return focus back to the logging program. I can't tell you how many times I've made this same mistake! I thought it would be nice to have a separate computer just to perform these simple tasks. I'd like to add another computer but there is just no room on the operating table. I was thinking about perhaps a laptop on a short stand? No

There was the solution right there in the doctor's office! A wall mounted computer that can be folded up and tucked away when not in use. To quote Bill Bell, W3RS-

R/SK (The Old Timer) BINGO BUCKO!

I whipped out my phone and took a picture of the manufacturer's name. ebay here I come! These computer stands are commercial grade and quite expensive to buy new. However, when you see them used on ebay, the seller likely got the unit free for the taking from some contractor clearing out an office that was no longer in use. In other words, they have close to zero dollars and zero cents invested in the thing that they are trying to get big money for on ebay.

The biggest deal for them is shipping the stupid thing. I saw the one that we have on the website. They wanted a decent buck for it. The auction also included a "make offer" option. Hmmmm So I gave him the ol' low-ball bid. They came back with a counter-bid that was well below the "buy it now" price. BOOM!

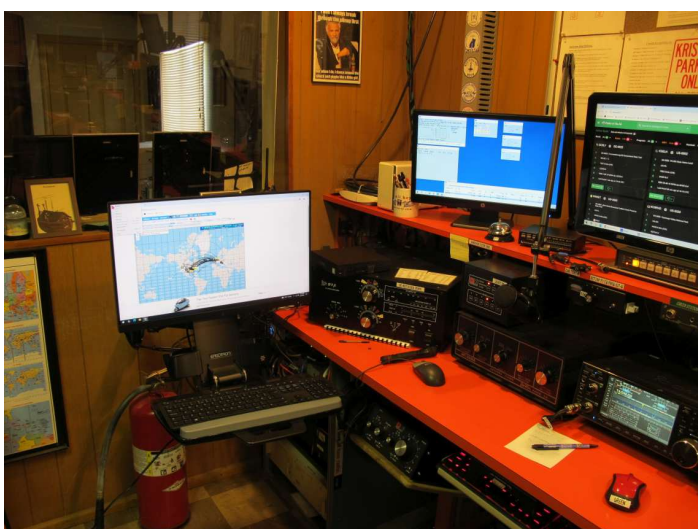
When the unit arrived I noted that it was a little beat up. The keyboard shelf was bent. After giving it some brute force twisting, it was close to flat, and that was good enough for me. It's still a little off-kilter, but it's fine. It's made out of some pretty heavy steel. The bottom of the keyboard shelf has some scratches. Might be a good place for some DX Engineering stickers!



The USB keyboard came with the stand. Now we need a monitor and a computer. At work I received an advertisement from Staples. They were having a Black Friday sale. Oh baby! They had a nice HP monitor with a VESA mount at a deeply discounted price. BOOM!

Now we need a computer? Again, off to ebay. I found a nice refurb DELL mini computer with an i5 processor, 32 gig of RAM and a fresh coat of WINDOWS 10 at a good price. It even came with a wifi/Bluetooth adaptor. BOOM!

One Thursday night, while the smoke and solder folks were in the meeting room smoking and soldering, I worked on mounting the arm onto the wall. I found a good stud and all was right with the world. It worked out perfectly. I did, however, have to move the world map over around 6 inches to clear the arm when it is folded up.



The new monitor bolted up perfectly to the VESA mount. The only thing I missed was there was no place on the arm unit to mount the computer. Off to ebay! I found a nice little custom wall mount at a good price and mounted it on the wall right next to the arm. I just need to relocate the Hamshack Hotline phone I also bought a new wireless mouse for the Handy computer. It has an ugly floral design on it so that you can't mistake it for one of the station computer mice!



Unlike the main station computers at the club, the Handy computer has a speaker so if you watch a Youtube video or listen to a distant SDR, you have sound. You can pull the unit right up close to you when operating the Green station. If someone is sitting behind you they can pull it back to them. When all of the fun is over just flip up the keyboard and fold the arm back up against the wall.

I hope you find this new computer, well, handy

**de Cooky - WC3O**  
**Skyview Radio Officer**

And that reminds me of a story...

Those of you that missed Bill Bell, W3RSR/SK missed a super good guy. Bill was one of the founding members of Skyview back in 1959/1960. Bill had a tower in his backyard. He couldn't climb it and he hated to see others climb. He was at Kennywood Park one day with his grandchildren. Bill was staring at one of the rides when it hit him. BINGO BUCKO!

You may, or may not have heard of a commercial product called a Hazer.

<https://www.macoantennas.net/Hazer.html>

A Hazer is a way to use cables and a winch to raise and lower your antenna with a unit that wraps around a tower such as Rohn 25.

Bill was looking at how the Kennywood ride was designed when he realized he could easily make his own Hazor using angle steel, some Unistrut and old roller skate wheels!

He hacksawed, some hardware and he was off to the races! He bought the cable from someone selling at the Butler hamfest for a few bucks. He used an old winch that he picked up at a flea market. He went over to Goodwill in Cheswick and picked up a couple sets of old roller skates. Bing bang boom he built his own Hazor for about as close to free as you can get.

I climbed the tower to mount a pulley and string the cabling. The hardest part of the operation was dragging an old car battery over to the tower/winch to operate it. Bill's homemade Hazor worked the first time out.

Another Old Timer innovation:

Bill's tower was in his backyard. Years ago they planted a Pin Oak tree. Well, you guessed it. The tree eventually grew to interfere with his 3 element beam. Bill had no problem cutting the tree, but his wife begged to differ.

Bill couldn't fully turn his beam, and he couldn't cut the tree. If he turned the beam too far the elements would get caught up in the branches. What's a ham to do?

Bill's shack was in his basement along the rear wall of the house. Bill's solution was to remove one of the basement wall blocks and install a piece of Plexiglass! Now he could be on the radio and watch his antenna turn to a point just before it hit the tree.

BINGO BUCKO!

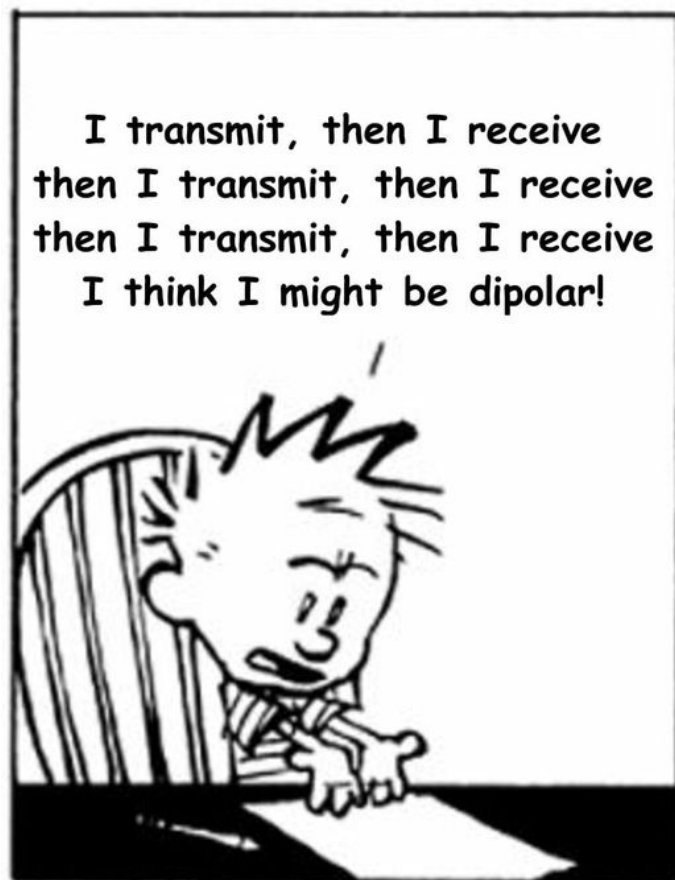
de Cooky - WC3O

## A Fifth Wheel Travel Trailer



## Home of a Roving SOTA Chaser ?

Seen by Dan - NM3A





An Interesting QSL Card

de Charles - KC3TTK

I know it has been a while since I have been published in the newsletter and I know my readers are concerned. I assure you I am well. I do not have a great deal to discuss this issue. But recently I did receive my first real deal actual QSL card in the mail.

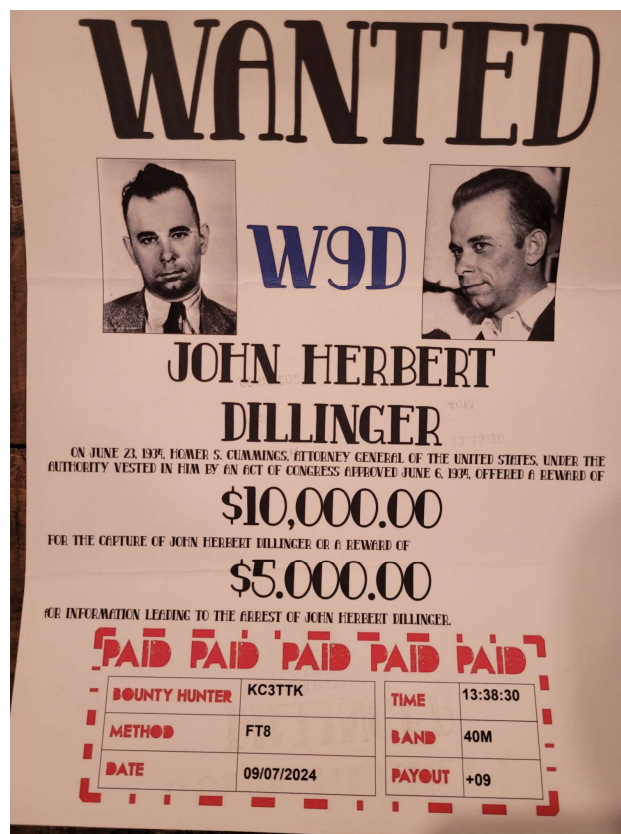
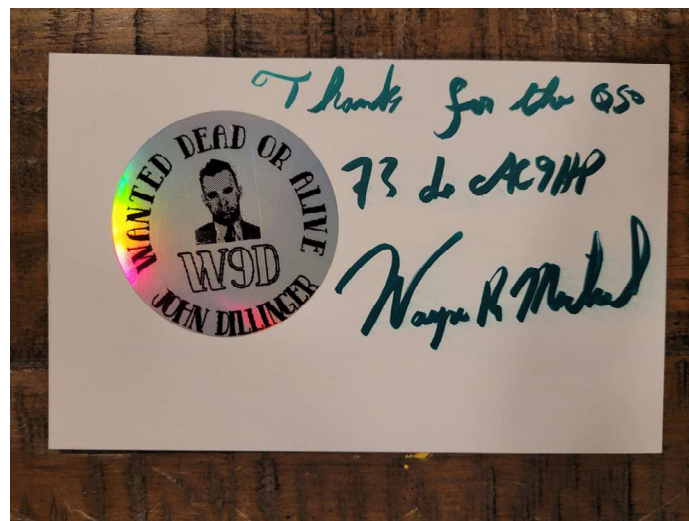
I know that over the last few years of having my license that I have seen all sorts of special event stations. I have even participated as an operator for our own 13 colonies and the KDKA anniversary special event.

This past September I was sitting on FT8 waiting to make a QSO with a particular station, I saw a 1x1 call. W9D. thinking it was a special event station, I answered his CQ and he got right back to me. I wrote it down and moved on.

Later in the day when I was updating my logs I came across the W9D and saw that it was a special event station out of Mooresville Indiana celebrating the capture of John Dillinger. The page said to send a couple of dollars for a QSL card. Since I didn't have any in my collection, I figured why not?

I put a couple dollars in an envelope and sent it to the address and forgot about it.

About 2 months later I got an envelope in the mail from a strange address. Upon opening the envelope, much to my surprise there was a QSL card and a note.

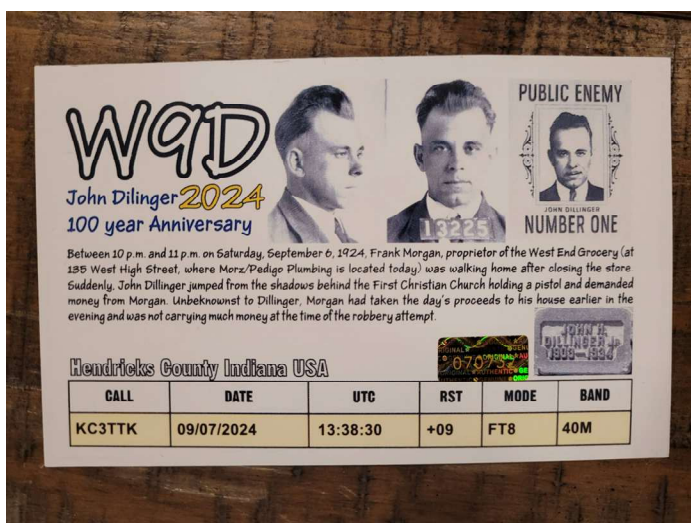


I think this was a very interesting way to start my QSL card collection.

Now off to design my card!

Thank you for reading

de Charles KC3TTK



## New Mobile Radio Setup

de Dan - NM3A

After our camping trek across the country this fall, I found that the hitch receiver on our ride was not 'tow' worthy anymore, despite the rest of the vehicle being in very good condition. So, I took to the unpleasant task of removing everything from our 2011 Honda Odyssey and selling it.

Unpleasant because it meant a lot of work to remove the radios and antennas and to reinstall the HF/VHF/UHF radios and their antennas on whatever new ride I purchased. A few days later, we had our Odyssey sold and a new Honda Ridgeline pickup bought.

Hopefully, we'll have many more years of camping with this tow vehicle and, of course, more years



of POTA and SOTA activations and general mobile activity. And that meant all the work of re-installing all that equipment and wiring!

Figuring out where to put the IC-7100 was the first challenge. Turns out the head fits very nicely in the forward alcove of the center console.

Only compromise there was giving up the wireless phone charger in that location. Minor, as I don't



use wireless chargers, anyway. A couple of strips of 3M Dual Lock strips easily hold it securely in place. Some well placed slots between the console and the dash allowed the cabling to the main radio body to be well hidden. They were tucked up under the console and routed back to under the passenger seat, where the 7100 main body is located. As in my old setup, I reused a wooden board to mount the radio. This board was zip tied to the HVAC vents under the seat to keep it from moving.



A wire connection from the seat anchor bolt to the radio provides a local RF ground. Notice the small, 2 Ahr AGM battery mounted on the right side of the radio and the power wiring. More about that later. Also to the right of the unit is the VHF/UHF antenna cable.

The IC-7100 does not have an internal antenna tuner, so I use an LDG 100A. This allows for semi-automatic tuning directly from the 7100's head unit and remote placement of the tuner. The 100A fits very nicely under the driver's seat on a similar wooden platform as the 7100 uses. The cabling between the 100A and the 7100 is then tucked up under the rear of the console to make a nearly invisible installation. (To make the installation visible for these pictures, the seats were in their most forward position.) The power cable also runs in this same area. The 100A only needs power to tune and uses latching relays to hold that setting between tunes. What little power it needs comes directly from the 7100.



Note the bright blue Victron battery isolator (secured to the rear seat support) just to the right of the 100A. More about that later. Left of the 100A is the HF antenna cable.

To run a 100 W radio, a heavy duty power cable directly from the battery is necessary. It is often a challenge to figure out how to pass that from the engine compartment to the passenger compartment. Holes through the firewall are usually filled with essential cabling and spare holes are often nonexistent.

In this case, there is a grommet in the side of the left foot well where the hood release cable runs through. This is accessible between the left front inner and outer fender. After some minor remove/replace of covers, a pair of 12 gauge wires were fished through this grommet. Integral 30 amp fuse holders in each line were attached to the battery positive cable and the battery negative cable.



Care was made to make sure the negative cable was attached after the Hall sensor at the battery terminal to allow the vehicle computer to assess the current (as in amperage) use normally.

This cable is routed along the hood release cable and secured properly with a cable protection loom where it crosses metal edges. Inside, the cable is routed and secured to vehicle cables under the floor sill trim and then under the carpet of the driver's seat.

The power cable goes to the blue Victron battery isolator, which is used as a heavy duty diode. The output of the isolator is cabled under the rear of the console to a Y-cable. The two outputs of the Y-cable go to the 7100 power connector and the 2 Ahr AGM battery. The AGM battery is connected via a bidirectional 3 amp diode to prevent overcharging.

The isolator/Y-cable/AGM setup allows for the radio to not reset when engine starts pull the voltage below 10 volts transiently and to keep the AGM charged at other times. This AGM battery keeps the radio voltage above 12.0 volts. This is especially necessary in this vehicle as it has start/stop capability, so turning the radio off/on at each full stop would be quite distracting. It does not allow for transmitting during these transients, however.

Next big challenge was finding how to mount the antennas. For VHF/UHF, I generally put an NMO mount through the roof near the dome light. In the Ridgeline, a cross brace prevented easy access there.

The sunroof meant I had to avoid obstructing its movement, but I couldn't see what was where. So I bought an inexpensive bore camera





This allowed me to see where a safe access area was. A 3/4 inch hole was drilled in the roof halfway between the shark fin antenna and the back of the open sunroof.

The metal edge was coated with cold galvanizing paint to prevent rust and the NMO mounted.



The bore scope was again used to find where to route the cable to the right hand C-pillar and avoid vehicle cables and the side curtain airbag. From there the cable runs under the rear door trim and secured to factory cables to under the passenger seat, where it connects directly to the 7100 VHF/UHF RF output.

HF antennas are bigger, requiring more substantial mounts. A hitch mount was ruled out as it would prevent opening the tailgate. I considered a custom bracket under the rear of the truck as I did with the Odyssey, but that seemed way beyond my fabrication capabilities and would result in a part protruding from the truck.

Others have used the tie downs in the truck bed successfully. In my case, I have a tonneau cover that will likely be in place nearly all the time. I decided to use the left front corner of the tonneau for the mount. I cut two heavy aluminum plates to mount above and below the 1 inch plastic cover. Four #10 mounting holes were drilled in each. A 5/8 inch hole was drilled in the bottom plate to mount a Wilson gumdrop antenna mount.vii



The gumdrop's SO-239 connector mounts through this hole and a 3/8 inch, 24 TPI socket is in the top for antenna mounting.





The wide base of the mount effectively distributes pressure to prevent deformation of the metal on which it's mounted. The top plate was drilled with a larger hole to accommodate the gumdrop's top. These were sandwiched across a large hole cut into the tonneau's cover. The top plate was sealed with a heavy duty caulk to both the tonneau cover and the gumdrop to prevent water ingress into the cover and pickup bed.



The two plates were secured together with four #10 SS bolts. The positioning of the antenna mount allows for full opening and securing of the tonneau cover without disconnecting the antenna.

This arrangement has no ground attachment, but the tie down bolts in the pickup bed are well grounded to the truck unibody. So, two 10 gauge wires were attached from the SO-239 nut to two different tie down bolts. A heavy duty, 50 A Anderson Power connector allows for easy ground wire disconnection if the tonneau needs to be removed. An earlier, temporary, separate ground

connection to an alligator clip was left in place. Crimped and soldered connections were used through out. The RF cable was routed through the non-metal, composite pickup bed and fished through a grommet beside the left rear seat. It was secured to existing cabling under the rear door sill plate and underneath the driver's seat to the LDG-100A tuner output.

To allow for garage access without disconnecting the 102 inch SS whip, a small SS eyebolt was mounted to the opposite corner of the tonneau cover



The free end of the whip can be attached there with a carabineer to keep the height below an opened garage door, as well as to allow for traveling through low underpasses or drive-thru windows.

The whip works well with the tuner for 10 and 12 meters. It also allows for listening to CB (11 meters), which is occasionally valuable when traveling.

For 80 through 15 meters, I switch out to ham stick antennas as necessary. These cannot be folded over easily, but this is not usually an issue for camping travels and POTA outings. A planned upgrade is to add quick disconnects to the most used ham sticks to make band changes easier.

These installations took me about 2 ½ weeks. This was mainly due to time spent thinking about how to do each item and then waiting for small parts that I needed to order. I viewed a number of YouTube videos to find out



how to remove/replace various trim and body parts on the Ridgeline. I got some ideas from what others did to install antennas, radios or other accessories. I needed to learn all the tricks to remove various trim pieces. Running the HF RF cable also required removing the left pickup bed panel to fish the cable. Total working time to actually get things done was probably less than 2 days.

Over all, I am very pleased with my new mobile setup. The microphone fits nicely in the small cubby above the radio alcove. The CW paddle is mounted to a board and is stored in the driver's seat back pocket. A steering wheel tray is stored in the passenger seat back pocket and the mobile log and pencil is in the console storage. This makes mobile POTA operations very ergonomic and convenient.

As with the old Odyssey, the Ridgeline does have a low level of RFI when the engine is running. However, the IC-7100's Noise Blanker and Noise Reduction circuits do a very nice job to tame the RFI to a low level for moving mobile HF operations. Some RF grounding of the exhaust system may allow for some future improvement. Most operations are at a stop with the engine off and vehicle RFI is not an issue.

A QRP first outing at Keystone State Park showed the HF installation performs very well. I'm looking forward to many more outings!

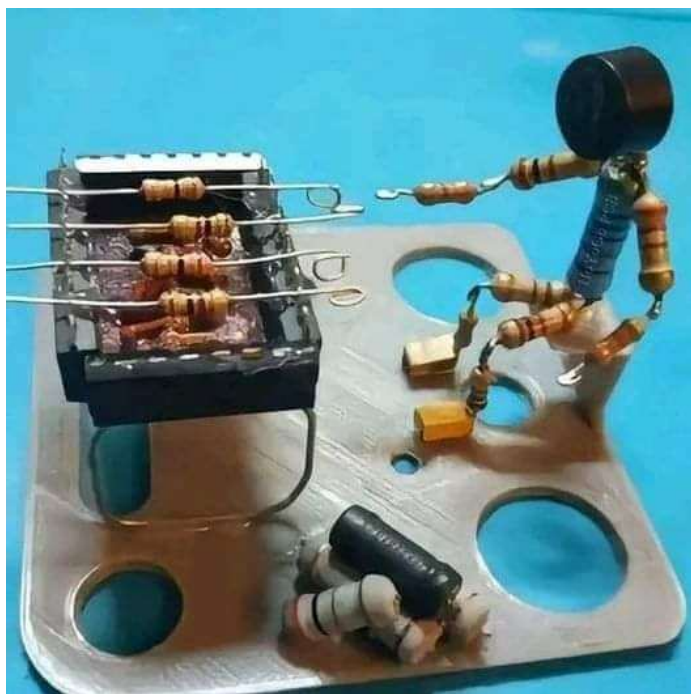
I hope my experience convinces more of you to put an HF rig in your own mobile.

72/73,

**de Dan - NM3A**



All Band Coverage



# Frequency Measurement Techniques

de Brian - KC3VNB

You probably think of your rig as just a transceiver (which admittedly is quite a lot already), but with a little help, it can actually be used to do very precise measurements of frequency and filter responses. In this article, we'll review how certain types of modulation work, and how we can leverage that knowledge to turn your rig into an incredibly precise test instrument. Why bother with this, you might ask. Well, aside from the obvious of making sure your rig is properly adjusted, it allows us to characterize not only our rigs, but other test equipment (signal generators, VNA's, etc.) to make sure everything in our shack is working properly. Also, there is a semi-annual frequency test conducted by the ARRL – a great way to try out some of the approaches presented here.

One word of caution – this is a deep rabbit hole, and once you go down it, you may never be the same. It can easily become a never-ending quest for increased accuracy and resolution...

## Modulation Basics

Before diving too deep, it is important to review some basic modulation types, since we will be leveraging characteristics of those types to do the heavy lifting for us. Let's start with a picture of an ordinary baseband signal, *e.g.* the output of a microphone picking up spoken voice. The graph shows the spectrum of the signal – that is, the signal strength vs. frequency (denoted by  $\omega$  for angular frequency). For simplicity, we will only show positive values of frequency – to be complete, we should show negative frequencies too, but that discussion is for another time.

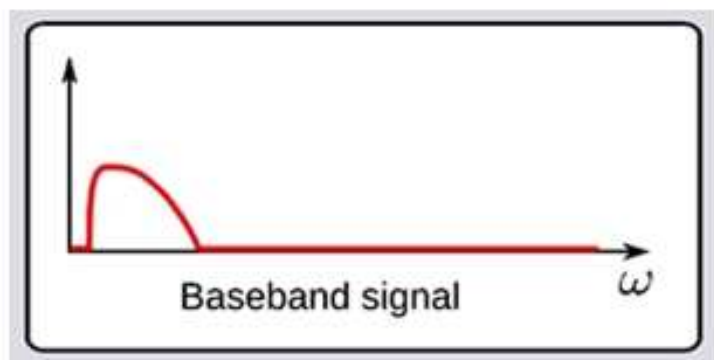


Figure 1 Baseband Signal Spectrum

If we take that baseband signal and mix it (that is, multiply it) with a carrier, and then add the carrier, we'll end up with double sideband large carrier (DSB-LC), better known as amplitude modulation (AM).



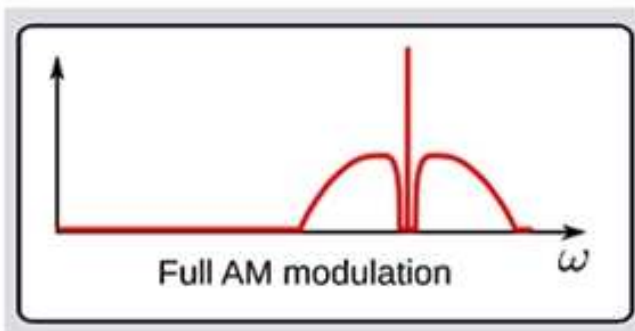


Figure 2 DSB LC - aka AM

Note that the AM carrier doesn't convey any information from the original baseband signal. It does however help to recover the original signal through demodulation, and it will be a useful tool for our purposes as well.

Finally, we have two variations of AM, where only sidebands are sent – this is far more efficient in use of energy, but it comes at the expense of more complicated demodulation, and is subject to distortion from even the smallest of mismatches between transmitter and receiver. The two types are lower sideband (LSB) and upper sideband (USB), with names obvious from the figures below.

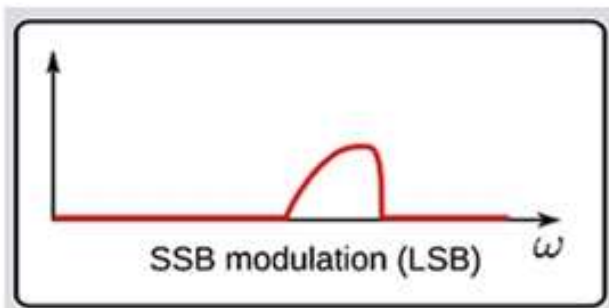


Figure 3 LSB and USB SSB-AM Modulation.

Now let's consider a very simple signal; a DSB-LC AM signal resulting from the modulation of a pure tone baseband.

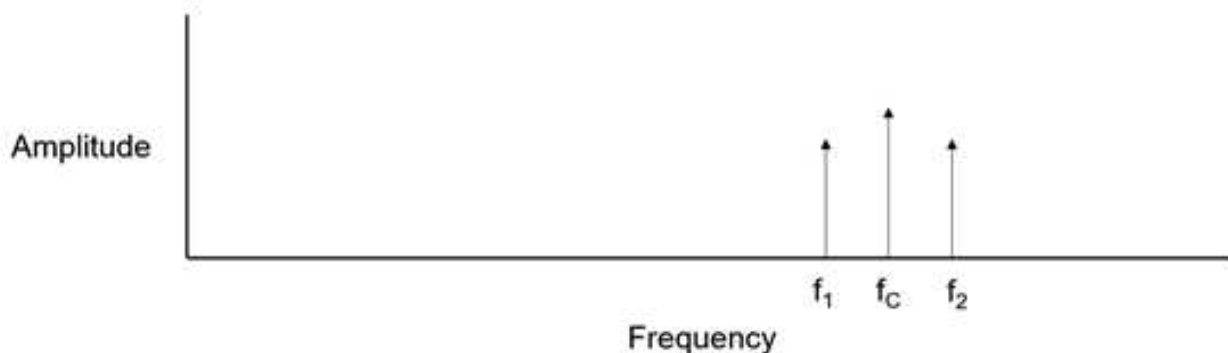


Figure 4 Pure Tone AM Signal

The carrier,  $f_c$ , is separated in frequency from  $f_1$  and  $f_2$  by the frequency of the baseband tone. If we want to recover the original tone, we would set our radio to AM, and tune to  $f_c$ , just like you would expect. Interestingly though, we could tune away from  $f_c$  by even a few hundred Hz and still faithfully recover the original tone. This is one advantage of large carrier AM. However, just because the signal was sent as large carrier AM, there's nothing that stops us from using other modes to demodulate it – in particular, imagine we change to USB and tune to  $f_T$  as shown in this figure.

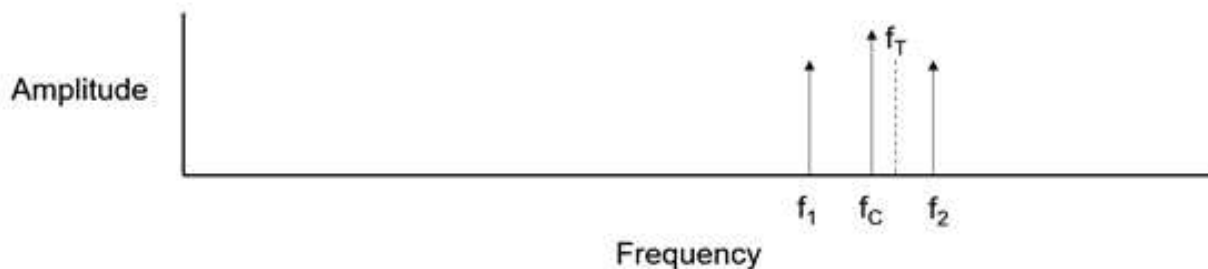


Figure 5 Demodulating AM with USB or LSB

In that case, we'll get a single tone out of the radio, with frequency equal to  $f_2 - f_T$ . Any change to our tuned frequency will modify the frequency of the tone we hear. As  $f_T$  goes up, the tone frequency we hear goes down. Now, think about what would happen if we switch to LSB. We'll get two tones out, one equal to  $f_T - f_c$  and the other equal to  $f_T - f_1$ . If we move our tuner, both output signals will shift in frequency, and in this case, in the same direction as we are tuning. Of course, if you tune too far in either direction, you'll eventually filter out the signals from the passband on either the lower or upper side.

Those two techniques will let us very carefully explore received signals. To summarize:

- If we have a large carrier, and we use AM, we can get nearly exact information from the sideband tones, even if our tuning is a bit off.
- If we have any signal, we can use USB or LSB to get the difference between our tuner and either tones above or below the tuned frequency respectively, as long as they are in the passband.

Notice also that by using our radio to receive in those different modes, we've shifted a much higher frequency, down to an audible frequency. This allows us to use a simple PC soundcard to measure the baseband frequency. Nothing fancy is required; the built-in audio of virtually any current PC can measure audio frequencies down to a few millihertz if you use the right software (which we'll discuss shortly). The net-net of all this, is if we have a precise reference signal coming into our radio, we can use a soundcard and simple math to determine very precisely the frequency of our tuner.

Where do we get a precise reference signal? Well, there are a few ways to do this that range from pretty good and free/cheap to unimaginably precise and ultra-expensive. Suffice it to say, we'll focus on the former, and just mention the latter. At the pretty good / free end, we have broadcast standards such as WWV or CHU. Both of those stations transmit incredibly precise



signals at their feed point; down to parts per quadrillion. However, unless you live very close to those transmitters, the frequency accuracy will shift due to atmospheric conditions. In particular, from ionospheric Doppler shifting. Believe it or not, the boundary in the ionosphere where those signals refract moves throughout the day, enough to measurably alter the **carrier** frequency that we receive. I emphasize carrier because the modulated tones that they transmit can be demodulated and provide audible frequencies that vary orders of magnitude less than the carrier Doppler shift. Remember from before, you can still get faithful sideband signals, even if you tune off of the carrier of a large carrier AM signal, which is what both WWV and CHU provide. In spite of the Doppler shifting, it is still typically possible to get within +/- 0.5 Hz of the actual carrier sent. Not bad for free. All of the (mostly) increasingly better options involve a local standard – an oscillator in your shack that provides a reference frequency. Here is a table of local standards and what you can expect in terms of accuracy.

Type	Typical Precision	Cost / Notes
Temperature Compensated Crystal Oscillator (TCXO)	+/- 0.5 ppm	<20 USD; usually not as good as WWV even with Doppler shift
Oven Controlled Crystal Oscillator (OCXO)	+/- 10 to 100 ppb	~10 to 50 USD; if calibrated or disciplined, can rival WWV with Doppler shift
GPS Disciplined Oscillator based on crystals (GPSDO)	+/- 10 ppb short term, but +/- 10 ppt long term	~100 USD; Outstanding long-term accuracy, but short-term stability depends upon oscillator type. Can easily exceed accuracy of over the air WWV.
Rubidium Oscillator	+/- 80 ppt or better short-term stability	~500 to 5000 USD; excellent short-term stability, and also long-term accuracy if combined with GPS discipling
Cesium Oscillator	+/- 0.1 to 0.01 ppt	20,000+ USD; the gold standard used by labs, and used to sync GPS satellites

Many hams will have at least one TCXO somewhere in their shack; moderns rigs often use them to derive the VFO function, and most low to medium end signal generators and counters will use them. Those that have started the descent down the measurement rabbit hole will likely have

some combination of OCXO and GPS disciplined oscillator. Here are two examples, both priced around 100 USD. The first shown is a model TM4313, and is available from your favorite overseas importer. The second is from Leo Bodnar in the UK, and is the single output flavor. The TM4313 does not have an adjustable frequency output, but it has a very nice 10 MHz sine wave output which is well suited for reference inputs to lab equipment.

Single frequency  
(10MHz) Oven controlled  
crystal oscillator (OCXO)



Variable frequency  
Temperature controlled  
crystal oscillator (TCXO)



*Figure 6 GPS Disciplined Oscillators*

OK, so without breaking the bank, you've taken the plunge on a modestly priced GPSDO – now what do you do with it? Well depending on the variety, you might feed it as a reference into a medium or high-end signal generator. Of, if it has programmable frequency output, you can use it directly as a signal source to your rig. Directly does not mean a physical connection – in fact, it is often more useful to just couple it to the rig by hanging some leads on the oscillator output. This will radiate plenty of signal for your rig to pick up a few feet away (and no, you won't be violating any FCC rules). Beyond that simple set up, all you then need to do is connect your rig to a PC soundcard. You can either use the audio out, or a USB connection. If you've ever used WSJTX or FLDIGI, you will use those same settings. In fact, WSJTX and FLDIGI are two of the programs you can use to do further analysis. The basic idea is this – couple a known reference to your rig, tune away from the reference by a convenient amount (like 1 kHz) up or down, depending on whether you'll be using USB or LSB. Then use an appropriate program on your PC (like the aforementioned, or SpectrumLab) to measure the frequency. In WSJTX, use the FreqCal mode (set the difference frequency to align with your chosen frequency delta). In FLDIGI, you can use the FreqAnalysis mode. In SpectrumLab, there is no particular mode, but you'll need to learn how to use the many config screens.

Here's a concrete example – First and foremost, let your rig warm up for a few hours. My own testing has shown that for an ICOM 7300, you should allow at least 3 hours before doing a careful adjustment (more on that in a bit). Then, set your reference oscillator to something convenient, like 20.3 MHz (good to avoid interference from known stations like WWV), and tune your rig to 20.299 MHz USB. If your rig is bang on, you will get precisely 1 kHz audio out. Check it in one of the programs mentioned, go into the settings for your rig, and adjust the



internal reference up or down to get as close as possible to 1 kHz showing in your PC software. If you don't have a reference oscillator, you can do the same steps with WWV or CHU. Pick your favorite frequency (the higher the better in terms of accurately setting your rig) and tune 1 kHz low, USB. Follow the same steps until your rig is outputting as close as possible to 1 kHz. For the ICOM 7300, it looks like this:

## Menu -> Set -> Function ->REF Adjust



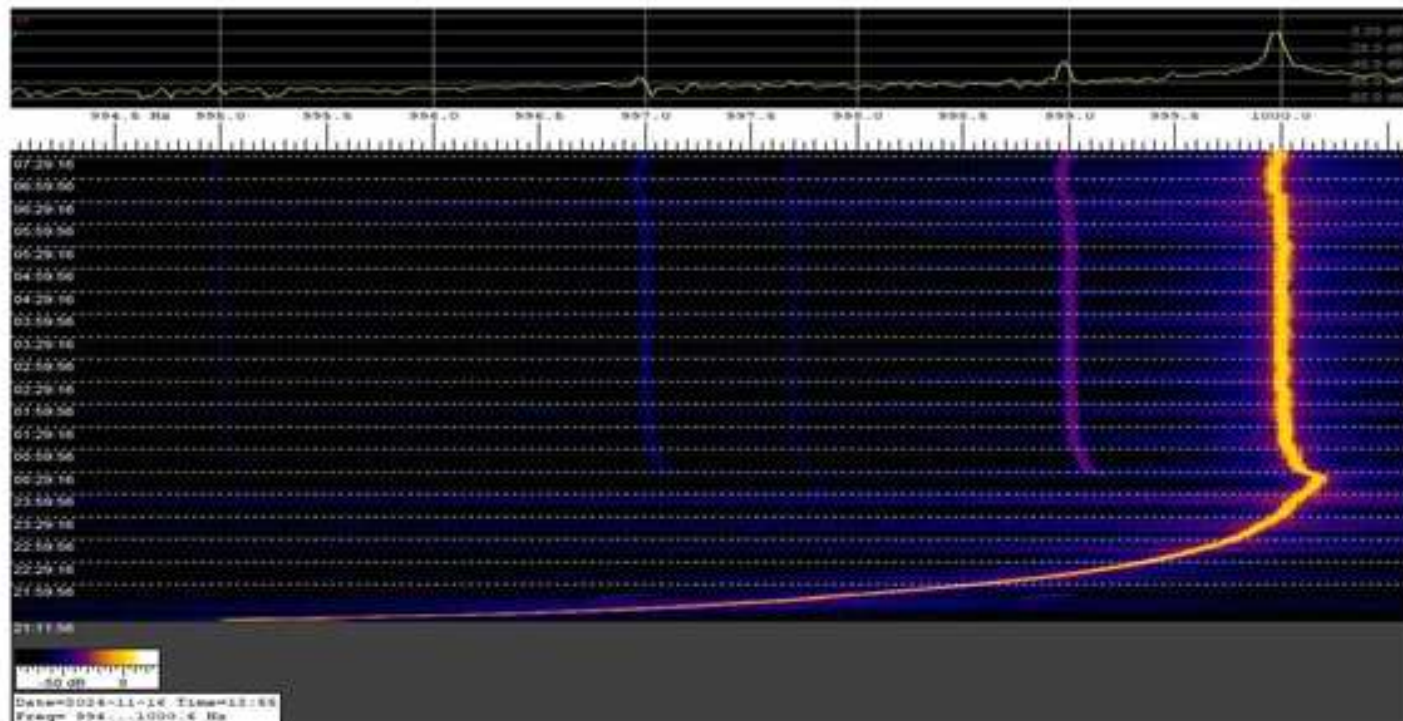
Use audio out to get the correct difference signal from your VFO compared to your reference

Figure 7 ICOM 7300 Reference Adjustment

You might be asking: how do I know the PC soundcard is accurately calibrated? A fair question to be sure, although even a garden variety chipset will typically be accurate enough to get within a few millihertz. However, if you wish to calibrate that out, you'll want to leverage one of the modulation principles mentioned previously. Tune to WWV using AM mode, and measure the background tones (they alternate between 500 Hz and 600 Hz for most minutes). As long as your received signal is not too noisy, you will get a very precise 500 or 600 Hz. Both FLDIGI and SpectrumLab have a separate calibration step and settings for the sound card. In SpectrumLab's case, it is extremely versatile and a little complicated. I'll leave those details to the reader. WSJTX has a calibration routine, but I have not found it to be terribly useful – and as far as I can tell does not separately compensate for the soundcard.

## Some Interesting Results

With all of the discussion of theory and mechanics out of the way, what does this all really look like in practice? First up, let's look at the VFO drift of an ICOM 7300 after it is first turned on. I sent a reference signal at 20.3 MHz (radiated from a signal generator referenced to my OCXO GPSDO) and tuned the radio 20.299 MHz USB. If everything was perfect, you'd simply see a constant 1 kHz signal. Instead, I got this, using SpectrumLab:



*Figure 8 ICOM 7300 Warm-up Drift*

This is a spectrogram (think waterfall on your radio) that ran for a bit over 10 hours – you can see the time on the left, and frequency scale near the top. The VFO was high by about 5 Hz at start up, so instead of the expected 1 kHz, we measured only 995 Hz. After about 3 hours, it settled down to nearly spot on. The “kink” in the graph is when the radio’s screen saver kicked in, and it then ran ever so slightly cooler. The faint lines 1 Hz and 3 Hz away from the main tone, I believe, are due to the 1 Hz blinking LED on the power button while the screen saver was running. It almost defies comprehension that such a small effect could be seen with simple tools.

Next up, let’s look at the drift of WWV received over a few hours. Again, this was done using SpectrumLab. In order to make sure we can discern the WWV drift as opposed to the radio VFO drift, I radiated a reference tone just 3 Hz below WWV’s frequency. You can see the reference tone on the left, and WWV on the right, meandering around. If you received a perfect signal from WWV, it would track exactly 3 Hz to the right of the reference signal. Interestingly, there appear to be multiple tones received from WWV, which I interpret as multipath reception. The bottom line – even though the carrier transmitted in Ft Collins, CO is incredibly precise, ionospheric Doppler shifting will noticeably take a toll on it.



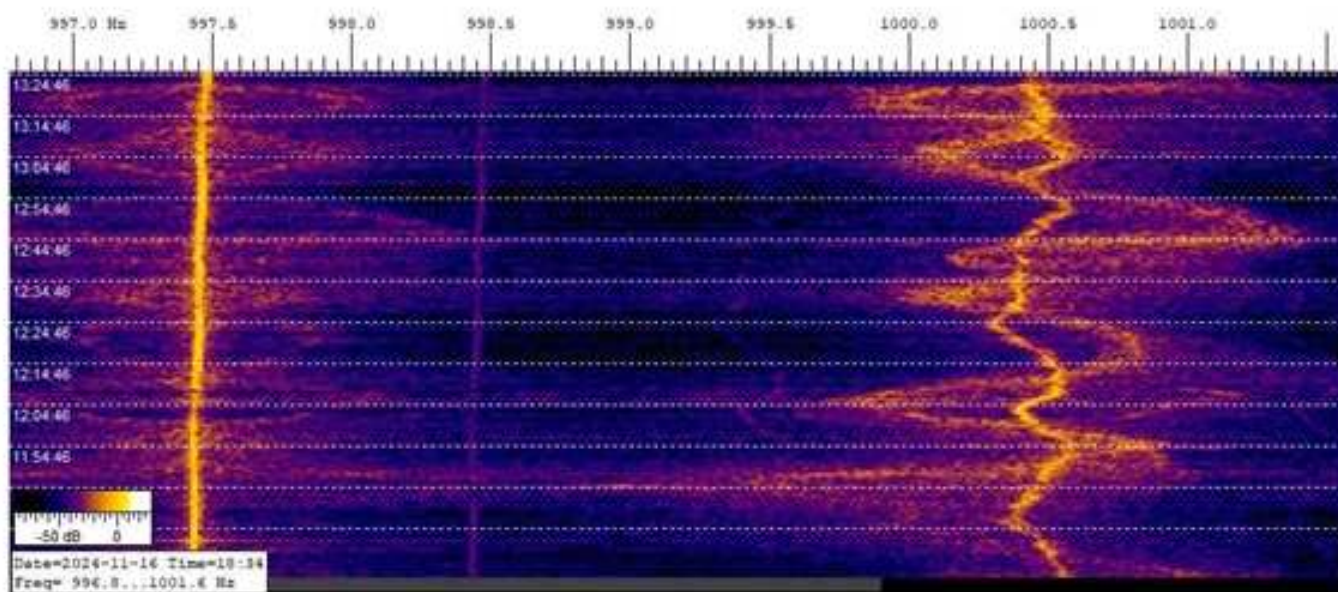


Figure 9 20 MHz WWV Doppler Drift

What about using what we've learned to measure the filter response on our radio? Here's an example using SpectrumLab where I swept tones across the USB filter passband. Using the peak hold feature of SpectrumLab and running many sweeps, it was possible to get a decent magnitude plot of the filter response.

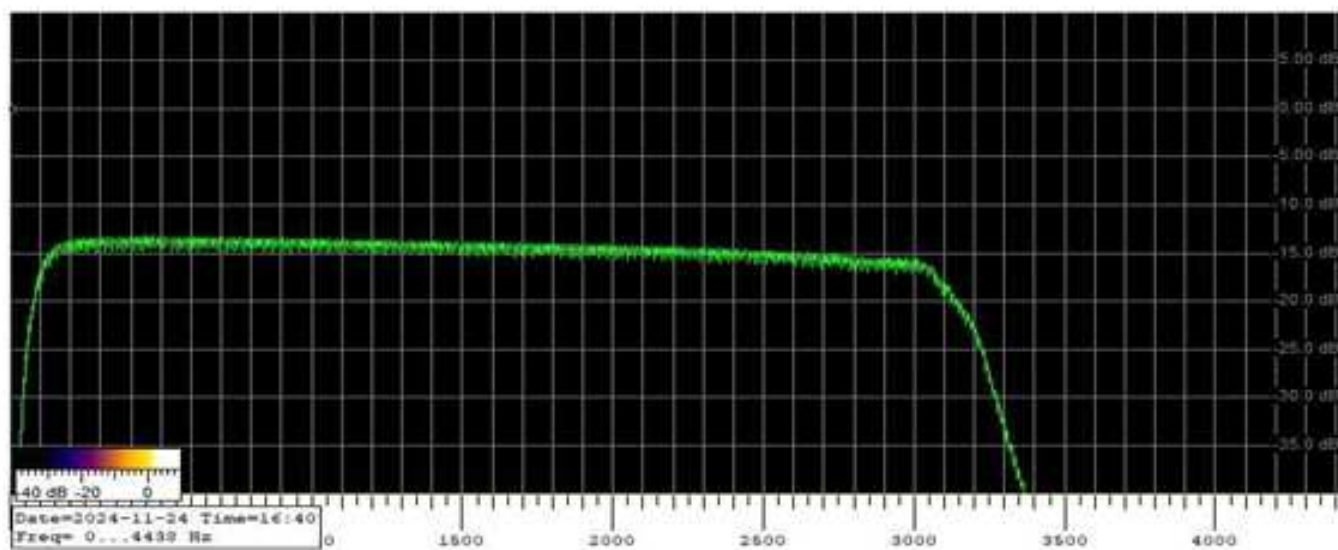


Figure 10 USB 3 kHz Bandwidth Filter Response (Soft Setting)

Finally, and just for fun, a 3-D plot of an FT8 signal from SpectrumLab. You can make out some of the individual frequency peaks within each of the transmission "groups". No real practical reason for viewing, other than giving some insight as to what is actually happening under the covers to encode the messages.

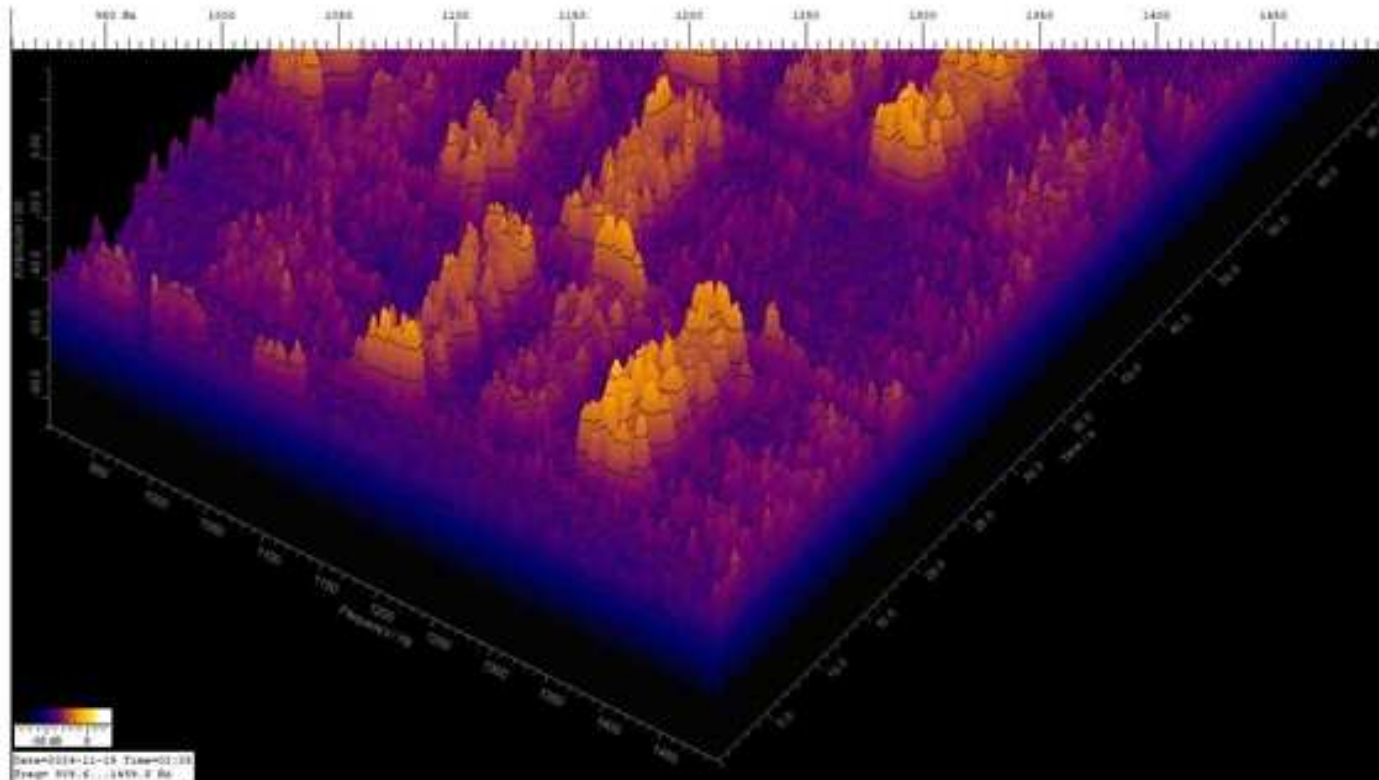


Figure 11 FT8 3-D Spectrogram

I hope you enjoyed this trip down the frequency measurement rabbit hole. As always, please reach out with questions or comments to [kc3vnb@gmail.com](mailto:kc3vnb@gmail.com).



**10 Cent Modification**—Adding a Trailing Counterpoise (Floating Ground) to your HT makes a big improvement.





## My Great Radio Adventure

de Linda - WIMP

### Putting on the Big Girl Boots & Taking the Plunge

Once I became a POTA hunter and discovered Point State Park is an official POTA activation, I ruminated for weeks on how to make this happen. In my mind, the park was only 'activated' by people with no place to go or just outright predators. It's a downtown city park, there's a certain reputation.

I tried to envision what it would be like, alone, in the park with possibly over \$1,000 in radio and antenna equipment, spread out on a temporary horizontal structure and pieces getting carried away by ....druggies? drunks? I really thought the only way to do this was with a Pitbull and a gun.

My interim activations at the Point were accomplished by parking within the perimeter, using a vertical antenna and a mag mount. Paying an exorbitant parking fee. The upside, well first, the real upside, 3 successful activations. The other possible plus at least in my mind, Wyndham hotel close by and providing 'facilities' to anyone who patronized their restaurant.

I use the term restaurant loosely, it was a Starbucks concession where I think a bottle of water and a very small 'personal' pizza totaled somewhere around \$16 but the bonus was using their restrooms. Add to that the parking fee, somewhere around \$4 per hour, not a cheap date.

Then someone told me they were pretty sure there was a location in the park that gave a legitimate 2-park designation, sometimes referred to as a 2-fer. Weeks went by, I heard it was really a 3-fer, 3 separately numbered official POTA park designations. Quite a dilemma and I was not finding the info on the POTA map. Somehow stumbled on the names: Point State Park the known entity POTA designation US-1401. Two trails, Potomac Heritage trail and Lewis & Clark trail. Definitely worth some research.

After scouring the internet and maps I eventually discovered that the Potomac Heritage trail originated in Alexandria VA and terminated....somewhere beyond Ohio-pyle. Locally the Potomac trail merges with what is designated and known as the Great Allegheny Passage.

It does not obliterate the Potomac, they share the geography of the trail in the Point Park segment traveling around the edge between the fountain and the river, well within the park perimeter (obviously) after that you'd need water wings. The Lewis & Clark trail, that was just as interesting because it isn't a trail, it's more of a land mass, and the L&C crew didn't traverse the point on foot, they may have traveled around it by boat.

My final confirmation was a chat with personnel at the ranger headquarters for Point Park where I confirmed the Potomac/Great Allegheny connection and then had a super conversation with the education director and got the entire Lewis/Clark/Pittsburgh history. My conversation with the ranger station made it obvious that a good 3-fer would be me setting up on the grass side of the fountain.

In an attempt to keep things very consolidated and in control, antenna, rig, and every accessory necessary (or at least what I thought I needed), I acquired a great little folding cart from Walmart with incredible capacity IMO. I packed everything into the cart in my apartment, trundled to the elevator, down to garage, packed up car, collapsed the cart.



And off we went on what for me, short of solo rides on my Harley from northwestern VT to my daughter's qth in Squirrel Hill and maybe some of my kayaking adventures attempting to fish and operate 'marine mobile' hihi, was going to be definitely a real adventure. Just think of it at

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my level in my world. I know plenty of you are SOTA active, not just POTA and you're thinking, well wait, she got in her heated car and drove 4 miles in about 15 minutes to set up for a 3-fer. Yeah I get it.

At the park I reversed the apartment packing, opened cart, loaded it with EVERYTHING and started the half mile trek from parking to fountain. All was quite calm, some walkers, some joggers nothing crazy. Not even attacking dogs.

I picked my spot and then attempted to setup my Chelgance MC-750 vertical. My priority was antenna placement while everything else was close by and reasonably safe in the cart. Once the antenna was up it wouldn't need constant scrutiny just because it's hard to walk off with a 17ft plus vertical unnoticed. Someone had told me you can't use ground stakes because the water level is too high.

The very first glitch happened at that moment, an adapter I didn't need just clung for dear life to the ground stake and I didn't have pliers with me. Who knew? I spotted the maintenance crew in a 4x4 and not only did they have pliers but they offered to do the full set up for me, I declined.



**The maintenance crew took the pictures of the rig set up and me operating, they had a very positive affect on me for this activation.**

My first probing with the stake proved the high water level wrong and after many attempts I finally found a spot where I could sink the ground stake in not completely but within 2" of full length. I setup antenna, then setup compact folding table, I went on faith because I had never used it or even practiced with it. No issues and the little folding camp chair I've used to fish along the Allegheny also worked.



**My cell phone is set on ham clock app. Table folds into briefcase size including handle.**

I did as much spotting myself as possible and got a lot of help from Skyview friends and other hams around the country, most from LICW. I was getting good pileups and then something I hadn't anticipated. It was the most 'exposed' activation I had done and tourists seeing me and the setup were very curious. I was happy to stop and explain and found most were really interested, curious and had no idea amateur radio was a 'thing.' I also handed out eyeball cards that I happened to have with me.



The maintenance crew was back and forth and at some point stopped to see what I was actually doing. It turned out the wife of one of the maintenance crew is a ham, like, what?!? She even has the same antenna, I mean he knew enough about it that he recognized it, I think she has POTA activated, lives up near McConnells Mill off of 79.

He sent her a picture of the rig when I was on 20 but then I switched to 40 and his next trip by said she had looked for me but I was gone. I said, send the 40M frequency which he did and we made contact. All CW which is pretty much 100% of the mode I've been using. And to clarify, the maintenance worker is not a ham.

Yes, there were facilities about half way in but too far away to be able to leave my radio setup.



My next interaction and just as good IMO, the chief of Park Police stopped by, asked if I was using a ground stake. Well now this is why you can't use it, nothing to do with water table. You cannot put anything into the ground at a National Heritage site and Point Park has this designation.

I said no problem I have a tripod with me I'll take the antenna down and set it up on the tripod. He offered to help and we chatted while I got it removed and there I was again. The base element of the antenna would not unscrew from the ground stake. Me: you wouldn't happen to have a pair of pliers would you? He: I'll find some. He was back within a few minutes, pliers, all good.



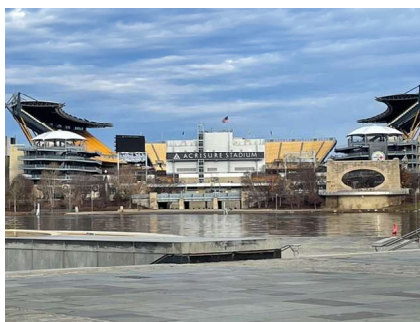
Antenna now on flat bar tripod with rock keeping it stable. It's extended the full 17ft 9". 40 M coil in place.

I happened to mention to him that my only concern with the tripod was everything getting blown over by the wind which at that location near the confluence of the 3 rivers was fairly significant. He searched and found a really weighty compact rock, perfect for my flat bar tripod.

He also offered to set the whole thing up but I really didn't need help. We had a good chat about ham radio, the whole POTA inspiration and the history of the trails and the Lewis & Clark expedition. A very positive encounter.

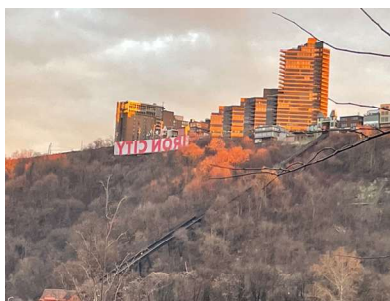
I continued to operate until freeze your butt off set in probably 12:30 or so, I got on the air before 9. I had 29 valid Qs, some good pileups and worked 4 bands: 10, 20, 30, 40.

My takeaway, well obviously a very positive experience and I really want to do this again but in the weather that day, I was inadequately dressed. When I head for state game lands, long underwear, insulated pants, lined boots all of that seems automatic. But this was Dec 31, morning, temps in low 40s, I didn't even pay attention to wind and wind gusts predictions. In that way I put myself at risk, after being there more than 2 hours I ignored tell-tale symptoms of hypothermia, shivering and trouble speaking but recovered well, at least as far as I know. Lived to activate another day.



Some will love this view, my Steeler fan grandsons did. I thought about photoshopping the name to Heinz.

FYI: Point State Park POTA US-1401, Potomac Heritage Trail National Scenic Trail POTA US-4564, Lewis and Clark National Historic Trail POTA US-4572.



de Linda - W1MP

But this was my favorite of the pictures I took:



# WEARSfest 2025

## Westmoreland Emergency Amateur Radio Service, Inc.

Formerly the Foothills Amateur Radio Club and the Chestnut Ridge Amateur Radio Club

# Greensburg, Pennsylvania

Saturday, March 29, 2025, 8:00AM to 1:00PM

Greensburg Masonic Center, 349 Donohoe Road, Greensburg

GPS Coordinates: N40°18'49.94" W79°29'22.82"

Talk-in on: 147.180, +.600, PL131.8

Visit the club's website for latest information: [www.wc3ps.org](http://www.wc3ps.org)

*Breakfast and Lunch Available, All Day 50/50, Walk Around Prizes*

### MAIN PRIZES

- First Prize: Xiegu G90 HF 20W SDR Transceiver  
Second Prize: Radioddity DB25-D Mini DMR Mobile Radio  
Third Prize: Yaesu FT-70DR Fusion Dual Band Hand Held

*Main Prize Tickets: \$5:00 each*

Bulk Ticket Pricing: 3 for \$10, 7 for \$20, 15 for \$40, 35 for \$75, 75 for \$100

*Door Admission Tickets: \$5.00 each*

Door Admission Ticket includes: Chances to Win Door Prizes

### Hamfest Table Reservation Form – Please Print Clearly

Name: \_\_\_\_\_ Email: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_ Zip: \_\_\_\_\_

Phone: (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_ Call Sign: \_\_\_\_\_

Tables w/o Electricity: \_\_\_\_ X \$10 = \_\_\_\_

Indoor table space is limited.

First come first served.

Tables w/ Electricity: \_\_\_\_ X \$15 = \_\_\_\_

Tailgating \$5, weather permitting.

**Make checks payable to:**

**WEARS**

**P.O. Box 1084**

**Latrobe, PA 15650**

**FOR TABLE RESERVATIONS, TICKET SALES AND MORE INFORMATION, PLEASE CONTACT:**

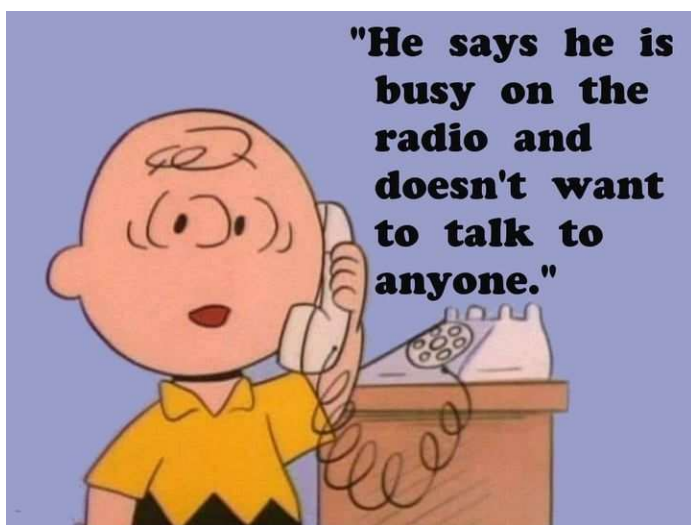
**Abe (N3BAH), 412-357-0076 or Sam (KE3PO), 724-689-2096**

**email: [wc3ps@comcast.net](mailto:wc3ps@comcast.net)**





**Advanced POTA Operator**



**LIFE IS SIMPLE**



## Skyview VE Sessions

Skyview provides VE Testing at the Skyview Clubhouse each month (Details provided later, near the end of this newsletter)

Here are some of the recent success stories

**December 2024**

— NONE —

**January 2025**

Denny Kifer N3QZU passed the Extra exam

Matt Nolen KD3AMZ passed the Technician exam

*de Bill - N3WMC*

## Welcome New Members !!

Welcome the following Skyview Radio Society Members who have joined us since publishing the **December 2024** newsletter:

**KD3AET – Seth Ross - Lower Burrell**

**KC3ZOH - Gordon McGriff - Bethel Park**

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 31 JAN 25

NM3 A	NY9 H	AC3NA	N3TIR
KD3 AET	WB3 HFP	G4NFS	W3TLN
N3 AFS	WA3 HGW	KB3NSH	KK3TM
KB3 APD	KB3 HPC	AJ3O	N3TTE
NA0 B	K3 HSE	WC3O	KC3TTK
N3 BAH	AK4 HZ	WO3O	AG3U
W3 BRL	AG3 I	KC3OCA	NS3U
W3 BUW	AC3 IE	KC3OCB	WU3U
KF3 C	KE3 IF	KC3OCC	KB3UIO
KA3 CBA	KC3 IIO	K3OGN	N3UW
KC3 CBQ	AB3 IK	N3OIF	KC3UNP
W3 CDW	WB3 INB	KB3OMB	W3UY
K2 CI	W3 IU	K4PDF	KX3V
K3 CLT	K3 JAS	KC3PIM	KC3VCX
K3 CWE	WB3 JHC	K2PMD	KC3VNB
N5 DB	N3 JLR	KE3PO	K3VRU
K3 DCG	KA3 JOU	W3PRL	KC3VYK
N3 DL	ND9 JR	KC3PSQ	W3VYK
N3 DRB	K3 JZD	KC3PXQ	N3WAV
KB3 DVD	WA3 KFS	AC3Q	W3WC
KC2 EGL	AC3 KI	NU3Q	KC3WCJ
KC3 EJC	AO0 KK	KC3QAA	K3WM
AB3 ER	K3 KR	NJ3R	N3WMC
WA3 ERT	KC3 KXZ	K3RAW	KA3WVU
N3 ERW	WE3 L	K3RMB	K3WWP
K3 ES	WA3 LCY	W3RRK	N3XF
KG3 F	AC3 LD	I2RTF	W3XOX
WB3 FAE	KC3 LHW	KI2RTF	KC3YEZ
K3 FAZ	WB3 LJQ	K3RWN	N3YJN
KC3 FEI	WB5 LLI	KQ3S	W3YNI
K3 FH	K3 LR	K3SBE	KB3YRU
K3 FKI	KC3 LRT	WA3SCM	W3YS
KC3 FWD	AB3 LS	KC3SDJ	KB3YYC
AC3 GB	N2 MA	KC3SNZ	KE3Z
N2 GBR	KC3 MBM	KB3SOU	K3ZAU
AC3 GE	N3 MHZ	K3STL	KB3ZFC
K3 GIR	KC3 MIQ	KC3STV	KC3ZIM
KB3 GKX	K3 MJ	KB3SVJ	KC3ZOH
KC3 GPM	W1 MP	W3SW	W3ZVX
K3 GT	K3 MRN	KC3TEX	
AB3 GY	N3 MRU	WV8TG	
KC3 GZW	KS3 N	N3TIN	

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 . . . . .

This is an interesting discussion about where AI is useful and where it is not. Included is a good explanation of the latest AI buzzword : "AI Agents" and how AI Agents are being utilized to marry the capabilities of AI with traditional tested programs. You will hear more and more about AI Agents, so this is worth a look, <https://www.youtube.com/watch?v=Y6Scr5Ago9g>

**Need Tools ? Go to  
Hazard Fraught Tools**

<https://imgur.com/gallery/hazard-fraught-tools-flyer-JcG3B>

(tnx Dan - NM3A)

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 April 1, 2025  
Closing Date For Submissions : Mar 15, 2025**

**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 - N3WMC  
(724) 882-9612

**Email:** [bdillen@comcast.net](mailto:bdillen@comcast.net)  
<http://www.skyviewradio.net/ve-tests/>

**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

This newsletter may be freely forwarded.

Permission is granted to other Amateur Radio publications to reprint articles from this issue, provided the original author and "*The Skyview Q5er*" are credited.

email your comments and article submissions to: [K3JZD AT ARRL DOT NET](mailto:K3JZD@ARRL.NET)



**I just got my ham radio license, now what do I do?**

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](https://groups.io/g/K3MJW) 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