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

Q5er – The Official Newsletter of the Skyview Radio Society

August 1, 2025

Swap & Shop
Sunday, August 24, 2025

2025 SKYVIEW RADIO SOCIETY SWAP N SHOP!

SUNDAY AUGUST 24, 2025 8:00am until 1:00pm

LOCATED AT OUR CLUB GROUNDS NEAR NEW KENSINGTON PA
2335 Turkey Ridge Road
New Kensington, PA 15068

Approximately 13 miles northeast of Pittsburgh
Location is near the intersection of Rt. 366 and Rt. 380
GPS Coordinates: 40.51761, -70.67714

Talk-in 146.640- 131.8pl

Admission $5.00 – Table space is $5.00 (Bring your own table)

Main prizes
ICOM IC-7300
Astron SS-30M-AP Power Supply
And other TBD Main Prozes

Door prizes

Begali CW Key Raffle

Breakfast and lunch served
Get your Skyview Burger and your Skyview Dipole Hotdog!

Contact: John Italiano WA3KFS - 724-339-3821

K3mjw@arrl.net
https://www.facebook.com/SkyviewRadioSociety

Sunspot Numbers Are Still High

Time to exercise the 10-12-15-17-20 Meter bands while they are Still Hot

Inside this issue:

2025 is Skyview's 65th Anniversary !!

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

Enjoy this 'antenna'ish' issue.

Jody - K3JZD

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

Ham Radio is a Contact Sport

From the Treasurer

The Skyview Swap & Shop is this month.

It is our annual fund raiser.

While extra hands are always needed for setup and tear down, it does not really take that many members to pull it off. If you are able to attend, let some one at the main tent know that you are available to fill in somewhere if needed.

Everyone can do their part by responding to the mailed request to buy a few tickets.

Jody - K3JZD

ADVENTURE: The respectful pursuit of trouble.

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.

This Space For Rent

Get your facts first, then you can distort them as you please. – Mark Twain

Skyview Business Meeting Minutes

de Don - WA3HGW

Skyview Radio Society

Monthly Business Meeting – July 1, 2025

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

Attending – 25 Members: KC3CBQ, N3WMC, KC2EGL, K3JAS, NJ3R, W3IU, K3FAZ, WA2HGW, W1MP, N3DRB, AB3GY, WA3KFS, WB3LLI, W3UY, KE3IF, AC3IE, AG3I, KC3VNB, KE3Z, AC3Q, N2MA, KQ3S, K3STL, AA3TZ, K3JZD plus Jill Cooper, PA State Representative from the 55th district.

Prior Meeting Minutes: The minutes of the June 3, 2025 meeting were distributed for review, with thanks to Brian, KC3VNB for taking the minutes in the absence of the Secretary. A motion to accept the minutes as distributed was made by N3WMC and seconded by KC2EGL. The motion passed without objection.

Treasurer's Report: Treasurer Jody, K3JZD, reviewed the 30 June 2025 Financial Report (attached). All expenses for the month were normal. There was $452.67 for building maintenance, Dayton Hamvention purchases and QSL cards. Income was received from some T-Bills maturing, which were also replaced. There was also income of $1,881,50 for the generator fund. A motion to accept the Treasurer's Report was made by K3JAS and seconded by W3UY. The motion passed without objection.

Membership Report: Tom, AB3GY, advised there are two new membership applications for July, and made a motion to open the membership rolls. The motion was seconded by K3JAS. The motion passed without objection. The applications are from:

Chris Grill, WB6CQA, a General class from Monroeville.
Tom Zajdel, AA6TZ, an Extra class from Pittsburgh.

AB3GY made a motion to accept the applications, which was seconded by N2MA. The motion passed without objection. AB3GY made a motion to close the membership rolls, which was seconded by WA3KFS. The motion passed without objection. Membership now stands at 160.

Radio Officer Report: Bob, WC3O reported that all radios were operating normally. The 146.640 repeater seems to have fixed itself. The reason is not known. It was possibly related to the weather balloon tracking station, but for now it's best to leave well enough alone. The 30/60 meter dipole spacers broke and will need to be repaired. The 80 meter dipole is still stuck on the HyTower, which will need to be lowered to be untangled. And the crank-up tower cable replacement continues to present more problems. Other than that, all is hunky-dory.

Kitchen Report: Bob, WC3O reported that current balance is $173. Kitchen supplies are good.

VE Report: Bill, N3WMC stated that no candidates tested last month. No one is currently scheduled for the July session at this time.

Newsletter: June Newsletter was released with 23 power packed and ready to consume pages. New material requested by July 15 for the August issue.

Building Committee: Marty, AG3I, reported that the architect has completed preliminary work in preparation for building permit applications. Marty will be working on scheduling a presentation of the work to the B.O.D.

Calendar of Events:
Thanks went out to all participants of the three, count em, three Skyview ARRL Field Day operations. A good time was had by all, and the scores are being totaled.

July 1-7 – Thirteen Colonies, K2M operating from clubhouse, and also at K3LR on July 5.
July 12 – Erie Hamfest
July 12 – ARES picnic at Moraine State Park.
July 15 – Ice Cream Social at the clubhouse.
July 20 – Somerset Hamfest.
August 17 – Warren Hamfest, Courtland, OH.
August 19 – Korn Roast at the clubhouse
August 23 & B24 – Skyview Swap & Shop. Setup on Saturday for good times on Sunday.

Swap & Shop: John, WA3KFS advised that letters will be going out soon with advance tickets for members to purchase. If all members buy these advance tickets, the cost of running the event will be covered. See John for your envelope when you see him at the clubhouse and save us the ever increasing cost of postage.

Old Business: Nothing to report

New Business: Nothing to report.

Weather Night:
July 8 – Lightening. A hot topic- don't miss it!
Steve also advised of some updates from the NWS PIT that while the recent heavy rain is over for a while, there may still be some flooding in areas. The hot weather is still here so stay hydrated and be weather aware.

Elmer Night: July 22, 7PM, Jim Hall, AD4EB mobile state QSO party extraordinaire.

Smoke and Solder: Jack, K3JAS reported that recent activity includes KE3Z building a PDP8 look-alike simulator which uses a Raspberry Pi inside. Jack Looking into more kits and a beginners surface mount project. We will also do some comparisons of some member's Icom IC-705 radios for settings and optimization.

Net Report: 6/5 W3UY at 39. 6/12 KB3YRN at 39. 6?19 KC3PXQ at 40. 6/26 KC3TTK at 30. Average is 37.25 for the month with Cousin Joe the high score.

50/50 Drawing: total collected is $66 with $33 going to winner Steve, K3FAZ. Thanks to Steve for donating the proceeds to the generator fund.

Meeting Adjourned: A motion to adjourn was made by K3JAS and seconded by AC3GB. The motion passed without objection. The meeting was adjourned at 7;59 PM.

Respectfully Submitted,

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

ARRL WAS Card Checker de Linda - W1MP

The ARRL has Volunteer Card Checkers for:

WAC	(Worked All Continents)
DXCC	(DX Century Club
WAS	(Worked All States)
VUCC	(VHF/UHF Century Club)

So, what is an ARRL Card Checker?

When the ARRL 'Logbook of the World' (LOTW) electronic logging program surfaced, it provided automatic cross checking of the individual entries to provide the QSO 'Confirmations' needed for the various ARRL Awards.

But some hams may have physical QSL Cards that preceded the creation of the ARRL 'Logbook of the World' that are needed for an Award. And some hams still prefer to provide physical QSL Cards via snail mail to confirm a contact rather than use LOTW.

The ARRL Card Checking Volunteers can review these physical QSL Cards and send the ARRL a 'Field Check List' that validates those physical QSL Cards. This way you do not have to incur the expense of mailing your QSL Cards to the ARRL and back whenever applying for an ARRL Award.

For more information about the various ARRL WAS (Worked All States) Awards that are available, go to

https://www.arrl.org/was

Linda, W1MP, is an ARRL 'US WAS HF Card Checker'. Who can handle this job for you. Linda will be available at the Skyview Swap & Shop on August 24th to check US WAS HF QSL Cards — ***NOT DXCC QSL Cards***.

Linda can also check QSL cards for all of the various ARRL US Worked All States Awards at other times. Contact Linda at W1MP@ARRL.NET to make arrangements.

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

June 2025

— NONE —

July 2025

— NONE —

de Bill - N3WMC

Radiogram Messaging and Traffic Handling

de Steve - K3FAZ

What? Radiograms you say? Traffic nets?

What purpose could they possibly still serve?

You say they still exist in this day and age?

Absolutely - in spite of modern technologies both still exist and are not dead. Traffic nets are still on the air being conducted daily by those who've made the commitment to keep one of the most foundational core skill sets of amateur radio alive and kicking.

Regularly scheduled traffic nets are still being held on HF and VHF, the Radiogram form has had only a few changes since the beginning so consistency in form and function still remain.

Why is radio message handling still so important? Well, because it still works.

What about cell phones and email? I've heard so many reasons why they are easier and/or better to relay information. Yes, modern technologies have provided some advantages however realistically both can be easily rendered out of service by either weather related or man made service interruptions.

Radiogram messaging has been a valuable service during disasters such as hurricanes, earthquakes, flooding, 9/11 etc. when technology has been compromised. Radiogram messages have been passed from our troops overseas during deployments to loved ones back home. Routine messages are very common and provide excellent practice for when the important needs arise.

Let's take a brief look at where amateur radio messaging began...back in the days prior to The Great War, young radio enthusiasts were busy experimenting with radio from their family home attic or garage, winding coils, building wire aerials, etc. Bit by bit they were able to communicate back and forth using morse code...they continued to experiment, pushing their envelope, learning how to transmit further, contacting other young radio enthusiasts and so on.

Hiram Percy Maxim was one of those operators. He wanted to see what distances could be achieved and devised a message format that required a reply from the receiving operator...as time went on a challenge went out to see how timely a message could be sent across the country with a reply being returned. The challenge was a success (the roots of radio contesting) and the National Traffic System was born.

The National Traffic System (NTS) was well organized with relay stations responsible for sending, relaying and delivering radiogram messages in specified areas across the country.

In the years to come (and improved radio equipment) regularly scheduled traffic nets were established and the movement of message traffic became quite streamlined not only here in the United States but with intercontinental networks as well.

Today, an organized network of local, section and regional nets can pass traffic across the state, across the country or overseas in a matter of a few hours. Traffic nets are held daily and operate in CW, SSB and digital modes ALL BY RADIO.

So, now that we have covered the history of message handling, let's peruse the nuts and bolts of the topic...

WHY - message handling is a core and fundamental skill set of the amateur radio hobby. Messaging is a public service and may be emergency, priority, welfare check or routine in nature.

HOW - message handling can be done in amateur radio CW, SSB, FM and digital modes using the Radiogram format.

WHEN - message traffic can be sent, received and delivered via regularly scheduled daily NTS nets

WHO - messages can be sent to anyone by anyone via licensed amateur radio operator

The Radiogram form is very straight-forward and easy to use, consisting of message and handling information, recipient information and up to a twenty five word message, etc. Very little has changed since the form began to be used.

Now, what about the local traffic nets?

Here's the skinny...

The Western PA Phone Traffic Net (WPAPTN) meets daily at 5:30pm on 3.918khz .

The Pennsylvania CW net meets daily at 7:00pm on 3.585khz .

There has been rekindled interest in a 2m traffic net for the greater Pittsburgh area.

So to summarize...message handling is fundamental, traffic nets are active every day, and we need YOUR PARTICIPATION!

Traffic handlers aren't a bunch of crusty old farts sitting in a dank basement in their underwear. ..traffic handlers are skilled radio operators committed to doing their part to get the message thru.

Learning the traffic handling process isn't all that difficult, the easiest way is to join us on the WPA PTN, check in, listen & copy along. Before too long you'll get the rhythm of the net and things will begin to feel familiar. Feel free to ask any questions during the comment portion of the net, we're very willing to help. Many long lasting friendships have been made by participating in the traffic nets.

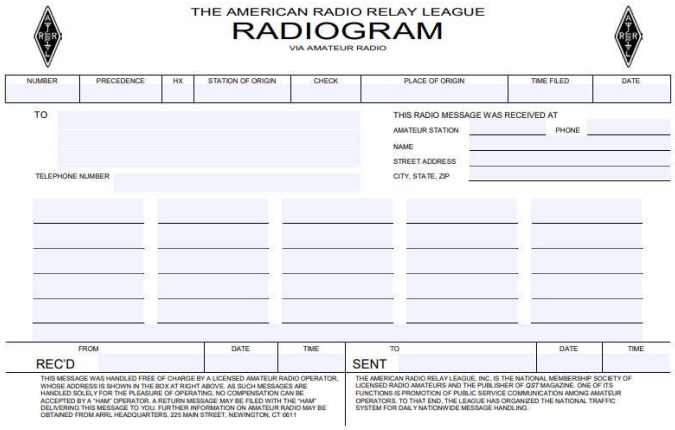
Here are a few links that are helpful in understanding traffic handling:

https://nts2.arrl.org/

https://www.arrl.org/nts

https://www.qs|met/mcarv/What%20is%20the°/o20Nationa|°/)20TraHic%20System.pdf

Here is the good ol' Radiogram form:



THE AMERICAN RADIO RELAY LEAGUE

RADIOGRAM

VIA AMATEUR RADIO

NUMBER	PRECEDENCE	HX	STATION OF ORIGIN	CHECK	PLACE OF ORIGIN	TIME FILED	DATE

TO

TELEPHONE NUMBER

THIS RADIO MESSAGE WAS RECEIVED AT

AMATEUR STATION PHONE

NAME

STREET ADDRESS

CITY, STATE, ZIP

FROM	DATE	TIME	TO	DATE	TIME
REC'D			SENT		

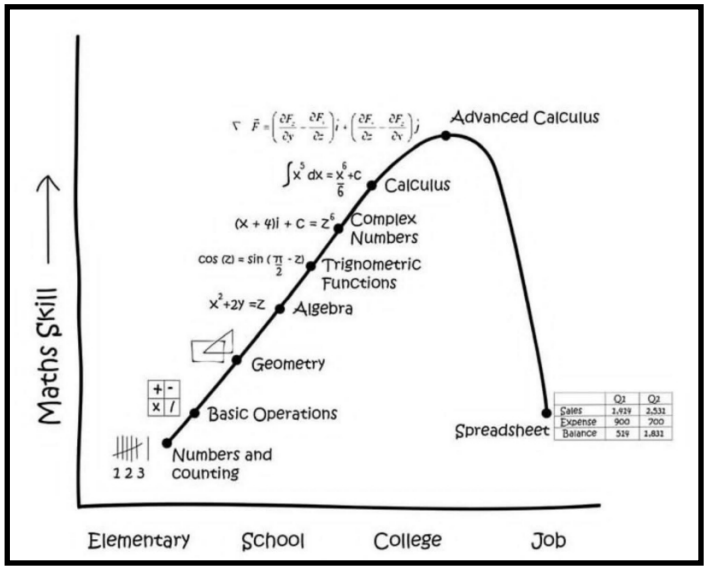
THIS MESSAGE WAS HANDLED FREE OF CHARGE BY A LICENSED AMATEUR RADIO OPERATOR, WHOSE ADDRESS IS SHOWN IN THE BOX AT RIGHT ABOVE. AS SUCH MESSAGES ARE HANDLED SOLELY FOR THE PLEASURE OF OPERATING, NO COMPENSATION CAN BE ACCEPTED BY A "HAM" OPERATOR. A RETURN MESSAGE MAY BE FILED WITH THE "HAM" DELIVERING THIS MESSAGE TO YOU. FURTHER INFORMATION ON AMATEUR RADIO MAY BE OBTAINED FROM ARRL HEADQUARTERS, 225 MAIN STREET, NEWINGTON, CT 0611

THE AMERICAN RADIO RELAY LEAGUE, INC. IS THE NATIONAL MEMBERSHIP SOCIETY OF LICENSED RADIO AMATEURS AND THE PUBLISHER OF QST MAGAZINE. ONE OF ITS FUNCTIONS IS PROMOTION OF PUBLIC SERVICE COMMUNICATION AMONG AMATEUR OPERATORS. TO THAT END, THE LEAGUE HAS ORGANIZED THE NATIONAL TRAFFIC SYSTEM FOR DAILY NATIONWIDE MESSAGE HANDLING.

Well, there you have it... the WPA PTN or PA CW net will be quite happy to have your participation in this valuable service to all. Please feel free to reach out with any questions that you may have.

Thank you for your time to read this article!

Steve Fazekas K3FAZ
WPN PTN net manager
maqyaradio@qmail.com
724-316-6894



Ham Sticks, Damn Sticks

de Wayne - K4WK

Tnx - http://www.hamdom.com/

Ham Sticks, aka hamsticks, are antennas that promise[1] portability, low cost, ease of set up, weight loss[2], and eternal youth[3] so I figured what the heck, and bought a set.

I've been using End Fed wire antennas for years, with good success, but sometimes on a POTA activation there are no cooperative trees nearby. An example of this is on the beach in Florida where palm trees, to a man, lack convenient limbs over which to toss your line, and the pines there are impossibly tall with limbs in the stratosphere. Other examples are the Sahara Desert, with no trees at all, or the Arctic. You can probably think of others.

Since End Feds as I use them are slopers and since I choose to hook the low end to my rig then I need a high point for the other end; like a painter's pole or telescoping tube with guy lines. I've done this quite a few times, with good results, but it is a nuisance to erect. Think about it: you're by yourself, and you have to stake out three (3) guy lines. How quick do you have to be[4] to hammer all three in the ground before your pole tips over?

Hamsticks, commonly being mag mounted on a car or attached to a simple tripod, sound a lot easier to erect. Countless YouTube videos show talented, smart, thin and young hams using their hamsticks in the field with wonderfully low SWRs and working stations all over the country with ease so I thought, "why not me?"

You must remember this, that hamsticks come with the promise[5] of very narrow bandwidth, you must tote your $300 SWR meter with you, somewhat offsetting the "low cost" aspect, but don't worry, you'll find other uses for that, maybe.

And, to use the mag mount system on a car, you'll have to buy a car. Budget $30,000 for this. And when you are car-shopping remember you must be able to reach the roof, so get a small car, or allow an additional $20 for a footstool. The economics are now getting unreasonable, IMHO.

A hamstick is a "compromise" antenna. Compromise, I've learned, is a contraction of "comes with a promise," the promise being that it might barely work under elusive ideal conditions, which I am still seeking.

Take the 40m hamstick for example; in fact, please take mine. I don't mean to get too technical here but, just so you know, in the 40m band the wavelength is, well, forty meters. A minimally functioning vertical would be a quarter (aka, 1/4) wavelength. I don't mean to get too technical here but forty divided by four is approximately ten, so a merely crummy vertical is 10m.

The 40m hamstick length overall[6], and I don't mean to get too technical here, about two meters, or one-fifth (1/5) the length of a crummy vertical. A better vertical would be one half (1/2) wavelength (I'll let you do the math on this one, for practice) or better yet, 5/8 wave (you can probably do this in your head), which is close to 25 meters, or 81 feet. Since eighty-one feet is too tall for the marketing claim of portability, a brilliant but vertically challenged electrical engineer named Tinker invented the hamstick

Originally he named this the Damn Schtick, because he said "I'll be damned if I can make this gimmick work," but the marketing department told him to come up with something better. His XYL suggested "Tinker's Dam(n)" because she didn't give a Tinker's Damn about amateur radio but the front office didn't like that either so they gave it the catchy name it has today.

Imagine if you will, fiddling in the field tuning a 6' rod that has the electrical equivalent of 81 feet of wire wrapped around it. Soon you may find yourself calling this thingie a Damn Stick as you use your $300 SWR meter standing on your $20 footstool reaching up on the roof of your $30,000 car to take the mag mount off to shorten (or wait, is it lengthen?) the whip[7] to get the damn schtick with an SWR in the single digits, put the mag mount back on the roof and check the SWR one more futile time

At least, that's what has happened to me on test runs and some actual, frustrating, deployments. I know, I know, you say it works fine for most folks such as the young and handsome hams on YouTube and for my friend, let's call him "Skip," who can magically tune a hamstick to perfection and yet when I call CQ the SWR jumps up.

Having had no radio luck with hamsticks, and experiencing no weight loss or return to youth, I now agree with Mrs. Tinker and no longer give a Tinker's Dam(n) for hamsticks.

They do sport good looks though, and with their whippiness they might make snappy casting rods; since I have one for a 40m lake and one for a shallower 20m lake maybe I'll try fishing next.

[1] "promise" is the root of the word "compromise" as you'll learn in a minute

[2] to be covered in a later article

[3] to be covered in a much later article

[4] PDQ

[5] "promise" is the root of the word "compromise" as you'll learn in a minute, please be patient

[6] base section is 44" inches and the adjustable whip is, say, 30" more

[7] It is called a "whip" because you'll be whipped getting up and down your footstool

Always Use The Proper Tool

Where is my Signal?

de **Charles Tom Rauch**

De Ham Radio Operators – (Facebook)

De Charles Tom Rauch

There was a post on here about operating frequencies of W1AW and FT4 on 40 meters. That would have been a great learning tool critical for operating but it was removed. It is a shame posts that can be very educational to many are removed.

We had local Georgia hams get in a long fight with Florida stations on 75 meters at least partly because stations (even the "extra class") did not understand where signals actually are. They didn't understand that the dial reading on the radio is often (almost always) not where the real signal is located.

The dial reading is just the dial reading, it is not very often where the signal actually is. In the example case of FT4 and CW from W1AW the signals were several hundreds or more Hertz apart (on totally different occupied channels) without overlap even though the dial frequencies were the same at 7.0475 MHz. With a clean modern normal radio free of operator or radio defects and proper filter selection:

CW occupies the exact dial frequency plus and minus perhaps 50 Hz or so for the sidebands. The sidebands occur because of the varying amplitude of the rise and fall of the envelope. The sidebands (CW is really 100% modulated off-on AM) only appear when the level is changing, so the shape of the envelope rise and fall controls the bandwidth occupied. The receiver with a proper filter should match the transmitter, otherwise we waste spectrum.

SSB normally occupies 300 Hz to 3000 Hz up (upper sideband) or down (lower sideband mode) from the dial frequency. If I dial 3700 kHz and talk LSB on a normal radio the vast majority of my signal power will fall from 3699.7 kHz down to 3697 kHz. Some undesired stuff will fall outside that range. The receiver should match the transmitter or we waste bandwidth.

If I am on SSB and my dial says some frequency, I am actually transmitting and receiving either above or below that dial setting by the audio bandwidth of the signal. Since this includes the receiver the actual channel spacing on dials should be a full 3 kHz or more to allow for signal defects. The next guy up or down, if of significant signal, has to be at least 3 kHz up or down. More if a radio system is crappy or someone is on ESSB or has the wrong filters picked.

W1AW even at 1500W has plenty of separation from FT4 when the dials are both on 7047.5 kHz because FT4 is moving around inside a normal USB channel bandwidth of 7047.8 to 7050 depending on tone selected and W1AW is exactly on the dial frequency of 7047.5 being an off-on keyed AM carrier.

SSB voice transmitted power is never on the exact dial setting but is spread up or down depending on the transmitter quality and bandwidth settings. Not knowing this is what got the locals in a long fight.

The dial reading is NOT often where the signal actually is occupying space. What you hear or see on the receiver can also be misleading. This is why the FCC will not allow ARRL volunteer enforcement people to report bandwidth or frequency infractions. Like it or not, we have dumbed down understanding how radios actually work and it causes occasional problems and misunderstandings.

***ED** - Not mentioned here is the CW Offset when using modern transceivers. Nowadays, even small CW-Only transceivers mimic the SSB transceivers that also send CW. The Lower Sideband is suppressed—most of the CW signal is on the Upper Sideband. When you switch from USB to CW, the dial on your transceiver typically displays a higher frequency, determined by the value of your CW Offset. You are still transmitting at the same frequency, it is just your receiver that is now displaying a higher frequency. Confusing? You bet it is. That is why the RBN will typically show that you signal is lower in frequency than your dial says. Be very careful when operating near your lower band limit.*

Uniontown Amateur Radio Club

75th Annual Gabfest

Saturday, August 9, 2025

The Uniontown Amateur Radio Club – W3PIE will conduct our
75th' Annual GABFEST
Saturday, August 9th, 2025!

The gates open around 8:00 AM with vendors welcome at any time prior to 8:00 AM! Please check our web site www.w3pie.org for updates.

The Gabfest will be held at the Radio Club Grounds located on Old Pittsburgh Road just off Northgate Highway/RT 43 Mon Fayette Expressway— near RT 51 and US RT 119 in Uniontown, PA.

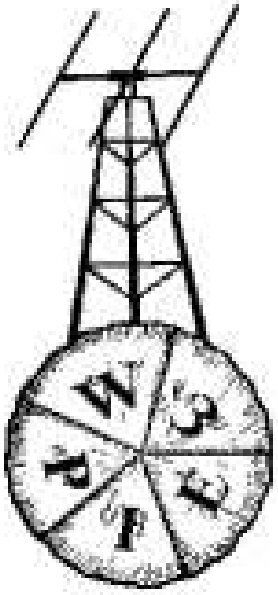
Talk in will be provided on 147.045 + (Full Time PL 131.8) Just call for W3PIE Gabfest Talk-in. This talk-in is provided for directions and Gabfest information. No check in is needed if you know how to get here!

As always, free parking is available! Refreshments available! Free Swap-N-Shop Set-up with registration! Check our web site prior to the event for updates.

Same Location, Same Free Parking, Same Great Food, New Presentations, More Fun – and always a good time and conversation with area hams

Hamfest Prizes for our event
Radioddity DB-25D VHF/UHF DMR Mobile Transceiver
Yaesu FTM-6000 VHF/UHF FM Mobile Transceiver
Yaesu FTM-6000 VHF/UHF FM Mobile Transceiver
Yaesu FT-70DR VHF/UHF System Fusion Portable Transceiver

Address of UARC-W3PIE is 433 Old Pittsburgh Rd, Uniontown, PA



Contact Tony Alviar 724-430-1277 (M-F 8-4) or George Syner 724-439-1554 (leave message if no answer) if more information is needed. Also, information is available anytime on 147.045 + (Full Time PL 131.8). Additionally - email officers@w3pie.org for information

Look forward to seeing everyone this year!

POTA PERformer Build

Dan - NM3A

A few weeks ago, Greg, KJ6ER, gave a Zoom talk at Skyview on his antenna designs. One of them, the **P**(ortable)**E**(levated)**R**(esonant)**former** got a 2nd place award from QST in 2024, as a significant contribution to antenna design in a contest.

https://drive.google.com/file/d/1LwSbXXeovjJdT8ijpOi-9FYR--nNsxgD/view

https://drive.google.com/file/d/1MxEQ0CfcLBhZ-TKTMg2xiMZeGdjsKnBN/view

I missed his talk, but I have heard good things about it, so I decided to build one for myself.

As many of you know, I rarely buy antennas for portable use. I usually build them; partly for the fun and satisfaction of building, partly to save money, although I could certainly afford to buy them, partly to get it NOW, rather than waiting for the delivery truck, and partly to minimize new waste. I have plenty of wire and various other items in my 'junque' box, so it often is pretty easy to put things together. I rarely buy much to build my antennas, and often what I buy is used stuff at hamfests.

I have a number of antennas for portable use. My main one is an 84' EFRW with a 17' counterpoise. It is deployed as an inverted V in a tree at about 25-30 feet and fed with a 9:1 unun and a tuner. Its advantages are: speed of deployment, speed of band changes, light weight, omni-directionality and good efficiency. That said, it has a fairly high takeoff angle and is good for NVIS to medium skip distances, but not so much for DX. For POTA and SOTA, it is an excellent antenna in most cases.

But there are times when it just isn't practical. In the western part of the United States, there are often few trees to throw an antenna into. Some parks restrict what you can do and frown on wires in trees or stakes in the ground. Some parks have too small a footprint to put up a large, long antenna. Some parks have a lot of foot traffic and you don't want to get in visitors' way. And some times, you really want DX contacts and need a low takeoff angle to maximize long skips. Sometimes I have a long hike to the activating area and I need the antenna to be as lightweight and compact as possible. So I have different antennas for each of these requirements. And sometimes I just like to experiment with something new.

Vertical antennas are nice when there are no natural supports available. Unfortunately, radials on the ground do not make for a very efficient antenna unless you have an awful lot of long ones (or you are in a saltwater marsh). A minimum of 16 at a quarter wavelength of your lowest band is needed to get moderate efficiency over most ground. Sixty gets you to very good efficiency and 120 is needed for excellent efficiency. That's a lot of wire, a lot of weight, and a lot of time to deploy and pack up.

Elevated radials make for a much more efficient antenna, and you need far less of them; just one makes a reasonably efficient antenna. Downside is that they need to be tuned for each band. Vertical whips need to be adjusted for each band as well. Greg has come up with a way to make this relatively easy to do in a relatively small package.

For portable use, many use a collapsible whip antenna with or without a base loading coil. This makes it easy to adjust the vertical radiator to a 1/4 electrical wavelength. As noted before, ground mounted radials often lead to an inefficient radiator, especially over low conductivity soil or rock. A simple thing to do is to elevate the radials. With (an) elevated radial(s), even just a single radial often improves efficiency dramatically over most terrain, while multiple ones can give directivity and some gain. The catch is that a tuned radial is needed for each band you wish to use.

Greg solved this problem by using two radials (a single can also be used) with links for each band. Greg uses female to male spade connectors as the link with a short non-conductive segment to isolate your chosen band. This allows for a constant physical length radial with no need to move its support each time a band change is effected.

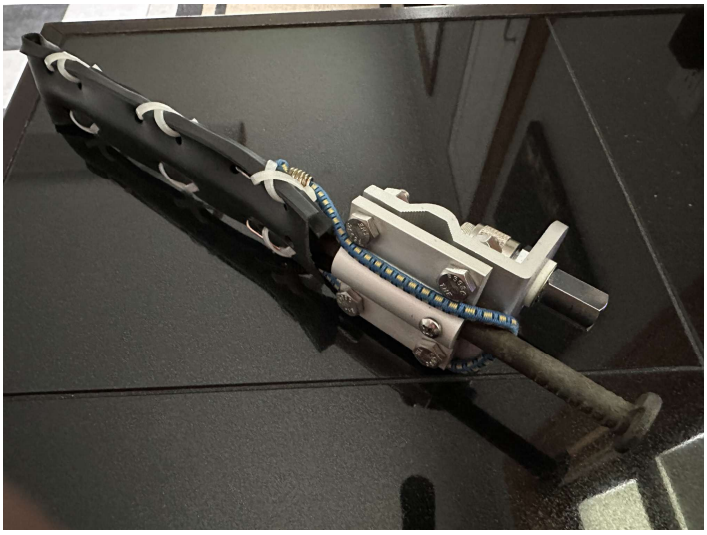
I won't go over details about radial and whip lengths, as they are in Greg's articles cited above, but here are the modifications I made for my version.

1. I used an old patio umbrella stay for the support tube. I cut off the head of a 12 inch nail spike and secured it in the stay for a ground spike. I cut three cords with loops on each end to use as guys.

Small tent stakes are used to secure the guys in the ground.

2. Grounding the support of the antenna makes no difference to matching for the longer wavelengths, but ground isolation is suggested as it may interfere with the shorter wavelength bands. A short length of half inch PEX tubing was secured to the top of the stay to isolate the antenna base from ground.

3. A mirror mount with a 3/8"-24tpi socket is permanently mounted to a 12" nail spike.



This is used to support a collapsible 17' whip for a ground mount vertical, but it also fits into the PEX on the stay of the PERformer support tube. The top of the spike is used to hold the guy loops.

4. Greg uses female to male spade connectors for his radial interconnections. I used short PVC pieces with an alligator clip.

This was a suggestion from, Dave, KZ9V. One, I had them on hand, and, two, I find them quicker to connect/disconnect. Small switches, banana plug/sockets, or bullet connectors with the PVC pieces could be used as well.

5. Greg suggests PVC driveway markers to hold up the end of the radials. I found that to be too difficult in dry, shale soil, so I purchased a plastic fence post with a steel spike in the bottom.

A 2x4 (4x4, 6x6, etc.) with a driveway marker in a hole or a string attached to a nearby tree would work as well.

As Greg mentions, a choke at the base of the antenna is necessary to avoid having the feedline become part of the antenna. In addition, various feedline lengths can make it difficult to get a match on some bands. As I only do QRP on portable outings, I used a homemade 1:1 choke on a small ferrite toroid. The antenna can easily handle much higher power levels, so a larger choke may be used. Coiled coax can help as well, but that is usually not good for more than 1 or two bands.

Two radials spaced 90 degrees apart give the antenna some gain, directivity, and increases efficiency. I opted to only use one radial to simplify setup. If you want omni-directionality, you can symmetrically arrange two or more radials around the base of the antenna. Using one or asymmetric radials also gives more NVIS radiation which may be useful for POTA.

Advantages of the POTA PERformer:

- efficient
- relatively easy to set up
- relatively lightweight
- resonant: no tuner required
- low angle of radiation; good for dx
- fairly small footprint
- easy to homebrew, although it is available on Etsy premade

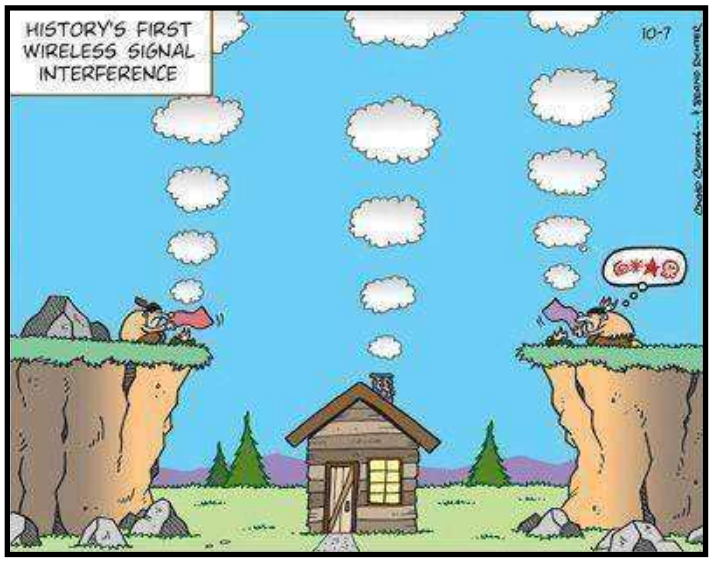
Disadvantages of the POTA PERformer:

- need to change radial connections and whip length for any band change
- potential hazard for other park users as the radial(s) are low to the ground
- shock/burn hazard with high power
- may be difficult to see, so trip hazard
- relatively cumbersome to carry a long distance from vehicle, so not good for sites requiring a hike, such as SOTA
- minimal NVIS radiation, so not as good for short skip

As with any antenna, it has its advantages and disadvantages and so may be the perfect antenna for some and not as good a fit for others. It is a nice addition to my armamentarium of portable antennas and it is easy to homebrew. My first choice remains my 84' EFRW/17' counterpoise, but this is a nice option in specific situations.

Overall, I like the idea of an easy to set up, efficient antenna. It makes for a nice addition to other easily deployable antennas for POTA and other portable activations.

de Dan - N2MA



Welcome New Members !!

Welcome the following Skyview Radio Society Members who have joined us since publishing the June2025 newsletter:

WB6CQA – Chris Grill - Monroeville

AA3TZ - Tom Zajdel - Pittsburgh 15289

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 JUL 25

NM3A	KC3GZW	KB3NSH	KC3TTK
K3AEB	NY9H	AJ3O	AA3TZ
KD3AET	WB3HFP	WC3O	AG3U
N3AFS	WA3HGW	WO3O	NS3U
KD3ANT	KB3HPC	KC3OCA	WU3U
KB3APD	K3HSE	KC3OCB	KB3UIO
KD3AQP	AK4HZ	KC3OCC	N3UIW
NA0B	AG3I	K3OGN	KC3UNP
N3BAH	AC3IE	N3OIF	W3UY
W3BRL	KE3IF	KB3OMB	KX3V
W3BUW	KC3IIO	K4PDF	KC3VCX
KF3C	AB3IK	KC3PIM	KC3VNB
KA3CBA	WB3INB	K2PMD	K3VRU
KC3CBQ	W3IU	KE3PO	KC3VYK
W3CDW	K3JAS	W3PRL	W3VYK
K2CI	WB3JHC	KC3PSQ	N3WAV
K3CLT	N3JLR	KC3PXQ	W3WC
WB6CQA	KA3JOU	AC3Q	KC3WCJ
K3CWE	ND9JR	NU3Q	K3WM
N5DB	K3JZD	KC3QAA	N3WMC
K3DCG	WA3KFS	N3QZU	N3WMI
N3DL	AC3KI	NJ3R	KA3WVU
N3DRB	AC0KK	K3RAW	K3WWP
KB3DVD	K3KR	K3RMB	N3XF
KC2EGL	KC3KXZ	W3RRK	W3XOX
KC3EJC	WE3L	I2RTF	KC3YEZ
AB3ER	WA3LCY	KI2RTF	N3YJN
WA3ERT	AC3LD	K3RWN	KC3YMC
N3ERW	KC3LHW	KQ3S	W3YNI
K3ES	WB3LJQ	K3SBE	KB3YRU
KG3F	WB5LLI	WA3SCM	W3YS
WB3FAE	K3LR	KC3SDJ	KB3YT
K3FAZ	KC3LRT	KC3SNZ	KB3YYC
KC3FEI	AB3LS	KB3SOU	KE3Z
K3FH	N2MA	K3STL	K3ZAU
K3FKI	KC3MBM	KC3STV	KB3ZFC
KC3FWD	N3MHZ	KB3SVJ	KC3ZIM
AC3GB	KC3MIQ	W3SW	KC3ZOH
N2GBR	K3MJ	KC3TEX	W3ZVX
AC3GE	W1MP	WV8TG	
K3GIR	K3MRN	N3TIN	
KB3GKX	N3MRU	N3TIR	
KC3GPM	KS3N	W3TLN	
K3GT	AC3NA	KK3TM	
AB3GY	G4NFS	N3TTE	

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 . . . . .

Battery technology continues to evolve.
Small one like this have a way of growing into larger ones that will do more.

https://tinyurl.com/bdd4xu5y

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 October 1, 2025
Closing Date For Submissions : Sept 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
http://www.skyviewradio.net/ve-tests/

Please E-Mail or call to register!!!
– NO WALK INS—MUST REGISTER –

Q5er Editor & Publisher: Jody Nelis - K3JZD

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

That's Easy . . . .

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

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

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

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

Is this how your dining room looks ??

Send in pictures of your Ham Shack