February 2026

Mount Vernon Amateur Radio Club

CQ CQ CQ

Inside this Issue:

MVARC ARES Sunday Night Net

Mount Vernon 146.790 repeater

Check-in starts at 9:00 pm

Unable to access the repeater from where you are?

We are on IRLP (EchoLink) K8EEN-R Node 809800

2026 Membership

Club dues run from January 1 to December 31. Regular membership dues are $20.00 or $15.00 for those over 65 years of age, additional members in the same family, or people who do not hold an active FCC amateur radio license.

Mount Vernon Amateur Radio Club
812 Coshocton Avenue
PMB #145
Mount Vernon, Ohio 43050

Name: _____ Call Sign: _____

Street or PO Box: _____

City: _____ State: _____ Zip: _____

Phone: _____ License Class: _____

Email Address: _____

ARRL Member (Y/N): _____

Quotes to ponder about being involved.

"Never doubt that a small group of thoughtful, committed citizens can change the world: indeed it's the only thing that ever has." Margaret Mead

"Volunteers don't get paid, not because they're worthless, but because they're priceless." Sherry Anderson

Presidents View

Roger, KE8ICI

Greetings All!

As most of you already know we had our Winter Field Day the weekend of January 24 and 25 at my QTH. The weather report was saying that a huge winter storm was fast approaching from the south and meeting a cold air mass coming down from the north and that I wasn't sure whether we were going to be able to even have the event, but it held off until late Saturday night. The US weather Bureau got this one correct. I think that Sunday afternoon I measured about 12 inches outside my barn and the temperatures down to below zero with some strong winds made conditions outside downright unbearable.

Getting everything set up for the event did not go very well to start off with, both of my automobiles decided to fail at the same time, the Honda Odyssey's driver's side door would not latch after it closed and as I would drive down the road it would open up and give me a continuous alarm that the door was not latched and slightly open up and rain and weather would blow in and make a mess. I called Mansfield Motor Group and tried to make an appointment but the soonest they could get it in was like five weeks away so that was not going to work for me so ordered the parts and repaired the latch myself, a job that according to some You Tube videos I had watched was little complicated but manageable; well don't believe everything you see on You Tube, it was a real challenge to get the old latch out and install the replacement. After many expletives, the latch was working and now finally, I could get back to preparing for Field Day, so I thought.

I park my GMC Yukon in the barn because it gets a little tight in the garage at the house, so it just works out better in the barn. I came out to the barn in the morning to continue preparing for field day and when I would open the door into the barn there was strong order of gasoline in the building. I had a couple of gas cans stored in the building and so I moved the cans outside thinking that they were the problem, nope wrong. I started up the Yukon to move it outside for more room to work and that's when I saw the puddle of gas underneath it; yep, you guessed it, the in-tank gas pump was spraying gas out of the two steel lines coming off the top of the pump. They both had rusted through and were leaking and the pump had to be replaced so another week and a half to complete this project, now back to field day preparations.

Well not so fast, I had a doctor's appointment on Tuesday the 13 of January with my urologist for a regular checkup that I have had since I was treated for prostate cancer back in 2010. I mentioned that I was experiencing some issues, and he said that he would schedule me for some outpatient surgery sometimes towards the end of January; I thought great that will get me through Field Day activities, and I had nothing going on after that other than keeping warm and the regular club meetings. Thursday afternoon his surgery nurse called and said I am scheduled for surgery Friday the 16th at 2:00 o'clock at St. Ann's in Columbus. Great just what I needed more interruptions; well, I survived the surgery and finally finished up with most of the preparations that I wanted to complete for field day and now all we had to deal with was the weather.

I added a Rohn H50 43.9 ft. telescoping mast to the north end of the barn with a HF Kits 80 meter end fed antenna going from the barn to a tree out in the yard hoping that the distance from my 43 ft vertical antenna (DX Engineering MBVE-5A Series SAF-T-Tilt) would help with interference between Don's (W8PEN) station for CW and the clubs go box for phone contacts that we had experienced from last year. Don started

on 40-meters, and everything was working well at his station, and he had made I think over 100 contacts in the first couple of hours.

The other station was not working so well on the vertical antenna; the bands were very noisy on 20 and 15 meters you could not hear anything but noise. We tried several things to see if it was something in the building but turning off different items made no appreciable difference, so I moved the coax over to a different antenna at the house and that was no help either, so we figured it had to be the atmosphere causing the noise. Later in the day the noise level started dropping and the bands opened, and we were up and running. We were down to 5 people at about 11:00 pm and the snow was just starting to come down, and we decided to call it a day; everyone left for home. We had 12 visitors overall and according to Don's estimate we had made 586 contacts on Saturday, and I made an additional 38 on Sunday.

Despite all the interruptions getting the barn set up and the gloomy weather forecasts we had a great time; my lovely wife provided us with a delicious lunch and beverages and hopefully we can do it all again next year.

The February meeting is coming up on the 14 at 10:00 o'clock and maybe the weather will improve, and we can have a great turnout. In the meantime, stay safe and warm and remember to Ham it Up.

73

Training Class Schedule

G. Michael, KE8HGE

Sessions meet weekly on Tuesday evenings, starting at 6:30 pm.

Study Session Schedule, 2026

Session 1 - Technician	Session 2 - General	Session 3 - Technician
2/24 – 4/14	6/30 – 8/18	10/27 – 12/15
Testing 4/15	**Testing** 8/19	**Testing** 12/26

Meeting Minutes

Darlene, WS8W

Call to Order

The January 2026 meeting of the Mount Vernon Amateur Radio Club was called to order by President Roger, KE8ICI at 10:00 AM. There were 17 members and one visitor in attendance.

Minutes of the Last Meeting

The minutes of the previous meeting were approved as presented in the Club Newsletter without objection.

Treasurers Report

Terry, KI8N provided an account of the current balance of all bank accounts including deposits and expenditures of all bank accounts through December 31, 2025. There were no additions or corrections, and the report was approved as presented. Motion by Scott, N8SY and Frank, KC8EVS.

Committee Reports

- **Amateur Radio Emergency Service (ARES)**

  Tony, KE8OE reported on several ARES topics:

  - There is a new ARES Director. New and better training is being developed, and they are committing to more communication and a better newsletter.
  - Knox County Amateur Radio Emergency Service (KCARES) mass communication test participation numbers are dropping. Tony is not sure why. KCARES needs more participation, however if there are members that are no longer interested in participating, please let Tony know.
  - If anyone is interested in learning how to use WINLINK, please get in touch with Tony. He encourages usage and becoming familiar with WINLINK.

- **American Radio Relay League (ARRL)**

  Scott, N8SY reported on several ARRL topics:

  - The Emergency Management Agency (EMA) wants to shift ARES control and go to Community Emergency Response Team (CERT). EMA has more control over CERT. However, CERT does not have good communication capabilities, which is where ARES can help. Scott suggest ARES members get involved in CERT.
  - National Incident Management System (NIMS) courses are offered as both online and classroom and they are accredited.
  - ARRL had a board meeting this week. Bylaw 18, which effects elections is changing. This will change how Section Managers, currently 71 in the county, are elected. There will now be an election once a year to accommodate electronic voting.
  - Scott encourages ARRL membership and listed many of the benefits. If a person signs up for ARRL the first time *through MVARC*, the club will be reimbursed $20.00 and if renewing ARRL membership *through the club*, MVARC will be reimbursed $5.00.

- The Homeowner Association (HOA) legislation is part of the 911 Enhancement bill and is proceeding though the various committees. This bill will expire at the end of the year if not passed, it is questionable that ARRL will pursue it again. ARRL currently offers two books on stealth antennas and there is another one about to be released.
- There is a Knox County CERT group, but there is no real coordination. CERT is considering combining counties because of the lack of participation. CERT uses GMRS and MARCS radios which are not always reliable.

- **Repeater**

  Roger, KE8ICI reported on several ARES topics:

  - The power distribution block is installed, and the battery backup is working and switches power seamlessly.
  - Roger will hook up the amplifier when weather permits.
  - Roger proposed to the directors' purchasing duplexers off eBay at an approximate cost of $500-$600 and that the club sells the Yaesu machine for approximately $300-$400. Motion to go forward by Scott, N8SY and Don W8PEN. Club vote Passed.

- **EchoLink**

  Don, W8PEN reported that he plans to move the EchoLink system from his house back to the club, maybe next weekend.

- **Directors**

  Frank, KC8EVS indicated that there is nothing to report from the directors this month.

Old Business

New Business

- Terry, KI8N mentioned that 2026 is ARRL Year of the Club which includes a club newsletter contest, club website contest, club photo submission and a Year-Long Worked-All-States Operating Event. See ARRL website for more information on these.
- Frank, KC8EVS received an email from the caretaker of the club building, and he asked for the door to remain locked after business hours. This would mean that the doors would be locked during club meetings. Don, W8PEN mentioned that he did not think it was legal to do so without a way to exit the building in an emergency. Everyone present seemed to agree. Frank is going to communicate that back to the caretaker.
- Frank, KC8EVS proposed that we now vote to donate to Apple Valley Property Owners Association after Field Day 2026. He will contact them this week regarding using the same location as we have in past years. Motion by Roger, KE8ICI and Scott, N8SY. Accepted.

  A donation to the club building management was also mentioned, but no motion was made.
- Terry, KI8N was contacted by Luke Brian with *hearham.com* who asked if he could list MVARC repeaters on his website. Terry will research the site and asked, if site is valid, are there any objections to listing the repeaters. No objections were expressed.
- Everyone agrees that December and January MVARC Newsletters were outstanding.

Future Club Events

- Roger, KE8ICI would like to do more club Parks On The Air (POTA) events this year. Kokosing Lake State Wildlife Area (US-9472) was suggested as a possible location.
- Winter Field Day 2026 will be at Roger's house again. He and his wife are providing Shredded Chicken, Baked beans, blueberry muffins, etc. However, others are welcome to contribute.
- Don, W8PN and Frank KC8EVS will host an open house at the club March 7th and 8th to co-inside with the ARRL DX contest.

Terry, KI8N and Frank, KC8EVS both brought copies of the Knox Weekly News that featured an article on MVARC.

The raffle for the Using the Baofeng Radio book was won by Don Bunner, KB8QPO.

Meeting adjourned, motion by Roger, KE8ICI and Scott, N8SY.

Present at the January Club Meeting

Tom, KD8HSA	Emery, W8TW	George, KE8HGE	Don, KB8WHQ
Bill, KD8QPO	Dan, ND8J	Darlene, WS8W	Don, W8PEN
Bill, KE8ZIG	Les, WA1LES	Frank, KC8EVS	Tony, KE8OOE
Terry, KI8N	Ralph, KC8REB	Evan, KF8APC	Rick Shoemaker
Nathan, KE0RYO	Roger, KE8ICI		

ARES

Tony, KE8OOE – Knox County EC

Zello: A Critical Communication Tool for Emergency Preparedness

Reliable communication is one of the most important elements of emergency preparedness. During severe weather, power outages, large-scale incidents, or network congestion, traditional communication methods such as phone calls and text messages can become slow or unreliable. Zello offers a practical solution for real-time voice coordination during emergencies.

Zello is a push-to-talk (PTT) communication platform that turns smartphones, tablets, and computers into digital walkie-talkies. With the press of a button, users can instantly transmit voice messages to individuals or groups, enabling rapid situational updates and coordinated response.

How Zello Supports Emergency Operations

Unlike conventional two-way radios that are limited by range, Zello operates over Wi-Fi and cellular data networks, allowing communication across neighborhoods, cities, or regions when internet access is available. This makes it especially useful for distributed response teams and volunteer networks.

Zello supports:

- Private channels for emergency teams and coordinators
- Public channels for community-wide monitoring and information sharing
- One-to-one communication for direct coordination

Messages are delivered in near real time and can be replayed, ensuring critical information is not missed.

Key Features for Public Safety Use

Zello includes several features that align well with emergency response needs:

- Low-latency voice transmission for immediate communication
- Channel-based organization for incident-specific coordination
- Voice message history and playback
- Text messaging for silent or supplemental communication
- Location sharing to improve situational awareness
- Hands-free operation using Bluetooth headsets or vehicle accessories
- Cross-platform compatibility across mobile and desktop devices

The application is designed to function effectively even under network strain, making it a dependable option during high-demand events.

Common Emergency and Preparedness Use Cases

Zello is widely used by:

- Emergency management teams
- Storm spotters and weather monitoring groups
- Search and rescue volunteers
- Neighborhood watch organizations
- Faith-based and nonprofit response teams
- Event safety and crowd management staff

Because the interface is simple and intuitive, new users can be trained quickly—an important advantage during urgent situations.

Planning and Readiness

Zello can be installed and configured before an emergency occurs, allowing teams to establish channels, assign roles, and conduct communication drills in advance. The free version is suitable for community and volunteer use, while Zello for Work offers additional administrative controls, moderation tools, and reliability features for organizations with more complex needs.

Conclusion

Clear, immediate communication saves time—and in emergencies, it can save lives. By combining the simplicity of traditional walkie-talkies with the reach of modern data networks, Zello provides a flexible and cost-effective communication option for emergency preparedness and public safety operations.

Communities that plan and adopt reliable communication tools like Zello are better positioned to respond quickly, coordinate effectively, and recover more efficiently when emergencies occur. The Knox County Zello Channel is KxCARES. Load the app on your Android or iPhone and send me a request, join the free side. It wants you to join the paid version just back out and reenter to get to the free version.

Radio Activity

Don, W8PEN

EchoLink

The EchoLink station has been a real challenge this past month. But I think it is all for the better.

I mentioned last month that I wanted to try moving the EchoLink station to the club house again. The first attempt was highly unsuccessful, and the station ended up back at my house where it has been stable.

The main advantage of putting the station at the club was that the club is so much closer to the 2-meter repeater guaranteeing good signals between the two. At my house, the EchoLink was in the basement, including the antenna! At times, especially during band openings, the EchoLink signal from my house to the repeater left a lot to be desired.

Since moving the station to the club house, the signal has been solid.

One disadvantage to having the EchoLink station in the club room is that if something goes wrong, I must make a trip to the club room. Not really an issue on weekdays during business hours, but I would have to contact a club member with a key to the building if it were weekends or nights.

I have partially compensated for this disadvantage by setting up the EchoLink computer so it can be remotely accessed. After some experimenting, I have confidence that I can fix some, if not all computer issues remotely. I can even reboot the computer remotely and still have control remotely once the computer has rebooted.

I learned a little from my first experience with running the EchoLink from the club room. Probably the largest drawback was trying to get EchoLink through some closed ports. At home, that wasn't a problem, I could open the required ports on my router, and everything worked as it should.

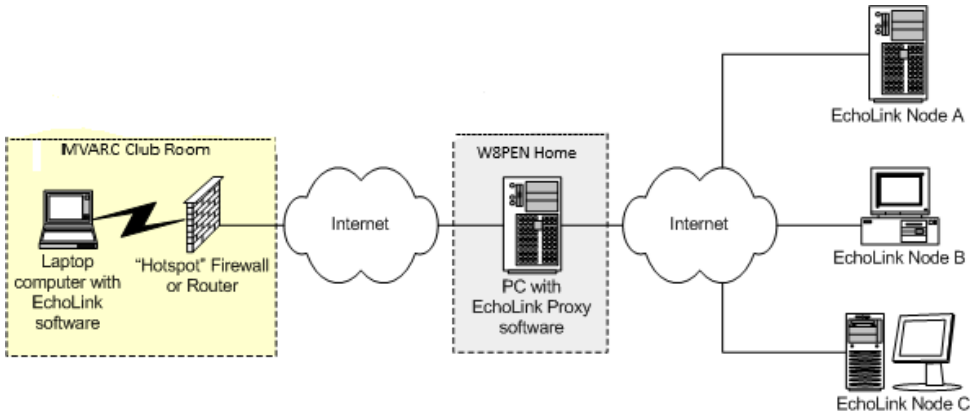
At the club room, however, we are relying on the WIFI system that the main occupants of the building have set up. Which is Knox County Head Start. We have permission to log in as guests. I can't "hack" into their router and open ports. First, I am not much of a hacker. Second, it just wouldn't be nice.

So, I was relying on using a VPN (Virtual Private Network), which I had subscribed to a few years ago. I paid a little extra to be able to open the ports needed to run EchoLink. This worked okay for a while. But in the end, it was not as stable as it needed to be, and I gave up on it and returned the EchoLink station to my home.

I did some research on how to bypass the ports needed to support EchoLink and it appears the only option is to direct the EchoLink computer to an EchoLink Proxy computer. In this case, the EchoLink computer does not need any ports open to work correctly. However, the Proxy computer does require the proper ports to be open.

It was easy enough to set up an EchoLink Proxy computer at my house. I already had the ports open and merely had to direct things to the correct computer via the local IP address.

Of course, I had to add yet another computer to the EchoLink system. Luckily, I had one spare computer that was stuck on the desk not being used.



The above figure taken from the EchoLink Webpage, Modified with actual locations

Of course, you like to test this kind of thing out before moving things to another location. Well, while setting this new system up at home hoping to run it for a week before moving things to the club room, the EchoLink computer decided to throw a wrench into things. It crashed!

I could reboot this computer, and it would work for about 15 minutes, then crash again! Well, it was about 15 years old.

I replaced the old EchoLink computer with the one I had just donated to the club last month. I had really planned on using that computer as the logging computer for the club's CW station I was trying to set up.

I had no options though. I was out of computers and EchoLink was a priority.

Setting up EchoLink on this newer computer was straight forward and EchoLink was back up in no time.

Setting up the Proxy and EchoLink station at home was easy enough and I let it play for a couple of days. No issues.

So, I took the EchoLink station back to the club room. It took about half an hour to set up. After some initial issues with setting the audio levels, everything is working fine.

EchoLink station is in the club room. The EchoLink Proxy is at my house.

Everything is looking good.

MVARC Calendar / Events

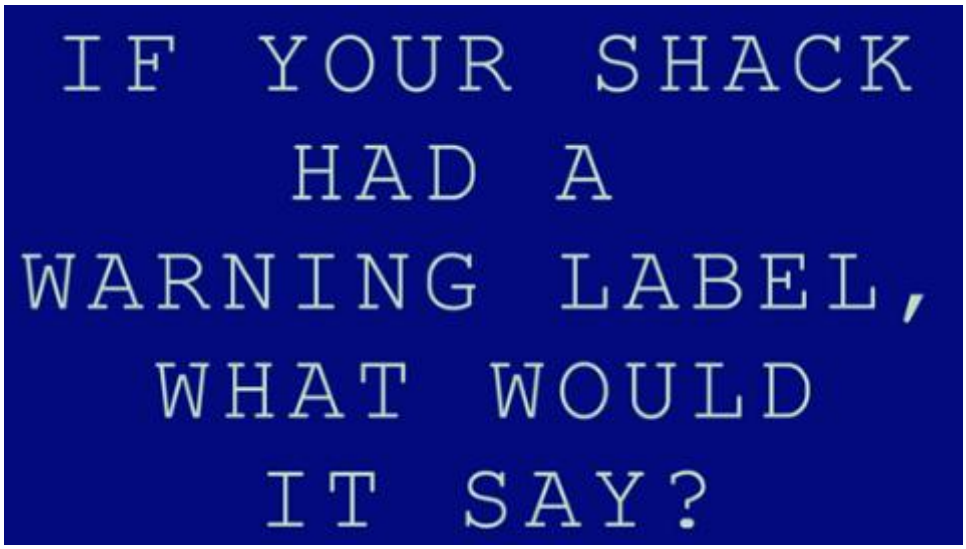
WEEKLY EVENTS

Sunday: 9:00 PM ARES Sunday Night Net
Wednesday: 4:45 PM — Dinner at Southside Restaurant
Friday: 9:00 AM Breakfast—McDonalds on Newark Rd.

ARRL Sanctioned Hamfests

https://arrl-ohio.org/hamfests/


MVARC
JANUARY
MEETING
DATE
SATURDAY
14 FEBRURY, 2026
TIME
10:00 AM
790 FAIRGROUNDS RD.
Third Floor - Enter from back of building


IF YOUR SHACK
HAD A
WARNING LABEL,
WHAT WOULD
IT SAY?

Winter Field Day 2026 Results

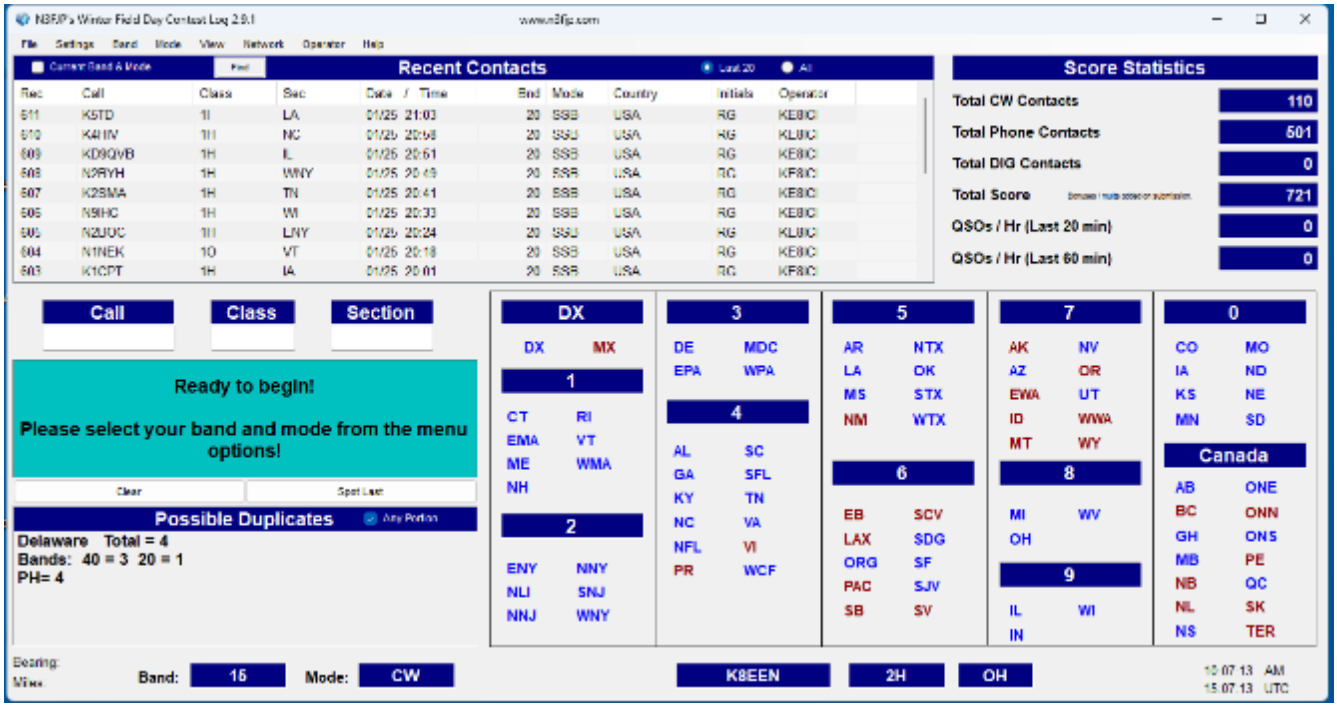
Don, W8PEN

This year's Winter Field Day was a fun, but shortened event. Due to the Winter Storm forecast, our group decided to operate Saturday night ending around 10:00PM. No plans to return Sunday, however, Roger, KE8ICI did some operating Sunday to boost our score a bit. Of course, the event was held at Roger's QTH, so he was right there.

Even though we shortened the event, it proved to be well attended and fun. The bands were hopping! If it wasn't five degrees out, I would have thought it was ARRL Field Day in June.

One thing I really liked about this event was that our operators were calling CQ and holding a frequency. This is something, as an experienced contester, that I have been preaching for years. Don't just tune and work stations call CQ. Let stations come to you by being the one calling CQ.

As you can see from the summary below, the group made 460 contacts while running a frequency for 6.6 hours. While Search and Pouncing, the group made 151 contacts in 6.3 hours or so. Big difference. If we can do this during ARRL summer Field Day, we would end up with a very good score.



"The scarcest resource is not oil, metals, clean air, capital, labor, or technology. It is our willingness to listen to each other and learn from each other and to seek the truth rather than seek to be right." Donella Meadows

K8EEN'sContest Summary Report for WFD					
Total Contacts = 611			Total Points = 3605		
Total Contacts by Band and Mode					
Band	CW	Phone	Digital	Total	%
80	0	4	0	4	1
40	79	361	0	440	72
20	31	117	0	148	24
15	0	19	0	19	3

Total QSOs Running = 460
Total QSOs Search and Pounce = 151

Total Operation Time = 12:52:19

Total Contacts by Operator		
Operator	Total	%
W8PEN, Don	196	32
KE0RYO, Nathan	156	26
KC8EVS, Frank	138	23
KI8N, Terry	96	16
EK8ICI, Roger	25	4

I was pleased with the number of contacts made by each operator. It was very even this year compared to some other years. It shows that our group is getting a bit more experienced in the contest operating environment. Contests like this help, as well as the POTA operations that members have been doing.

K8EEN WFD History		
Year	QSOs	Score
2024	921	9210
2025	456	3350
2026	611	3605

"Twenty years from now you will be more disappointed by the things that you didn't do than by the ones you did do. So throw off the bowlines. Sail away from the safe harbor. Catch the trade winds in your sails. Explore. Dream. Discover." - Mark Twain

Mount Vernon Amateur Radio Club

Date: JAN 24 2026

Name	Call (none leave blank)
Dan Meidel	N08J
Lee Bechtle	WA4LES
Dan Russell	W8PEN
Frank Counts	KI8EVS
Teeny Windsor	KI8W
Nathan Kinsinger	KE8RYO
Rick Overmiller	N/A
Sue	N8SY
Evan Koontz	KF8APC
Michael Deane	W8010

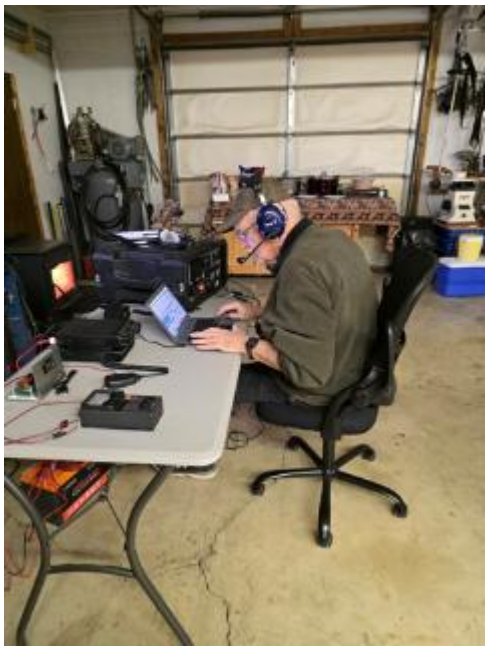
Roger, KE8ICI was also there (at home….) but forgot to sign the sheet.

Honorable mention for Winter Field Day goes to Patricia, Roger's better half. Patricia treated the group to Sloppy Joe's, Shredded Chicken, and baked beans. Along with some good chocolate chip cookies. Balancing out with Chips and beverages. Life couldn't be better.

It was truly disappointing missing the Sunday morning blue berry muffins! Thanks Patricia!





Photos by Roger, KE8ICI

Photos by Frank, KC8EVS

Miscellaneous Rambling

Terry, KI8N

After last month's meeting and Scott, N8SY Tony, KE8OOE mentioning GMRS radios I decided to see if I could modify one of my handhelds to transmit on those frequencies. The mod required is called the "MARS Mod" which opens the radio to frequencies outside Part 97 ham allocations on VHF and UHF. Giving the radio the ability to transmit from 136 to 174 MHz and 430 to 470 MHz. Since I had a Yaesu FT-4X I had never used, I figured why not experiment with this HT.

Going to YouTube for video instructions I found that this radio is easily modded by entering an eight number code, no hardware modifications required. So I proceeded to successfully mod this HT. Then using RT Systems software I entered the GMRS frequencies into memory.

However, to legally transmit on GMRS requires an FCC license, so I went to the FCC website and applied for a Radio Station Authorization and paid the $35 fee. About three days later I received an email from the FCC saying my authorization was approved and listed under my FRN. I am now licensed as WSLD253.

After this I looked up the frequency ranges for the Anytone T-D878UVII Plus Digital DMR Dual-band and discovered it is Part 90 Certified so I also programmed this HT with the GMRS frequencies. I still need to have a conversation with someone else talking on GMRS frequencies just to verify both radios work in this configuration.

If you have questions regarding GMRS go to MYGMRS.com for information.

With the start of the Emergency Communications articles I wondered if a faraday bag would be a good idea for storing/shielding a ham radio? I decided to start my search of faraday bags on trusty ole Amazon.com. If you just search for faraday bag, thousands show up. However, most of the bags are small and state they are for cell phones or car key fobs.

As I was paging through the selections I started thinking, what good is shielding a phone or car keys? In case of an Electromagnetic Pulse (EMP) how is anyone going to use their phone? Won't all the cell towers be zorched and no longer operational? But there you are with a perfectly good cell phone and absolutely no way to use it! Same with car keys, especially those with a wireless fob. Your car electronics are destroyed but your key fob is fully operational, just not in this galaxy. I can't believe people actually purchase these small bags as they are such wastes of money at least in regards to EMPs. And no, I did not purchase a bag for any of my ham radios or at least not yet.

Now before anyone freaks out, yes I know there are uses for these bags for protecting phones, key fobs, laptops and other sensitive equipment from invasion of scammer wireless and RF signals. However, I was only interested in EMP events since ham radios really don't store or give out credit card or social security numbers to wireless or RF signals (just the individual behind the mic). I still couldn't believe the bag descriptions stated they were good for protecting these devices when an EMP occurs.

Since I had already went down the security rabbit hole this led me to reading about financial fraud scams. The more I read the more fearful I became of exposing any financial records or transactions. This even goes as far as scammers being able to learn about you from simple things such as hospital invoices. I typically shred all personal written communications but learning about the scam possibilites makes me wonder how much information is readily available and even as simple to find as dumpster diving recyclable bins placed about the area or stealing from mailboxes.

The one item that was constantly discussed is scamming the elderly. I thought about my mother and the possibility of someone pretending something had happened to someone in her immediate family. Would she recognize it as a scam? She is very alert but if there was fake induced panic how would any of us react?

At one time I kept receiving emails that were supposed to be from Frank, KC8EVS stating he needed club funds to purchase equipment. This person insisted in the emails that the money had to be sent in the form of specific gift cards. It was easy to dispute the validity of such emails as the sender address was incorrect and that is not how club funds are disbursed.

I would recommend learning about scammer techniques and discussing them with your family so they are aware of any hinky financial account activities. Also, be sure to check all of your accounts regularly, validate all credit statements, and beaware of your subscriptions and monthly bill statements.

I am planning to go over the 2025 treasurer's club financial picture and provide an anticipated 2026 budget. I believe you will see that MVARC is in good financial shape and we should start thinking about items we need for the club ham shack. We will discuss this further in upcoming meetings.

I can't go without stating I did another POTA activation. This time it was at Mount Gilead State Park (US-1979) in support of winter Support Your Parks weekend. I stopped at the park Saturday morning 1/17 after having breakfast with the Morrow County ham group. I made 38 SSB contacts in about an hour. It was cold that morning so that limited the time I wanted to stay at the park. I started on 17M with a few contacts then moved to 40M where over half of the contacts were made, then went to 15M and ended on 20M. It was good to get out, but I am definitely turning into a fair weather fan.

Don't forget February 14th is Valentines Day.

That's it for this month. See you at the meeting on the 14th. – "Stay safe and Ham it UP"! 73

My Adventures in Ham Radio

Don, W8PEN

Assisted by Microsoft Copilot

Chapter 6: The Road to Dayton

Ham radio had become part of my daily rhythm. Chuck and I kept a regular weekly schedule, and I often relayed messages between him and my parents. In the 1960s, there were no cell phones—ham radio was our lifeline, and it worked beautifully for our family.

I was making contacts almost every day, and my Morse code skills steadily improved. I was now comfortably operating at 10 to 13 words per minute—a solid pace. That was encouraging, especially since the next milestone was the General Class license, which required 13 wpm to pass. The theory exam loomed as well, and it was a big step up from the Novice test. But fall was still a ways off. No need to panic—yet.

One evening during a contact, Chuck dropped a bombshell: "How'd you like to come to the Dayton Hamvention?" Like, wow.

This wasn't just any hamfest—this was *the* hamfest. The biggest in the world.

The plan was simple: I'd take a Greyhound bus to Dayton on Friday afternoon. Chuck would meet me at the station, and I'd spend the night in his dorm at the University of Dayton. Believe it or not, even Mt. Vernon had a bus station back then.

I was nervous. I'd never ridden a Greyhound before, let alone traveled solo. But the pull of the Hamvention was too strong. I swallowed my nerves and boarded the bus.

The ride turned out to be surprisingly pleasant. A kind, older gentleman struck up a conversation, sensing perhaps that this was my first solo trip. He seemed genuinely interested in my ham radio stories. Maybe I even inspired him to get his license, who knows?

Chuck was waiting at the station, just like he said he would be. We walked to the university, and our first stop—naturally—was the campus ham shack.

The setup was impressive. The 6-meter station, operated by Technician Class hams, featured a Hammarlund HQ-110 receiver paired with a 6-meter converter. The transmitter was a Heathkit Seneca, capable of AM and CW on both 6 and 2 meters—no SSB yet.

I didn't catch what kind of antenna they were using, but it worked.

The HF station had another HQ-110 and a Heathkit DX-100 transmitter, covering 80 through 10 meters with 180 watts output. AM and CW were still the norm—SSB was just beginning to gain traction.

Novices like me could use the HF station too, but we had to stick to 75 watts and crystal control to stay within FCC rules. There was a tray of crystals sorted by band, ready for use.

Operating that station was a treat. Compared to my Span Master and DX-35, this was luxury. I was getting spoiled.

After a restless night, too much excitement and too much late-night chatter—we set out for Hara Arena, the site of the Hamvention.

To my surprise, four of us hitchhiked there. One guy held up a cardboard sign that simply read "Hamfest." It didn't take long before a couple of friendly hams pulled over and gave us a lift.

Hamvention was overwhelming, in the best way. Every major manufacturer in the ham world was there. The crowds were thick, and it took hours just to browse the exhibits inside the arena.

Outside, the flea market was in full swing. It was April, and the sun was shining, a rare treat for that time of year. The place was packed. I had saved up some allowance money and earned a bit extra doing chores for Mom. I was ready to buy.

Chuck was on the hunt for gear to build a 6-meter station. I was looking for a better receiver.

Eventually, I found it: a Hallicrafters S-120 shortwave receiver. The price was within reach. I had Chuck give it a once-over. The seller claimed it worked fine and even knocked a few bucks off to seal the deal. I took the plunge and handed over my hard-earned cash.

Chuck scored a used 6-meter converter—homebrew, but well-built. We hoped it would be nicely paired with my new receiver to tune in 6-meter signals.

Back then, 2-meter FM repeaters didn't exist. For Technician Class hams, 6 meters was the hot band.

At the end of the day, we didn't have to hitchhike back. Hamvention had arranged shuttle buses, and one dropped us just a block from campus.

That evening, I boarded the bus back to Mt. Vernon, exhausted but exhilarated. My new receiver and Chuck's converter were tucked safely under my feet. I didn't talk to anyone this time—just drifted off to sleep, dreaming of signals and call signs.

It was dark when we pulled into Mt. Vernon. Mom was waiting. I gave her the full rundown on the weekend's adventures.

Even though it was late, I couldn't resist testing the receiver. Sleep would have to wait.

Verdict: *It works! Big improvement.* Signals were no longer crammed together like they were on the Span Master. The S-120 even performed decently on 15-meters, something the old rig struggled with.

I went to bed that night a happy ham.

Vintage Ham Gear Spotlight

A look at four legendary rigs from the 1950s–60s:

Hammarlund HQ-110 – HF Receiver

- Years Made: 1957–1961
- Bands: 160–6 meters (receive only)
- Modes: AM, CW, SSB (receive only)
- Power Output: N/A
- VFO: Yes (receive)
- Crystal Control: Optional
- Notable Tubes: 6C4, 6BA6, 6BE6, 6AL5
- Special Features: Calibrator, Novice-friendly, 6-meter converter input
- Weight: Approximately 30 lbs.
- A popular Novice receiver, often paired with DX-35 or DX-40

Heathkit Seneca VHF-1 – VHF Transmitter

- Years Made: 1958–1961
- Bands: 6 meters and 2 meters
- Modes: AM, CW
- Power Output: About 120 watts AM / 140 watts CW on 6 meters
- VFO: Yes (built-in)
- Crystal Control: 4-position switch
- Notable Tubes: 6146 finals, 12AX7 audio
- Special Features: Dual-band VHF, screen modulation, internal power supply
- Weight: Approximately 50 lbs.
- A Technician-class favorite for VHF before FM repeaters

Heathkit DX-100 – HF Transmitter

- Years Made: 1955–1959
- Bands: 160–10 meters
- Modes: AM, CW
- Power Output: About 150 watts AM / 180 watts CW
- VFO: Yes (built-in)
- Crystal Control: Optional
- Notable Tubes: 6146 finals, 5R4 rectifiers
- Special Features: High-level plate modulation, rugged build, TVI suppression
- Weight: Approximately 100 lbs.
- An iconic "boat anchor" still admired and used today

Hallicrafters S-120 – Shortwave Receiver

- Years Made: 1961–1964
- Bands: 4-band coverage (AM broadcast, 80–10 meters)
- Modes: AM, CW (receive only)
- VFO: Yes (tunable across bands)
- Crystal Control: No
- Notable Tubes: 12BE6, 12BA6, 12AV6, 50C5, 35W4
- Special Features: Compact design, AC/DC operation, headphone jack
- Weight: ~10 lbs.
- A budget-friendly entry receiver for shortwave and Novice hams

Final Takeaway

Emergency Communications Basics

This month's continuation of ham radio survival topics is focusing on:

- Infrastructure
- Power and Energy Survival

What is infrastructure?

The simple definition is "the basic physical and organizational structures and facilities" and since we are interested in emergency communications we will take this as having a working repeater and a location from which to operate. However, there could be a failure of the repeater(s) and then what do we do?

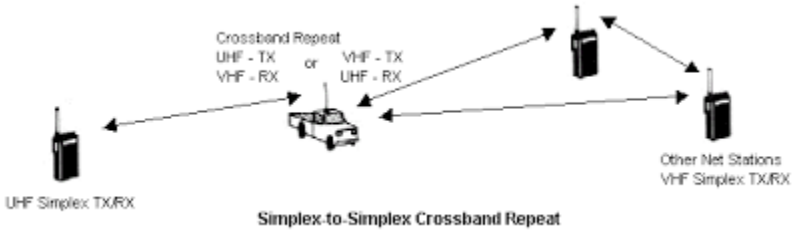
A look at repeater versus simplex operation. A repeater uses two frequencies, one for receiving (the frequency your radio transmits on) and another for transmitting (this is frequency your radio receives). Note, with a repeater there are other variables needed to make this means of communication work. Simplex, however, only uses one frequency for both transmit and receive.

First off, our Emergency Coordinator has sent out an SOP stating what to do. So, if the repeater is operational, we will attempt communications using the assigned repeater frequencies. For this you must know the frequency, its offset, is it a plus or minus, and the CTCSS tone (if needed). Most of the time this information is available via Repeaterbook.com but you should have the local repeaters already programmed into your radio, so you are ready.

However, if the repeater(s) is not functioning, we will move to a designated simplex frequency. In this case we will initially meet on 146.520 MHz and wait for the net controller to direct us. It is quite possible we will have to move to a less busy simplex frequency.

Based on the above scenarios it is imperative that you know how to program your HT or mobile VHF/UHF radios to be able to effectively communicate. Waiting until the need arises will probably delay or limit your participation.

- **Cross Band Operation**



Simplex-to-Simplex Crossband Repeat

The next possible method of operation is cross band operations. In this case a dual band radio is required since it will receive an RF signal on one frequency band and retransmit it on another frequency band. This mode of radio operation must occur across different bands (typically 2-meter VHF and 70-centimeter UHF). It cannot operate within the same band because the transmitter would "de-sense" (blind) the receiver. Typically, a mobile radio acts as a bridge for a HT. For example, your HT transmits on a UHF simplex frequency; the mobile radio receives this and immediately retransmits it on a VHF repeater or simplex frequency. When the net controller replies, the mobile radio receives the VHF signal and relays it back to your HT on the UHF frequency.

The most common use of cross band operation is to extend the range when operating away from the mobile radio since the output RF power of a mobile is higher than a HT radio. This is effective when someone on foot must stay in contact with a net while away from their vehicle or their assigned operating location.

- **Terrain**

VHF and UHF are line-of-sight communications so hills, vegetation, or buildings will affect the range of these radios. It is important, if possible, to be positioned above or to the side of items that will affect your ability to reach the net controller. It may be possible for your signal to bend or reflect around obstacles, but you may be required to move/relocate to reach the repeater or communicate via simplex.

HF is not as affected by line-of-sight because of lower frequencies, higher RF power levels and antennas that have a high takeoff angle, think NIVS, or are located on higher terrain.

- **Facilities**

This covers where you will be located during your portion of the emergency. You may be called to operate in a building or from home as a net controller. However, most responders will be deployed into the field. So, you may be operating from your vehicle, inside a designated shelter, or on foot. Preparedness is required so you can be effective at any location. Note, shelters and your vehicle may experience weather extremes. Since this will be a time of emergency it may be noisy, windy, rainy, hot, cold or even at night. Be sure to dress for anticipated environments and have food and water provisions. Also, there may be safety issues such as downed trees, power lines/poles or running water. ALWAYS be safe and do not do anything that would put your life at jeopardy.

Power and Energy Survival

Emergency communications via ham radio power requires portable, durable, and rechargeable systems, with LiFePO4 batteries (12V-13.8V) being preferred for their high energy density, stability, and light weight (up to 80% lighter than lead-acid). Essential, reliable power sources include solar panels, portable generators, and backup batteries. Optimal setups often involve QRP (low power) for efficiency, though LiFePO4 allows for higher-power rigs.

- **Batteries**

Lithium iron phosphate (LiFePO4) are highly safe, durable and efficient rechargeable batteries that offer many deep cycle operations within their lifespan. These batteries provide superior stability, are lightweight, and typically feature built-in battery management systems (BMS) for protection. This category of battery can be charged via solar panels with the correct charge controller. Key characteristics are.

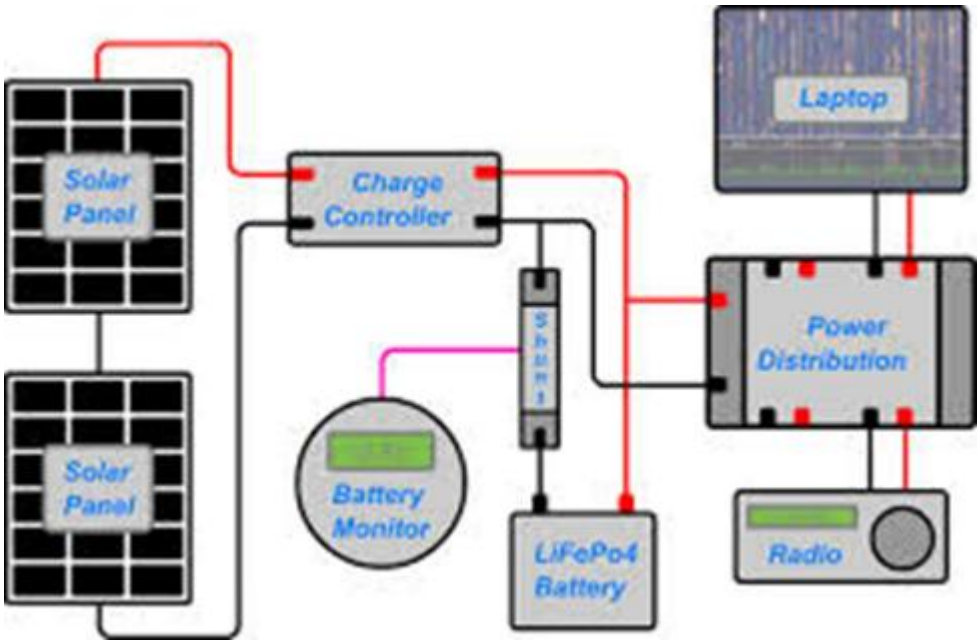
- **Lifespan:** LiFePO4 batteries last significantly longer than lead-acid counterparts, with many models offering over 5,000 to 15,000+ deep cycles.
- **Safety:** These batteries are known for being extremely stable, with a low risk of fire or explosion, making them suitable for residential and mobile applications
- **Performance:** They have high efficiency and can maintain a high charge/discharge rate without losing capacity over time.
- **Applications:** They are ideal for off-grid power systems.
- **BMS Integration:** Most modern LiFePO4 batteries include a built-in battery management system (BMS) to protect against overcharging, deep discharge, and high temperatures.

The drawbacks to LiFePO4 batteries are their initial cost and cold weather operation. Another issue is the requirement for specific chargers/solar charge controllers. A lead acid charger will **not** provide the required voltage to fully charge a LiFePO4 battery.

Another battery type is the lead acid battery. For ham radio operations a deep-cycle battery is preferred to avoid damaging the battery during discharge cycles. These batteries will provide a stable 13.8 vdc but voltage drop over time will limit their usage. A couple of drawbacks with lead acid batteries are their weight and safety regarding acid gas discharge if overcharged. This type of battery is initially less costly and can be charged via normal chargers and solar panels/controllers. If you use your vehicle's battery, be vigilant as you will be running down the voltage and your vehicle may not start to allow you to leave which could be a large safety issue. It is not recommended to use your vehicle battery when providing emergency communications.

- **Solar Power**

Solar power can be used to charge your battery to keep it operating and able to power your ham radio(s). This method involves connecting solar panels facing the sun to a charge controller to the battery. There are numerous types and output power solar panels available. The lightest panels are foldable or roll-up great for field operations and typically 30 to 60-watts. Larger and heavier panels ranging from 100 to 200-watts provide greater charging capability but require more room.



- **Portable Generators**

Portable generators are another method of operating emergency communications especially when it is dark outside, off-grid or you do not have other back-up power sources. The types of generators that work with ham radio are:

- Inverter Generators: Preferred for ham radio equipment because they produce clean AC power with low harmonic distortion, which reduces radio interference.

- Portable Power Solar Generators: These are silent, emission-free options like Bluetti or EcoFlow that can power radios directly from DC ports (12V) or through their AC inverters.
- Gasoline Generators: Suitable for high-power (QRO) operations but require careful placement to avoid RF interference and carbon monoxide hazards.

The issues with gasoline and inverter generators are noisy operation, production of RFI and safety. Generators may have to be placed as far away from antennas and rasios as possible to avoid interference. Never run gas generators indoors and ensure proper grounding to avoid electrical shock.

- **Low Power (QRP) Operation**

In ham radio, QRP refers to low-power operation, typically 5 watts or less for CW (Morse code) and 10 watts or less for SSB (voice), originating from the Q-code meaning "reduce power" or "shall I reduce power?"

In emergency field operations this mode may be required to save your power source or avoid interference. The above definition refers to HF operation but for a mobile or HT VHF/UHF radio, reducing power is another way of saving your batteries. Instead of operating your VHF/UHF radio at full power you may opt to reduce power to prolong time in the field especially if operating from your vehicle battery or the HT rechargeable internal battery.

Next month this continuing series of articles will cover antennas you can build or erect to make emergency communications possible.

2026 Upcoming MVARC Events

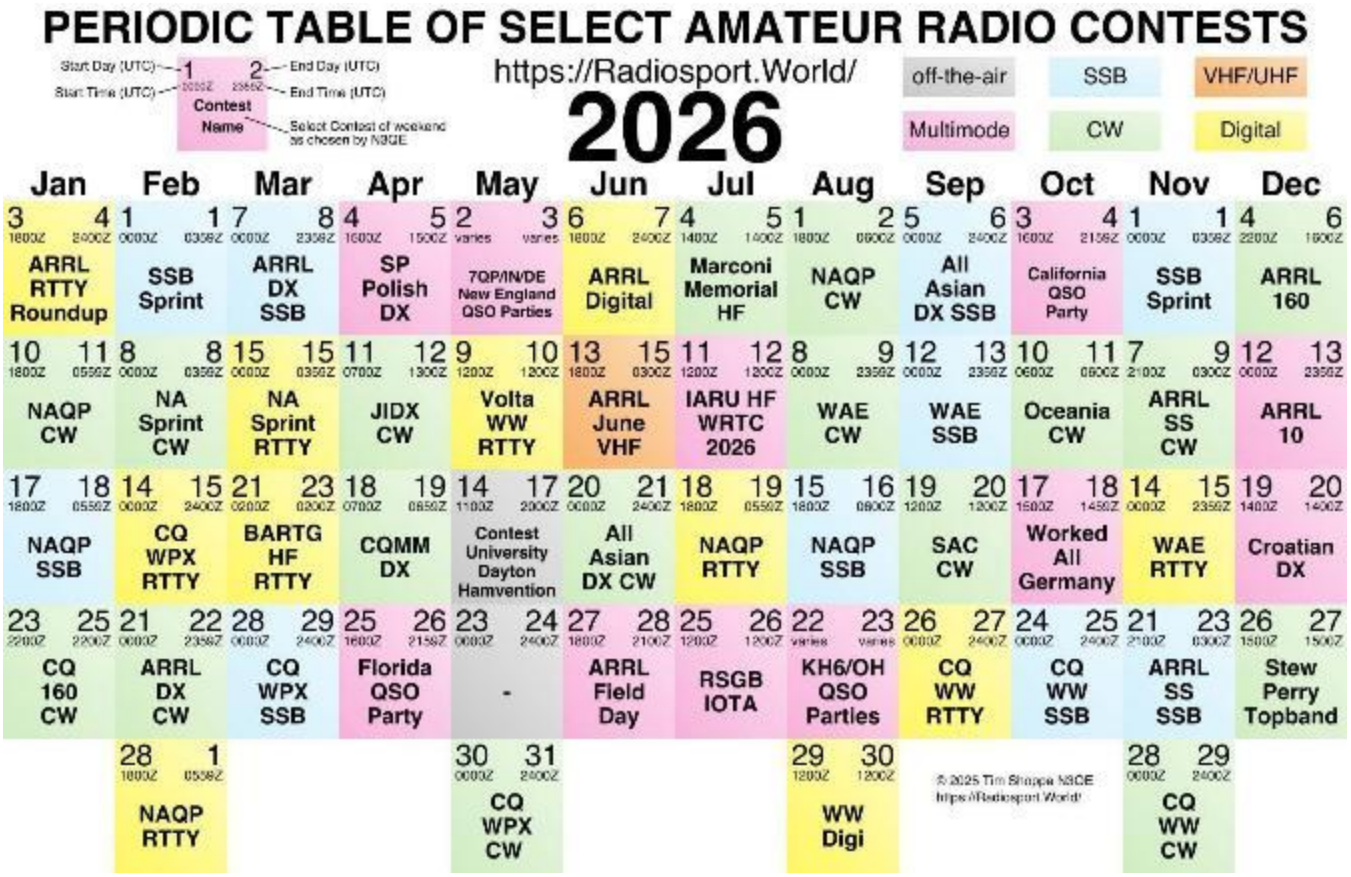
NVIS Day	April 25
ARRL Field Day	June 26-28
Boy Scouts	TBD
Mount Vernon First Friday	August 7
OSPOTA	September 12
Centerburg Old Time Farm Festival	September 26-27
Club POTA	TBD

amazing how 1 glass of water can do such wonders for your body

yet such horrors for your laptop

Ham Radio Contest Periodic Table

I found this self-described ham radio contest Periodic Table. This is not a comprehensive list of all contests but attempts to show the major contest activities for each weekend. If you click on the link and go to the webpage you can print a full-size page.



Ham Radio Contest Calendar

A Brief History of Morse Code: The Original Digital Mode

Don, W8PEN

If you've ever tapped out a CQ on a straight key or listened to the musical rhythm of dits and dahs drifting across the bands, you're participating in a tradition nearly two centuries old. Morse code isn't just a communication method—it's one of the foundational technologies that shaped the modern world.

From Paintbrush to Telegraph Key

Morse code takes its name from Samuel F. B. Morse, an American artist-turned-inventor who helped pioneer the electric telegraph in the 1830s and 1840s. Although Morse conceived the idea of encoding messages, the system we know today owes much to his collaborator Alfred Vail, who refined Morse's early concepts into a practical alphabet-based code.

By 1837, Morse and Vail had developed a working telegraph system capable of sending electrical pulses over wires—an astonishing leap forward in an era when long-distance communication still depended on horses, ships, and semaphore towers.

American vs. International Morse

Early telegraph operators in the United States used what became known as **American Morse**, a system with variable-length dashes and spaces. Meanwhile, European operators adopted a simplified version created by Friedrich Gerke in the 1840s. Gerke's revision eventually evolved into **International Morse Code**, the standardized system still used by amateur radio operators today.

International Morse's consistent timing and simpler structure made it easier to learn and far more reliable over noisy or long-distance circuits.

The Telegraph: The First Global Communications Network

With the rise of telegraph companies like Western Union, Morse code became the backbone of global communication. Messages that once took weeks could now be transmitted in minutes. Railroads used it for dispatching, newspapers relied on it for breaking news, and militaries adopted it for secure, long-distance coordination.

In many ways, Morse code was the world's first digital communication mode—binary, efficient, and remarkably resilient.

Decline… and Revival

By the mid-20th century, telegraphy began to fade as telephones, radio teletype, and eventually digital networks took over. Yet Morse code never disappeared. Amateur radio operators kept the tradition alive, valuing its simplicity, elegance, and ability to punch through noise when other modes fail.

Even today, Morse code appears in aviation, emergency signaling (SOS remains universally recognized), and even space exploration—NASA has used Morse-like pulse patterns in spacecraft communication tests.

Why It Still Matters

For hams, Morse code is more than nostalgia. It's:

- A low-power, high-efficiency mode ideal for QRP
- A universal language that transcends accents and alphabets
- A living link to the earliest days of radio
- A skill that rewards rhythm, patience, and craftsmanship

Whether you're pounding brass on a vintage J-38 or keying a modern paddle into a digital decoder, you're part of a lineage stretching back to the dawn of electronic communication.

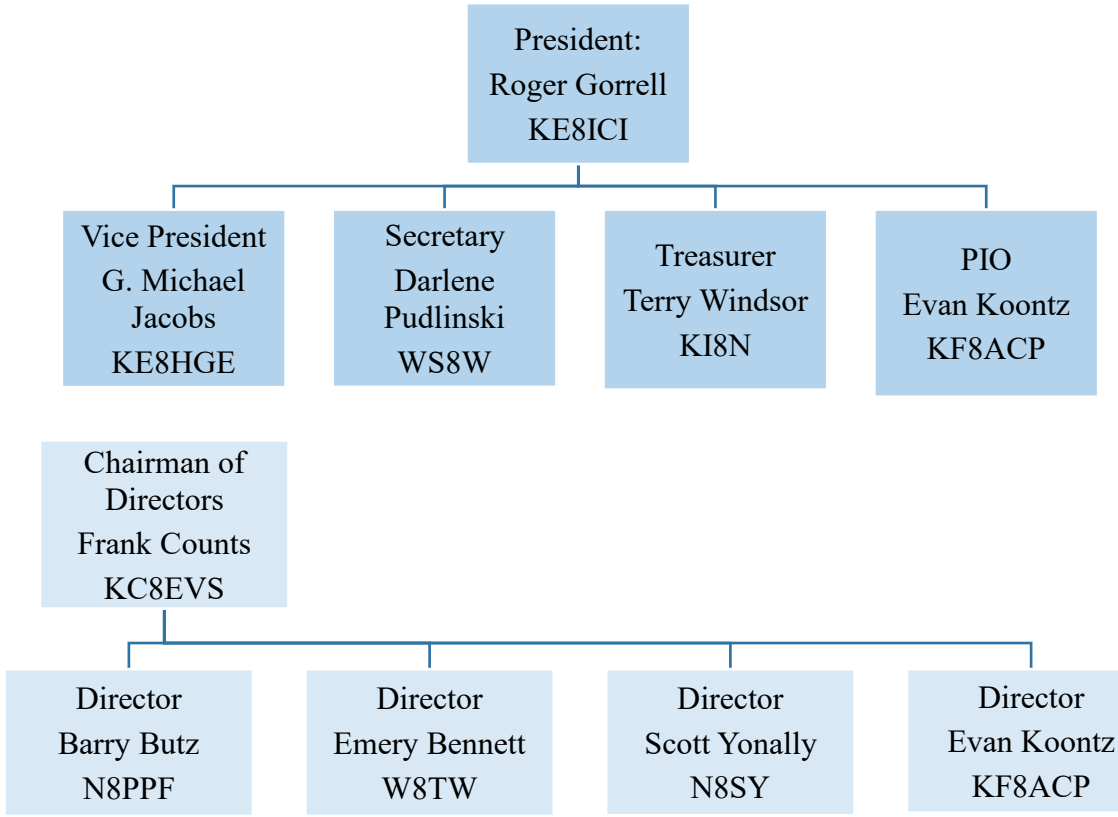


Morse code isn't just history, it's heritage.

This article was created with the assistance of Microsoft Copilot sources

Britannica – *Morse Code: Invention, History & Systems*
Wikipedia – *Morse Code*
World History.Edu – *How and When Was Morse Code Invented?*
Morsecode.uk – *A Brief History of Morse Code*
History.com – *Morse Code & the Telegraphi*

MVARC 2026 Club Officers



The MVARC CQ Newsletter is delivered to club members via email containing a link to the MVARC webpage, Newsletters button.

** MVARC CQ is the official newsletter of the Mount Vernon Amateur Radio Club. **

Contact Us

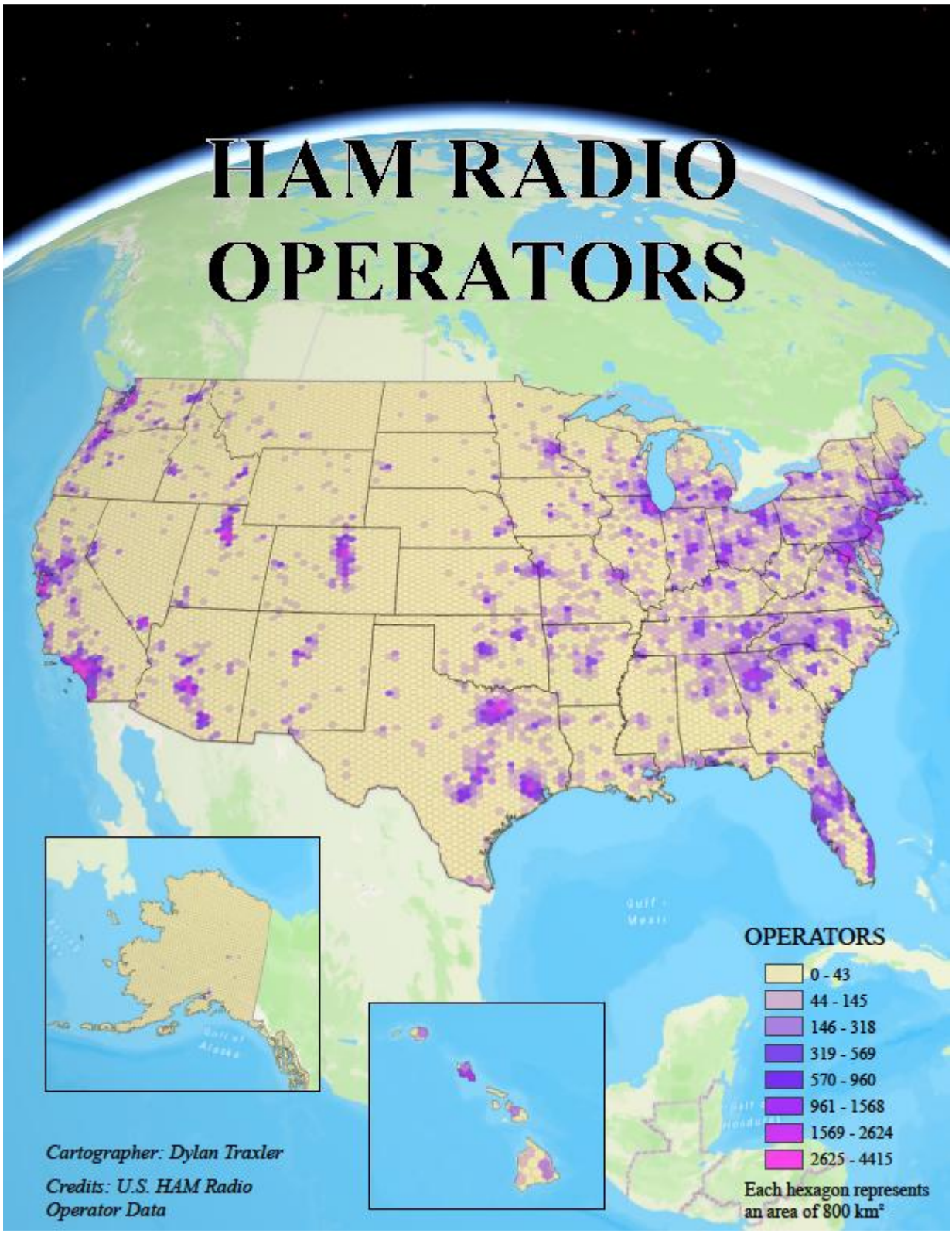
Mailing Address
812 Coshocton Ave.
PMB #145
Mount Vernon, OH 43050

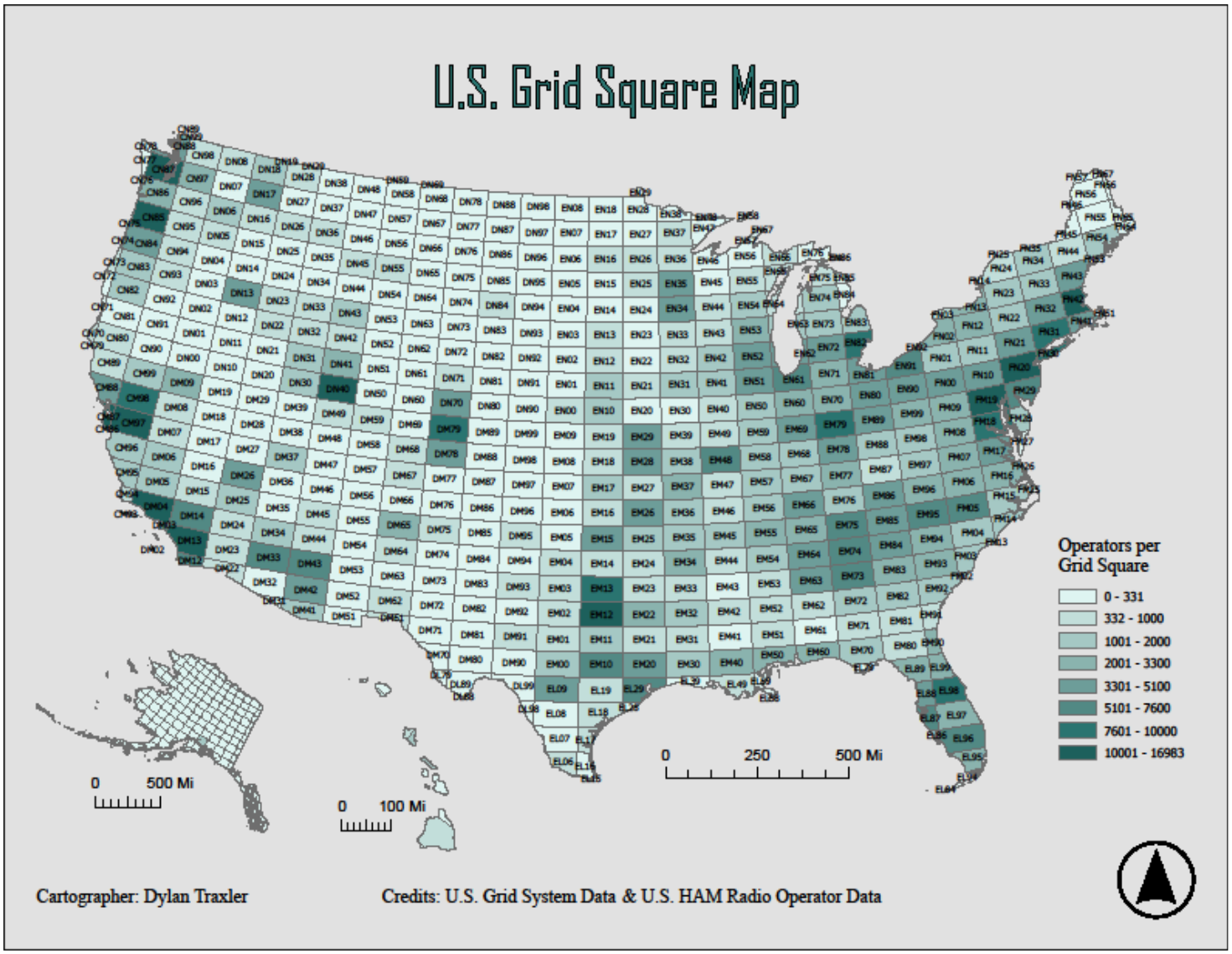
Web Page
mvarc.net

Facebook Page
https://www.facebook.com/mvarc

MVARC Email
admin@mvarc.net

Mapping USA Ham Radio




U.S. Grid Square Map
Operators per Grid Square
0 - 331
332 - 1000
1001 - 2000
2001 - 3300
3301 - 5100
5101 - 7600
7601 - 10000
10001 - 16983
0 250 500 Mi
0 500 Mi
0 100 Mi
Cartographer: Dylan Traxler
Credits: U.S. Grid System Data & U.S. HAM Radio Operator Data