Mount Vernon Amateur Radio Club

January 2025

2025 Edition 1

Inside this issue:

MVARC Repeaters

K8EEN
146.790 MHz
- 600KHz / PL = 71.9 Hz

K8EEN-R EchoLink Node: 809800

K8EEN
444.600 MHz
+5 MHz / PL = 71.9 Hz

Meeting Notice

January Meeting— January 11 — 10:00 am at the Academy Building on Fairgrounds Road.

President's View

Frank, KC8EVS

Happy New Year, 2024 is in the books. It was a busy year for me, and it has passed quickly. I haven't accomplished all I wanted in amateur radio, but this is a new year, so it's a fresh start.

First off, this year, we have changed the monthly meeting from Monday at 7 p.m. to the second Saturday at 10 a.m. for the next three months (Jan-Feb-Mar). This is a reminder, and hopefully, I won't forget. It's an important meeting as we get ready for Winter Field Day. I hope to see you all at the meeting and at Rogers's, KE8ICI, for Winter Field Day.

Something I'm going to try this year is the ARRL VHF contest on the 18th. I haven't worked much on those bands other than repeaters here locally. I'm hoping to make a few contacts, especially on 6 meters. This is a contest that you can operate with a Tech license as you have all privileges on those frequencies. So, give it a try.

A suggestion was made to me concerning an activity in the July/August period. In the past, we have not done much radio-wise as a club except for the last couple of years we have tried to set up a booth at the First Friday event and talked about the event out at Apple Valley (Family Palooza). We can still participate in one or both, but I'm not convinced that they are as productive for the time we put in.

The suggestion was to organize a club Parks on the Air (POTA) activation. This would be just time to get out and set up and play radio for a few hours.

Bring your thoughts and ideas to the meeting.

That's all for now. Keep warm and dry and hope to see you soon at one of the meet ups.

73

Winter Field Day	Jan 25-26 2025
NVIS	TBD
Blackfork Gravel Grinder	May 3, 2025
Field Day	June 27-29
OSPOTA	Sep 6, 2025
POTA Activation	TBD
First Friday	TBD
Family Palooza (Apple Valley, Floral Valley)	TBD

Every Sunday night on the Mount Vernon 146.79 repeater for our weekly MVARC ARES Sunday Night Net. Check-in starts at 9 pm.

Unable to access the repeater from where you are? We are on IRLP (EchoLink) K8EEN-R Node 809800.

Meeting Minutes

The December meeting was the annual Christmas Party at Bob Evans Restaurant.

New MVARC Members

New members from the December testing session;

David "Scott" Brooks, KF8DAL

Cathy Windsor, KF8DAF

Note: if you are a new ham you are eligible for the QRZ New Ham Jumpstart Program.

Click on the link or go to QRZ.com and scroll down to the box for the Jumpstart Program.

This program is designed to promote amateur radio to the masses, helping to eliminate a possible barrier to entry by providing new hams with everything they'll need to get on the air at a very reasonable price.

Contact MVARC

MVARC

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

Email

admin@mvarc.net

"I don't know how to make you feel better about that." BikeFarmer—YouTube

Membership Renewal

It is time to renew your MVARC club membership for 2025. Dues can be paid at a club meeting or mailed to the club address.

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

MVARC Membership Application

Regular membership dues are $20.00. Dues are $15.00 for those over 65 years of age, additional members in the same family, or who do not hold an active FCC amateur radio license.

Name: _____ Call Sign: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ License Class: _____

Email Address: _____

ARRL Member (Y/N): _____

Please include the Membership Application with your payment as the Treasurer needs this to keep records of who has paid and ARRL membership status. To keep our ARRL Affiliated Club status this information is required when yearly updates are provided to the ARRL.

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1 **NEW YEARS DAY**	**2**	3 9:00 am— Breakfast McDonalds	**4**
5 9:00 pm ARES Sunday Night Net	***6***	7	8 4:45 pm Dinner	9	10 9:00 am— Breakfast McDonalds	11 **CLUB MEETING 10:00 AM**
12 9:00 pm ARES Sunday Night Net	13	14	15 4:45 pm Dinner	16	17 9:00 am— Breakfast McDonalds	18
19 9:00 pm ARES Sunday Night Net	20 **Inauguration Day**	21	22 4:45 pm Dinner	23	24 9:00 am— Breakfast McDonalds	25 **Winter Field Day 11:00 am**
26 *9*:00 pm ARES Sunday Night Net	27	28	29 4:45 pm Dinner	**30**	**31** 9:00 am— Breakfast McDonalds	

Link to: Ham Radio Contest Calendar

DMR and FM Digital Modes Class

Stephen, N8RLW

I am putting together a class on "What is DMR". This will be a high-level overview of how DMR works and why there are so many different FM digital modes.

It will be a virtual class, so no one has to leave their shack to attend. I'll send out the access link the week before the class and I just need people to sign up by sending an email to: sharvey6325@gmail.com.

To register, I just need your first and last name along with your email address.

I'll be using Google Meet for this presentation and will send out the link to the people who sign up.

It is just that the simple.

Class: DMR and FM Digital Modes

Date: February 15, 2025 (Saturday)

Time: 11:00 AM

Run time: 1 hour

Knox County Repeaters

MVARC Sponsored Repeaters—K8EEN

146.790 Pl 71.9

Type: Analog Only

Features: Weather Net, ARES Net at 9:00PM on Sunday EchoLink: 809800

444.600 PL 71.9

Digital ID 00 for C4FM/Fusion

Type: Automatic Mix mode, Analog and Yaesu C4FM/Fusion

Features: Backup to the 146.790 machine and open to all to use.

Individual Repeaters open to all Amateurs for use.

KD8EVR Repeater

442.100 PL 71.9

Type: Automatic Mixed mode, Analog and DMR

Color Code: CC7 (which is the digital PL of DMR)

TalkGroups with TimeSlots

TimeSlot1

Local 9 - Local Traffic Only

313964 - Knox, Morrow and Marion County

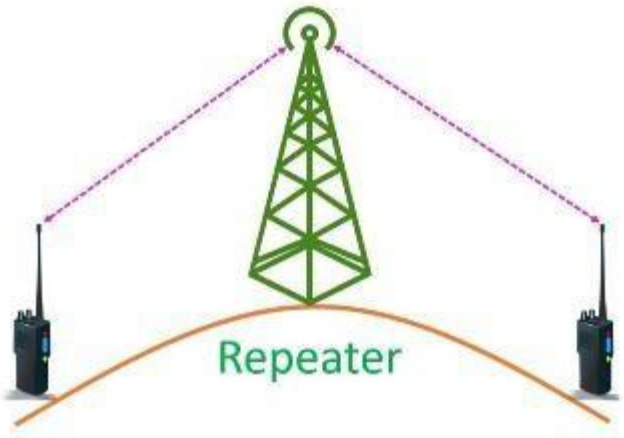
31395 - ARES USA only

Timeslot2

Local 2 - Local Traffic Only

3139 - Ohio Statewide 10-minute limit

Link



Radio Activity

Don, W8PEN

Happy New Year Everyone! 2024 was a good year for the club. Personally, I saw the club as very active and growing. Hopefully, that will continue as we dive into 2025.

Some of the positives that I have seen the past year:

Thanks to Michael Jacobs, KE8HGE, we continue to get a slow, but steady increase in licensed hams in Knox County. Michael is continuously having a Technician Class or a General Class course. Not only has the local ham population grown, but the number of hams upgrading to General and then studying for the Extra on their own has been an immense boost to our club. Thanks Michael!

Those of you that have not attended a meeting lately should consider doing so. We always have a very good turnout. After the meeting, members hang around for quite a while and just eyeball and rag chew. This is because we are a friendly club and members like each other. Disagreements are even fun because no one gets upset. We just agree to disagree.

Thanks to the continuous work of Steven, N8RLW, and Roger, KE8ICI, an updated repeater system has been installed. Yes, it was a struggle. Yes, there are still a few issues that need resolved. But the repeater is currently working well and the few issues we are having with the repeater have known solutions. It is just a matter of implementing some of those solutions. Unfortunately, the main issue right now is with the duplexer, which could be an expensive fix.

I have noticed the issue with the duplexers (a little bit of crackling in the received audio) much less lately. Maybe this issue will go away on its own. You know, as the duplexer accumulates dust or dirt or something. You never know.

The 444.600 repeater was moved from KCH hospital to the water tower where the 2-meter repeater is located. This has improved the coverage of the repeater immensely.

The EchoLink equipment experienced an almost total rebuild during 2024. A new transceiver was donated to the EchoLink system by Scott, W8HK. The computer was upgraded to a Windows 10 computer, and a new antenna was installed. EchoLink has been running without issues since about July 2024.

2024 Field Day was a huge success this year. One of our biggest events of the year.

The club's HF station continues to evolve. We have two HF antennas in the attic. One is a fan dipole for 80 and 40 meters. The other one is an Off-Center-Fed antenna for 80 – 10 meters.

The Icom IC-7300 is currently available to anyone that wants to operate. Especially after club meetings or during contests.

The Kenwood TS-570D has been turned into a remote base that can be operated via the internet. Currently, this remote system is up and running but only available to me. It is still in the experimental stage, and I need to make sure the interface to operate this radio is easy to understand and the equipment stable.

Eventually, this remote base will be available to club members who sign up for it. I can see it being a bonus for club members lacking equipment or in unfriendly radio communities, such as retirement centers, nursing homes, deed restrictions, etc.

I cannot guarantee that this remote station is going to be a success. There are a number of issues that still need to be addressed. This is why it is only available to me for the time being. However, I can tell club members that I have made several successful contacts through this remote base while sitting in my living room chair at home and using my laptop.

Please be aware: Anyone coming in after hours to operate the IC-7300 may still do so. I know there are a few of you that do that. To operate the IC-7300, you will need to remove the antenna from the TS-570D and use it on the IC-7300. This antenna should go on the external antenna tuner at ant 1 on the back of the tuner. When doing so, please shut off the power supply to the TS-570D. That way, no one can turn the TS-570 on via remote while someone is operating the IC-7300.

This is just a precaution so that someone remotely does not try operating the TS-570D. Even though it should always be off. The person accessing the TS-570D remotely has the capability of turning the radio on and off.

When you have finished using the IC-7300, please reinstall the antenna on the TS-570 and turn the power supply back on. If the radio turns on, please shut it back off. That way the radio will be ready for remote operation.

My Long Wire Antenna

I finally got to try out my new 250-foot-long wire antenna on 160 meters. I was not impressed. It was one of the poorer antennas that I built for 160 meters. And I have tried a bunch over the years.

The antenna is now down and my standard OCF has been installed in its place. The biggest issue is the OCF only covers 80-10 meters. While it does cover the WARC bands, it does not cover 60 meters. My friend Lynn and I use 60 meters quite often during weekdays to talk to each other.

Therefore, a new antenna is being built that should add 160 and 60 meters into the picture. This antenna is one elevated radial against my 48-foot tower. The tower itself is too short to resonate on 160 meters. However, it is top loaded with a 6-meter beam.

I have tried this type of antenna before and have had some success with it. However, that was when I had a huge 20 – 10-meter beam on the tower. I am not sure the 6-meter antenna will have enough top loading effect to matter, but it is easy enough to find out.

On the plus side, 60 meters is close to the third harmonic to 160 meters. With any luck, I will be able to use this antenna on 60 meters with reasonable SWR. At least my radio's internal antenna tuner should be able to tune the antenna to 60 meters.

Nothing like a Winter antenna project to get blood flowing. LOL.

Winter Field Day

Looks like the club will once again be participating in Winter Field Day. We will again be setting up stations at Roger's, KE8ICI QTH.

We will be operating one SSB and one CW station, with the capability of running PSK-31 digital. In fact, the CW station will be available for SSB or digital as needed.

The Winter Field Day rules do not allow FT-8 and FT-4 digital modes, however, PSK-31 and RTTY, or other conversational modes are okay. The rule states that the digital mode must be a conversational mode. FT-8 and modes like it are strictly signal report modes and do not qualify under the rules.

More information will be shared during the January 2025 meeting.

Equipment for Sale

Barry, N8PPF, still has equipment from his brother's estate that he would like to sell. There are two nice HF rigs available. One is an Icom, the other an Alinco. Also, available is a 6-meter transceiver, a 2-meter handheld, and a bunch of other stuff.

Equipment will be available for inspection at the January meeting. If you are a new ham, this is your chance to get an HF rig at a reasonable price.

I personally have bought a few items from this sale, and everything looks and has worked perfectly.

Bill, KD8WHQ also has an Icom transceiver available for sale. Not sure of the model number. Bill is replacing it with a new IC-7300. Talk to Bill at the meeting if interested.

That is a wrap!

Hope to see all of you at the January meeting. Please take note that this meeting will on Saturday morning. January 11, 2025, at 10:00 AM. Please check elsewhere in this newsletter for confirmation of that date.

Hope to see you there.

Miscellaneous Rambling

Terry, KI8N

Where did December go? I feel like I didn't accomplish anything ham related. No antenna work, very few contacts, and only one POTA activation at Mohican State Park and that wasn't until the 28th. Perhaps, I can accomplish more in January?

Thanks to the VEC team for their time in the December testing session. My wife, Cath, took and passed her Technician class license and was issued KD8DAF. She is signed up for an online General class and will be studying for the next ham license level. She has already requested a call sign that was her dad's; WA8KJJ. He passed on Veterans Day this year and had been a ham for over sixty years. Now, she has to check into the Sunday night ARES net.

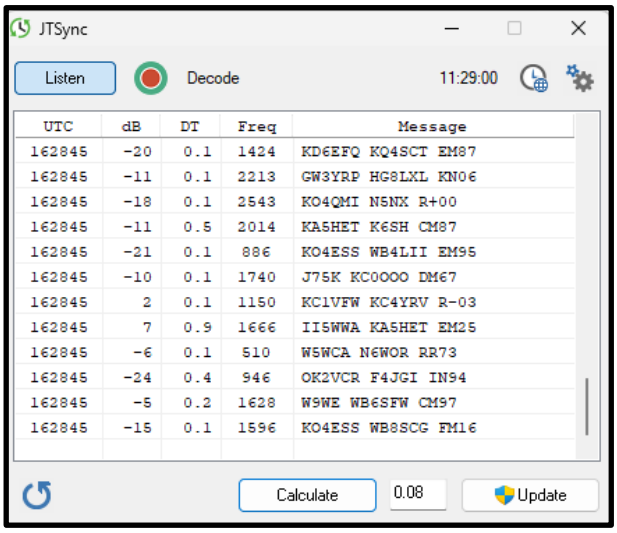
I did purchase a couple of items related to playing ham. I got a new CW Morse double paddle key without the steel base that is extremely light weight and hoping to start doing some CW POTA activations in 2025. This key seems to work well once the adjustments for my keying style were accomplished. However, I have to hold it down so it doesn't slip around on the desk but it is light, so carrying it in my activation bag should be easy.

I also got a new desk pad shown below that shows the amateur bands and phonetic alphabet. This replaced my worn-out mouse pad and generally cleaned up the desktop. When I ordered it I didn't pay attention to its size and it is quite large 16" x 35".

My last new item was a larger tripod and extendable 18 -foot mast. I used this during my last POTA activation to support a Hustler Resonator assembly - it was more stable than my other tripod and mast.

Has anyone checked your computer clock to see how well it is time synched? You can use Time.IS to verify how well your computer clock is keeping time. Then using a freeware program like Dimension 4 to sync with other sources will bring your clock within milliseconds of Universal Time.

If you are doing an FT8 or F4 activation and notice your time differential from other activators is greater than 2.0 seconds then JT Sync is very useful for syncing your time with others. I have found this to be much easier to use then plugging in an external GPS dongle and syncing the computers time with it.

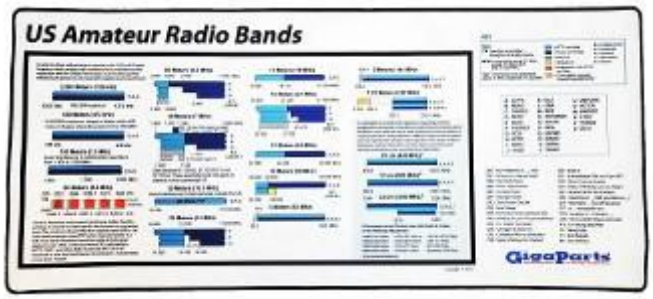


Finally, I am planning to operate in the ARRL RTTY Roundup starting January 4. I haven't done much RTTY in the last couple of years and decided this sounds like a contest I would like to give a shot. Not sure how much time I will operate, but if the weather is as cold as predicted there is my excuse to stay inside and play radio. Not looking to be overly competitive but just enjoy participating.

I am still plodding along with the car engine rebuild, have finished the work on the transmission, and will start cleaning and painting the engine bay this month.

Now back to your regularly scheduled day, me working on my ongoing project list, and hoping everyone is radio active!

"Be safe and Ham it UP"!



"A suggestion was made to me concerning an activity in the July/August time period. In the past we have not done much radio wise as a club ..." Frank, KC8EVS

Final Takeaway—Wire Antennas

Ham radio wire antennas are an essential part of amateur radio setups, especially for operators looking for affordable, effective antennas that can be used in various frequencies and environments. Wire antennas are popular due to their simplicity, versatility, and ability to adapt to various spaces. Here's an overview of common types of wire antennas and how they are used.

1.Dipole Antenna

The dipole antenna is one of the most widely used wire antennas in ham radio. It consists of two equal-length conductors (wires) that are typically resonant at a particular frequency.

Setup: The two legs of the antenna are usually set up in a straight line, with the feed point (where the coaxial cable connects) in the center.

Advantages: Simple to build, easy to install, and effective for a wide range of frequencies depending on length.

Tuning: The length of the wire should be approximately half the wavelength of the operating frequency (in feet, this is calculated as (468 / f(MHz)).

2.Inverted V Antenna

An inverted V antenna is a variation of the dipole antenna, where the legs of the antenna are sloped downward, forming an inverted "V" shape.

Setup: It is mounted high at the center, with the two legs sloping downward, typically at an angle of 45 degrees or less.

Advantages: It is easy to install in limited spaces (like a small backyard), provides a reasonable balance of performance, and can be multi-band if made with adjustable elements.

Tuning: Similar to a regular dipole, the length of each leg is based on the desired frequency.

3.Vertical Wire Antenna

A vertical wire antenna is usually a single, straight wire that stands upright, supported at the top and bottom.

Setup: It can be mounted on a mast or a pole. Often, a radial system (a set of horizontal wires) is used at the base to improve performance by acting as a counterpoise.

Advantages: Compact and efficient for transmitting in all directions (omnidirectional). It's particularly useful for stations with limited horizontal space but who have vertical clearance.

Tuning: Vertical antennas are often tuned to specific frequencies and may be more complex to adjust than dipoles.

4.Long wire Antenna

A long wire antenna consists of a long single wire, usually much longer than a dipole, and can be used for both transmitting and receiving signals.

Setup: The wire is typically stretched out in a straight line, and one end is connected to the radio. The other end might be left open or terminated, depending on the design.

Advantages: Can cover multiple frequencies (wideband performance). It can be installed in a variety of locations.

Tuning: Long wire antennas often require a matching network or antenna tuner to operate effectively across a broad frequency range.

6.End-Fed Antenna

An end-fed antenna is a wire antenna that is fed from one end rather than the center (like a dipole).

Setup: The feed point is typically at one end of the antenna wire, and the other end can be suspended in the air.

Advantages: Easier to install, especially in locations where space is limited. It can be fed using a matching transformer (or other impedance matching devices) to match the antenna to the radio.

Tuning: Typically requires a matching device, like a transformer, to ensure proper impedance matching.

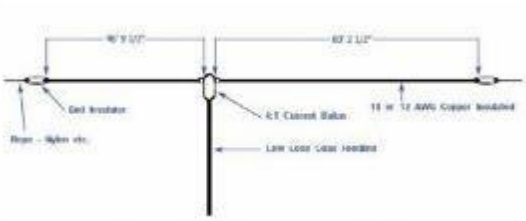
7. OCF (Off-Center Fed) Dipole

The OCF dipole is a variation of the dipole antenna, where the feed point is located off-center instead of at the midpoint.

Setup: The feed point is typically located at a point 1/3 of the way along the total length of the antenna, rather than at the center.

Advantages: This antenna can cover multiple bands without needing an antenna tuner. It is useful in situations where space is limited but multi-band performance is desired.

Tuning: Requires careful placement of the feed point and may require a matching network to ensure efficient operation.



Loop Antenna

A loop antenna is a wire antenna that forms a closed loop (either circular, square, or triangular).

The loop can be placed at various heights and configurations (horizontal or vertical) and is fed at one point with a balanced transmission line (Ladder Line).

Advantages: Can be effective for directional operation, with good performance at higher frequencies (HF bands). It's often quieter than other types, which can help in receiving weak signals.

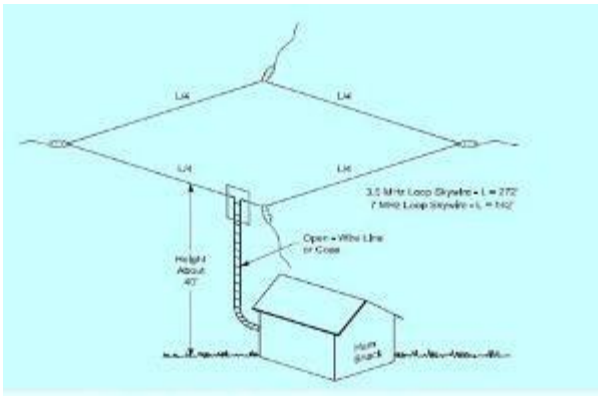
Tuning: The loop's circumference should be a specific fraction of the wavelength for resonance, usually close to the wavelength of the operating frequency.

Horizontal Loop

A specific type of loop antenna where the wire is arranged in a horizontal plane.

Setup: The loop can be oriented in various shapes, such as a square or rectangle, depending on available space.

Advantages: This antenna type can provide good radiation characteristics and low noise, making it suitable for weak signal reception.



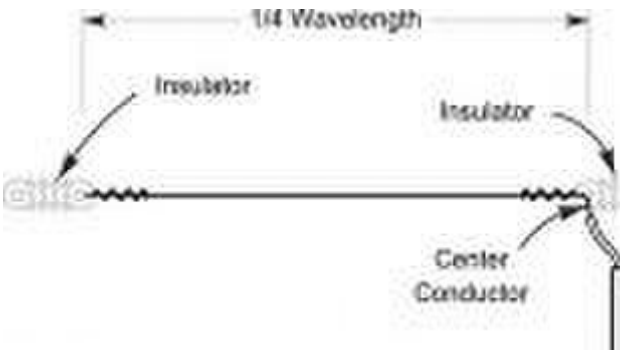
Considerations for Ham Radio Wire Antennas:

- Length: The physical length of the antenna is critical for its tuning to the correct operating frequency. A longer wire typically covers lower frequencies, and a shorter wire is used for higher frequencies.
- Installation Location: The height and positioning of the antenna (such as horizontal or vertical) can affect performance. In general, higher placements allow for better radiation patterns and reception.
- Matching: Impedance matching is often necessary to ensure maximum power transfer between the antenna and the transceiver. This is typically achieved using an antenna tuner or a matching network.
- Space: Many wire antennas are ideal for limited spaces, such as urban or suburban environments, as they can be installed in tight corners, between buildings, or along fences.

Conclusion

Wire antennas are an essential part of amateur radio because of their flexibility, cost-effectiveness, and ease of installation. The type of wire antenna you choose will depend on factors such as available space, desired frequency range, and installation conditions. With the proper tuning and matching, wire antennas can perform well for both transmitting and receiving on a variety of bands.

Dipole Antennas



Tuning a dipole antenna is the process of adjusting its dimensions and matching it to the desired frequency to ensure optimal performance. Here are the key steps to tune a dipole antenna effectively:

1. Calculate the Optimal Length

The total length of a dipole antenna is typically a half-wavelength of the frequency it is designed to operate on. The formula for calculating the total length is:

$$Total\ Length = \frac{468}{\text{Frequency in MHz}}$$

Where:

- Total Length is the total length of the dipole in feet.

Frequency in MHz is the operating frequency in megahertz (MHz).

Divide this total length by 2 to get the length of each leg of the dipole antenna.

For example, if your target frequency is 14.275 MHz (20 meters), the formula gives: 32.78 feet.

Each leg of the dipole will be: 32.78' ÷ 2 = 16.39 feet

2. Adjust for Bandwidth and Impedance

After constructing the antenna, it may need adjustments for the best impedance matching (typically 50 ohms) and bandwidth. The antenna will need to be adjusted for minimal Standing Wave Ratio (SWR) at the desired frequency.

To adjust the antenna:

- **Lengthening the antenna** lowers the resonant frequency, bringing it closer to the target frequency.

Shortening the antenna raises the resonant frequency, moving it further from the target frequency.

3. Measure SWR (Standing Wave Ratio)

Use an SWR meter or antenna analyzer to measure the impedance of the antenna system:

- Ideal SWR is 1:1, indicating perfect impedance matching.

SWR between 1:1 and 2:1 is generally acceptable for most communications.

If the SWR is high:

- **Increase the length of the antenna** to lower the resonant frequency.

Decrease the length of the antenna to raise the resonant frequency.

4. Adjusting for Multiple Bands (Optional)

If the antenna is used for multiple frequencies, such as in a multiband dipole (e.g., for 20m, 40m), the antenna's design will require a compromise between different resonant frequencies. You can add traps or use a ladder-line for better multi-band performance.

5. Fine-tuning

- Move the antenna (height, orientation) for optimal radiation pattern and performance.

Use a tuner if precise matching is still needed after the length adjustments.

6. Test Performance

Once the SWR is minimized at the desired frequency, test the antenna's performance by checking signal strength and clarity on air. You can use a receiver or a signal analyzer to confirm the radiation pattern and signal quality.

Summary of Steps:

1. Calculate the dipole's length for the target frequency.
2. Assemble the antenna with the calculated length.
3. Measure SWR with an antenna analyzer.
4. Adjust the antenna length to match the frequency better.
5. Optionally, adjust for multi-band operation if necessary.

Perform on-air tests to ensure good performance.

With these steps, your dipole antenna should be tuned and performing optimally for your desired frequency.

End-Fed Antennas

An end-fed antenna is a type of antenna used in ham radio that is typically fed at one end, as the name suggests. These antennas are popular among amateur radio operators due to their simple design, ease of installation, and ability to perform well in a variety of situations.

Key Features of End-Fed Antennas:

♦ Feeding at One End:

As opposed to a center-fed dipole, which has its feed point at the center, an end-fed antenna has its feed point at one end of the antenna.

This type of antenna can be easier to install, especially in locations where space is limited or where a full-length dipole antenna would be impractical.

♦ Efficiency and Performance:

End-fed antennas can provide good efficiency and performance if designed correctly, though they are often more affected by feedline impedance mismatches than other types.

A typical design includes the use of an impedance matching network or transformer, such as a 4:1 current balun or a 1:49 unun to match the impedance of the antenna (often 50 ohms) to the radio's output impedance.

♦ Simple Design:

These antennas are usually a single long wire, making them less complicated to set up than other antenna types.

The wire can be as long as a quarter wavelength or more, with common lengths ranging from 20 to 80 meters depending on the desired frequency bands.

♦ Installation Flexibility:

End-fed antennas can be installed horizontally, vertically, or sloped, making them versatile for various installation scenarios (like mounting along the eaves of a building or in trees).

The antenna may be more compact and flexible than a full dipole or multi-band antenna.

♦ Multiband Capability:

Many end-fed antennas are designed to work across multiple bands, with a matching network that allows them to operate on several different frequencies.

Some designs include traps or use of a wide range of resonant lengths to provide multiband functionality.

Benefits of End-Fed Antennas:

* Space-Saving: They can be easier to install in small spaces, especially in urban environments where a full dipole antenna might not be possible.

* Simple Construction: Few components are needed, making it an affordable and easy antenna to build.

* Wide Coverage: With the right matching network, an end-fed antenna can cover multiple bands, making it useful for general HF operation.

* Challenges of End-Fed Antennas:

* Impedance Matching: Due to the nature of the antenna's design, impedance matching can be more critical, and an external matching device may be needed to minimize losses and improve performance.

* Grounding: End-fed antennas may require a good ground or counterpoise to function optimally. Without one, they can be less efficient or may cause unwanted radiation patterns.

* SWR (Standing Wave Ratio) Concerns: Depending on the length and frequency, end-fed antennas can have high SWR, requiring careful tuning and adjustments to achieve optimal performance.

Types of End-Fed Antennas:

1. Simple End-Fed Half-Wave (EFHW):

A half-wave antenna, with the feed point at one end, typically resonant on one band. Matching transformers or networks are often used for multiband operation.

2. Multi-band End-Fed Antennas:

These antennas are designed with specific matching networks that allow them to work on several bands without the need for manual switching or adjustments.

3. Half-Wave vs. Quarter-Wave Designs:

A half-wave antenna is typically more efficient but longer, while a quarter-wave antenna might be shorter but less efficient.

Example of End-Fed Antenna Construction:

For a typical End-Fed Half-Wave (EFHW) antenna:

- Antenna length: 33 feet (approximately 10 meters) for 20 meters band, designed for multiband use.
- Matching transformer: 49:1 unun (unbalanced-to-unbalanced transformer) to match the impedance of the antenna to the transmitter.
- Installation: Can be mounted horizontally, sloping, or in an inverted-V shape, depending on available space.

Conclusion:

An end-fed antenna is a practical and versatile option for ham radio operators, especially those with limited space or who want an easy-to-assemble, multiband antenna. While they require proper matching for optimal performance, they can provide excellent results when designed and installed correctly.

FM Repeater Nets In And Around Knox County

County	Net	Frequency	Day and Time
Coshocton	CCRA ARES	147.045 PL 71.9 147.045 PL 71.9	Every Sunday 9:00 PM Every Monday 8:00 PM
Delaware	Monday Night Net	145.170 PL 74.4	Every Monday 8:00 PM
Knox	**ARES Sunday Night Net**	**146.790 PL 71.9**	**Every Sunday 9:00 PM** **EchoLink** **K8EEN– R Node: 809800**
Licking	N8RA Tuesday Night Net	146.880 PL 141.3 444.500 PL 141.3	Every Tuesday 9:00 PM on the 146.880 except for the last Tuesday of the month they check in on the 444.500 repeater.
Morrow	Morrow County Information Net	146.775 PL 107.2	Every Sunday 9:00 PM
Richland	IRAC Net - Mansfield	146.940 PL 71.9	Every Wednesday 8:00 PM

"2024 Field Day was a huge success this year. One of our biggest events of the year." Don, W8PEN

MVARC Election Results

G. Michael, KE8HGE

2025 MVARC leadership team.

- President: Frank Counts
- Vice-President: Emery Bennett
- Secretary: none (Terry has volunteered to serve as Secretary/Treasurer if no one else steps forward)
- Treasurer: Terry Windsor
- Public Information Officer: none

Directors for the 2025-6 cycle:

- Scott Yonally (2nd round)
- Tyler Fields (1st round)
- Evan Koontz (1st round)

Amateur Radio Vinyl Decals

Nichole Adessa, N8OVE

I make vinyl decals. I made two designs for MVARC. The links below are to the designs on my online shop.

The first link is a club design shown below.

https://www.etsy.com/listing/1009895981/mount-vernon-amateur-radio-club-vinyl?ref=shop_home_active_1&variation0=1971593946&variation1=1991398087

The second decal is personalized with the individual's Call Sign added.

https://www.etsy.com/listing/995928986/personalized-decal-with-call-sign-for?ref=shop_home_active_2

NOTE: You can view both designs and color options by going to the web address.

"Ham radio wire antennas are an essential part of amateur radio setups, especially for operators looking for affordable, effective antennas that can be used in various frequencies and environments." — Final Takeaway

Ohio ARRL Sanctioned Hamfests

Ohio ARRL Hamfest gatherings and Conventions

Ohio Great Lakes Division ARRL Sanctioned Hamfests.

Or

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

Training Class Schedule

G. Michael, KE8HGE

Sessions meet weekly, every Tuesday evening, starting at 6:30 pm.

Study Session Schedule, 2025

- Technician Class license:
  February 25 to April 15, testing session April 16.
- General Class license
  July 1 to August 19, testing session August 20.
- Technician Class license
  October 28 to December 16, testing session December 17.

"I am putting together a class on "What is DMR". This will be a high-level overview of how DMR works and why there are so many different FM digital modes." Stephen N8RLW

Editors Notes

The MVARC Newsletter is delivered to club members via email containing a link to the MVARC webpage, 2025 Newsletters button.

We really **NEED** your input - help eliminate missing articles on club events or interests!

Submit an article as a Word, OpenOffice or text file attachment to an email. ***"Do not"*** submit a PDF file.

Contact email for the MVARC newsletter is:**admin@mvarc.net**.

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

MVARC

- President
Frank, KC8EVS
- Vice President
Emery, W8TW
- Secretary / Treasurer
Terry, KI8N
- Club Call Trustee
Don, W8PEN
- Equipment Trustee
Barry, N8PPF
- Directors
Michael, KE8HGE
Roger, KE8ICI
Scott, N8SY
Tyler, KF8AVA
Evan, KF8APC
- Newsletter Editors
Frank, KC8EVS
Terry, KI8N

Web Page
MVARC.net

Facebook Page
https://ww w.facebook.com/mvarc

MVARC Email
admin@mvarc.net

Mount Vernon at Christmas