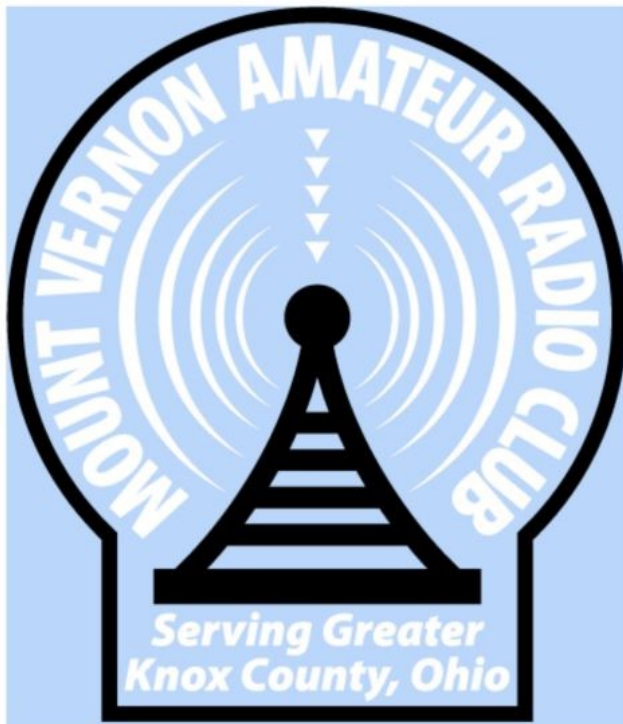


April 2023

2023 Edition 4



# Mount Vernon Amateur Radio Club



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## MVARC Repeaters

K8EEN VHF Repeater

146.790 MHz

- 600KHz / PL = 71.9 Hz

K8EEN-R Echolink Node:

809800

K8EEN UHF Repeater

444.600 MHz

+5 MHz / PL = 71.9 Hz



# MVARC APRIL MEETING

Monday April 10 at  
7:00 PM

Academy Building  
790 Fairgrounds Rd.

## Our Agenda

- Updates
- Events
- Old Business
- New Business
- 50/50 Raffle
- Fellowship



<https://MVARC.net>

## President's View

### Frank Counts KC8EVS



It's April and I hope that all is well at your QTH. March has been a busy month here with the grand-

children and getting the farm back in shape. It didn't take long for everything to become overgrown. I'll be a couple of years getting it back to where it was.

I've got my antenna up, 160 M off center fed dipole. I still need to make some adjustments to it but that will be much easier now since I don't have to climb the wind mill to bring the whole thing down if needed. While I was up there, I installed another pulley so that I can raise another antenna to experiment with. I already have a couple in the works to see how they perform. I want to put one up out on the back forty so I can operate back there while camping.

This month is NVIS day on the 22<sup>nd</sup>. As of now there will be two stations operating at one of our county parks, Thayer Ridge Park, and Wolf Run Park. Also, we hope to bring up the EOC during the festivities. Come out and join the fun. I will be operating from Thayer Ridge and would love to have you come out and run the station. I'll be there from 10 am to until I get tired of operating or 6 pm the end of the event.

Starting on Thursday's we will be meeting on the repeater (146.79) at 7 pm until ...well until everyone gets tired of talking. If you have a few minutes, please join us. It's not a net, it will be a round table

format which is fun. I always forget who I follow in the rotation or forget what I was going to mention as I listen to others. Please join in if you hear us break in and join the fun. You can come and go as you please.

I'm adding a picture of my station set up. I would love to see what your station set up looks like. Send a picture to me or Terry and we will post one each month in the newsletter. It doesn't have to be fancy set up just what you use. A handheld beside a recliner is fine as that is where I was last year.



With that I hope to see you April 10 at 7 pm. We have been having great attendance and I would love to see more. If you can't make it join us at 9 am Fridays at McDonald's, 4:45 pm Wednesdays (South Side, Pizza Hut) Michael usually updates the location on our Sunday night net. And please join the Sunday net on 146.79 repeater at 9 pm and on Thursdays at 7 pm for the round table.

73

## Meeting Minutes

**Scott Yonally**

**N8SY**



The March 13 meeting was called to order by Frank, KC8EVS and he asked if there were any additions or corrections to the February Meeting Minutes as published in the newsletter. Hearing none, the meeting minutes were ap-

proved as published.

### Treasurers Report

Terry, KI8N gave the Treasurers report. There were no corrections or changes and will stand as read.

He also gave an update on the clubs' use of the ARRL Club Commission. He reported he had turned in ARRL dues for a new member and himself and has received \$20 back from the ARRL. This shows that that system does work, and the club can make a little money by taking the time and collecting ARRL dues along with the normal club dues. Some discussion followed.

### Committee Reports

#### ARES

Terry gave a short overview of what Knox County ARES is doing. Some discussion followed about what NIMS courses have been taken by several members and not credited in the Ohio Section ARES pages.

Barry, N8PPF reminded everyone about the upcoming Skywarn training. Some discussion followed about what classes would be available.

#### ARRL

Frank displayed a recent edition of QST where MVARC is now listed as a Special Service Club. It's listed on page 77 of the March edition.

Frank and many of the members wanted to know more details about the recent Board decision concerning the recusal of N2RJ. Scott, N8SY gave a somewhat (abbreviated) overview of all the facts and how and why the Board concluded how it did. Discussion followed. Scott also gave an update on some ideas that are being kicked around to the ARRL membership where it might be needed to change the way QST is delivered to the membership. He also explained what cost savings measures have been initiated by the CEO to contain costs and keep the membership dues from being raised.

Scott also announced that he will be running for the Great Lakes Division Director position this year.

#### Repeaters

Steve, N8RLW reported the repeaters are working. No problems reported and everything is working well. He reported in the spring he and a few others would be putting a packet node station on the air. This would be installed at the water tower location. He would utilize a lot of equipment that is already in hand, so this installation will not cost much to install. He also stated that he was thinking of starting a new net. This net would be on the 440 repeater to give it a regular workout. He's thinking of possibly having the net on the 3rd Saturday of each month. The idea of this net is to get everyone familiar with the 440 machine and making sure this repeater gets utilized.

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**“The Mt. Vernon group was granted the first Ohio Repeater license under these new regulations, WR8ABA.” Don, W8PEN**

### **MESH / EchoLink**

Don, W8PEN gave a short overview of the MESH and EchoLink systems. He stated everything is in working order. Some discussion followed on the usage at night by foreign stations. They check-in but when they are called, they don't respond.

### **Club Station Lease**

Frank reported there has been no new news to report. He will check back with them in 6 months.

### **V.E. Testing**

Frank reported we had several testing sessions with the following people passing. Marc Whitaker, KE8WMB; Jocelin Whitaker, KE8WMC; and Nicole White, KE8WXD. We congratulate them all and welcome them into the club.

### **Club Meeting Space**

Frank reported he had a discussion with a person in charge via email along with the personnel downstairs (Head Start) and they have confirmed that there will be a wall constructed in the big meeting area within the next few months. They have no issue with us using the new room and the wall is only being built to help cut down any disturbances from folks coming up the stairs and walking through the area.

They have asked us for a schedule for when we will need the meeting room which will be no problem. There was some discussion about getting our classes and testing scheduled on a regular basis as well as getting better access to the building itself.

### **Events**

- NVIS Day is April 22 from 10am to 4pm. Frank stated that he would be inputting information about NVIS on the clubs

Facebook page so the Parks Department could also add this event to the Parks Department Calendar as well. Discussion followed as to who and where operations would occur.

- Black Fork Gravel Grinder is May 6 with a 10 am mass start. It is expected to have over 500 bikes entered this year. Discussion followed.
- Field Day and State Parks on the Air are also coming up as additional events.

### **Old Business**

Barry encouraged everyone to come out and operate Field Day in June.

Terry reported he has had little luck contacting anyone at the Knox County Litter Prevention about having the club get involved with this program. He also reported that he had investigated further into setting up PayPal or Square to help collect dues electronically. Much discussion followed with the members requesting Terry to do more investigation into PayPal and what it will take to get it setup.

It was also suggested we get more information about setting up an information booth at some of the upcoming public events. The Farmers Market would most likely be the best one to try this with.

**New Business**

Tony, KC8UR made a motion to purchase an amplifier/speaker and microphone to use at the meeting. This way everyone can hear all of what is being discussed. Much discussion followed with a second by Emery, W8TW. Motion passed unanimously. The Directors are to get a list of equipment needed and get it ordered.

The raffle was held for a 50/50 drawing and/or a pair of Baofeng BF-888S VHF hand-held radios with Barry, N8PPF winning

A motion to adjourn the meeting was made at 8:20 pm EST with no dissenting votes cast.

**Personnel present a the meeting;**

Frank Counts, KC8EVS	Don Bunner, KB8QPO
Ralph Bower, KC8REB	Wayne Bower, WB8WB
Emery Bennet, W8TW	Barry Butz, N8PPF
Tom Evans, KD8HSA	Roger Gorrell, KE8ICI
Don Russell, W8PEN	Ralph Dunmire (no call)
Michael Jacobs, KE8HGE	Scott Yonally, N8SY
Ralph Hoffman, W8LFR	Tony Spiegel, KC8UR
Steve Harvey, N8RLW	Bill Stroud, KD8WHQ
Terry Windsor, KI8N	Bart Hains, KD8LDT



## Let's Be 440.600 Radioactive

**Steven Harvey**  
**N8RLW**



Are you aware the MVARC has a 440MHz repeater? Did you know it can do Wires-X, C4FM and Analog? If you answered no to any of these questions or you're wondering what tech jargon did he just say. Then you need to join us starting in the month of May 2023 for the 440 FM and Digital Tech Net on the MVARC 444.600 machine.

This new net will be held monthly on the 3<sup>rd</sup> Saturday of the month starting at **10:00 AM to 11:00 AM** on the 444.600 pl 71.9. The FM and Digital Tech will be hosting various topics of digital nature such as, what is C4FM, why is it different from DMR. What is the difference between a Talk Group and a Room. Many other topics in the digital ham radio world will be explored and this will also give our lonely 444.600 machine some exercise besides Terry, KI8N and Steven, N8RLW using it to listen to Wire-X groups all over the world.

We'll all check in and have discussion on the topic and see where it goes from there. My hope over time is to get enough local people with C4FM radio's so I can open this net up to others who can check into the net via our Wires-X room on the repeater. In the meantime, dig out your dusty 440 rig or dual band handheld and set it up for an outside antenna and program it to 444.600 pl 71.9. Give it a try before the net starts that way if you have any questions let me know. Let's become 444.600 Radioactive.

73

Steven Harvey; N8RLW Net Control for the 440Mhz and Digital Tech Net

### Schedule and Topics

May 20<sup>th</sup>, 2023 - What did you see at Dayton that was digital?

June 17<sup>th</sup>, 2023 – What is C4FM and Wires-X and how can I use it?

July 15<sup>th</sup>, 2023 – What is DMR and how is it different from C4FM?

August – TBA

September – TBA



**440.600 MHz**  
**PL 71.9**

### **FM and Digital Tech Net**



## NOTICES

### 2023 Upcoming Events

The following are 2023 club participation events.

- NVIS Day, April 22
- Black Fork Gravel Grinder 2023 - May 6th
- Mohican Trail 100 race at Mohican State Park—June 3
- Field Day, June 24 and 25 at Apple Valley
- Ohio State Parks On The Air—September 9 at Mohican State Park
- ARES Readiness repeater check for Red Cross shelter locations.
- ARES tabletop disaster simulation
- FLDIGI exercises and message sending
- Annual ARES SET
- Various ham radio contests from club station.
- Christmas Party 2023

### MVARC has a new a new mailing address

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

NOTE: When sending mail to this address the PMB and # must be used.

The new 2023 – 2027 question pool is effective July 1, 2023 – June 30, 2027, and *must* be used for General-class license exams administered on or after July 1, 2023.

### MVARC now has an active Facebook presence

<https://www.facebook.com/mvarc>

Watch for announcements and reminders of upcoming events.

**Do you have any events/activities YOUR club should participate in?**



## ARES

Terry Windsor

KI8N



Not much ARES activity this month. Working on the Knox County ARES Operations Manual. I realize I keep saying I am working on this but it seems that I make good progress then a

couple of days later I rethink what I did and change it again. Just need to make a good outline and then work from it. That is my plan for this month to settle on content then write the manual as planned. Once I get a good preliminary version I will email it to a few of you to review and comment. I am sure there will be items I missed or was not as clear as I hoped.



Did anyone attend any of the Skywarn training sessions? Originally I had planned to attend the in-person session at Wooster. However, I completely forgot about it until a few minutes before it was scheduled to begin. So I enrolled in the online session on March 28th and completed that training course.

On the 18th I will be attending a G191 EOC/ICS Interface course at Knox County EMA office. After this I should be able to share my take and ideas at our May MVARC meeting.

There is an article from Steven Harvey regarding signing up to work the Black Fork Gravel Grinder and this is a great way to work on your emergency point-to-point communications skills, react to real-time situations, and interface with the public.

Everyone should stay familiar with your radios and work on your communication capabilities.

Thanks everyone and stay safe and be prepared!

### CONTINUING:

This is a great time for all club members interested in ARES to review the [Ohio Section ARES](#) web pages and complete or update any NIMS ICS training courses.

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“I’m adding a picture of my station set up. I would love to see what your station set up looks like.” Frank, KC8EVS

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# April 2023

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2 <b>Palm Sunday</b> 9:00 pm ARES Sunday Night Net—Don (W8PEN)	3	4 OHDEN Net 7:45 pm	5 4:45 pm Dinner - Southside Diner	6 7 PM Roundtable Discussion on 146.79 Repeater	7 <b>Good Friday</b> 9:00 am Breakfast - McDonalds, Newark Rd.	8
9 <b>Easter Sunday</b> 9:00 pm ARES Sunday Night Net— Roger (KE8ICI)	10 7 pm <b>MVARC            Monthly            Meeting</b> 	11 OHDEN Net 7:45 pm	12 4:45 pm Dinner - Southside Diner	13 7 PM Roundtable Discussion on 146.79 Repeater	14 9:00 am Breakfast - McDonalds, Newark Rd.	15
16 9:00 pm ARES Sunday Night Net— Michael (KE8HGE)	17	18 OHDEN Net 7:45 pm	19 4:45 pm Dinner - Southside Diner	20 7 PM Roundtable Discussion on 146.79	21 9:00 am Breakfast - McDonalds, Newark Rd.	22 <b>Earth Day</b>
23 9:00 pm ARES Sunday Night Net—Terry (K18N)	24	25 OHDEN Net 7:45 pm	26 4:45 pm Dinner - Southside Diner	27 7 PM Roundtable Discussion on 146.79 Repeater	28 <b>Arbor Day</b> 9:00 am Breakfast - McDonalds, Newark Rd.	29 <hr/> 30 9:00 pm ARES Net

## Ham Radio Contest Calendar

## Radio Activity

Don Russell

W8PEN



During the March meeting, Steven, N8RLW, approached me about writing up a little history of the Mt. Vernon Repeater System.

It occurred to me that I had already written up such an article and started checking through the old Newsletter files to see if I could find the original article. No use reinventing the wheel. Found it in the March 2006 Newsletter! That was seventeen years ago, so I thought it was worth republishing. A plus was that I found a few other articles that I may be worth republishing.

I covered the history in two parts. Part two was in the April 2006 edition of the Newsletter. With just a few modifications, I present to you the original articles. Part two will be in next month's Newsletter.

### History of the Mt. Vernon ARC 2 Meter Repeater

I thought it might be interesting to write up something about the history of the Mt. Vernon Repeater System. Back in the early seventies (1972 or so) when Repeaters and 2 meter FM were still rather new, my brother Chuck (WA8ONN) and I bought a couple of Drake TR-22's. These were the cutting edge of 2-meter FM technology at the time.

They were slightly bigger than today's mobile rigs. There was a strap so you could carry it around on your shoulder. No rubber duckie here. These rigs used telescoping whip antennas much like the CB walkie talkies. I believe these were six channel units and you had to



buy crystals to channel them to your frequencies. A rechargeable battery pack was built in, and the unit weighed about five pounds. Power output was one watt with a 12-volt battery. These radios were extremely popular and typical range was 5 miles mobile to mobile. We could work into the Columbus Repeater with ease. Yes, the 16/76 Repeater was already well established. It had an auxiliary input of 146.34 MHz.

The more Chuck and I read up on the subject, the more we liked the idea of putting our own repeater on the air. Many other groups were thinking the same thing. Newark's 28/88 Repeater was just getting on the air. Canton was thinking repeaters. Galion was just putting their repeater on the air. Therefore, Chuck and I attended a couple of the Ohio Repeater Council meetings and were given the repeater frequency of 146.19 MHz receive and 146.79 MHz transmit.

The next visit was to the Dayton Hamfest where we picked up some commercial Motorola and GE equipment. This was of course tube type stuff. No solid-state surplus back then.

The Motorola commercial transceivers were made up of a complete transmitter strip and a complete receiver strip. It was easy to pull them apart and install them in their own cabinets. We did this so we could get as much isolation as possible to prevent the receiver from being desensed by the proximity of the transmitter.

Our purchases included a High Band Motorola transceiver (the repeater), a couple of UHF band transceivers (these were cheap, and we bought them for 450 MHz radio control), and a GE High Band transceiver (for our base at home). Getting the stuff was easy. Building the repeater was a challenge.

Understand that all the Ham magazines were publishing monthly articles on 2 meter FM and repeaters. The Motorola transmitter and receiver strips were very popular for repeater use, so there were numerous articles on the "how to". There were plenty of Morse code identifier projects in QST, Ham Radio, and CQ. A few repeater controllers were also being presented by these magazines. There were no commercial controllers at the time. You had to "roll your own". Other items that had to be built were COR's (carrier operated relays) to key the repeater, and audio mixers to blend the receive audio, ID audio, and controller beeper audio into the repeater transmitter.

If one wanted touch tone control, then there were some surplus telephone touch tone decoders out there. These decoders were solid state, with bulky and noisy relays. But they seemed to work better than the homebrew projects using NE567 IC chips. We tried them both.

The only thing solid state was the controller, ID'er, and touch tone encoder. Everything else was tube type. The controller was much different by today's standard too. No microprocessors. We used IC timers (LM555, they are still around), and logical and/or ICs for the controller. To get the

identifier programmed with the correct call, there was a diode matrix to solder in!

This was all so much fun! Really! It was not too long before the first Mt. Vernon Repeater went on the air as WA8ONN/R. Chuck was the electronic wizard. I was just a gofer and the guy that built the COR and Audio Mixer. But they worked!

The first repeater was in our mom and dad's garage on Coshocton Avenue near Division Street.



**FIG 1:**  
First Mt. Vernon Repeater, WA8ONN/R  
At the home of WA8ONN and WA8YRS



**Fig 2: Bottom of the cabinet**

The receive antenna was a Ringo Ranger. The transmit antenna was a home brew four bay dipole array. At the time, duplexers were a bit out of our price range. The tower was only 40 feet high, so the antenna separation was not much, and we did have some desense. That is how I know all about checking for desense these days!

The repeater did not have much range, but we had a lot of fun testing it while looking for a good repeater site. Chuck worked in Mansfield at the time, and he could start hitting the repeater somewhere between Bellville and Fredericktown.

This was repeater number one.

Repeaters being new to Ham Radio, the FCC of course was in a panic. They felt like they had to regulate this new technology. You know. If the government regulates something enough, then the government makes money while slowing up advancement to the technology. Then the government has a chance to make additional rules. Times have not changed much in fifty years!

Well, the FCC came out with a whole bunch of new rules directed at repeaters. Had to get a special repeater license, had to get an auxiliary receiver license, had to get a control station license. Had to make antenna gain measurements. Thank goodness they saw the errors in their ways and do not require all of this now. But back then it was a pain!

The Mt. Vernon group was granted the first Ohio Repeater license under these new regulations, WR8ABA. A group in Michigan beat us to the first WR8 call! But we have bragging rights for Ohio.

We were not the first repeater in Ohio, just the first repeater licensed under the then new FCC rules and regulations.

This required us to do our own antenna measurements which was a lot of fun. We took a field strength meter and walked around the block taking measurements. Since the repeater was still in the garage, we were able to claim direct control which made the application go smoother. Then later, we applied for remote control authority when we moved it to its new location, which was repeater number two. Stay tuned next month for information on repeater number two.

Hope to see you all at the April meeting.

## Black Fork Gravel Grinder Volunteer Sign Ups

Steven Harvey

N8RLW



Attention all Club Members as the coordinator for this year's Black Fork Gravel Grinder I need to get about 6 to 8 people who are willing to spend most of the day on Saturday, May 6<sup>th</sup>, 2023, from 9 am to 3:00 pm helping do emergency communications. We will also be doing a test run rain or shine on Saturday, April 29, 2023 at the rest locations starting at 10:00 am to test our communications capabilities. This takes around a couple of hours to complete and make sure we have proper communications between sites.

If memory serves me, this will be our 4<sup>th</sup> year partnering with the Gravel Grinder Bike Race. Please use the link below on our MVARC website to sign up for the event. This helps me know who will be able to help and which location.

This year a food truck will be at the Mohican Wilderness site so any members who need something to eat or want to go away for lunch I highly recommend the food truck.

Your participation will be a great way to help sponsor this race and support the local food truck. Any question or concerns please contact me.

**Please sign-up no later than April 14<sup>th</sup>, 2023.**

Link to the: [sign up page](#) also located on the main page of [MVARC.net](#).

Link to the [Black Fork Gravel Grinder Race](#).

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# Ohio's Premier Gravel Event

## Miscellaneous Rambling

Terry Windsor

K18N



Last month I mentioned working radio communications at the Arnold Sports Festival and I had a good time. On Friday I was stationed

at; Highland Games, Pro Strongman, Power Lifting, and Ninja games. Then on Saturday I three different power lifting events and back to Highland Games. It was a fun weekend, saw several world records set, and I met a lot of amateur operators, mostly from Franklin county.



We had our 5 year old granddaughter from Memphis spend a couple of nights with us. Went to a petting zoo and visited the Cincinnati Art Museum. My daughter referred to this as a tune up event since we will have the granddaughter here for about 7 days in June. Just hoping us grandparents are up to the challenge!

One item I would like to expand on is the ARRL's Club Commission Program. In February myself and Don, KB8QPO used this program and MVARC received a \$20.00 pay-

ment from ARRL. It was easy to do and it is a great way for us to add funds to our bank account to be able to add to the club station or activities. This is the link to the [ARRL Membership Application](#) which you would fill out with your information and membership / magazine selections. Then just turn into me at the club meeting or mail to the club address and I will get it sent in with the Reconciliation Form to update your membership and provide the club's bank account information.

Finally, I wasn't very active radio wise in March. Only two POTA activations, although both were new Ohio locations for me. Based on LOTW I only had 425 contacts in March. A little below my typical monthly average.



Figure above from the Arnold shows this competitor from Sweden lifting 218 Kgs (about 481 lbs.). He eventually lifted over 600 lbs.

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**“This shows that that system does work, and the club can make a little money by taking the time and collecting ARRL dues along with the normal club dues.” Scott, N8SY**

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## 10 Meter Suspended Antenna

Barry Butz

N8PPF

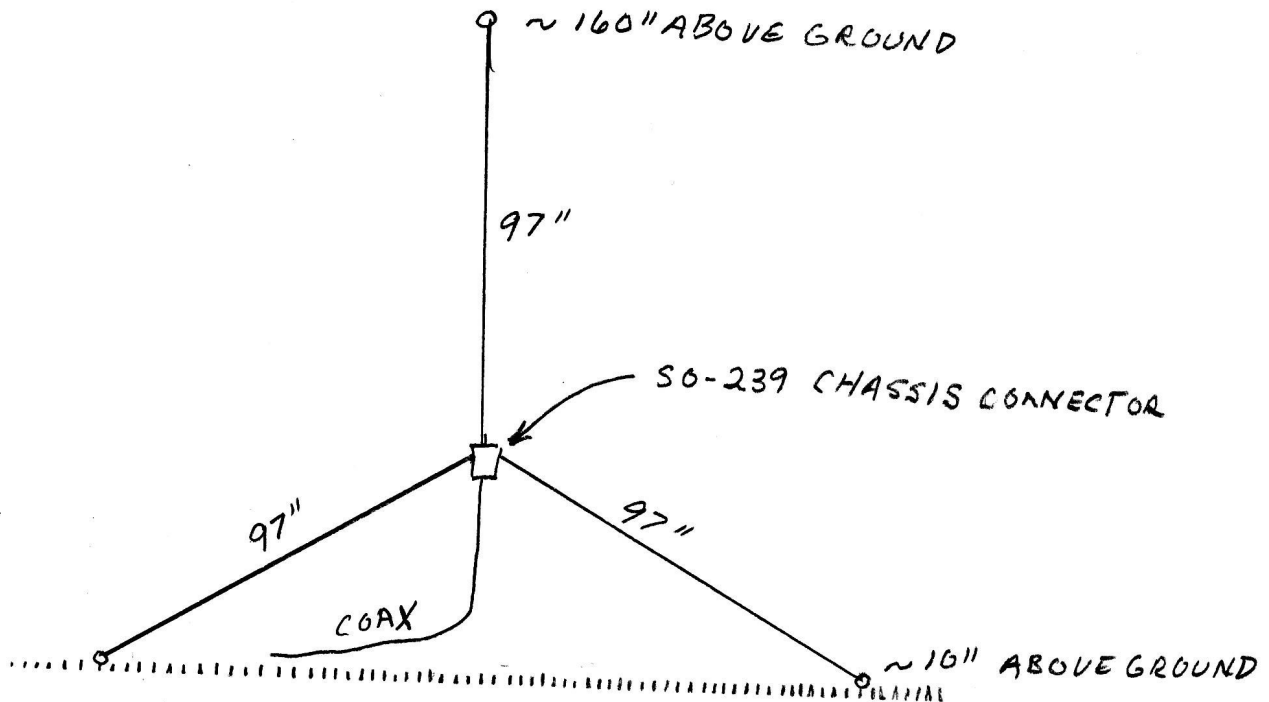


Those who have heard me on the net lately might wonder why I keep harping about the 10 meter band. There are a couple reasons. First, since solar cycle 25 has come on strong; with 10 meters performing better than it has in years. Secondly, this is an opportunity for technician class hams to experience HF operating. I decided to make the simplest antenna I could think of.

Sometimes you hear that 10 meter is no good for techs because they are licensed for only part of the band. The fact is that portion is greater than many of the other bands - 300K for data and 200K for SSB. Check out the band chart. I believe there are techs that have radios that include 10 meters but are just lacking an antenna. I was such a ham myself.

So, to get on with the antenna project. I decided to make a ground plane vertical, like the common VHF vertical. The material is just wire, one SO-239, and some string. The vertical element wire is suspended by a string tossed over a tree branch. Keeping matters simple, just two ground plane radials are drooped 30 degrees below horizontal and staked near the ground with more string.

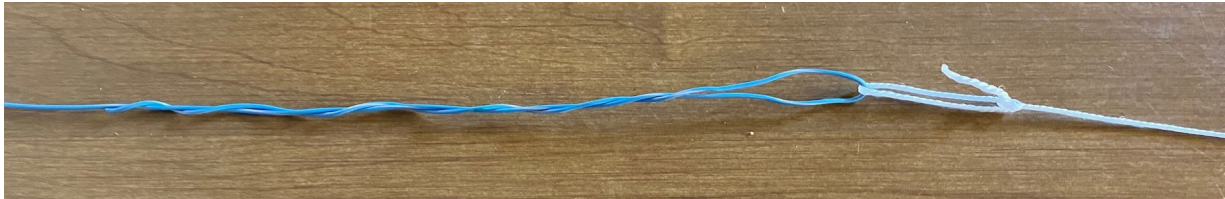
### 10 METER SUSPENDED ANTENNA





Before designing, I ran a computer plan using EZNEC. The plan called for 101" length for all three elements. It's kind of a rule to allow for longer element lengths so I cut the wires extra long, thinking I might need it. When I tested for SWR the length was too long. I started shorting inch by inch and checking each step. Finally, I was satisfied with 97". At the time I was shooting to cover the Tech portion only. In fact, the antenna is so broad that the SWR goes from 1.3 to 1.0 to 1.8. I could have done some more fine-tuning, but the temperature was too cold for more outdoor work.

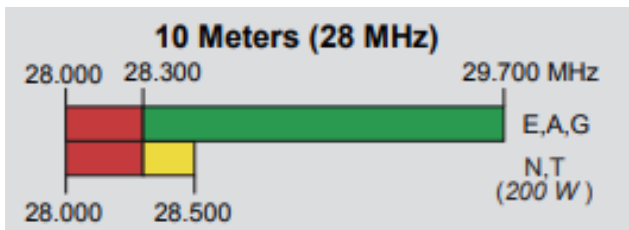
The wire ends are made into loops to connect to the string. Loops also can easily make a temporary or permanent length.



In the end does this thing of beauty work? You can ask XE1RK in Mexico City. He gave me a 56 signal report on 28.430. He even played back my voice and it sounded pretty good.

There are some obvious improvements in the design. Raising the whole antenna would be worth a try. Lowering the radials to a 45 degree droop would be expected to lower the takeoff angle. And of course, adding two or more radials would be an improvement. After making changes SWR can be rechecked, and length adjustments are easy to make.

I'd like to give this prototype to a tech member to help get on the air. It's not a big deal but it could help someone get started. Please actually try it.





## Final Takeaway

### FM Repeater Nets Around Knox County

Steven Harvey

N8RLW



Are you aware of the local repeater nets that happen each week around Knox County? If not, here is a handy table showing the times and when they happen. I have compiled this list for the counties around Knox. If you would like me to add other nets to this list, please contact me and I'll do an update in the next newsletter. This is a great item to print out and keep by your radio as every check-in is appreciated on all nets.

If you're a new ham this will allow you more opportunities to get more practice. Hope to hear from some of you on these nets.

73

County	Net	Frequency	Day and Time
Ashland	No net as of 03.30.2023		
Coshocton	CCRA	147.045 PL 71.9	Every Sunday 9:00 PM
	ARES	147.045 PL 71.9	Every Monday 8:00 PM
Delaware	Monday Night Net	145.170 PL 74.4	Every Monday 8:00 PM
Holmes	No net as of 03.30.2023		
Knox	<b>MVARC Roundtable</b>	<b>146.790 PL 71.9</b>	<b>Every Thursday 7:00 PM</b>
	<b>ARES Sunday Night Net</b>	<b>146.790 PL 71.9</b>	<b>Every Sunday 9:00 PM</b>
	<b>440 FM and Digital Tech Net</b>	<b>444.600 PL 71.9</b>	<b>3<sup>rd</sup> Saturday of the month starting May 2023 at 10:00 AM</b>
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 Net	146.775 PL 107.2	Every Sunday 8:30 PM
Richland	IRAC Net - Mansfield	146.940 PL 71.9	Every Wednesday 8:00 PM

## General Exam Sample Test Questions:

**G7A05** What portion of the AC cycle is converted to DC by a half-wave rectifier?

- A. 180 degrees
- B. 90 degrees
- C. 360 degrees
- D. 270 degrees

**G7A07** What is the output waveform of an unfiltered full-wave rectifier connected to a resistive load?

- A. A series of DC pulses at twice the frequency of the AC input
- B. A series of DC pulses at the same frequency as the AC input
- C. A steady DC voltage
- D. A sine wave at half the frequency of the AC input

## Extra Class Exam Sample Test Questions:

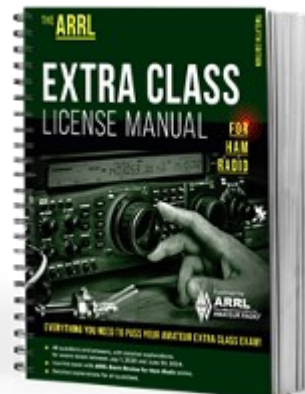
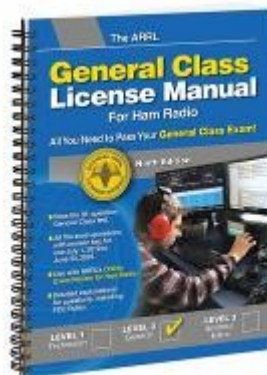
**E9C09** Which of the following describes a G5RV antenna?

- A. A multi-band antenna
- B. A phased array antenna consisting of multiple loops
- C. A wide band dipole using shorted coaxial cable for the radiating elements and fed with a 4:1 balun
- D. A multi-band dipole antenna fed with coax and a balun through a selected length of open wire transmission line

**E9C12** Which of the following describes an Extended Double Zepp Antenna?

- A. A portable antenna erected using to push support poles
- B. A center-fed 1.25-wavelength antenna (two 5/8-wave elements in phase)
- C. A wideband vertical antenna constructed from precisely tapered aluminum tubing
- D. An end-fed folded dipole antenna

These test questions are from the current test pools for their respective license classes. How did you do? The answers are on the last page. Practice tests for all license classes can be found here: <https://www.qrz.com/hamtest/>. The ARRL license manuals shown are available from the [ARRL](http://www.arrl.org), retailers, or Amazon for license studying.



## Miscellaneous Amateur Radio Information

Join us every Sunday night on the Mt. 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) -  
Just look us up.  
K8EEN-R Node 809800.

## Ohio Traffic Nets



### The Ohio Single Side-Band Net (OSSBN)

Ohio Single Side-Band Net; Ohio connection for what is going on in the Ohio Traffic System. The Net meets on 3.972.5 MHz at 10:30 am, 4:15 pm, and 6:45 pm daily. Alternate Frequency for all sessions is 3.968 MHz.



### Central Ohio Traffic Net

The Central Ohio Traffic Net is a part of the Ohio Section of the National Traffic System. They meet daily to handle traffic; all licensed amateur radio operators are welcome to check in and to learn to handle traffic. COTN meets daily at 7:15 pm on 146.970, -.600 MHz, PL 123.0. Signal Operating Instructions and frequencies given here: <https://www.cotn.us/sop>.

### The Ohio ARES HF Digital Net—OHDEN

Tuesday at 7:45 pm 1804.5 MHz, USB, Olivia 8-500 with waterfall frequency 1500.

Sunday at 4:00 pm 3584.5 MHz, USB, Olivia 8-500 with waterfall frequency 1500.



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“Attention all Club Members, as the coordinator for this year’s Black Fork Gravel Grinder I need to get about 6 to 8 people who are willing to spend most of the day on Saturday, May 6<sup>th</sup>, 2023.” Steven N8RLW

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## FCC and License Updates



### First-Time Exam Applicants Must Obtain an FCC Registration Number before Taking an Exam

All amateur examination applicants are required to provide an FCC Registration Number ([FRN](#)) to the Volunteer Examiners (VEs) BEFORE taking an amateur exam. **Social security numbers are no longer accepted at exam sessions.**

Amateur candidates who already have an FCC license, whether for amateur radio already have an FRN and can use the same number. All prospective new FCC licensees, however, will be required to obtain an FRN *before* the examination and provide that number to the volunteer examiners on the Form 605 license application

All applications will be required to contain an email address for FCC correspondence. Applicants will receive an email direct from the FCC with a link to the official electronic copy of their license whenever a license is issued or changed.

### FCC Application Fee and VEC Filed Applications

EXAMINEES MUST PAY WITHIN 10 DAYS.

Examinees do **NOT** have to wait for the email from the FCC to pay the fee. As soon as an the application file number is issued by

the FCC, they can pay by logging into the CORES [Payer FRN System](#).

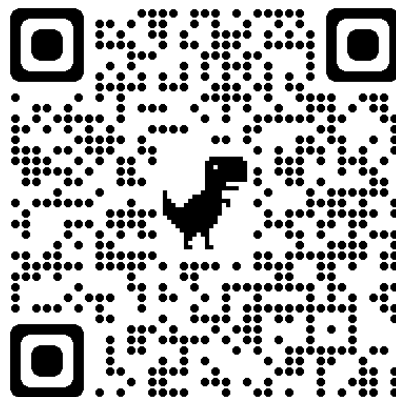
Application File Number search using an FRN: [FCC Application File Number Search](#)

### FCC Legacy CORES System—Retired

The Federal Communications Commission (FCC) retired the [Legacy version](#) of its Commission REgistration System (CORES) on July 15, 2022.

CORES is designed to identify those who hold certain types of FCC licenses and FCC authorizations, including amateur licenses, and organize them in an easily accessible manner under a common FCC Registration Number (FRN) regardless of whether one holds a single such authority or more.

Starting on July 15, 2022, the Legacy CORES website will re-direct users to the [Commission's updated CORES](#) site. Although some functionalities in the old system will continue to work for a short time, the [FCC has urged all users](#) to transition to the updated CORES system to take advantage of its enhanced security and functionality.



## MVARC

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\* President

Frank Counts, KC8EVS

\* Vice President

Barry Butz, N8PPF

\* Secretary

Scott Yonally, N8SY

\* Treasurer

Terry Windsor, KI8N

\* Club Call Trustee

Don Russell, W8PEN

\* Equipment Trustee

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\* Directors

Michael Jacobs, KE8HGE

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### Note

The Friday morning breakfast is meeting at McDonalds. 111 Newark Road, Mount Vernon (next to Southside Diner).

This is to accommodate parking since the Academy Building visitor parking is not available during week-day work times. The group has temporarily decided to relocate to a meeting location that is easier for club members, guests, and visitors to access.



## Answers to sample test questions on page 20.

G7A05: A – 180 degrees

G7A07: A – A series of DC pulses at twice the frequency of the AC input

E9C09: D – A multi-band dipole antenna fed with coax and a balun through a selected length of open wire transmission line

E9C12: B – A center-fed 1.25-wavelength antenna (two 5/8-wave elements in phase)

## Editors Notes



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

*Thanks to all for your assistance with the MVARC Newsletter; in 2022 we were selected as the second best newsletter in the Ohio Section.*

Please note the contact email for the MVARC newsletter is: [admin@mvarc.net](mailto:admin@mvarc.net).

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

## Web Page

MVARC.net

## Facebook Page

[https://  
www.facebook.com/  
mvarc](https://www.facebook.com/mvarc)

