

March 2023

2023 Edition 3



# 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 MEETING INVITATION

 March 13, 2023

 7:00 PM

 Academy Building  
790 Fairgrounds Rd.



Visit our Webpage:

<https://MVARC.net>

## President's View

Frank Counts

KC8EVS



It's March and the time is going to change maybe for the last time this month, maybe not. I'm not sure as I have not followed up to determine if the house of representatives passed the bill. We can only hope as I don't see a need for this but that is me. If you know let me know so I know what to expect. I hope all are well here in our household we have been very busy as we still have a grandchild in the hospital. He is doing

well and should be home by the end of this week. Just in time as another daughter is due the 13<sup>th</sup> of March. You think that when all children move out parenting is over, well that isn't so. It's never ending, and we are ever grateful to be a part of all these little lives plus our own children.

Well, the wife is going to be home for the next couple of days, she has spent a lot of time at the hospital helping the kids, so I should be able to climb the windmill and get my antennas back up. Since last summer she does not permit me to climb ladders, etc. without her being present. I'm just glad to be able to climb anything it wasn't that long ago just a couple of stairs was out of the question. I will be installing a pulley at the top so that I can raise and lower my dipole antennas without climbing.

I ran across a YouTube video that caught my attention Ham Radio Now [https://www.youtube.com/watch?v=0Pr05aPRi\\_0&t=3044s](https://www.youtube.com/watch?v=0Pr05aPRi_0&t=3044s) "HRN 462 Angry Radio Relay League". These guys are usually very critical of the ARRL so no surprise as the direction they go in this video.

Basically, the League reprimanded this director, and she is upset and voicing her disagreement via YouTube. By the way she has her own YouTube channel Ria's Shack Ham Radio. Then a short time later I saw this video which shed a different light on the subject "Dave's Radio Shack" <https://www.youtube.com/watch?v=A8fDCx-dzcc>. In this video another director gives another opinion as to what happened in this directors meeting and why the League acted against Ria. You can also go to ARRL's web page and read the minutes of the board meeting. After all this, I know I'm a little slow I remembered that here in our small club we have a vice director who was there for the meeting. So, you can sit through all these video's and read the minutes, or you can just ask Scott, N8SY. I bring this up as the ARRL does a lot for us as hams but as with any organization big or small there will be conflict within the organization. I'm glad that we have the resources that we have available to us to review. Before this I never thought to review the Board meeting minutes, not a difficult or long read (two days of minutes) but gives you a better idea what direction and the discussion that ARRL is going. Now later in this newsletter you will find the minutes of our meeting which lasted 30 minutes to an hour. Please read through them and see what is up with the club. Bet you wondered where I was going with this :)

February's meeting was great thanks to all who attended. Looks like a fun summer ahead NVIS is coming soon April 22. See you on the 13<sup>th</sup>.

## Meeting Minutes

**Scott Yonally**

**W8SY**



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

published. Terry, KI8N gave the Treasurers report. He gave a full accounting of last year's expenditures. There were no objections or changes and will stand as read.

### Committee Reports

#### **ARES**

Terry, KI8N gave a short overview of what Knox County ARES is up to. He reported there is an upcoming Knox County LEPC meeting. He also announced that Mark Maxwell has retired and James Dechant, Marks former assistant is now the EMA Director. Some discussion followed about upcoming events.

#### **ARRL**

Scott, N8SY gave a short overview of what ARRL is up to with all the new programs being instituted that will help clubs and the membership. He also announced the Dayton Hamvention would be the Great Lakes Division Convention with a Wouff Hong ceremony included.

Terry, KI8N added that he will be initiating the Club Commission program for anyone wanting to join or renew their membership

with ARRL. By going through the club to join or renew your membership the club will be receiving a reward of \$15 for a new membership and \$5 for a renewal. This is money given directly to the club for collecting ARRL dues. It's free money and although the club most likely won't get a huge amount of money, it will get some. Some discussion followed.

#### **New Hams Added**

Frank, KC8EVS announced that the club recently had a V.E. testing session and we did have 2 that got their Technician Licenses. They are Marc and Jocelin Whitaker, KE8WMB and KE8WMC respectively. A big round of applause was given.

#### **Repeaters**

Roger, KE8ICI reported on the work that is on-going with the repeaters. No problems reported and everything is working well right now.

#### **MESH / EchoLink**

Don, W8PEN gave a short overview of the MESH and EchoLink systems. He stated we need more stations to hook to the MESH network. Some discussion followed on the possible connection at the repeater site.

#### **Club Station Lease**

Frank, KC8EVS reported that there has been no new news to report.

#### **Hospital Repeater Access**

Michael, KE8HGE reported that progress is continuing with the hospital on gaining access when needed and the repeater located there is still working fine.

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**"In case you have not heard, the group decided to start meeting for the Friday breakfast at 9:00 AM instead of the 10:00AM that has been done for several years." Don, W8PEN**

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

Michael, KE8HGE and Frank, KC8EVS reported that we still have several folks from the last Technician Class that still need to take their tests. Arrangements need to be made with them to get a time and place for their testing. Some discussion followed with a possible date of the first Thursday in March for testing.

### **Facebook Page**

It was reported that Scott, N8SY and Steve, N8RLW have now been given admin privileges to the page. If possible, they will also give admin privileges to a few of the officers of the club as well.

### **Old Business**

Frank, KC8EVS reported on several events that the club will be doing. Some discussion followed. Frank also reported he has had contact with the folks at Apple Valley about Field Day arrangements. The tent will once again be available to us. More discussion followed about some of the rule changes for this coming years Field Day.

### **New Business**

Frank, KC8EVS asked everyone to visit the updated radio room in the back. Lots of changes have been made. He also reported he would like to see a fillable form for membership and the possible addition of PayPal or similar company to do on-line payments for dues.

Barry, N8PPF inquired about why club financial information cannot be published to the website. Much discussion followed with Emery, W8TW making a motion to post nothing about our funds on the website. Ralph, KC8REB seconded the motion. The motion passed with one dissenting vote.

Terry, KI8N suggested we setup an information booth at some of the upcoming public events. He envisioned a popup tent with a table with some brochures that explain about

amateur radio and the club along with a portable radio to do demonstrations with. Much discussion followed.

The raffle was held for a 50/50 drawing and/or a pair of Baofeng BF-888S VHF hand-held radios. Ralph, W8LFR won and took the radios. The money collected from the 50/50 drawing will go into the treasury.

A motion to adjourn the meeting was made at 8:18 pm EST with no dissenting votes cast.

Members in Attendance;

Frank Counts; KC8EVS  
Ralph Bower; KC8REB  
Emery Bennett; W8TW  
Tom Evans; KD8HSA  
Don Russell; W8PEN  
Michael Jacobs; KE8HGE  
Ralph Hoffman; W8LFR  
Darlene Pudlinski; KE8TJN  
Terry Windsor; KI8N  
Shawn Bleiler; KD0DMJ  
Don Bunner; DB8QPO  
Wayne Bower; WB8WB  
Barry Butz; N8PPF  
Roger Gorrell; KE8ICI  
Scott Yonally; N8SY  
Wendell Combs; KE8NUX  
Bill Stroud; KD8WHQ  
Jocelin Whitaker; KE8WMC  
Marc Whitaker; KE8WMB



## NOTICES

### Daylight Savings Time begins 3/12!

### 2023 Upcoming Events

The following are possible 2023 club participation events.

- NVIS Day, April 22, 2023
- ARES Readiness repeater check for Red Cross shelter locations.
- ARES tabletop disaster simulation
- FLDIGI exercises and message sending
- Annual ARES SET
- Ohio State Parks On The Air at Mohican State Park
- Black Fork Gravel Grinder 2023 - May 6th, 2023
- 24-hour foot race at Mohican State Park.
- Skywarn™ Training by the National Weather Service
- Field Day, June 24 and 25, 2023
- 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.

### General License Examinations

The National Conference of Volunteer Examiner Coordinators ([NCVEC](#)) Question Pool Committee ([QPC](#)) has released the [2023 – 2027 General Class FCC Element 3 Question Pool & Syllabus](#).

The new pool incorporates some significant changes compared to the 2019 – 2023 pool. Its 432 questions were modified slightly to improve wording or to replace distractors; 51 new questions were generated, and 73 questions were eliminated. The difficulty level of the questions is now more balanced, and the techniques and practices addressed were updated.

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.

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

## National Weather Service—Skywarn Weather Spotter Training

The Cleveland weather forecast office has posted their Spotter Training for 2023. [Spotter Training Schedule](#) and registration links.

There are no local in-person training classes scheduled in our immediate area however, there are two online / virtual Basic classes and one Advanced class.

I like going to the in-person classes and am registered to attend the class on 3/16 in Wooster. If anyone else would like to go please let me know.

Location	Date & Time	Address	Basic / Advanced
<a href="#">Mentor, OH</a>	3/7/2023 600 pm	Lake County Emergency Management 8505 Garfield Rd	Basic
<a href="#">Shelby, OH</a>	3/9/2023 600 pm	Pioneer Career and Technology Center 27 Ryan Rd	Basic
<a href="#">Maumee, OH</a>	3/14/2023 600 pm	Maumee Branch Library 501 River Rd	Basic
<a href="#">Massillon, OH</a>	3/15/2023 600 pm	Jackson High School 7600 Fulton Dr NW	Basic
<a href="#">Wooster, OH</a>	3/16/2023 600 pm	Wayne County Public Library 220 W Liberty St	Basic
<a href="#">Fremont, OH</a>	3/22/2023 600 pm	Terra State Community College, The Neely Center 2830 Napoleon Rd	Basic
<a href="#">Ravenna, OH</a>	3/23/2023 600 pm	Maplewood Career Center 7075 OH 88	Basic
Online	3/28/2023 200 pm	Online	Basic
<a href="#">Willard, OH</a>	3/30/2023 600 pm	Willard High School 1 Flashes Avenue	Basic
Online	4/6/2023 200 pm	Online	Advanced
<a href="#">Elyria, OH</a>	4/11/2023 600 pm	Gates Auditorium 125 E Broad St	Basic
Online	4/13/2023 600 pm	Online	Basic

There is also a schedule for the Wilmington office where the closest classes are in Columbus. [Wilmington Spotter Training Schedule.](#)

## Radio Activity

**Don Russell**

**W8PEN**



What an unusually nice February we have had. As I write this, the sun is shining, and the temperature is hovering around 40 degrees F. Of course, yesterday it was in the 70's and tomorrow is supposed to be in the 50's!

I hear in Michigan they have a Winter storm running wild. I guess Ohio is the new South. At any rate, I will take all the nice days that we get. Each nice day is one bad day we don't have to live through.

### Club Room / Shack

We are tweaking the clubs radio shack a little bit at a time. We were still getting RF in the equipment when we operated Winter Field Day, although a few minor adjustments to arranging the equipment helped to reduce the RF to a tolerable situation.

After some "after contest" discussion, it was decided to replace the Off Center Fed antenna with a fan dipole. In theory, this would eliminate any RF getting into the shack. The OCF antenna is an unbalanced antenna which is susceptible to RF flowing on the outside portion of the coaxial feed line. Roger, KE8ICI and I had put a choke at the feed point of the antenna which was supposed to reduce or eliminate the RF issue. However, it did not.

A final solution was tried. I had a 25 foot length of RG-8X coax available. I made what is called an "Ugly Balun" or choke out of this coax and a cardboard form measuring 3 inches in diameter. See below for more information on this Ugly Balun.

The fan dipole in contrast to the OCF remains

a balanced antenna and should not have any issues with RF in the shack.

The solution Roger and I eventually chose was to install a fan dipole antenna for 80 and 40 meters in the attic a foot or two away from the OCF antenna.

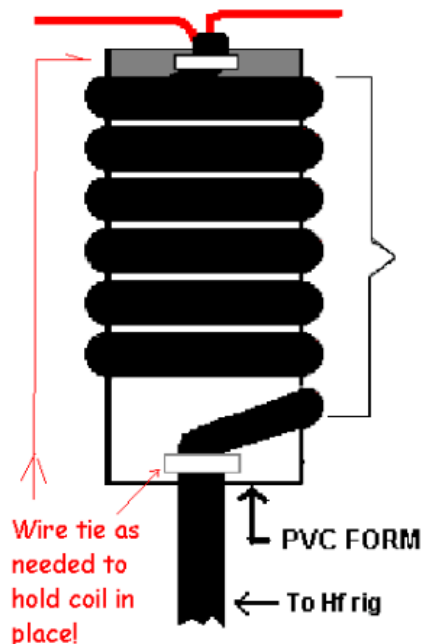
As we were hoping, the Fan Dipole antenna was trouble free as far as stray RF goes and the OCF antennas stray RF was tamed with the Ugly Balun.

A two antenna coaxial switch completed the upgrade to our station. We now have a pretty good station consisting of the Icom 7300 and the Kenwood TS-570D. I decided that the third radio was making the operating desk a bit overcrowded, so I put the Yaesu FT-900 back on the shelf.

The Ugly Balun worked like a champ! I now see no signs of RF in the Radio Room.

You can find information about the Ugly Balun here: <https://www.hamuniverse.com/balun.html>

While the Ugly Balun is much bigger than the typical Choke balun you find on the market, it is much cheaper and very effective.



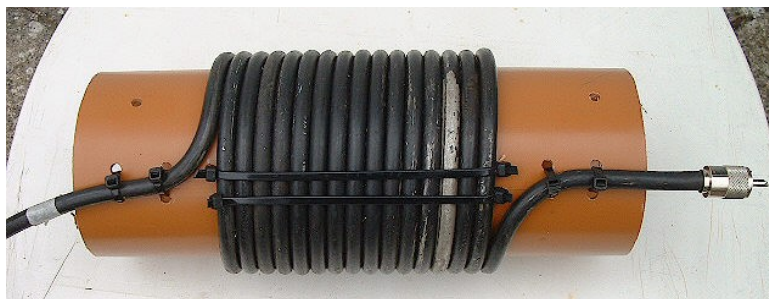




### Friday Morning Breakfast

In case you have not heard, the group decided to start meeting for the Friday breakfast at 9:00 AM instead of the 10:00AM that has been done for several years. I think the early start to breakfast has been well received, as the picture below will show you. Two club members left before I snapped this picture, so we had twelve members present.

Currently, the breakfast is being held a McDonalds on Newark Rd, across from Baker's IGA at 9:00 AM. As nicer weather approaches, we will likely start meeting at the Foundation Parks shelter, as we have done in the past.



**An "Ugly" Balun  
Or  
1:1 Air Core Choke Balun**

## ARES

### Terry Windsor

#### KI8N



Four of us, Don; W8PEN, Frank, KC8EVS, Roger; KE8ICI, and Terry; KI8N met at the Knox County EMA office and checked out the Kenwood TS-2000 and Yaesu FT-8800.

This was the first time these radios have been operated since JT DeChant, EMA Director had the antennas over the sheriffs building repaired.

The FT-8800 worked with both MVARC repeaters, 146.790 and 446.400.

The TS-2000 was tested on two HF antennas, an 80 meter dipole and an 80 through 10 meter dipole. We made on contact on 20 meters with a POTA operator in Texas. Don contacted his friend Lynn and we met and tested the antennas on several HF bands with him.

The TS-2000 also worked on VHF and UHF through the MVARC repeaters.

I have restarted working on the Knox County Amateur Radio Emergency Service Operations Manual. This document will list our capabilities and methods of responding to emergency call outs. When completed and reviewed it will be posted on our web page under the members only sections.

I am also working on contacting Laura Webster at Knox County 911 center to inquire

about checking the 2 meter radio installed there. Hope to have more information soon.

One other item I learned about is Knox County has a CERT group (Community Emergency Response Team) starting back up and they are looking for volunteers. If you are interested they meet the fourth Thursday of every month at 6:30 pm at the EMA office. You can contact me for Philip Lohmeyer's phone number and email address if you want to get more information.

That's what has been happening in February. 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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“ 2 that got their Technician Licenses. They are Marc and Jocelin Whitaker, KE8WMB and KE8WMC respectively. A big round of applause was given. Frank, KC8EVS

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# March 2023

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1 4:45 pm Dinner - Southside Diner	2	3 9:00 am Breakfast - McDonalds, Newark Rd.	4
5 9:00 pm ARES Sunday Night Net—Don (W8PEN)	6	7 OHDEN Net 7:45 pm	8 4:45 pm Dinner - Southside Diner	9	10 9:00 am Breakfast - McDonalds, Newark Rd.	11
12 9:00 pm ARES Sunday Night Net— Roger (KE8ICI) <b>Daylight Savings Time Begins</b>	13 7 pm MVARL <b>Monthly Meeting</b> 	14 OHDEN Net 7:45 pm	15 4:45 pm Dinner - Southside Diner	16	17 9:00 am Breakfast - McDonalds, Newark Rd. <b>St. Patrick's Day</b>	18
19 9:00 pm ARES Sunday Night Net— Michael (KE8HGE)	20 <b>FIRST DAY OF SPRING</b>	21 OHDEN Net 7:45 pm	22 4:45 pm Dinner - Southside Diner	23	24 9:00 am Breakfast - McDonalds	25
26 9:00 pm ARES Sunday Night Net—Terry (K18N)	27	28 OHDEN Net 7:45 pm	29 4:45 pm Dinner - Southside Diner	30	31 	

## Ham Radio Contest Calendar

## Miscellaneous Rambling

**Terry Windsor**

**K18N**



As I stated last month we went to Missouri in February to visit mom and I did activate three POTA parks close to her house. Two of

them were new ones for me.

I took the Elecraft KX3 and used the AX1 antenna to make about 120 total contacts. The weather was very good and with just 15 watts everything worked great. Really starting to enjoy working with lower power.

One item I am following up on is an idea I pitched at the last meeting regarding litter pickup on a Knox County road. I believe this would be good for the public to realize we exist and to see that we are involved with our community. I will bring this up again at the March meeting with any information I gather from county officials.

I also hope that you all feel there is a need for the community to know our capabilities and would be interested in manning a table this summer at either a First Friday or Saturday Farmers Market event.

I am looking forward to this week's Arnold Sports Festival. I volunteered to work with the medical teams to provide amateur radio coverage for the events. I had done this a

couple of times before covid and had a good time meeting others working the event and getting to watch the activities. This year I am working both Friday and Saturday and expect the crowds to be large and the competition outstanding.



One item I am planning to try again is installing the Mesh antenna to see if I can make it into the system. I took the antenna down last June after the tornado because it was facing the wrong direction and never put it back. Didn't work last year but maybe this time I will have better propagation. If Roger, KE8ICI puts a Mesh link at his home it might be possible for me to get in through his link. Not going to know unless I give it a shot!

Last thing—anyone tried to put a double recliner into a motorhome where the recliner back does not come off? We did it last month. It was tight getting through the small door and took both of us to wiggle and shuffle the chair up the steps, around the corner, and into the place where the old jack knife sofa (torture device) had been. Then replaced the dinette booth with a new table from Ikea. Looks much better now and the new chair is very comfortable!

Until next month "Ham it UP!"

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**"I will take all the nice days that we get. Each nice day is one bad day we don't have to live through." Don, W8PEN**

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## Final Takeaway

### How Do Repeaters Work

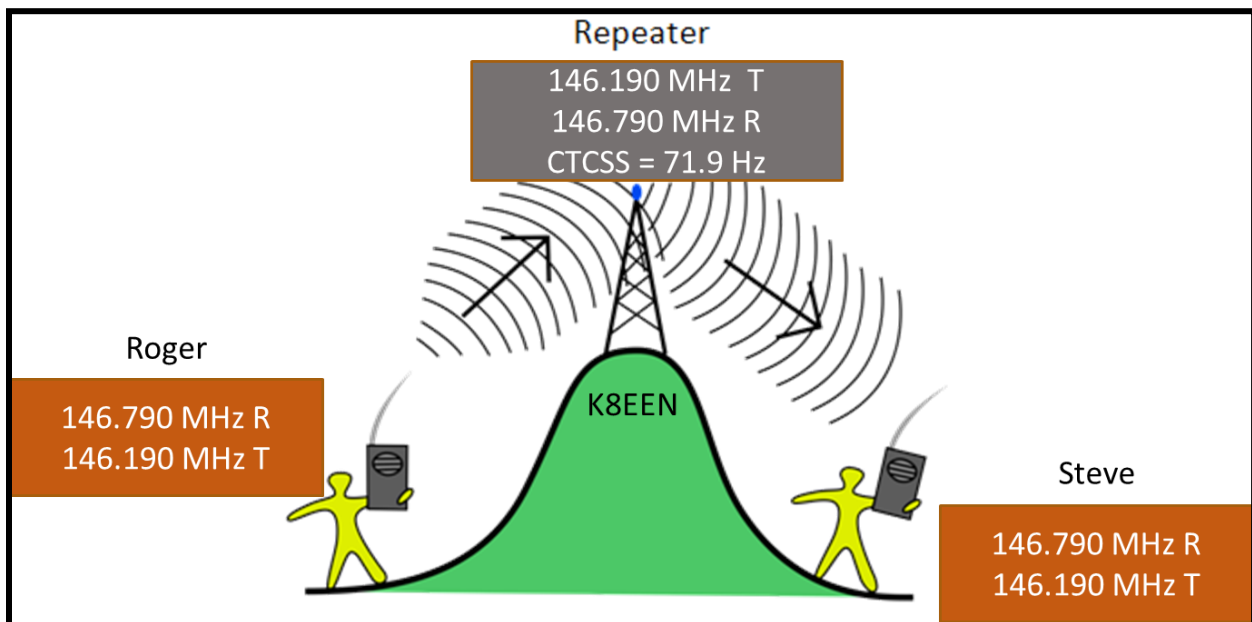
A repeater is an automatic controlled radio station that takes an incoming signal and simultaneously repeats it out to a wide area. What makes repeaters work great, is they are usually situated at high altitudes and run higher power than your average handheld or even mobile amateur radios. Thus, they effectively make your signal reach far further than your handheld or mobile radios can by themselves.

To successfully talk on a repeater you need to know its;

- Reference frequency (146.790 MHz)
- Offset (0.6 MHz)
- Offset direction (Minus)
- PL Tone (71.9 Hz)

**K8EEN** repeater information shown in parenthesis.

#### Basic Repeater:

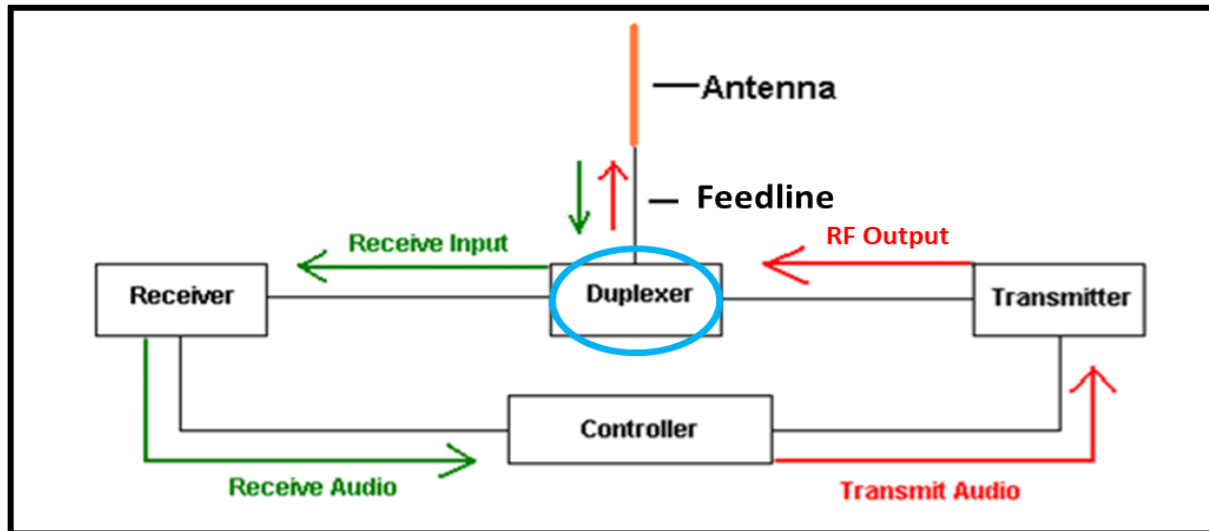


CTCSS: Continuous Tone-Code Squelch System. Called a PL Tone (Motorola Private Line).

50 possible sub-audible tones used for squelch control.

Split / Offset is the difference between the receive and transmit frequencies. - 0.6 MHz above.

## Repeater Components:



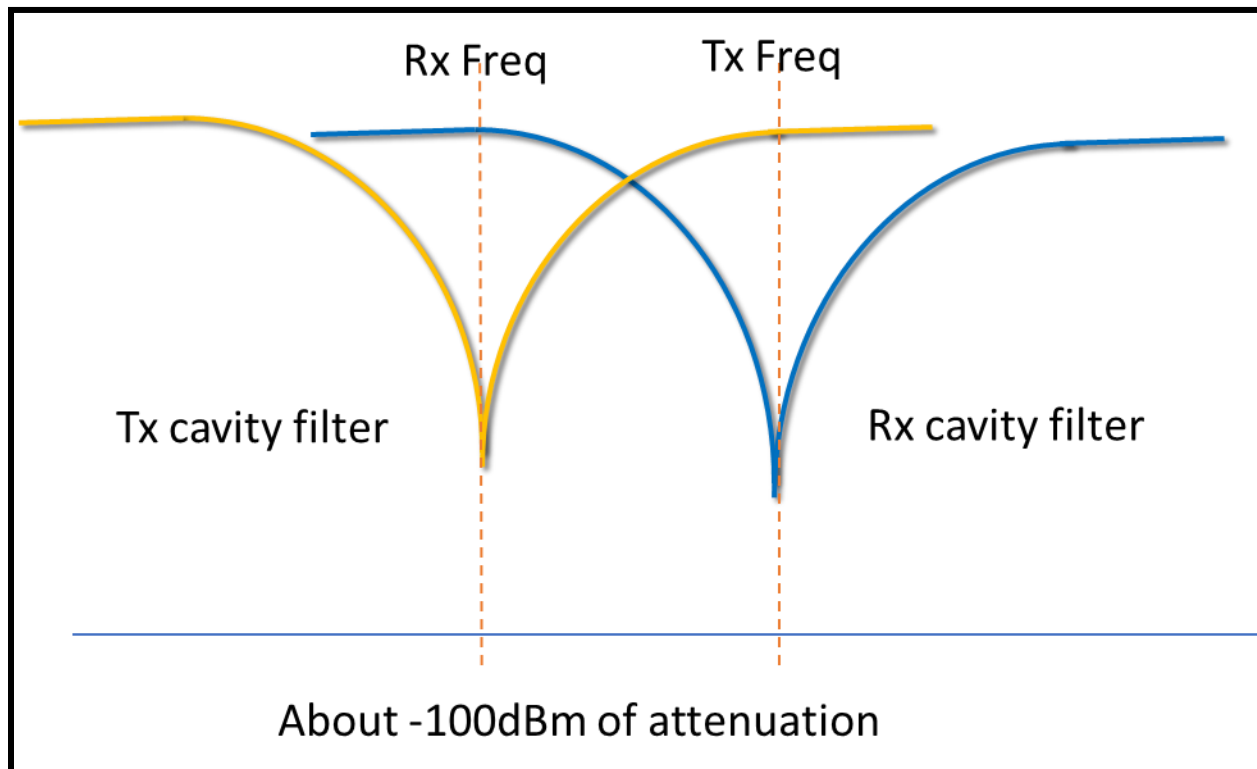
## Duplexer

Basically, a deep notch filter for protecting the receiver from the transmitter's output frequency.

Separate Transmit and Receive antennas do not solve the problem. The receiver would be desensitized in the close proximity of the transmitted signal.

Receive filter notches out the transmitter frequency.

Transmitter filter notches out the receiver frequency.



## MVARC

\* 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

Barry Butz, N8PPF

\* Directors

Michael Jacobs, KE8HGE

Arlin Bradford, KD8EVR

Roger Gorrell, KE8ICI

Steve Harvey, N8RLW

Scott Yonally, N8SY

Bill Stroud, KD8WHQ

\* Newsletter Editors

Frank Counts, KC8EVS

Terry Windsor, KI8N

### 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.

### Contact Us

MVARC

812 Coshocton Ave.

PMB #145

Mount Vernon, OH

43050

Email

[admin@mvarc.net](mailto:admin@mvarc.net)





## General Exam Sample Test Questions:

**G5C04** What is the total resistance of three 100 ohm resistors in parallel?

- A. 0.30 ohms
- B. 0.33 ohms
- C. 300 ohms
- D. 33.3 ohms

**G5C09** What is the capacitance of three microfarad capacitors connected in series?

- A. 33.3 microfarads
- B. 0.33 microfarads
- C. 300 microfarads
- D. 0.30 microfarads

## Extra Class Exam Sample Test Questions:

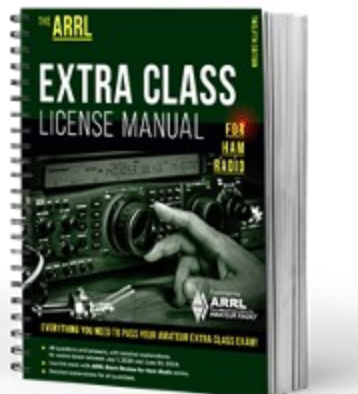
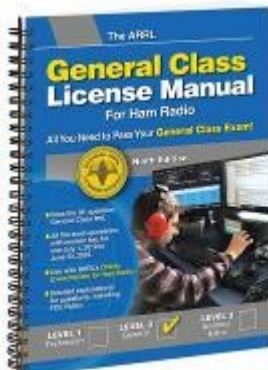
**E3B01** What is trans equatorial propagation?

- A. Propagation between a point on the equator and its antipodal point
- B. Propagation between points located on the magnetic equator
- C. Propagation between points at the same latitude
- D. Propagation between two mid-latitude points at approximately the same distance north and south of the magnetic equator

**E3B03** What is the best time of day for trans-equatorial propagation?

- A. Morning
- B. Afternoon or early evening
- C. Late at night
- D. Noon

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.grz.com/hamtest/>. The ARRL license manuals shown are available from the [ARRL](https://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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“Everyone should stay familiar with your radios and work on your communication capabilities.” Terry, KI8N

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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](#).

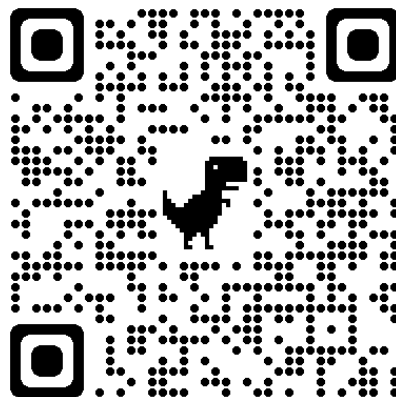
Application File Number search using an FRN: [FCC Application File Number Search](#)

### 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.



## Answers to sample test questions on page 17.

G5C04: D – 33.3 ohms

G5C09: A – 33.3 microfarads

E3B01: D – Propagation between two mid-latitude points at approximately the same distance north and south of the magnetic equator

E3B03: B – Afternoon or early evening

## 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.

