



Meetings are held on the 2nd Monday of each month at 7:00 pm at the Knox County Chapter of the American Red Cross (Annex) 300 North Mulberry Street Mount Vernon, OH 43050



K8EEN Repeater: 146.790. MHz (600KHz with PL of 71.9 Hz)

**K8EEN-R Echolink Node: 809800** 

K8EEN Repeater: 444.600 MHz (+5 MHz with PL of 71.9 Hz)



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#### **President's View**

Good morning to all this cool November. Hope all is well there in your shack. We have been busy here as usual, never a dull moment in this household, even though number 8 left for college over 7 years ago. Officially we are empty nesters so to speak, just means our household has expanded to several in different cities, states and continents. Keeps us going.

Well, we as a group have been hit with an email scam! As you may have read in several emails that we have sent out that we think someone took names and email addresses from the web site and used them to try to scam for money and bank accounts if possible. So, you must be on the alert at all times and always a possibility the emails are coming from someone you don't know. Never give money or account numbers via email only. No one from the Mount Vernon Amateur Radio Club will request money this way and we have no need for account numbers. We will discuss it more at the up coming meeting November 11. If you have questions or concerns please attend or contact me.

Moving onto a radio related topic, I am open to anyone who would like to test (for an upgrade, or if you have someone that you have been Elmering and they would like to test. The option would be most Fridays at 10a at the Training facility at the American Red Cross in Mount Vernon. For now, we will do this only by **Reservation only**, as I need to make sure to have enough VEC's to conduct the test and to have the proper testing material on hand. If you want to test, please contact me.

Prior to testing you are given a sheet of paper to read, (ARRL VEC testing sites) concerning RF safety. You sign that you have read and will comply with section 97.13(c) of the commission's rules regarding RADIOFREQUENCY (RF) RADIATION SAFETY and amateur service section of OST/OET Bulletin Number 65. How many of you understand or have read these rules and bulletins? Well, I have to confess that I was asked a question at the last test session and was not prepared to answer satisfactorily. Bottom line for the Tech, is keep it under 50 watts on VHF and UHF and you should be in compliance. This is something important to keep in mind as we set up our stations. I'm looking into this more and will be discussing it in future newsletters. I have read and re-read the information sheet and find it a little confusing and over whelming. I will be the first to say that has been a problem of mine for many years (67 to date). So, as I start looking into this, I welcome anyone's expertise, and advice in the future.

With that I will bring this to a close and look forward to seeing all of you at the next meeting, November 11<sup>th</sup> at 7p in the American Red Cross Training Facility. Or seeing you on Friday mornings at 10a in the same location.

The ARRL Ohio Section calendar lists many interesting events around Ohio. The webpage is shown below:

https://arrl-ohio.org/g-calendar/default.html

Visit us on Facebook:

**Mount Vernon Amateur Radio Club** 

Visit our new website:

https://mvarc.net/ or

https://k8een.net

#### **Traffic Nets:**

#### http://www.ossbn.org/

Ohio Single Side-band Net.org, our Ohio connection for what is going on in the Ohio Traffic System. The Net meets on 3.972.5 KHz at 10:30 a.m., 4:15 p.m. and 6:45 p.m. daily. Alternate Frequency for all sessions 3.968 KHZ

http://www.cotn.us/
The Central Ohio Traffic Net is a part of the Ohio Section of the National Traffic System. We meet daily to handle traffic; all licensed amateur radio operators are welcome to check in and to learn how to handle traffic. The Net meets daily at 7:15 p.m. local time.

#### **Area Radio Clubs:**

**Delaware Amateur Radio Association:** <a href="http://k8es.org/">http://k8es.org/</a>

Newark Amateur Radio Assoc: https://www.n8ara.org/

(Mansfield) InterCity Amateur Radio Club: <a href="https://iarc.club/">https://iarc.club/</a>

SDR:

#### http://websdr.org/

A WebSDR is a Software-Defined Radio receiver connected to the internet, allowing many listeners to listen and tune it simultaneously. Go to the chart in the middle of the page and select the <u>Band</u> you want, then <u>Region</u> (North America). This will bring up 18 listening stations in the United States and Canada. Pennsylvania, Alabama and Utah are favorites for this area. There is also a mobile application available for free.

# The Mount Vernon Amateur Radio Club Officers

#### **President:**

Frank Counts, KC8EVS fcounts@gmail.com
Phone: 740-358-9131

Filolie. 140-330-3131

Vice President: Scott Fields, W8HK ballixxe@yahoo.com

Phone: 740-504-8204

**Secretary / Treasurer:** 

Terry Windsor, KI8N ki8n.tw@gmail.com Phone: 740-507-6329

#### Club Call Trustee / Director:

Don Russell, W8PEN w8pen@yahoo.com Phone: 740-397-0249

#### **Equipment Trustee / Director:**

Barry Butz, N8PPF n8ppf@mvarc.net Phone: 740-397-7540

#### <u>Directors</u>:

Emery Bennett, W8TW eabenn2002@hotmail.com Phone: 740-397-8127

Greg Short, W8DOH gsw8doh@gmail.com Phone: 740-485-8449

Bill Stroud, KD8WHQ bstroud52@centurylink.net Phone: 740-625-5728

Louie Wilkinson, NT8I louie@nt8i.com

Phone: 740-603-2302

Michael Jacobs, KE8HGE g.m.jacobs@gmail.com Phone: 740-542-9222

Newsletter Editor & Facebook Editor: Bill Bradley, KC8BB kc8bb@att.net

Phone: 740-504-0414

# October Meeting Minutes October 14, 2019



Frank, KC8EVS called the meeting to order at 7:00 pm with 17 members and 2 guests present.

September Meeting Minutes accepted as noted.

Treasurers Report presented by Terry, KI8N; accepted as noted.

#### Repeaters:

Noted the 146.79 and the 444.6 repeaters are working.

Some signal fluctuations and noise has been noted on the 146.79 repeater. Don, W8PEN is planning to check with a watt meter.

Interference that had been noted on the 444.6 repeater in August has not recurred. Still being monitored and Don is working on a solution for remote controlling/shutoff of the repeater to control future interference incidents.

#### Mesh:

Mesh network is working and has been expanding.

Matt Mitchell, KB8UVN has connected to the water tower from Johnstown (19 miles) via a 5 GHz connection. And now we have nodes connected through Johnstown to Delaware. Another 5 GHz node from KCH is aimed at the water tower.

Don, W8PEN is working on a Mesh bulletin board system to enable chat, email, and video conferencing.

Anyone interested in adding a node contact either Don or Frank regarding equipment needs and configuring.

WiresX – Still on hold for internet connection at KCH.

#### ARES:

Nothing new per Bill, KD8WHP. There is in planning a MVARC simulation in Knox County to validate repeater and simplex communication between critical locations to the Red Cross Training Center - TBD.

#### **Old Business:**

#### MVARC Webpage

Web site was repaired and is live at the following addresses: MVARC.net and K8EEN.net.

Secure area still being worked on and posted pictures need to be identified. Direct questions to Scott, N8SY or Louie, NT8I.

The ARRL Ohio Section calendar lists events: <a href="https://arrl-ohio.org/q-calendar/default.html">https://arrl-ohio.org/q-calendar/default.html</a>

#### **New Business:**

Reading and voting on changes to MVARC Constitution and Bylaws. All changes accepted and passed.

NOTE: Club membership dues changed to \$20.00 and \$15.00 per calendar year. See membership application enclosed in this newsletter. New method of selecting officer candidates starting immediately is Board of Directors make up the nominating committee.

MVARC Christmas Dinner to be held at Fiesta Mexicana on December 8, 2019 at 6 pm. Location is 997 Coshocton Ave., Mount Vernon.

New member, Steve Baughn, WD8NPL

#### Adjournment

Meeting adjourned at 7:45 pm.

50/50 Drawing won by Terry, KI8N.

Yaesu FT70DR hand held raffle won by Larry, AC8YE. This raffle netted MVARC \$140.00.

Terry Windsor, KI8N MVARC Secretary/Treasurer

#### **Knox County Sirens**

#### By Bill Stroud, KD8WHQ

We have been asked from Mark Maxwell, the Knox County EMA Director, if we could monitor the Outdoor Warning Sirens for Knox County. They are activated on the 1<sup>st</sup> and 3<sup>rd</sup> Fridays of each month.

What we are asking for is if you hear a siren located close to where you are please send me a text or email indicating which Siren you heard. Please send this to me Bill Stroud at <a href="mailto:bstroud52@centurylink.net">bstroud52@centurylink.net</a> or 740-404-8207. Below is a list of the sirens.

Thanks for your help.

## KNOX COUNTY OUTDOOR WARNING SIREN LOCATIONS

Community	Township Location		Lat	Long	Elev	Population 5,827
1 Apple Valley	Howard	3995 Apple Valley Dr. (East Boat Launch)	40 25' 3.1"   82 20' 43.4"		971	
2 Apple Valley	Howard	2925 County Rd 4 (Apple Valley Marina)	40 27' 31.4"	82 20' 9.5"	1022	
3 Batemantown	Middlebury	19748 Waterford Rd.(Middlebury Twp Bldg)	40 31' 35.5"	82 35' 47.2"	946	1,646
4 Centerburg	Hilliar	100 Dally St. (Waste Water Plant)	40 17' 51.4"	82 41' 57.5"	1171	3,517
5 Centerburg	Hilliar	49 E. Main St. (Gazebo Park)	40 18' 16.6"	82 41' 43.3"	1176	
6 Danville	Union	7 W. Walnut St. (Fire Dept Bldg)	40 26' 58.4"	82 15' 41.1"	1020	2,405
7 Fredericktown	Wayne	2 E. Sandusky St. (Municipal Bldg)	40 28' 53"	82 32' 35"	1143	948
8 Gambier	College	101 West Scott Lane (Kenyon Security Bldg)	40 22' 35.9"	82 23' 51.3"	970	
9 Gann (Brinkhaven)	Union	217 Main St.	40 28' 6"	82 11' 37.6"	891	2,405
10 Howard	Howard	23059 Coshocton Rd. (Fire Dept Bldg)	40 24' 31.1"	82 19' 56"	1080	5,827
11 Martinsburg	Clay	187 N. Market St. (Fire Dept Bldg)	40 16' 20.8"	82 21' 15.6"	1156	1,318
12 Mount Vernon	Clinton	215 Ames St. (Fire Dept Bldg)	40 22' 25.7"	82 28' 54.6"	1190	2,863
13 Mount Vernon	Clinton	8835 Columbus Rd (Smithhisler Meats Bldg)	40 21' 46.1"	82 31' 21.3"	1274	2.863
14 Mount Vernon	Clinton	7 Fountain St. (City Park Maintenance Area)	40 23' 34.8"	82 30' 9.8"	1200	2,863
15 Mount Vernon	Pleasant	1122 New Gambier Rd. (Water Dept Reservoir)	40 23' 29.68"	82 27' 15.13"	1175	1,646
6 Mount Vernon	Clinton	100 Sychar Rd. (Hiawatha Water Park\Pool)	40 24' 20.2"	82 28' 8.6"	1032	2,863
17 Mount Vernon	Clinton	307 Wooster Road (Mound View Cemetery)	40 24' 10.5"	82 29' 5.5"	1149	2,863

#### By Don Russell, W8PEN

Did October fly by or what? Wow! On the bright side, I will be done with the leaves in a few more days. The windy weather of late has dropped all the leaves and they are waiting for me to do something with them. But I am thinking of the nice clear shot I now have to put up my next antenna. Oh, to be a ham.....

A few things to go over this month, so let's get started.



#### **Club Repeaters**

We are once again having problems with our 2 meter repeater system. Lately the receive performance has been down quite a bit. The problem is bad enough that our friends in the Newark and Heath areas have not be able to join our Sunday Night Net. Upon checking, I find that I cannot get into the repeater when returning from Westerville on Route 3 until I am on the Mt. Vernon side of Centerburg. Usually, I get in somewhere around Condit Station. That is a big difference!

Barry, N8PPF and I went out to the repeater site to trouble shoot this issue. Using Barry's antenna analyzer, we found that the antenna SWR was okay, although a bit high at 1.8 to 1. But the SWR has always been about that. It is a commercial antenna tuned to a bit above the 2 meter band.

The next point to check was the transmitter port at the repeater duplexer. The duplexer has very sharp tuning and even if slightly off, would affect repeater performance. The SWR was actually lower than at the antenna: 1.3 to 1.

Next was the receive port of the duplexer. This is where Barry and I suspected a problem and the SWR here was 2.8 to 1. Much too high and a likely cause of poor receiver performance.

Just in case it was the repeater, Barry and I installed the backup repeater (Yaesu DR1-X). I was hoping to use the repeater controller on this repeater, but couldn't get it to work with the cable I had put together. I will work on it some more as I get time.

Repeater receive performance may have improved slightly, but we still have a problem. So the duplexer is likely the problem.

Of course, this means we need to get the duplexer re-tuned. I am reviewing our options, but unless we can borrow some expensive test equipment, we may have to pay someone to tune the duplexer.

The 70 cm repeater seems to be working well. It does not get much use. Hopefully when we get it connected to the internet via Yaesu Wires, activity will increase a bit.

#### **Local Mesh Network**

The local mesh network continues to expand. We have made significant improvements to our system at the water tower, KCH Hospital, and the Red Cross.

We are close to approval on installing a node or two on Rastin Tower at Foundation Park. This would be a very nice addition, as Rastin Tower overlooks downtown Mt. Vernon. It also has a clear path to the North where we should be able to pick up coverage in the northern part of Mt. Vernon which is blocked from the water tower by a hill. Rastin Tower will also give us a backup 5 GHz link to Johnstown so that if the 5 GHz link at the water tower goes down, we will still be in business.

Unfortunately, we will not be allowed to power the nodes from the towers electrical service. I am checking out the feasibility of installing solar panels and batteries. Currently I am planning a 100 watt solar panel and two 50 AH 12 volt batteries in parallel. We may find that we will need to add to this at a later date, but we have to start somewhere.

It is hopeful that we can be at the very top of the tower. This would be the ideal spot because it is hard to get to and out of sight. Little chance of vandalism.

Terry KI8N wants to put a node at his home in Chesterville. This may be an opportunity to expand in this direction. If Terry runs a 5 GHz link to the water tower and a 2.4 GHz node with an omni directional antenna, then we would at least have a presence in Chesterville.

Now that we are getting some high priority nodes up, it is time to start thinking about how we can use our Local Mesh as a service to our served agencies. That would mainly be the Knox County EMA and the Knox County Red Cross.

With that in mind, I have been thinking about organizing three "go boxes" for mesh nodes. These go boxes would need to have one mesh node and antenna on a tripod, a computer, an IP phone, and perhaps a printer. The antenna should be directional to give us the best chance of meshing with the closest node.

Among other things, these go boxes would allow email service between a disaster site, Red Cross shelter, or anywhere else needed and the situation room at either the Knox County EMA or Red Cross.

Having a printer available for each go box and using the email server on our mesh network would allow printed instructions to be relayed between the command center and disaster site / shelter. Even pictures could be easily sent as attached files. Simply print the message or picture and deliver it. One hundred percent accurate as long as it was typed in correctly from the originator.

Of course, for this to work we would need similar mesh nodes at our the Knox County EMA and Red Cross. We already have one at the Red Cross. One of the clubs Laptop computers donated by Arlin Bradford, KD8EVR would work just fine with the node. We would still need to get a printer. Printers are pretty cheap anymore though and we don't have to buy them all at once. Heck, maybe members would have good working printers left over from an upgrade that would work. We would also be looking for a few donated laptops. Windows XP works well for this use.

At the Knox County EMA, we would need to install a mesh node on the roof or their tower. Since the node at KCH is very close, I doubt if we would need much more than a roof mounted node. Then, we have the radio room and a laptop or two available to use. I will bet they have a few printers in their store room not being used. Of course, all this would have to be coordinated by the Knox County ARES.

#### **Other Things of Note**

In the last year or so, the club seems to have had its share of problems with the 2 meter repeater. We did install the current repeater in 2002, a good seventeen years ago. It would be nice to update to a newer repeater, even though the current problem has nothing to do with the repeater itself.

Therefore, I am going to strive to get our repeater controller working with the Yaesu DR1-X. If I can't figure it out, I might try delegating this to one of our other members. I think my problem is simply wiring the cable. Because the wiring diagram itself has been used successfully by other repeater groups.

If we can get the controller working with the Yaesu DR1-X, then this would become our permanent repeater and the old one would revert to being a backup. I see nothing wrong with keeping both repeaters in the repeater cabinet. Even if we get the Controller and DR1-X repeater working together, I still plan on using the external amplifier. It is putting out close to 60 watts when using the DR1-X repeater.

#### **Signing Off**

That is it for this month. This column went a bit longer than intended. Once my fingers found the keyboard, they just wouldn't stop typing:).

Stay tuned for next month. I really didn't even get to cover the subject I wanted to cover this month.

73 DE W8PEN

### **MVARC Membership Form**

Club dues run from January 1 to December 31 and are collected the last quarter of the year. You can mail your dues to the address shown below, bring to an MVARC meeting, or give them to any club officer. Visit our web page at <a href="https://www.mvarc.net">www.mvarc.net</a> for further club information.

Regular membership dues are \$20.00. Membership dues are \$15.00 for personnel who are retired, over 65 years of age, additional members in the same family, or who do not hold an active FCC Amateur License.

## Mount Vernon Amateur Radio Club PO Box 372 Mount Vernon, OH 43050

Name:	Call Sign: _	
Street or PO Box:		
	State:	
Phone:	License Class:	
Email Address:		
ARRL Member (Y/N):		

<sup>\*\*</sup>Suggestions for possible meeting programs:

#### By Dan Romanchik, KB6NU

This morning, I found this email in my inbox:

Thank you for your website and great content. I passed the Tech and General tests on Saturday, and I will be taking the Extra exam in November. Your "No Nonsense" guides were very helpful.

I do have a question, though. How do I stay current on what's happening in the ham world? For example the CQ WW SSB contest was this weekend. How do newbies know this kind of thing? How do we find local or regional Hamfests and other events?

This is a great question. Like any special interest, it can seem daunting to get plugged in (pun intended) to the community. Here are a few of my suggestions:

#### Join the ARRL

(<a href="http://arrl.org/">http://arrl.org/</a>). The American Radio Relay League (ARRL) is really the place to start for information related to amateur radio. *QST*, the ARRL's monthly magazine, includes news about upcoming contests and ARRL - sanctioned Hamfests. It also reviews new amateur radio products and provides a wealth of technical information.

In addition to *QST*, the ARRL publishes many email newsletters that members can subscribe to. For example, *Contest Update is a* biweekly newsletter that not only lists upcoming contests, but also includes tips on operating contests. The *ARES E-Letter* is a monthly public service and emergency communications newsletters. There are also email newsletters for ham radio instructors, those interested in DX, legislative matters, and satellite operation.

#### Join your local club

While the ARRL will help you keep abreast of amateur radio news and events nationally and internationally, if you want to know what going on in amateur radio in your area, you should join your local club. To find clubs near you, go to <a href="http://www.arrl.org/find-a-club">http://www.arrl.org/find-a-club</a>.

#### **Visit the WA7BNM Contest Calendar**

https://www.contestcalendar.com/. This contest calendar has become my go-to resource for any and all contest information. This site provides detailed information about amateur radio contests throughout the world, including their scheduled dates/times, rules summaries, log submission information and links to the official rules as published by the contest sponsors. Its features include an 8-Day calendar, a 12-Month calendar, and separate calendars for state QSO parties, CW contests, and QRP contests. You can also get a weekly e-mail of contests taking place in an 8-day period (Monday through Monday), as well as a list of contests scheduled for the next week and a list of log submission information for recent contests.

How to get "plugged in" to the amateur radio community

Continues on page 9

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# How to get "plugged in" to the amateur radio community Continued from page 8

November, 2019

#### **Ham radio blogs**

Blogs are also a good way to keep up with what's going on in amateur radio. I like to think that I do a good job of covering what's going on in amateur radio, but, of course, I can't do it all. That being the case, you might also want read other blogs. Other amateur radio blogs that you might want to check out include:

- The K0NR Radio Site <a href="http://www.k0nr.com/wordpress/">http://www.k0nr.com/wordpress/</a>
- QRP–When you care to send the very least <a href="https://w2lj.blogspot.com/">https://w2lj.blogspot.com/</a>

Everything Ham Radio <a href="https://www.everythinghamradio.com/">https://www.everythinghamradio.com/</a>

There are a bunch of other good ones out there. Find the ones you like and subscribe to them, so that you get a notification when new items are posted.

#### **Mailing lists**

Mailing lists are kind of old school, but if you have a special interest, chances are that there is a mailing list for it. For example, I own an Elecraft KX-3, so I subscribe to the Elecraft KX User Group mailing list <a href="https://groups.io/g/Elecraft-KX/">https://groups.io/g/Elecraft-KX/</a>. Many amateur radio mailing lists are migrating to the Groups.io. To find a list, just click on the "Find or Create a Group" link at the top of the page. I just did a search for "amateur radio" and found 910 different amateur radio mailing lists.

#### **Podcasts and videocasts**

Podcasts are also another great way to stay up with amateur radio. I'm partial to the ICQ Podcast <a href="http://icqpodcast.com/">http://icqpodcast.com/</a> because I am on the panel once a month. The podcast not only includes a discussion of what's new in amateur radio, but also a feature, which digs a little deeper into a particular topic. Other great podcasts are Ham Radio Workbench <a href="https://www.hamradioworkbench.com/">https://www.hamradioworkbench.com/</a>, and Linux in the Ham Shack <a href="https://lhspodcast.info/">https://lhspodcast.info/</a>. Internet video shows that are worth checking out are Ham Radio 2.0 <a href="https://www.livefromthehamshack.tv/">https://www.livefromthehamshack.tv/</a>, Ham Radio Now <a href="https://www.hamradionow.tv/">https://www.hamradionow.tv/</a> home, and Ham Nation <a href="https://twit.tv/shows/ham-nation">https://twit.tv/shows/ham-nation</a>.

This is by no means an exhaustive list. If you have an amateur radio information resource that you find particular helpful, please let me know.

Dan Romanchik, KB6NU, is the author of the KB6NU amateur radio blog <u>KB6NU.Com</u>, the "No Nonsense" amateur radio license study guides <u>KB6NU.Com/study-guides/</u>, and often appears on the ICQ Podcast (icqpodcast.com). When he's not trying to keep up with ham radio, he likes to build stuff and operate CW on the HF bands.

# November 2019

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						<b>9</b> 10:00 am Breakfast at Barb's Diner Columbus Road
10 9:00 pm ARES Sunday Night Net on K8EEN NT8I, Louie	11 7:00 p.m. MVARC Monthly Meeting -Red	12	13 5:00 pm Dinner at Southside Diner	14	15 10:00 am Breakfast at Club Meeting room	16 November Sweepstakes Phone 16th -18th
17 9:00 pm ARES Sunday Night Net on K8EEN KE8HGE,	18	19	<b>20</b> 5:00 pm Dinner at Southside Diner	21 Thanksgiving	22  10:00 am  Breakfast at  Club Meeting  room	23
24  9:00 pm ARES Sunday Night Net on K8EEN W8DOH, Greg	25	26	27 5:00 pm Dinner at Southside Diner	28	29	30
1 December 9:00 pm ARES Sunday Night Net on K8EEN	2	3	<b>4</b> 5:00 pm Dinner at Southside Diner	5	6 10:00 Breakfast at Club Meeting room 160 Meter	7
8 9:00 pm ARES Sunday Night Net on K8EEN NT8I, Louie	9 7:00 p.m. MVARC Monthly Meeting -Red Cross Annex	10	<b>11</b> 5:00 pm Dinner at Southside Diner	12	13  10:00 am  Breakfast at Club Meeting room	14 10:00 am Breakfast at Barb's Diner Columbus Road 10 Meter Contest 12/14-15