

**The Mount Vernon Amateur Radio Club  
PO Box 372, Mount Vernon, Ohio 43050**



**Meetings are held the 2nd Monday of each month at 7:00 pm  
at the Knox County Chapter of the American Red Cross,  
300 North Mulberry Street, Mount Vernon, Ohio**



**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)**

**INSIDE THIS ISSUE:**

<b>Emergency Preparedness</b>	<b>1</b>
<b>Editor Notes</b>	<b>2</b>
<b>MVARC Meeting Minutes for February</b>	<b>3</b>
<b>Radio Activity</b>	<b>4-6</b>
<b>Why are there so many Techs?</b>	<b>7-8</b>
<b>March / April Calendar</b>	<b>9</b>

**Emergency Preparedness**

**By Patrick Valentino, KD8PSM  
Knox County ARES Emergency Coordinator**



Nothing would be more beneficial for emergency planning than to participate in a real world event with an Amateur Radio Emergency Service (ARES) activation. Fortunately, disasters don't happen often in Knox County so the next best thing is to prepare by planning, training and exercising. The Knox County ARES Leadership Team has developed a plan to assist response agencies and organizations in a disaster. Starting in April, the Knox County ARES Membership Team will have an introductory meeting before the club's April 10th meeting at 6:00 pm. Please plan to attend if you are curious or want to be part of ARES, here is the Knox County ARES Roster.

- |                   |        |
|-------------------|--------|
| Frank Counts      | KC8EVS |
| Emery Bennett     | W8TW   |
| Tom Evans         | KD8HSA |
| Wayne Bower       | KE8HWB |
| William Bradley   | KC8BB  |
| Barry Butz        | N8PPF  |
| Scott Keys        | AC8PT  |
| Mike Liston       | KE8ANP |
| Russell Maroni    | KE8GGA |
| Tony Spiegel      | KC8UR  |
| Don Russell       | W8PEN  |
| Terry Windsor     | KE8ANS |
| Patrick Valentino | KD8PSM |

## Notes from the Editor:

If you receive our Monthly Newsletter by mail or you are a new member and have a email address, please consider accessing our Newsletters online. Our mailing list has doubled in the last year, (which is great, which means our club is growing), but it also increases our ink, paper, envelopes and postage costs.

You can access our Newsletter from our MVARC Club website below:

<http://www.mvarc.net/LinkClick.aspx?fileticket=0cnb6dmJEeM%3d&tabid=57&mid=375>

You may print it from there if you wish and explore past issues of our Newsletters as well. If you don't have a computer or email account, we would be happy to send you each edition by mail.

Thank you for your time,

-Bill, KC8BB -Newsletter Editor

### Skywarn Spotter Training

The National Weather Service will be offering Spotter training for Knox County thru the Emergency Management Agency. Training will be on March 14, 2017 @ 6:00 p.m. at the Knox County Memorial Building (basement), 112 East High Street, Mount Vernon, OH. For those interested in weather, spotter training or Amateur Radio Emergency Service, please plan to attend. No pre-registration needed and presented at no charge. After the training, a Spotter Certificate is available online at: [http://www.weather.gov/cle/SKYWARN\\_schedule#certificate](http://www.weather.gov/cle/SKYWARN_schedule#certificate)

### **The Mount Vernon Amateur Radio Club Officers**

#### President:

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

#### Vice President:

**Terry Windsor, KE8ANS**  
ke8ans@gmail.com  
740-507-6329

#### Secretary/Treasurer:

**Jim Williams, N8IBR**  
n8ibr51@centurylink.net  
Phone: 740-967-0627

#### Call & Repeater Trustee:

**Don Russell, W8PEN**  
w8pen@arrl.net  
Phone: 740-397-0249

#### Equipment Trustee:

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

#### Directors:

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

**Don Blizzard, W8UMH**  
w8umh@yahoo.com  
Phone: 740-392-9753

**Scott Fields, K8AEC**  
ballixe@yahoo.com  
Phone: 740-504-8204

**Bill Bradley, KC8BB**  
wljabradley@yahoo.com  
Phone: 740-397-0267

#### Newsletter Editor &

#### Facebook Editor:

**Bill Bradley, KC8BB**  
wljabradley@yahoo.com  
Phone: 740-397-0267

MINUTES OF THE FEBRUARY 13TH 2017 MVARC MEETING

16 MEMBERS AND 1 GUEST PRESENT.

MEETING CALLED TO ORDER BY KC8EVS AT 0001 UTC.

KC8BB MADE A MOTION TO APPROVE MINUTES FROM JANUARY 9 2017 MEETING. 2ND W8UMH. APPROVED.

K8AEC MADE A MOTION TO ACCEPT FEBRUARY TREASURERS REPORT, 2ND KC8BB. APPROVED.

W8PEN REPORTED THAT BOTH CLUB REPEATERS WERE OPERATING AS EXPECTED.

KD8PSM REMINDED MEMBERS INTERESTED IN ARES ACTIVITIES, THAT YOU NEED TO TAKE AND PASS THE ICS COURSES IF YOU WOULD LIKE TO BE ELIGIBLE TO OPERATE FROM THE COUNTY EOC CENTER. YOU NEED TO PASS THE FOLLOWING ICS COURSES-ICS100, 200, 700, AND 800. THESE COURSES ARE AVAILABLE ONLINE. YOU CAN STILL PARTICIPATE IN ARES ACTIVITIES WITHOUT THESE COURSES.

KD8PSM STATED THAT THE EMA IS WORKING ON A TRAINING MANUAL. HE ALSO MENTIONED THAT THE 911 CENTER HAS EXPRESSED AN INTEREST IN HAVING AMATEUR RADIO EQUIPMENT INSTALLED THERE ALSO.

KD8PSM STATED THAT THE EMA MOBILE COMMAND CENTER WOULD BE ON DISPLAY AT THE RED CROSS CENTER LOCATED AT 300 NORTH MULBERRY ST FROM 7 TO 9 PM ON THURSDAY FEBRUARY 23RD.

PRESIDENTS REPORT

NEW CLUB HANDBOOK IS NEARING COMPLETION.

STILL NEED TO SCHEDULE DATES TO DEMONSTRATE THE ASSEMBLY AND PROPER OPERATION OF THE CLUBS GO BOXES AND RED CROSS STATIONS.

KC8EVS LISTED THE FOLLOWING UPCOMING 2017 CLUB ACTIVITIES:

NVIS DAY SATURDAY APRIL 22ST

EARTH DAY HALF MARATHON SUNDAY APRIL 23RD

FIELD DAY JUNE 24TH AND 25TH AT APPLE VALLEY

DANIEL EMMETT SPECIAL EVENT STATION THE SECOND WEEK IN AUGUST FROM THE RED CROSS ANNEX STATIONS.

OHIO STATE PARKS ON THE AIR, SATURDAY SEPTEMBER 9TH FROM THE GOURGE OVERLOOK IN MOHICIAN STATE PARK.

VE TESTING SESSION SATURDAY, FEBRUARY 25TH, 2017 STARTING AT 9 AM.

GENERAL INFORMATION

MARK YOUR CALANDERS; KNOX COUNTY WEATHER SPOTTERS CLASSES WILL BE HELD MARCH 14TH AT 6 PM. PLEASE PLAN TO ATTEND. ESPECIALLY NEW MEMBERS OR MEMBERS WHO HAVE NEVER TAKEN THIS TRAINING. LEARN WHAT INFORMATION OUR SERVED AGENCIES NEED DURING WEATHER EMERGENCIES. CONTACT KD8PSM OR KC8EVS IF YOU PLAN TO ATTEND, OR FOR MORE DETAILS.

K8AEC MOVED THAT THE CLUB WRITE A CHECK OF \$50.00 TO COVER NEWSLETTER EXPENSES TO KC8BB. 2ND W8PEN. APPROVED.

AFTER AMENDING HIS ORIGINAL MOTION, W8PEN ASK THAT THE CLUB APPROVE AN AMOUNT UP TO \$500.00 TO GET THE SECOND CLUB STATION OPERATIONAL AT THE RED CROSS ANNEX. AC8PT MOVED, W8TW 2ND APPROVED.

W8PEN MOVED TO ADJOURN, 2ND W8TW. APPROVED. MEETING ADJOURNED AT 0028 UTC.

THE FLOOR WAS THEN TURNED OVER TO N8SY AND KD8EVR FOR AN EXCELLENT PRESENTATION ON DIGITAL MOBILE RADIOS. WHAT THE TECHNOLOGY IS, AND WHAT THIS MODE OFFERS THE AMATEUR COMMUNITY.

RESPECTFULLY SUBMITTED

N8IBR SECRETARY MVARC

**By Don Russell, W8PEN**

Lots of happenings during the month of February and early March. So lets get to it!

### Technician Ham Course

The latest Technician Class has been successfully completed with six class members earning their Technician Class license and one class member earning his General class ticket. Those taking our course and passing the exams were:

<b>KE8GFV</b>	(Tech)	Marshall, Steven C	Bladensburg, OH 43005
<b>KE8GFW</b>	(Tech)	Adams, Nathan L	Johnstown, OH 43031
<b>KE8GFX</b>	(Tech)	Street, Daniel E	Centerburg, OH 43011
<b>KE8GFY</b>	(Tech)	Sargent, Mary E	Mount Vernon, OH 43050
<b>KE8GFZ</b>	(Tech)	Randall, Lori A	Johnstown, OH 43031
<b>KE8GGA</b>	(Tech)	Maroni Jr, Russell P	Coshocton, OH 43812
<b>KE8GGB</b>	(General)	Curry, Gregory M	Johnstown, OH 43031

Congratulations to these graduates of our class. I am hoping that they will find our club a valuable resource and be an active participant in our club activities.

Those not taking our course but showed up during our VE Test Session were the following:

<b>KE8GGC</b>	(Tech)	Davis, Kenneth L	Mount Vernon, OH 43050
<b>KE8GFU</b>	(Tech)	Grim, Sara E	Granville, OH 43023

Ken studied on his own and is very interested in ham radio, after being an SWL'r (Shortwave Listener) for many years. He is currently studying for the General Test.

Sara is Scott Keys, AC8PT, daughter and Scott is helping her set up a 2 meter station at her home. Hopefully, Sara will be able to check into our Sunday night nets.

Lastly, we have a new ham in Danville. He did not take the test locally (maybe Mansfield?). I have not talked to him yet, but I have heard him on the repeater.

<b>KE8GFK</b>	(Tech)	Short, Gregory A	Danville, OH 43014
---------------	--------	------------------	--------------------

Welcome to ham radio Gregory. Hope to talk to you soon.

Again, congratulations to all the new hams. Please feel free to use any of our club resources, including all three local repeaters. If you would like to work some HF, please arrange with one of the club members to operate our station at the Red Cross.

### **Will We have a General Class?**

As usual, after the Technician Class Course was over, there was some interest in a General Class Course. We have tried General Class courses before with limited results. Reason being, we usually tried the General Course

**By Don Russell, W8PEN**

immediately following the Tech Course. I think everyone was burned out from trying to take (and teaching) two courses in such a short time.

Therefore, I am considering the idea of a General Class course sometime in September. This would be after the summer vacations and activities. It will also be long before the start of a new Tech Class Course giving a break between both courses.



I am thinking of using the KB6NU's "NO NONSENSE GENERAL CLASS STUDY GUIDE". This is a free pdf download off the internet. You can also purchase a copy through Amazon.com for about \$15.00.

Along with this study guide, we will be using power point question and answer sessions so that we go over every question in the General Class Question Pool. These power point sessions will also be available on a CD for those with computers. They can be used as a flash card for exam prep. For those lacking computers, I am considering a DVD version of the question pool that can be played on a standard DVD player.

Anyone wishing to help design this course, please let me know. I would be happy to share the workload.

### **New DMR Repeater**

One new thing that has been happening locally is the installation of a DMR digital repeater. Arlin Bradford, KD8EVR, has been busy promoting Digital Mobile Radio (DMR) around Central Ohio and has replaced his analog FM repeater with a DMR repeater. The repeater is still on 442.100 MHz (+). It has been disconnected from the long time repeater linking up North. While you can still use the repeater in analog FM mode, it would be wise not to do so. This repeater is really busy transmitting digital signals!

You will need to purchase a DMR radio to use this repeater. Arlin sells these as part of his business, or you can buy one at Amazon.com. Prices start at about \$100 for a hand held with reasonable performance (that is what I bought, a TYT MD-380, which seem to be very popular). This is not plug and play. Once you buy a radio, you will have to program it. You can do this manually, but is not recommended. You can download a code plug for the local area, which is recommended.

Once you have your radio programmed everything else is pretty simple. There is a learning curve due to the new lingo being used on DMR, but things are pretty simple to learn. As long as signals are good, audio is very pleasing to listen to.

What can you do with a DMR radio? Well, the list is impressive. Arlin's DMR repeater is connected to the internet, which means you can talk to most anyone in Ohio, North America, or the World! For example, I usually monitor KE8EVR/R – Ohio State. This channel allows me to talk to anyone in Ohio that is listening to this same channel. I can give a call out and be heard anywhere in Ohio. Or I can reply to a call given out by anyone else in Ohio.

So, if you have the time and an extra \$100 or so to play with, I would get together with Arlin or one of the other DMR guys for help buying and setting up your first radio.

Arlin has presented several programs on the DMR system locally and I am sure he would be willing to answer any and all questions about this system.

### **Repeater Update**

Along with Arlin's new DMR repeater, the club has two repeaters that are owned and operated by the club. The 2 meter repeater, K8EEN/R is our flagship repeater and has been in operation since the early 1970's.

This repeater covers all of Knox County and beyond. All are welcome to use this repeater. Program your radio to 146.790MHz (-) with a PL of 71.9 Hz. To use this repeater.

This repeater is currently working well and is available to all.

The club maintains a 70cm Repeater on 444.600 MHz (+) with a PL of 71.9 Hz. This is a relatively new repeater and work is still being done on it. Coverage is good, although not quite as good as the 2 meter repeater. We are working on upgrading the antenna for better coverage. We are hoping to eventually cover all of Knox County with this repeater.

This repeater is also digital, but not DMR. This is a Yaesu Fusion repeater and works on analog FM and C4FM digital. Everyone is encouraged to try out this new repeater in either mode. I am expecting most users will be on Analog FM. Eventually, this repeater will be hooked to the internet, but not in the near future.

### Local Mesh Update

Our mesh network has been working very well. We still need to establish one more high profile node, which should be done sometime this Spring. We also need to convert what nodes we have running via the internet to total RF. Again, I am waiting for better weather before pushing this.

There are several local hams interested in putting nodes up. This is great. The more nodes we have, the more reliable the whole network will work. The closer the nodes are together, the better signal and faster throughput. I have enough pieces to put together three nodes. If anyone wishes to put one of these nodes up, please let me know. High and in the clear is best, but a site analysis is the only way to really find out if a location would be a good one for our network. For most places in Mt. Vernon, a node on top of a 20 or 30 foot pole, or the very top of a house should work pretty good.

I have discovered that in order to use our IP telephones on this mesh network, we have to improve the signals between a couple of nodes. I am Thinking of installing an extra node with a parabolic antenna at the KC8BB site pointing at the Red Cross node. Then, another parabolic antenna at the KD8WSI site pointing at the node a KCH. The addition of these two nodes should greatly improve throughput. I am finding that the rolling hills of Knox County are not good to microwave signals on low towers. But we are making progress.

One line of thinking is that these extra nodes should be on a frequency other than 2.4 GHz. We have two 900 MHz nodes we can experiment with. The 900 MHz nodes would have a better chance of going through foliage (trees!). The downside is that the 900 MHz nodes would have higher noise floor.

If these two nodes do not work out, we may try 5 GHz. I think the addition of these two nodes will improve our links tremendously and allow our telephones to work properly as we convert from internet tunnels to true RF links.

The last news for our mesh network is that I have installed a local email server on our network. This is a local email server, meaning that these emails will not go out over the internet. My local email address is [w8pen@local.mesh](mailto:w8pen@local.mesh). All users will have a similar email address. Using this service will be very familiar to all. One would use an email client like Outlook or Thunderbird.

I set up a Thunderbird client and have been testing the email server for a few weeks now. I have been sending myself emails with attached files and this has been working for several weeks without a hitch. I am ready to go big time with this and will be sending instructions to all current mesher's on how to set up your email client to make use of this server.

In summary, we currently have six RF nodes online. We have five nodes online via internet tunneling. We have a web page server (which needs updated. Anybody want to be a Web Master?). There is an Email Server online. I am playing with an FTP file server, but have not been able to get it to work properly.

Current goals are to boost signals to two nodes and get four of the six internet nodes converted to RF by Spring. Also, we need to install a node at the water tower where the K8EEN repeater is located. This has been approved and we have the equipment to make this happen.

Sorry about this being a rather long column this month, but I felt the information needed to be presented. See you all at the meeting.

**By Dan Romanchik, KB6NU**

Recently, one of my readers asked, "Why do most people have a Technician license and not a General or Extra? Is it simply not interesting enough to get more privileges?"

This is a very interesting question, one that I've written about before. I think there are several issues at play here. In no particular order:

It's pretty easy to get a Tech license, so a lot of people get them just for the challenge, but really never intend to use the license.

Some people get a Tech license, but then find out that amateur radio isn't what they thought it was going to be.

Some people get a Tech license, then can't find an Elmer to help them. They lose interest and give up on ham radio.

Some people get a Tech license, buy an HT, and think that's all there is to amateur radio. They quickly lose interest in amateur radio, because talking on the repeaters just isn't all that interesting.

Some people get licenses to participate in local emergency communications or CERT organizations. There's no need for them to get anything more than a Tech license.

Since it's so easy to get a Tech license, even those that aren't technically inclined get them. Getting a General Class license requires a fair amount of study, and because they don't see the benefits of putting in that kind of work, they just don't bother.

I posted this question to my blog and got several interesting replies. Perhaps the most cogent was by Kenneth, W6KWF. He wrote: "The only thing General/Extra gets you is HF, which is becoming an increasingly small fraction of the possibilities of the amateur hobby. Amateurs could easily spend their whole lives moving from FM repeaters to microwave to VHF packet to EME to CERT/event support, etc, etc, without having any interest to explore what few facets of the hobby need HF privileges."

I think this is a great point. When incentive licensing was put into place in the late 1960s, HF was where the action was. Nowadays, more of the "cool stuff" is happening on VHF, UHF and microwaves. Getting additional HF privileges is not really a big deal anymore for many hams.

Yet another new license class?

Right on the heels of this discussion, the ARRL posted a news item, "ARRL Seeks Opinions Concerning Possible New Entry Level License" (<http://www.arrl.org/news/arrl-seeks-opinions-concerning-possible-new-entry-level-license>). According to this report, the ARRL Board of Directors set up an Entry Level License Committee in September 2016.

The committee is gathering member input via an online member survey (<http://www.arrl.org/license-1>) and will make recommendations to the Board for possible rules changes to submit to the FCC. They note, "The result could mean changes to the Technician license, but it could also be an additional, but simpler, license with privileges that would give a newcomer a taste of most facets of ham radio from HF to VHF and UHF. The survey will be online until April 7, 2017.

**By Dan Romanchik, KB6NU**

According to the survey page, the committee is trying to address several issues, including:

The declining population of new hams under the age of 30.

A decline in the number of new licensees who actually get on the air.

Amateur Radio's lack of appeal for those under the age of 30, compared to other technical hobbies.

The increasing challenge of engaging and retaining Technician licensees.

A reluctance in much of the amateur community to embrace newer technologies of interest to the younger segment of the population.

Personally, I don't think that coming up with a new entry-level license class with privileges that are even more limited than the Technician Class is a bad idea, but whether or not it's successful will depend completely on the implementation. Unless the new class of license is accompanied by some kind of program that will help these new licensees really become engaged with amateur radio, then we're just creating another class of inactive licensees. I don't know exactly what this program would consist of, but without it, this effort is doomed to failure.

And, who's going to develop and run this program? The only organization that has the horsepower to make this work is the ARRL. They are going to have to step up big time. Most clubs don't have the people or resources to do it properly. If you have any thoughts on this, I urge you to contact your ARRL division director (<http://www.arrl.org/divisions>).

---

When he's not pondering questions about the amateur radio licensing structure, Dan blogs about amateur radio at KB6NU.Com, writes the "No Nonsense" amateur radio study guides, and teaches ham classes. You can contact him by e-mailing [cwgeek@kb6nu.com](mailto:cwgeek@kb6nu.com).



# March, 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<b>5</b> 9:00 pm ARES Sunday Night Net on K8EEN <b>KC8BB –Bill</b>	<b>6</b>	<b>7</b>	<b>8</b> 5:00 pm Dinner at Southside Diner	<b>9</b>	<b>10</b> 10:00 am Breakfast at Hardee's	<b>11</b> <b>9:00 am</b> Breakfast at Allison's Finer Diner
<b>12</b> 9:00 pm ARES Sunday Night Net on K8EEN <b>KE8ANS –Terry</b>	<b>13</b> 7:00 pm <b>MVARC            Monthly Meeting</b>	<b>14</b> 6:00 p.m. <b>Weather Spotter            Training            Memorial Bldg.</b>	<b>15</b> 5:00 pm Dinner at Southside Diner	<b>16</b>	<b>17</b> 10:00 am Breakfast at Hardee's	<b>18</b>
<b>19</b> 9:00 pm ARES Sunday Night Net on K8EEN <b>W8PEN – Don</b>	<b>20</b>	<b>21</b>	<b>22</b> 5:00 pm Dinner at Southside Diner	<b>23</b>	<b>24</b> 10:00 am Breakfast at Hardee's	<b>25</b>
<b>26</b> 9:00 pm ARES Sunday Night Net on K8EEN <b>KD8HSA –Tom</b>	<b>27</b>	<b>28</b>	<b>29</b> 5:00 pm Dinner at Southside Diner	<b>30</b>	<b>31</b> 10:00 am Breakfast at Hardee's	<b>1 April</b>
<b>2</b> 9:00 pm ARES Sunday Night Net on K8EEN <b>KC8BB –Bill</b>	<b>3</b>	<b>4</b>	<b>5</b> 5:00 pm Dinner at Southside Diner	<b>6</b>	<b>7</b> 10:00 am Breakfast at Hardee's	<b>8</b> <b>9:00 am</b> Breakfast at Allison's Finer Diner
<b>9</b> 9:00 pm ARES Sunday Night Net on K8EEN <b>KE8ANS –Terry</b>	<b>10</b> 7:00 pm <b>MVARC            Monthly Meeting</b>	<b>11</b>	<b>12</b> 5:00 pm Dinner at Southside Diner	<b>13</b>	<b>14</b> 10:00 am Breakfast at Hardee's	<b>15</b>