



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)





INSIDE THIS ISSUE:

President's View	1
Ham Radio News & Information	2
January Meeting Minutes	3-4
Radio Activity	5-6-7
Earth's Magnetic North Pole Shifts	8
Make Ham Radio a Habit	9
February /March Calendar	10

President's View

If you are reading this you have survived snowmageddon and the big freeze, so much for global warming this time of the year. Hope you've got your antenna's up and secure. Talking with Don, W8PEN the other day and he said he looked out and saw that his EME array looked like two inverted U's, not good. They thawed out and straighten out in good working order, whew. I've been working on a couple of projects here in my shack and plan on bringing them in to the club meeting in the future. Otherwise I've been busy keeping the fires going so we can keep warm.



February is the month that we need to start planning for the upcoming year. Really I should have started last month but better late than never. Important dates to remember:

April 27th 10a-4p NVIS

June 22-23th Field Day

August (TBD) Dan Emmett Special Event

September 7th Ohio State Parks on the Air

I'm looking for someone interested (well you don't have to really be interested, just help get it done) in getting one or all of these events organized. So email me (<u>fcounts@gmail.com</u>) come to the next meeting (Feb 11 at 7p), or Friday at 10a at the ARC building and let me know what or how you would like to participate.

Something fun coming up soon:

February 17th Intercity Hamfest and Computer Show (Mansfield Hamfest) I believe they open the gates at 7a. It is a fun and sometimes very cold Hamfest.

As usual I hope to see you Monday Feb 11th at 7p for our monthly meeting or maybe a Wednesday at 5p at Southside or Friday at 10a at ARC or on the second Saturday at 10a at Barbs diner.

Frank, KC8EVS

Page 2

Ham Radio News & Information

February, 2019

The 2019 Repeater Directory[®] includes "crowdsourced" listings contributed by users, repeater owners, and volunteer frequency coordinators. This means more listings, and updated more often. Public service volunteers: include this printed directory with your emergency 'go kit.

- **28,000+ listings.** World's largest printed directory of repeater systems.
- Listings for US and Canada, organized by state/ province, city, and operating mode.
- Digital repeaters including FUSION, D-STAR, DMR, NXDN, and P25 systems.
- VHF/UHF and microwave band plans included.
- Spiral "lay flat" binding (size: 6" x 9").

Make it yours! Cover includes space to personalize your directory (permanent marker or label recommended). **Special Member Price! Only \$17.95** (regular \$19.95) Item No. 1045 - \$17.95

*****2019 IARC Mid*Winter Hamfest and Computer Show******

https://iarc.club/hamfest/index.html

http://www.ossbn.org/

Ohio Single Side-band Net.org, our Ohio connection for what is going on in the Ohio Traffic System.

<u>eHam.net</u>

Ham radio on the net. Articles on Ham Radio as well as interesting topics for all of the Ham Radio hobby. Product Reviews, classifieds, Ham Radio News, propagation and upcoming events around to country.

Delaware Radio ARES website: www.delares.org

Wayne Technical Fanatics http://ww8tf.club/

FT8Call:

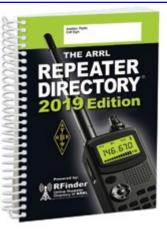
http://ft8call.info/downloads/

<u>SDR</u>

Shortwave Listening Without a Receiver http://www.hamsphere.com

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 <u>Band</u> **y**ou 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.



The Mount Vernon Amateur Radio Club Officers

<u>President</u>: Frank Counts, KC8EVS

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Vice President: Scott Fields, K8AEC ballixxe@yahoo.com Phone: 740-504-8204

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February, 2019

January 2019 Meeting Minutes

By Terry Windsor



Frank, KC8EVS called the meeting to order at 7:00 pm.

There were 19 MVARC members present.

December Meeting Minutes accepted: Motion by Scott, N8SY and seconded by Bill, KD8WHQ.

Treasurers Report presented by Terry, KI8N. Motion to accept by Louie, NT8I and Seconded by Greg, W8DOH. Motion passed to accept Treasurers Report. For club finance specifics please contact Terry, KI8N.

Repeaters:

Don, W8PEN, reported the 146.79 repeater is working. Some noise/static has been observed. May install Back-Up repeater to check if noise follows the repeater or may be in cabling. Currently S-Meter is showing some fluctuations.

The 444.6 repeater at Knox County Hospital is working. Need equipment to install and operate Wires-X and awaiting KCH to install an internet connection. Motion for \$150.00 to purchase Wires-X HRI-200 made by Don, W8PEN and seconded by Emery, W8TW. Motion passed and Louie, NT8I to follow up.

Mesh:

Don, W8PEN, reported Mesh network is working but hasn't been used lately. Don is holding a MESH meeting upstairs after the club meeting to discuss getting MESH back on track.

ARES:

Radio is at the Mount Vernon 911 center, awaiting opportunity to install and check out.

April 6 is the Ohio Section ARES Conference at OSU Marion Campus, Marion, OH.

State wide Exercise is scheduled August 6 – 8 and locally will utilize the Knox County Fairgrounds.

Contact Bill, KD8WHQ for more information.

Old Business:

Club equipment insurance was discussed. New equipment to add this year and some older equipment to be removed. Terry, KI8N to determine if the club has online access to our insurance equipment list.

Scott, N8SY MVARC members need to register on ARES Connect and start logging activities – Note: members must register for each event prior to the event. After events the link goes away and you will need to notify Bill, KD8WHQ to register you for the past event.



New Business:

Frank, KC8EVS discussed upcoming 2019 club events. These events are the normal activities the club participates in:

Winter Field Day January 26 – Will operate from the club station at the Red Cross Training Center. Winter Field Day starts at 2 pm.

NVIS Day April 27, 10 am to 4 pm.

Field Day June 22 and 23

Dan Emmitt in August

Ohio State Parks on the Air September 7

Upcoming activities noted:

North American QSO Party, SSB, January 19

ARRL VHF Contest

Mansfield Hamfest, February 17

Michael, KE8HGE starting a new Tech class starting Thursday January 24 at 7 pm. The class is scheduled for seven weeks with a testing session on March 16.

Michael, KE8HGE stated the MVARC web page is at a standstill waiting on Ruben to determine if a new server will be implemented. Michael to contact Ruben in regards to renewing the MVARC domain name.

Bill, KC8BB noted that he has been notified via the MVARC Facebook page that someone in Mount Vernon is causing interference on 75 meters. This person has been narrowed down to a house on the west end of Mount Vernon. Bill was asked if he knew the person causing the interference, he does not.

50/50 Drawing won by Bill, KC8BB and donated to club

<u>Adjournment</u>

Motion to adjourn by Louie, NT8I and seconded by Bill, KD8WHQ. Motion passed and meeting adjourned at approximately 7:45 pm.

Terry Windsor, KI8N MVARC Secretary/Treasurer



Radio Activity

By Don Russell, W8PEN

Hello to all my radio friends out there. Got some interesting things to write about this month so lets get started.

January Ice and Antennas

The January storm did not hit Mt. Vernon as hard as it hit other areas in Ohio. Non the less, at least for me, it was a pain. Instead of 12 to 14 inches of snow, I think my area got maybe 4 inches. The snow was not a problem. The ice before the snow (and after) was.

I was afraid my EME antennas would not hold up to a severe icing. I did the best I could when installing, but was it enough?

After the storm, I took a peek. The antennas had maybe ¼ inch of ice coated on them and they were drooping quite badly. Anyone ever hear of an inverted U antenna? Because of the ice, the antennas developed very high SWR and I could not operate without risking the equipment. Patience paid off and two days later I was once again operating.

Another problem I had was that the elevation calibration was off by about 10 degrees. That is a mystery because I drilled a hole through the support boom and the ends of the elevation rotor to prevent that from happening. Several days later, this problem went away. I think I just needed to turn the power off on the rotor control box and turn it back on to reset the calibration.

Since the 2 meter antenna on the 50 foot tower is the same model, it also had High SWR. I have 3 identical 2 meter antennas. Two for EME on the short tower and one for terrestrial and meteor scatter on the 50 foot tower. The only antennas that did not experience high SWR was the 6 meter beam and the HF windom antenna.

Once the ice melted, everything returned to normal. I made a note to myself to replace the boom support rope I use on the antennas with a rope that does not stretch.

Local Mesh Project

After the January club meeting a group of us had a short meeting concerning the local mesh project. Present was Larry Howell AC8YE, Frank Counts KC8EVS, Louie Wilkinson NT8I, Barry Butz N8PPF, and me, Don Russell W8PEN. Larry is a new club member who is moving to the Centerburg area from Delaware, Ohio. Larry is very experienced in the mesh network created for ham radio and networking in general. I am really happy to have Larry assist and advise our little group.

After talking about the equipment that the club now has and possible future improvements to our network, Larry asked a logical question: "What do you plan to do with a local mesh network"



By Don Russell, W8PEN

This is something I have not thought about for a while. Indeed, what do we want to accomplish? I had no complete answer. Something we need to think about. So, I have come up with a list of goals that I would like to accomplish with the local mesh Network

Overall, I would like the network to be able to help provide communications during a local disaster or event. To start, I would like to see our PBX phone system expanded and clients to our email server added.

1. We have main nodes at the Red Cross and KCH hospital. I would like to expand this by installing nodes at the water tower where the K8EEN repeater resides and the Knox County EMA. In fact, we should have two nodes on the water tower. One with an omni direction antenna and one with a beam antenna of some sort pointed either at Fredericktown or Centerburg, or perhaps Delaware. Both nodes can both be on 2.4 GHZ. But maybe one should be on 5 GHz.

2. Place mesh phones at the Red Cross, Knox County EMA, and KCH hospital. Perhaps a mesh phone at the water tower. Plus, anyone with their own node can set up a phone.

3. A computer and printer should be available at each of these main nodes so that mesh Email can be used. This way we can send files back and forth and print out sent documents when required.

4. Develop two or three portable mesh nodes that can be easily moved to the event site. This should include a mesh phone, a computer, and a printer.

5. Eventually we can tie all these nodes to mesh video cameras. I saved this for last because it would be the most expensive part of the equation, and while a nice bragging point, probably not a needed item.

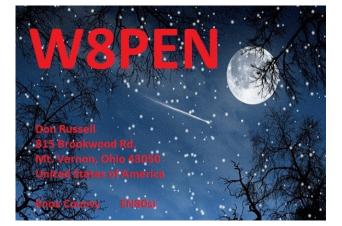
None of this will be started until Spring. But it is food for thought. I would appreciate anyone's opinion on this matter.

QSL Card Update

Thanks to all those positive responses to my article about designing your own QSL card. While I still like the website mentioned in the article, I find it a bit limiting. I have found that I can make a really nice QSL card using Windows Paint program.

The 3.5 X 5-inch photo paper I bought worked out great for me. It is only $\frac{1}{2}$ inch shorter than a standard QSL card. I do find that writing on the glossy side of photo paper is a bit difficult unless you have a special pen. So, I have moved the QSO information to the back of my cards. Here is a sample:





815 Brookwood Rd. Mt. Vernon, Ohio 43050			Confirming QSO With:				
Knox County EN80si				Radio:			
Day	Month	Year	UTC	Frequency	Mode	Rpt	
				Ant:			

PSE TNX QSL

Gee, I had more, but newsletter space is limited so I will stop here.

See everyone at the February meeting. Until then, stay radio active.

Earth's Magnetic North Pole Shifts toward Siberia

02/05/2019

National Centers for Environmental Information (<u>NCEI</u>) scientists have updated the world magnetic model (WMM) mid-cycle, as Earth's northern magnetic pole has begun shifting quickly away from the Canadian Arctic and toward Siberia, an <u>NCEI report</u> said this week. The new WMM more accurately represents the change of the magnetic field since 2015. The alteration could have an impact on government, industry, and consumer electronics.

"Due to unplanned variations in the Arctic region, scientists have released a new model to more accurately represent the change of the magnetic field," the report said, noting that updated versions of the WMM are typically released every 5 years. This update comes about 1 year early.

"This out-of-cycle update before next year's official release of WMM 2020 will ensure safe navigation for military applications, commercial airlines, search and rescue operations, and others operating around the North Pole," said NCEI, which is part of the National Oceanographic and Atmospheric Administration (NOAA). "Organizations such as NASA, the Federal Aviation Administration, US Forest Service, and many more use this technology. The military uses the WMM for undersea and aircraft navigation, parachute deployment, and more."

Other governmental entities use the technology for surveying and mapping, satellite/antenna tracking, and air traffic management. Smartphone and consumer electronics companies also rely on the WMM to provide consumers with accurate compass apps, maps, and GPS services.

Airport runways may be the most visible example of a navigation aid updated to match shifts in Earth's magnetic field. Airports around the country use the data to give runways numerical names, which pilots refer to on the ground. The declination has changed slightly more than 2.5° over the past 2 decades or so. Compasses use declination — the difference between true north and where a compass points — to help correct navigation systems for a wide variety of uses.

As Earth's magnetic field evolves between the 5-year release schedule of the WMM, these predicted values can become off as the rate of change in Earth's magnetic field evolves due to unpredictable flows in Earth's core. The NCEI report said Earth's north polar region is experiencing one of these erratic changes. — *Thanks to NOAA-NCEI*

Source: http://www.arrl.org/news/earth-s-magnetic-north-pole-shifts-toward-Siberia

By Dan Romanchik, KB6NU

Every week, I get an email newsletter from Penguin Random House called *Signature. Signature* includes links to articles about books and writing. Being a writer, I clicked on the link to "5 Good Writing Habits You Need to Learn Now." As I was reading the article, it occurred to me that the advice could also apply to amateur radio.

So, with apologies to the author, Lorraine Berry, here are five things you can do to make ham radio a habit:

- **To get on the air more, or to do more building, set up a time to do it.** If you enjoy getting on the air or homebrewing, but never seem to be able to find the time to do it, you need to put it on your schedule. Set aside the time a couple of days, or a week, or even a month in advance, and you'll be more likely to do it. If you set up a regular time every week, pretty soon it will be a habit.
- If ham radio is important to you, create an environment that encourages you to do ham radio. To make ham radio a habit, you really need a place that's set up to do ham radio. If you have to dig out and set up your equipment every time that you want to get on the air, you're just not going to do it. You need a "shack" that makes it easier for you to engage in the hobby. Richards, K8JHR, gave me some great advice back in 2012 on where and how to set up a shack (https://www.kb6nu.com/building-a-new-shack/).
- **Create temptations that reward you for your new habit of ham radio.** For me, being able to make interesting contacts, or building some new gizmo, is reward enough, but you may want to reward yourself with a beer or some ice cream after an operating session.
- Make it easy to do what you like to do. This is related to #4. Your shack should have everything you need to easily do whatever ham radio activities you enjoy doing. If you enjoy operating, then it should have a nice operating desk. If you enjoy building, then set it up so that all of your tools are readily accessible. The easier it is to do, the more likely it is that you'll do it. If you enjoy operating portable, then build up a kit that has all the stuff you need, and have it ready to go when you're ready to go.
- Start with the Two-Minute Rule for new habits and continue from there. The "two minute rule" (https://www.lifehack.org/articles/productivity/how-stop-procrastinating-and-stick-good-habits-using-the-2-minute-rule.html) is a tool to help you overcome procrastination. The idea is to allot just two minutes to a task that you'd like to complete or a skill that you'd like to develop. It's a small commitment, but enough to get you started, and the idea is that once you're started on a particular task or project, continuing work on that task or project becomes a lot easier. Those two minutes could easily become a half hour or an hour once you've gotten the ball roll-ing.

Armed with this advice, I'm expecting you to be a more active ham in 2019. I'll be listening for you on 40 m.

Dan Romanchik, KB6NU, is the author of the KB6NU amateur radio blog (KB6NU.Com), the "No Nonsense" amateur radio license study guides (KB6NU.Com/study-guides/), and one of the hosts of the No Nonsense Amateur Radio Podcast (NoNonsenseAmateurRadio.Com). His wife sometimes thinks that amateur radio has become too much of a habit for him.

February, 2019

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
3	4	5	6	7	8	9
9:00 pm ARES Sunday Night Net on K8EEN KC8BB – Bill			5:00 pm Dinner at Southside Diner		10:00 am Breakfast at Club Meeting room	10:00 am Breakfast at Barb's Diner Columbus Road
10	11	12	13	14	15	16
9:00 pm ARES Sunday Night Net W8PEN – Don	7:00 p.m. MVARC Monthly Meeting -Red Cross Annex		5:00 pm Dinner at Southside Diner		10:00 am Breakfast at Club Meeting room	International DX-CW Contest 2/16 & 2/17
17	18	19	20	21	22	23
9:00 pm ARES Sunday Night Net on K8EEN NT8I – Louie			5:00 pm Dinner at Southside Diner		10:00 am Breakfast at Club Meeting room	
24	25	26	27	28	1	2
9:00 pm ARES Sunday Night Net on K8EEN KE8HGE -Michael			5:00 pm Dinner at Southside Diner		March 10:00 am Breakfast at Club Meeting room	Contest: International DX-Phone
3	4	5	6	7	8	9
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