



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

Louie Wilkinson, NT8I



Greetings to all and happy spring! What a strange time we find ourselves in. I hope everyone is sticking with social distancing and staying home.

The meeting this month will be Monday, April 13th at the normal time of 7PM, but instead of meeting at the Red Cross we will meet on the K8EEN repeater for an on-air meeting with myself as net control. This will be a great opportunity for everyone to participate in a net, even if that is just to check in and listen.

I myself am still working my normal schedule being in an essential industry, but other than work I have spent all my time at home. I find myself trying to be productive to make the most out of this, but also procrastinating and instead binge watching shows or playing video games online with friends. Though I don't mind not being as productive as I could be, as it is important to take time to care for your mental health, and I find that connecting with friends online to play video games is a great way to still remain social, even if it is socially distant.

Looking forward I know many of you would like to get back to business as usual, with multiple club social events each week, but that is something that will be evaluated by myself and the Directors based on the public health guidelines. As the stay at home order for Ohio was extended through this month all in-person club events are suspended for at least that long. But don't worry, when safe to do so we will resume our in-person gatherings. Of course, that has not stopped people from socializing on the airwaves, be that via the repeater, or on HF every couple of days. For anyone who has not, I would encourage you to turn on your radio, call out on the repeater, join one of the HF round-table sessions, or even call and check in on friends you would normally see Friday mornings. Together, we will make it through this.

73,
Louie, NT8I

Visit us on Facebook:**Mount Vernon Amateur Radio Club****Visit our new website:****<https://mvarc.net>****Please email for inquires and information at:****info@mvarc.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: <http://k8es.org/>****Newark Amateur Radio Assoc: <https://www.n8ara.org/>****(Mansfield) InterCity Amateur Radio Club: <https://iarc.club/>**

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

<https://arrl-ohio.org/g-calendar/default.html>**The Mount Vernon Amateur Radio Club Officers****President:**

Louie Wilkinson, NT8I

Vice President:

Greg Short, W8DOH

Secretary

Michael Jacobs, KE8HGE

Treasurer:

Terry Windsor, KI8N

Club Call Trustee:

Don Russell, W8PEN

Equipment Trustee:

Barry Butz, N8PPF

Directors:

Chairman: Frank Counts, KC8EVS

Greg Short, W8DOH

Michael Jacobs, KE8HGE

Don Russell, W8PEN

Barry Butz, N8PPF

Emery Bennett, W8TW

Bill Stroud, KD8WHQ

Newsletter Editor & Facebook Editor:

Bill Bradley, KC8BB

March Meeting Minutes March 9, 2020



Louie, NT8I called the meeting to order at 7:00 pm. There were 20 MVARC members and two visitors present. February Meeting Minutes accepted. Treasurers Report presented by Terry, KI8N. For club finance specifics please contact Terry.

Repeaters

The 146.79 and 444.6 repeaters are working.

Mesh

Mesh network is operational.

ARES

Bill, KD8WHQ discussed signing up for the ARES Ohio Spring Conference scheduled April 4 in Marion. (NOTE: This conference has been cancelled.) More information regarding an HF drill in the conferences place is available at: <https://arri-ohio.org/SEC/default.html>.

Bill also presented what ARES is, who does it, responder levels, training levels and where MVARC would report (Red Cross Training Center). He also discussed signing up for Knox Alerts (http://entry.inspironlogistics.com/knox_co_oh/wens.cfm)

Training / responder level requested for all ARES activation is Level 2 which requires NIMS (ICS) courses IS-100, 200, 700 & 800. All of this information is available at: https://arri-ohio.org/SEC/reference-training_materials.html.

Another item cancelled by the Covid19 pandemic was the EMA March 17 tabletop drill for Knox County where ARES was going to participate.

Business

Louie discussed upcoming and requested 2020 club events.

NVIS Day April 25, 10 am to 4 pm. This event will be held at the Red Cross building. This has also changed due to the Covid19 pandemic and now club members will participate from their home locations. More to follow at the April meeting.

Hamvention May 15 – 17. (Cancelled for 2020)

Field Day June 27 and 28. Will need someone to take the lead as activity coordinator. This is your chance to work with the members of the club to actively promote amateur radio within the community.

The ongoing Technician training class is progressing with testing scheduled March 14.

There is a request by the Black Fork Gravel Grinder to have MVARC provide communications services for their May 2 bicycle race. There are three races: 23, 30, and 54-mile starting on Wally Road and going into Coshocton County and ending on Wally Road. You can view information about this race at: <https://www.blackforkgravelgrinder.com/>. It was decided that more information is needed about our involvement and Louie was going to follow up.

Adjournment

Motion to adjourn by Bill, KD8WHQ and seconded by Greg, W8DOH. Motion passed and meeting adjourned.

50/50 Drawing won by Scott, W8HK.

Terry Windsor, KI8N

80 Meter OCF Antenna

Terry, KI8N

After reading about Don's work with antennas I thought I would write about how last fall Larry, AC8YE and I had discussed using DX Engineering's heavy duty 46-foot fiberglass tubing assembly to erect wire antennas: DXE-TFK46-HD. I do not have tall trees that will support antennas at a good height, so I purchased this item and erected it in my back yard by the garage to support an 80-meter OCF antenna.

First, I dug a three-foot-deep post hole to sit a five-foot piece of three-inch PVC pipe into. The bottom section of the fiberglass tubing is placed into the PVC pipe to support the assembly. I also attached a pulley to the top section of the tubing so that I can use a line to raise and lower the balun when I need to work on the antenna without having to unclamp the fiberglass tubes and lower them.



The balun, coax and wires were attached, the tubing extended and locked into place and the antenna hoisted into the air. I used a pine tree on each side of the pole to attach the wires in an inverted V. I also guyed the tubing in two locations to prevent it from swaying in the wind. In the photo I drew in the antenna wires since they do not show in the picture.

Finally, I ran approximately 100 feet of RG-213 to the shack in the basement and have been using this antenna for SSB, CW, and digital contacts. I was lucky that the SWR is good on 80, 40, and 20 meters and most other bands can be used with the radio's internal tuner.

Don Russell, W8PEN



What a difference a few weeks make. The coronavirus/COVID-19 has shown just how vulnerable we, as human beings, are. I hope all club members (actually everyone world wide!) is staying safe and self isolating or following the social distancing guidelines. This is not something to be fooling around with. Please follow the directives set in place by Governor DeWine and the Ohio Department of Health. Together, we will all get through this.

I am sure club cancellations and other information will be covered elsewhere in this newsletter. However, I want to let everyone know what some members have been doing.

In place of our regular Friday breakfast at the Red Cross, for now, we are holding a net on the 2 meter repeater on Fridays at 10:00 A.M. So, join the breakfast net by grabbing a cup of coffee and getting on the repeater. The conversation is good and social distancing is easy when using ham radio.

In addition to the Friday breakfast net, I have been coordinating an HF net about every other day. This net started on 80 meter SSB. However, the group found it much better to use 10 meters instead. Signals tend to skip over the close stations on 80 meters. 10 meter signals seem to be much better. So tune in daily on 10 meters / 28.340 MHz at 1:00 P.M. to see if the net is running. No 10 meter antenna? A dipole antenna is very easy to make and takes up very little space. If you have an 80 meter antenna, try that. My 80 meter antenna, with the help of the internal antenna tuner on the Kenwood TS-590S, works very well and I am getting good signal reports. It would be worth a try.

2 Meter Repeater

Once again we are having issues with our 2 meter repeater. Every time it rains the repeater signal starts seriously degrading. This could only mean that water is getting in somewhere in the antenna and feed line system. This moisture could be getting in just about anywhere. I am thinking the phasing cables on the antenna itself since we did just replace the cable from the antenna to the hard line this past summer.

I am convinced that the only way to totally solve this issue is by replacing the antenna and perhaps the hard line. We can replace the repeater antenna temporarily and check the antenna when we get it on the ground. Then after fixing any problems with it, we can reinstall the repeater antenna on the water tower.

These antennas are expensive, but the club needs a reliable repeater and what we have right now is anything but reliable.

More on this at the April meeting, which will probably be held on the repeater, if it is not raining (HiHi).

As a reminder, if the 2 meter repeater does go down for some reason, the 70cm repeater will be used as a back up. For those not familiar with the 70cm repeater, the frequency is 444.600 (+5 MHz). PL is 71.9 Hz.

Local Mesh Network

The local mesh network continues to work well. We have several high profile nodes scheduled to be installed this Spring. We are, however, going to wait until the threat of the coronavirus over.

We are planning high profile nodes in Fredericktown, Centerburg, and Martinsburg. Only the Centerburg node has been approved so far and this won't happen until maintenance on the water tower has been completed sometime in June. Fredericktown only needs to get council approval, which looks likely. While we have not approached Martinsburg about the possibility as of yet, I do have one source that supports the installation of a mesh node on the water tower there.

I am working on a system that will enable video chat on the mesh network. This would work much like Skype video chat. I am not sure how much bandwidth this would take, and if it will even work effectively on a mesh network. I would presume that we would need solid high quality links to make this work. I will let members know how this goes.

NVIS Day

The club has officially canceled NVIS Day as a group event. Meaning that club members are not going to get together at the Red Cross and operate NVIS as planned.

As club NVIS Chair Person, I am asking that anyone interested in this event, do it from home. Set up your own NVIS antenna, or use what you already have up. Most 80 meter antennas at the typical height of 30 – 40 feet are actually NVIS antennas anyway.

All club members participating in NVIS should email me a report on stations worked, frequency, type of antenna used, and power output used. And of course operating mode (CW, SSB, Digital). Any other information one can think of would be a positive.

I will use these reports to submit a detailed club report to the sponsors of NVIS Day.

Wrap Up

That is it for this month. Hope to “hear” everyone on the 2 meter repeater meeting night. Please stay safe and by all means be “radio active”.

by Barry Butz N8PPF



Our camper is a 17 foot Casita (Little House). You have seen it at Field Day. Although it can be connected to AC power, we prefer to camp in more primitive sites without hookups. The built-in cooktop and refrigerator are propane fueled, although the refrigerator needs a small amount of 12 volt battery power for controls. Lights, water pump, and radios also use 12 VDC. The camper carries a group 27 deep cycle battery. I have learned that keeping the battery charged is more of a challenge than you might expect. Even though I have a generator, I decided that a solar panel was a better way to go.

The panel I bought measures 20" x 40" and is rated at 140 watts output. A 100 watt panel would have cost significantly less per watt but I wanted to get maximum usage of the space available on the roof. Testing the output showed about 7 amps in full sun. Since the panel is mounted horizontally, output is reduced a little but not enough to make an elaborate tilting mount.



It is recommended to use 6 or 8 gage wire to minimize loss. I drilled through the roof and carefully sealed the feed through. Inside, where it is accessible I mounted a charge controller. This is necessary to protect the battery from overcharging. The charger I chose is different from many others in that the charge voltage can be set manually. Many charge controllers have a fixed setting of 13.8 volts. One of the my first lessons in tending batteries is that 13.8 volts takes an enormously long time to reach full charge and also can harm the battery if applied indefinitely. I set my controller to 14.2 volts when the battery is in daily use and to 13.2 float voltage when usage is nil

Solar Power continues on page 8



My research tells me that most charge controllers pulse the output at a high frequency when the battery approaches full charge. This produces audio noise and is a problem for ham operators. My solution is to temporarily reset the voltage above or below the noise threshold.

To use low wattage AC powered appliances I have installed a 300 watt true sine wave inverter. This easily handles things like TVs or computers. If I needed to use things like microwaves or toasters (which I don't) I would start the generator.

I did this installation four years ago and it has worked out nicely. Today panels have improved and come down in price, making the project even more viable.

Happy camping or Field Day!

Barry, N8PPF

April, 2020

<i>Sun</i>	<i>Mon</i>	<i>Tue</i>	<i>Wed</i>	<i>Thu</i>	<i>Fri</i>	<i>Sat</i>
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12 9:00 pm ARES Sunday Night Net on K8EEN NT8I, Louie	13 7:00 pm MVARC Monthly Meeting on K8EEN	14	15	16	17 10:00 am Friday Breakfast Net on K8EEN	18
19 9:00 pm ARES Sunday Night Net on K8EEN KE8HGE, Michael	20	21	22	23	24 10:00 am Friday Breakfast Net on K8EEN	25
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