



January 2021

K8EEN VHF Repeater:
146.790 MHz
-600KHz with PL = 71.9 Hz

K8EEN-R Echolink Node:
809800

K8EEN UHF Repeater:
444.600 MHz
+5 MHz with PL = 71.9 Hz

Contact Us

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

Meetings are held on the 2nd Monday of each month at 7:00 pm on the K8EEN 146.79 MHz Repeater.

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MVARC Information

MVARC monthly meetings meet on the K8EEN 146.790 MHz repeater. **The next MVARC meeting is January 11, 2021.**

**Visit us on Facebook:
Mount Vernon Amateur Radio Club**

**Visit our Webpage:
<https://mvarc.net>**

**Email for inquires and information:
info@mvarc.net**

MVARC

President

Michael Jacobs, KE8HGE

Vice President

Greg Short, W8DOH

Secretary/Treasurer

Terry Windsor, KI8N

Club Call Trustee

Don Russell, W8PEN

Equipment Trustee

Barry Butz, N8PPF

Directors

Chairman:

Louie Wilkinson, NT8I

Emery Bennett, W8TW

Barry Butz, N8PPF

Frank Counts, KC8EVS

Don Russell, W8PEN

Greg Short, W8DOH

Scott Yonally, N8SY

Newsletter & Facebook

Editors

Frank Counts, KC8EVS

Terry Windsor, KI8N

Join us every Sunday night on the Mt. Vernon 146.79 repeater for our weekly ARES Net. Check-in starts at 9pm.

Unable to access the repeater from where you are located?

We are on IRLP (EchoLink) - Just look us up.

K8EEN-R Node 809800.

Ohio Traffic Nets

<http://www.ossbn.org/>

Ohio Single Side-Band Net; 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 6:15 p.m. daily. Alternate Frequency for all sessions is 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/>

Marion Amateur Radio Club:

<http://www.marionhamradio.com/home.html>

The ARRL Ohio Section calendar lists events around Ohio.

<https://arrrl-ohio.org/g-calendar/default.html>

Parks on the Air is a fun activity: <https://parksontheair.com/>



MVARC President's View

Michael Jacobs, KE8HGE



January is said to be named after Janus, the Roman god of beginnings and transitions. I think we can all agree that we could use a January right about now.

2020 was a rough year, and I cannot think of anyone whose life has not been touched in some way by Coronavirus, COVID-19, or (my personal favorite) "Skippy the Super Virus."

A principal motto of ham radio has been "When All Else Fails: Amateur Radio."

When we say this, we generally frame the "failure" in the context of electricity, and the means of communication that depend on it. When "fail" happens, hams step up and fill that gap until the failure is addressed and the loss restored.

In 2020, it was not the power that failed; rather it was our ability to go places and do things and meet with others. This is not the kind of failure that we are used to handling. But we are hams. Our breakfasts and meetings became nets because this is what we do. We set aside the larger group interactions that we all enjoy, but still gotten done the things that needed doing. And we have done them well. I think we can all be proud of the way we have been able to continue with the normal course of our business this past year when that course was anything BUT normal.

And it has not been just COVID that has affected us. Early in the year, we learned that the Red Cross would be moving out of the Zelkowitz House, where they -- and we -- have had a home for the last several years. To where are they moving? When will they get there? We are not sure. We only know that when the Red Cross finds a new home, we should have a place to meet again.

2021 promises to be a year of transition. Vaccinations should be starting in earnest early in 2021, so we can hope that "Skippy" gets put into a box. The Red Cross should be able to secure a new home, as well, which will give us a place where we can once more gather and celebrate ham radio.

Will be other challenges? Probably. But I am certain that we will step up and meet them. As we always have.

"When All Else Fails, And Even This: Amateur Radio."

Stay Happy, Healthy, and Safe.

Post-script: as I was getting this ready to send out to Terry and Frank, I saw a bit on the Mount Vernon News website that the Red Cross has relocated to 812 Coshocton Ave. I will see about stopping by there in the next week or so to see what is going on and if they have sufficient room there for us to meet (when meetings become something we decide or can start doing again).

December 14, 2020 Meeting Minutes

G. Michael Jacobs, KE8HGE



Opening (Louie Wilkinson NT8I)

The repeater was placed into Net Mode by Louie, NT8I Net Control / MVARC President at 7:00 PM with 11 members (including Net Control) checked in.

Election of Officers

The only order of business this evening was the election of officers. The following slate officers was presented for 2021 and accepted without objection:

President: G Michael Jacobs (KE8HGE)

Vice-President: Greg Short (W8DOH)

Secretary/Treasurer: Terry Windsor (KI8N)

Scott Yonally is starting a 2-year term as a Director, Barry Butz is beginning his second consecutive 2-year term as a Director. Louie (NT8I) will be taking on the position of Chair of the Board of Directors as the out-going Club President.

Old Business

Michael (KE8HGE) asked about due payments and how to get them to the Treasurer. Terry (KI8N) indicated that they should be mailed into the PO Box. Louie (NT8I) reminded us the dues were \$20 for the year, with a reduced level (\$15) for retirees and additional family members. There is a membership form in the newsletter.

Meeting Adjourned

Without objection, Louie (NT8I) adjourned the meeting, and the repeater net was closed at 7:12 PM.

Radio Activity

Don Russell, W8PEN



As we welcome in a new year, it might be the time to work on antenna projects. What? Oh yes. Antennas put up in the Winter always work better than ones put up in the summer. At least that is what I have always been told. In my experience, you just get colder putting the antenna up.

I always put up a 160 meter “inverted L” antenna just before the ARRL 160-meter contest. Mainly because that is the only time, I really need such an antenna.

Generally, I take the inverted L down after the contest. Then sometimes put it back up in February for the CQ 160-meter contest. Of course, I already have a 160-meter windom up in the air, so I really do not need to go through the effort. But the 160 meter inverted L antenna seems to play much better than the windom antenna does on 160 meters. Especially when working DX on 160 meters.

Even though I failed to get the inverted L antenna up in time for the ARRL 160-meter contest, this antenna merits more details on my installation.

Why an inverted L? Most antennas for 160 meters are large. A dipole is around 270 feet long. A dipole at a reasonable height of 30 to 40 feet will act like an NVIS antenna on 160 meters because electrically, this height is too close to the ground. Remember from past issues of this newsletter that an NVIS antenna has most of the RF going almost straight up and saturates the area out to a couple of hundred miles but is not much good for DX long distance communications.

A good antenna for working 160-meter DX would be a quarter wave vertical antenna. This antenna would be around 130 feet straight up. Something the average ham probably could not afford. An inverted L antenna for 160 meters would be about 130 feet long. The difference between this antenna and a vertical is that part of the antenna is strung up vertically as high as possible, typically 40 feet or higher. Then the balance of the antenna is run horizontally to a nearby post or tree. Mentally visualizing this installation, it forms an inverted L.

For example, using a tall tree, you can place the vertical part of the inverted L antenna on a tree limb, hopefully 40 to 50 feet high. Then, using another tree perhaps 100 feet away from the first, attach the end of the horizontal portion of the antenna.

Feeding the antenna is the same as feeding a vertical antenna. Using coax, connect the center conductor to the antenna wire a foot or so above the ground. I use a tent stake to support the bottom end of the antenna. The outer braid of the coax should go to some radials laid out on the ground or buried an inch or so under the ground. On 160 meters each radial should be 124 feet long. But not many hams have that much room. Just put out as long a radial you can and as many as you can. Trim the end of the antenna for lowest SWR.

An inverted L antenna can also be designed for other bands. An 80-meter inverted L would be around 65 feet in total length. 30 feet vertical and 30 feet horizontal would make a nice, limited space DX antenna. Same with 40 meters, although you are getting to the size where you can put up a full sized vertical here. An inverted L antenna for 40 meters would be around 33 feet in total length.

The advantage of an inverted L is that it has a radiation pattern like a true vertical antenna. Thus, the inverted L is a good DX antenna for hams with limited space especially on 160 and 80 meters.

Give it a try. You might like.

Local Repeater

Keeping my fingers crossed. I think we finally have the 2-meter repeater back up to the performance it should have. And with no noise!

Even after rebuilding the repeater antenna (thanks to Matt KB8UVN), the receive performance seemed to be down quite a bit. A readjustment of the receiver squelch made a big improvement in our coverage.

It has been a month since we reinstalled the repeater antenna. All seems to be working well.

On the 70cm repeater, all is working as it should. Little activity though. I check it almost daily whenever I am mobile. When we get Yaesu Wires X installed on this repeater, I expect activity to pick up some. The internet connection needed for Yaesu Wires X has been run. But Covid-19 has made access to the repeater limited, except emergencies for now.

Local Mesh Network

Our AREDN mesh network continues to run smoothly. We lost a node when the Red Cross building was sold. However, we recently installed a node at Ariel Foundation Park. This node is up about 50 feet and performing well. It is a great addition to our network.

It is frustrating, but I think installation of nodes on the Centerburg water tower is going to have to wait until Spring. We had several setbacks and spent time we should have been working on this project troubleshooting the 2-meter repeater. The Fredericktown water tower project is also on hold.

Hopefully the Covid-19 issue will be behind us by early 2021 and we can get both projects finished off. It just takes time.

If things work out, there will be an article in this newsletter with instructions on how to use the local mesh network. Right now, we have concentrated on getting nodes up and talking to each other. Now is the time to start using the system. The local mesh network is meant to be a tool for the ARES in support of our local agencies. At least a few ARES members need to familiarize themselves with this network so that it will be beneficial.

Currently, the mesh network has several capabilities. There is an email server installed. It uses a POP3 Server and an OUTGOING SMTP Server. An email client such as Thunderbird or Outlook is required to use it. Set up is easy. This is a local email server. It does not deliver email to and from the internet.

There is also a Bulletin Board system running on the network. This is much like a BBS from the old days, but a bit more modernized. It has its own email server for those logged into the BBS, which again, does not go out to the internet. It also has multiple rooms that can be visited, or you can create your own room. I have most of the clubs past newsletters on this BBS. There is also a chat room available for those logged into the BBS.

Lastly, there is a telephone PBX available. This system needs some users so it can be tested. I have a limited supply of phones available. This is the one system I am not sure of as far as reliability.

For those that live in the Mt. Vernon area, I do have eight mesh nodes ready for installation. Any club member wishing to take advantage of the mesh network, let me know. We can do a test setup at your location and see how it goes. I am willing to eat the cost on these nodes simply so we can get things moving.

In addition, I am hoping to have two mesh nodes ready to deploy at a disaster site. These nodes will include a parabolic antenna, mesh node, computer, and a ten-to-20-foot mast.

I have several IP phones that need to be set up. While I want to save two phones for the mesh node go boxes, whatever phones I have left would be available to local hams. I am keeping my eye open for more IP phones. That is a wrap for this month. Looking forward to hearing all members on Sunday nights and the January meeting.
73 all.

Getting Started with the MVARC Local Mesh Network - Part 1

Don Russell, W8PEN



Until recently, most of the activity on the Local Mesh Network has been limited to setting up mesh nodes at high profile locations so that the local ham community would have access to the network. This work included the task of making sure all the mesh nodes had good signals between them so we could maximize thruput.

Currently we are in a good place. We have mesh nodes at the water tower on Wooster Road, KCH hospital, Ariel Foundation Park, and the Parking Garage on the Mt. Vernon downtown square. These nodes are all line of site to each other and performing very well. Moving forward, we are still in the process of installing nodes on the Centerburg and Fredericktown water towers.

While there are no doubt exceptions, I anticipate that with these four high priority mesh nodes, Mt. Vernon is well covered. Individual hams in Mt. Vernon should be able to install personal mesh nodes from just about anywhere in Mt. Vernon and be able to join the local mesh network. Personal mesh nodes will also enhance the local mesh network coverage. Personal mesh nodes should be installed as high as possible. Twenty feet or more, or at least above the house.

As mentioned in the "Radio Activity" column, I have up to eight personal mesh nodes ready to go. These mesh nodes have the latest AREDN firmware installed and have been tested. Any local ham interested in hosting a personal mesh node should contact me for a site survey to see if a mesh node at your location is feasible. My email address is w8pen@yahoo.com.

In this two- or three-part article, I will attempt to explain how to use the local mesh network. However, before we get into the meat of how to use the several applications available, lets first review the workings of the local mesh network. Then, next month I will describe how to use the Bulletin Board System (BBS), email server, and other goodies.

So, what is our local mesh network? Our system incorporates mesh nodes developed by the **Amateur Radio Emergency Digital Network** (AREDN for short). Installing their firmware on a few brand name commercial routers or access points is the heart of our system. We mostly use Ubiquiti Network products, but there are several manufacturers that AREDN firmware supports.

The modified commercial units create a self-discovering mesh network. What this means is that as new mesh nodes are installed (like personal nodes), the mesh network discovers these additional mesh nodes and includes them in the entire network. The additional mesh nodes become part of the network. Therefore, I ask that anyone installing a personal mesh node simply leave the mesh node running continuously.

A mesh node is self-contained. They do not need a computer attached to them to perform their function. The only time you need a computer attached to a mesh node is when you want to use one of the applications available on the network. Personally, I have a separate home network connected to the ham network but not

connected to my internet. This way, I can use any of my computers on Wi-Fi to access the local mesh network. I will explain how I do this in a separate article if there is interest.

Lets look at what happens when you bring up a mesh nodes GUI (**G**raphical **U**ser **I**nterface). Of course, you need to have a computer attached to do so. A GUI is the mesh nodes web page. Each mesh node has one. Here is what my personal mesh nodes GUI looks like:

AREDN
AMATEUR RADIO EMERGENCY DATA NETWORK

W8PEN-MtVernon-South

Location: 40.3565 -82.4723
2 Miles South of Mt. Vernon on Rt-13

[Help](#) **Mesh Status** ▾

Wifi address	10.148.241.128 / 8	Signal/Noise/Ratio	-51 / -95 / 44 dB	<input type="button" value="Charts"/>
LAN address	10.167.140.1 / 29	firmware version	3.20.3.1	
WAN address	192.168.0.166 / 24	system time	Thu Dec 17 2020 09:36:00 EST	
default gateway	192.168.0.1	uptime	1 day, 23:58	
SSID	AREDN-5-v3	load average	0.06, 0.09, 0.11	
Channel	-2	free space	flash = 740 KB /tmp = 13404 KB memory = 11396 KB	
Bandwidth	5 Mhz	OLSR Entries	Total = 122 Nodes = 32	

Part of the AREDN™ Project. For more details please [see here](#)

This first page gives the basic information of the node. From here, you can find the IP address of the node, the Wi-Fi channel it is operating on, the firmware version, etc. It also gives the GPS coordinates of the mesh node. Ideal if you need to aim a directional antenna.

To move on, we go to a page that tells us what nodes this node (W8PEN-MTVernon-South) is connected to. Do this by clicking “Mesh Status” (circled in the above picture).

W8PEN-MtVernon-South mesh status

Location: 40.3565 -82.4723
2 Miles South of Mt. Vernon on Rt-13

Stop Quit

Local Hosts	Services	Current Neighbors	LQ	NLQ	TxMbps	Services
W8PEN-MtVernon-South		K8EEN-MtVernon-2G-Central	64%	48%	1.4	
● CITADELBBS	CITADELBBS	K8EEN-MtVernon-2G-North	13%	0%	0.0	
		K8EEN-MtVernon-FP-2G	45%	76%	6.5	
		W8PEN-GL-USB	84%	100%	13.0	
Remote Nodes	ETX	Services	Previous Neighbors			
K8EEN-MtVernon-FP-5G	2.97		when			
K8EEN-MtVernon-5G-Central-Johnstown	3.39		W8PEN-TEST-5 18.2 hours ago			
K8EEN-MtVernon-5G-Central	3.39		OLSR Entries			
K8EEN-MtVernon-5G-North	3.97		Total			
K8EEN-MtVernon-5G-Johnstown	4.07		Nodes			
K8EEN-MtVernon-East	4.23		117			
K8EEN-5G-From-KCH-to-Water-Tower	4.33		30			
KD0DMJ-MTV-Home	4.39					
K8HGE-MTV-Home	5.12					
KB8UVN-Johnstown-5G-MtVernon	5.70					
KB8UVN-Johnstown-2G-MtVernon	5.80					
KB8UVN-Johnstown-2G-Galena	5.80					
KB8UVN-Johnstown-2G-NE-120	5.80					
KB8UVN-Johnstown-5G-SW-120	5.80					
KB8UVN-Johnstown-2G-SW-120	5.80					
KB8UVN-Johnstown-5G-NW-120	5.80					
KB8UVN-Johnstown-Services	5.80					
● johnstown						

This second page reveals information about the other nodes connected to the local mesh network.

Looking at circle #1, one can see that there are four nodes connected by RF to my node (W8PEN-MTVernon-South). This means my node is seeing the RF signals from the four nodes listed, which is in the 2.4 GHz range. The LQ and NLQ are indications of the connection quality of the signals. The lower the numbers, the more repeats and the slower the system.

Marked as #2 are mesh nodes that are available to me within the system, but not connected directly to my mesh node. These are nodes that the four RF nodes mention previously can see by RF paths. #3 “previous neighbors” are nodes that I did see at one time, but were either turned off, or otherwise the signal was lost. “OSLR Entries” shows how many mesh nodes are in system. This page shows 30 mesh nodes. I am not sure what the 117 number represents. Something for me to check out.

The reason we have 30 mesh nodes shown is because there is a 5 GHz link to Johnstown, which also links us to Delaware, Sunbury, and Gahanna.

As you can see, we have quite an expanded network here. Locally, we are pushing to cover all of Knox County. I think eventually, the mesh network will cover all of Ohio.

While these two pages are interesting, they do nothing but report what nodes are up on the mesh network. Just having the mesh nodes up is not enough. We need to develop uses for the local mesh network, of which there are plenty.

So, to begin our journey into the uses of the mesh network, next month I will describe how to connect to the W8PEN-BBS. This is a computer bulletin board system that has many features. The BBS is mostly made up of rooms. I have been working hard on building up a few rooms that should be useful to users. There is an archive of club newsletters available, a Public domain book room, ham videos, a room which users can upload and download files for everyone’s enjoyment. Users can also create their own personal rooms. There is also a chat

room for those connected to the BBS and an email server to leave messages to other users. Presently, there are two newsroom feeds available.

The BBS is ever expanding. I welcome anyone wishing to help build this BBS into something special.

Please stay tuned to part two of this article in next month's newsletter.

VE Testing

Frank Counts, KC8EVS



Due to COVID (or Skippy as the Pres calls it) has put a lot of restrictions on testing. I had no problem with testing outdoors as we did at Foundation Park, but since we live in Ohio outdoors activities are greatly reduced at this time (unless it is antenna building according to W8PEN). Our indoor activities are not only hampered by COVID but we lost our meeting facility at the Red Cross. Currently, I do not feel comfortable hosting any testing. But all is not lost. There are still some groups in Ohio that are listed as scheduling in person exams and you can see these listed here: [Find an Amateur Radio License Exam in Your Area \(arrl.org\)](#) or here [Laurel VEC](#). These are two major organizations that give exams, you must contact them to make sure that they are still testing as things may have changed since the posting of these dates. There is another option, online testing.

You can find online testing sites here: [Find an Online Exam \(arrl.org\)](#) You will find several sites here that are administering online exams. Since they are online you are not restricted to a geographical area. Draw backs are they take more time, usually restricted to taking one exam at a time and the use of the laptop with a video camera and an additional camera. You can go to each site to see and read how they conduct the exam.

Sorry for the inconvenience this has or is causing. I am presently looking into setting up online testing and will have more to say later concerning setting that up. Also, as the situation changes with the pandemic or as the weather gets better, we will resume in person testing here in Mount Vernon.

2021 DX Ultra Marathon – One Week to Go

Bill Stroud, KD8WHQ



Here is an article on a 2021 DX Ultra Marathon, that lasts throughout 2021 and sounds like fun.

With only seven days left before the start of the competition, we are delighted to announce that as many as 423 participants have pre-registered for the event. We believe this is almost extraordinary, especially if compared with participation levels in much more established similar initiatives. We also understand that there is considerable buzz about the Marathon in DXing and contesting circles, and we think it is not unreasonable to think we will have more than 500 participants once the event gets going.

We are also delighted to announced that Jeff Demer N1SNB has volunteered for the role of Marathon Manager and has been enthusiastically appointed. Jeff is a well-known DXer, contester and DXpeditioner - his experience and enthusiasm for our initiative will provide an additional boost to an event which already looks as the "next big thing" in HF DXing.

Joining Instructions

To sign up, please follow these steps:

1. Visit <https://www.tbdxc.net/marathon> and read carefully the .pdf file with simple rules of the Marathon. Alternatively, you can spend a few minutes watching the explanatory videos. This is VERY IMPORTANT, as the answers to many questions you may have are already there.
2. From 00:00 UTC on Thursday, 31 December, visit <https://tbdxc.hamserver.de/marathon/> and sign up. This is a two-step authentication process and within minutes you will be officially registered for the event. NOTE: the website is already up and running, but until next Thursday you will only be able to access the HELP/FAQ section.
3. Once officially registered, do not, repeat do not enter any result before 00:00 UTC on Friday, 1 January 2021. The entry page will be available, just please do not use it before the official start of the event.

Help Always Available

If you have followed the recommendations above and have carefully reviewed the simple rules of the Ultra-Marathon, you should already have found an answer to many questions you may have.

Furthermore, before contacting us you should look at the HELP section of the Marathon's website. You will find answers to several FAQs and clarify any doubt you may still have.

However, if you have problems with the registration process or with entering your score, if you need to change some of your personal data, or if you didn't find an answer to your question in the FAQ, you can contact us by email at marathon@tbdxc.hamserver.de.

We would like to thank each of you for your interest in this new initiative. The warm welcome the Marathon received humbled us and gave us further enthusiasm and impetus. Now, let us make this a full success! Especially, let us have fun and revive our beloved CW and SSB DXing activity!

Season's Greetings and best of luck to you all with the 2021 DX Ultra-Marathon.

Pete MM0TWX

TBDXC Founder and CEO

Quick Updates



Tom Sly, WB8LCD, Appointed as Ohio Section Manager

12/21/2020

Tom Sly, WB8LCD, of Kent, has been appointed as the Ohio Section Manager, effective January 1, 2021. Tom will assume the seat that incumbent Section Manager Scott Yonally, N8SY, is vacating to become Great Lakes Division Vice Director, after serving as Ohio Section Manager since 2014.

Tom was appointed by ARRL Radiosport and Field Services Manager Bart Jahnke, W9JJ, after consulting with Great Lakes Division Director Dale Williams, WA8EFK. The Section Manager appointment extends through September 30, 2022.

Sly is an ARRL Life Member and has served as Ohio Section Affiliated Club Coordinator since 2017. He is past president of the Portage County Amateur Radio Service (PCARS) and has been a radio amateur since 1968.

FCC Posts Email Address Reminder on ULS Page

The FCC is encouraging users of the Universal Licensing Service (ULS) to have an email address on file with the FCC. “Applicants are strongly encouraged to provide an email address on their license application(s), which will trigger the electronic issuance of an official copy of their license(s) to the email provided upon application grant. Per the timing specified in Rulemaking FCC 20-126, the FCC will no longer print, and licensees will no longer be able to request, hard copy license authorizations sent by mail.” The FCC has not yet established the date by which an email address will be required on all applications. FCC ULS link:

<https://www.fcc.gov/wireless/systems-utilities/universal-licensing-system>

News from the FCC

The FCC has just approved new license fees for Amateur Radio. According to the FCC Report and Order released December 29, 2020. Amateur Radio license fees will cost \$35 for new licenses, renewals, vanity & all modifications. This proposal still must go through all approvals, but the fee is coming.

Amateur License Study and Morse Code Instruction

I found the following YouTube videos of amateur radio licensing classes posted by W4EEY. These videos cover the material for successfully testing for an amateur license and can be especially useful since MVARC may not be able to organize a spring Technician training class due to gathering restrictions and lack of a meeting location. W4EEY also has videos that teach morse code and intermediate morse code.

- **Technician:** https://www.youtube.com/playlist?list=PLZ_9BZQ8gpzjSuF-nExJHAXhzrf_NnYfH

There are 12 videos that cover the study material for taking the Technician license test.

- **General:** https://www.youtube.com/playlist?list=PLZ_9BZQ8gpzjLtp4t55A9G6k2s4faOBcK

There are also 12 videos that cover the material for obtaining a General class amateur license.

- **Extra:** https://www.youtube.com/playlist?list=PLZ_9BZQ8gpzjFPHhqSCORMKYS0YEos16I

There are 20 videos that cover the Extra class licensing requirements.

- **Morse Code:** https://www.youtube.com/playlist?list=PLZ_9BZQ8gpzjDCun2p6HdDDRthbMik5Tj

This training video series is 10 lessons for learning morse code.

- **Morse Code Intermediate:**
https://www.youtube.com/playlist?list=PLZ_9BZQ8gpzgMJVu3baYZgZWj3_55jKVp

There are 8 videos each about 1 hour and 15 minutes in duration.

Technician Exam Sample Test Questions:

T7D07 Which of the following measurements are commonly made using a multimeter?

- A. SWR and RF power
- B. Impedance and reactance
- C. Voltage and resistance
- D. Signal strength and noise

T2C01 When do the FCC rules NOT apply to the operation of an amateur station?

- A. Never, FCC rules always apply
- B. When operating a RACES station
- C. When operating under special FEMA rules
- D. When operating under special ARES rules

General Exam Sample Test Questions:

G4B15 What type of transmitter performance does a two-tone test analyze?

- A. Percentage of carrier phase shift
- B. Percentage of suppression of carrier and undesired sideband for SSB
- C. Percentage of frequency modulation
- D. Linearity

G1C02 What is the maximum transmitting power an amateur station may use on the 12-meter band?

- A. An effective radiated power equivalent to 100 watts from a half-wave dipole
- B. 50 watts PEP output
- C. 200 watts PEP output
- D. 1500 watts PEP output

These test questions are from the current test pools for their respective license classes. How did you do? The answers are on Page 20. Practice tests for all license classes can be found here: <https://www.grz.com/hamtest/>

We still have a need for a future MVARC meeting location so if you know of a suitable room please let any club officer know what may be available.

Your 2021 club dues are due. There is a membership form located on page 18 which contains information regarding amount and where to send your 2021 dues payment. There are no changes to the 2021 membership dues.

Speaking of club dues, are you an ARRL member? If you want to join or need to renew your membership you can do it online here: <http://www.arrl.org/membership>.

Editors Notes



To All: The MVARC Newsletter is delivered to club members only by email link to the MVARC webpage.

If you know a member who can not access or is not on this email chain please share this information with them and have them contact the editors.

Also, if you haven't sent in your 2021 dues by the time you read this **you are LATE**. Heads up, those that have not paid by the end of January will not be on the email distribution for the February newsletter.

Frank and I would really like to hear from you as to layout, articles, ideas for new content and anything else you would like to read or write about. Please have all written input to us by the fourth Friday of the month for inclusion into the next monthly newsletter. Some thoughts are virtual ARES Round Table simulation, local SET for verification of readiness and ability to communicate throughout the county via mobile or HT radio, or you could study and test for your General or Extra class license.

How about sending us your member profile? We would like to highlight a current MVARC member each month. I will be sending out emails to a few this month to revive this column going forward.

We hope to add more photos and content as we learn more about what we are doing and especially after receiving your feedback. Please reply to us via the club's email: info@mvarc.net.

Miscellaneous Rambling

Terry Windsor, KI8N



When I started thinking about what I am going to put in this month I was having trouble coming up with ideas. So, I sat down at my part time work and started jotting down a few things. These are the thoughts I had, and it blossomed into more than I thought I had.

I was not involved in much radio activity this month. I chased a few parks on the air via SSB and CW but really did not do any rag chewing or work FT8 or FT4. Looking at the number of contacts in my log this is one of the lowest contact months I had all of 2020. Do not know if it was lack of motivation or attention tied up with other activities. However, I did get my 518th unique park and have contacted 730 parks since March of this year. Just hope that next month I can get back into working the radios and trying to make more contacts on 15 and 10 meters.

You should have read Don's article about putting up a 160-meter antenna. I had every intention of putting up a 160 inverted L antenna, even went so far as to cut the wire and build a unun in hopes of entering the ARRL 160-meter contest in December. But the best laid plans fell through and due to procrastination, I did not get the antenna installed. I intend to try and get it up soon so I can try to get some of the states I need to get WAS on 160 (currently have 43 confirmed). Just hope the weather lets me work on it without turning into popsicle boy. I did try using my end fed antenna, Chameleon EMCOMMII as a 160-meter inverted L but the results were dismal. Other stations reported my signal as weak and just readable. Chalk that up as a failure even though the antenna user documentation says it will work in this fashion.

I received a new Yaesu FTM-300DR dual band radio this month. I was awarded it as a prize for working as a chat person for Gigaparts and putting in over 20 hours each week in November. It is a powerful radio with more features than I probably will ever use. I am learning about Fusion, Wires X, APRS, and how to program repeaters into it. It is a lot easier to work with than any of the HTs that I have. Currently have it in my shack as the radio I use for VHF and UHF work.

Another topic that I have been getting back into is becoming better at CW. I have been listening to operators on the air, and code practice tapes to get better at copying. I also have been working on my ability to send CW without so many mistakes. Using an MFJ-464 CW Keyer/Reader and paddles I practice sending at 20 wpm during lulls in chat times. However, I quickly realized I need a more structured approach with someone holding me accountable, so I signed up for CW Academy's beginner class. This is the second time I will have taken this class but thought I should start at the beginning before trying the Intermediate classes. My class is scheduled in the April/May semester. Lots of time to practice before formal training begins. <https://cwops.org/cw-academy/cw-academy-student-sign-up/> I also considered signing up with Long Island CW Club as they run multiple classes at a time and can accommodate more students. However, you must join their club and they require learning with a straight key. <https://longislandcwclub.org/>

Another project I started working on is replacing the magnetic mount antenna on my truck. It appears to be scratching the top of the cab and that is not making me happy. It also scrapes when entering any parking garage. In January I am going to order a new front fender mount with a NMO style connector and a new Diamond dual band antenna. Hoping this configuration will work better and not scratch the truck.

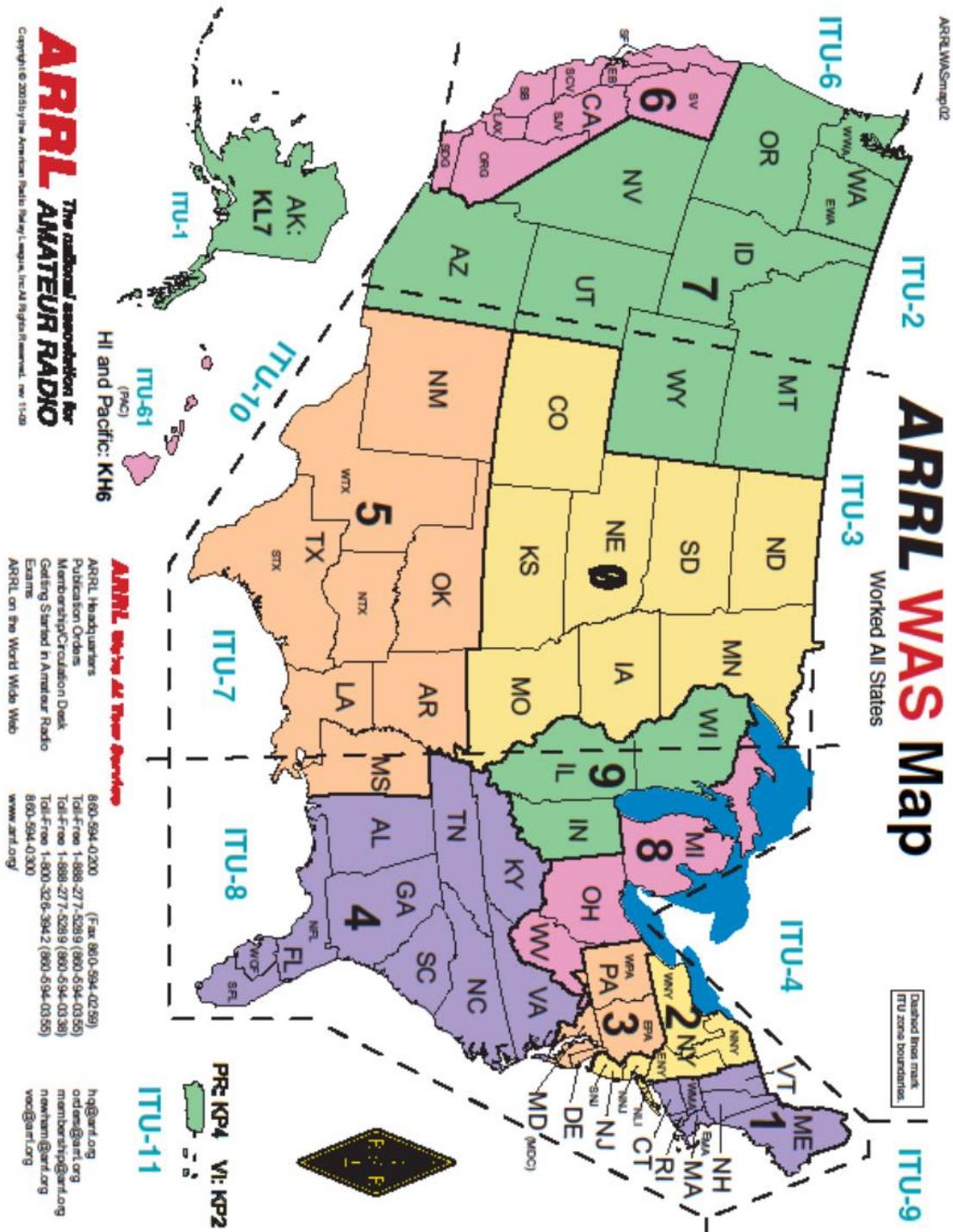
A couple of things not related to amateur radio also made my list. I bought a new sit on top fishing Kayak and am working on getting it set up the way I would like for fly fishing. Hopefully, next year I will get quite a bit of use out of it. The other task is working on the 69 Mustang. When I put it up for the winter, I found the start of a rust spot on the passenger door. So, my plan is to cut that out, weld in a patch, fix the body work around it, and then repaint the door, hood, and front fenders. I need this done before the end of spring when it will be time to drive it again.

Finally, does anyone else read any other club's newsletters? I have been reading the newsletters every month around Ohio that Scott, N8SY posts on his ARRL Ohio Section web site. Looking for ideas how other clubs' format theirs and what kind of content they include. Been interesting reading what other clubs are doing and how they are meeting during this awkward pandemic time. https://arrl-ohio.org/club_news/index.html

Everyone have a safe New Year and plan some activities for the rest of this long and cold winter to stay active.

ARRL Worked All States (WAS) Map

A copy of the ARRL WAS Map you can print and have available if needed. Can also download from here: https://www.arrl.org/files/file/Awards%20Application%20Forms/WASmap_Color.pdf



MVARC Calendar

January

2021

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 Happy New Year	2
3 9:00 PM ARES Sunday Night Net on K8EEN 146.79 MHz	4	5	6 4:45 PM Dinner at Southside Diner	7	8 10:00 AM Breakfast Roundtable meeting on K8EEN 146.79	9
10 9:00 PM ARES Sunday Night Net on K8EEN 146.79 MHz	11 7:00 PM MVARC Monthly Meeting	12	13 4:45 PM Dinner at Southside Diner	14	15 10:00 AM Breakfast Roundtable meeting on K8EEN 146.79	16
17 9:00 PM ARES Sunday Night Net on K8EEN 146.79 MHz	18	19	20 4:45 PM Dinner at Southside Diner	21	22 10:00 AM Breakfast Roundtable meeting on K8EEN 146.79	23
24 9:00 PM ARES Sunday Night Net on K8EEN 146.79 MHz	25	26	27 4:45 PM Dinner at Southside Diner	28	29 10:00 AM Breakfast Roundtable meeting on K8EEN 146.79	30

Membership Form

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 www.mvarc.net 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: _____

City: _____ State: _____ Zip: _____

Phone: _____ License Class: _____

Email Address: _____

ARRL Member (Y/N): _____

**Suggestions for possible meeting programs:

Final Takeaway

New Set of 2021 Emojis Unveiled



Blush



Confused



Disappointed



Frowning



Grinning



Happy



Kissing



Laughing



Mad



Relaxed



Slightly Smiling



Smiley



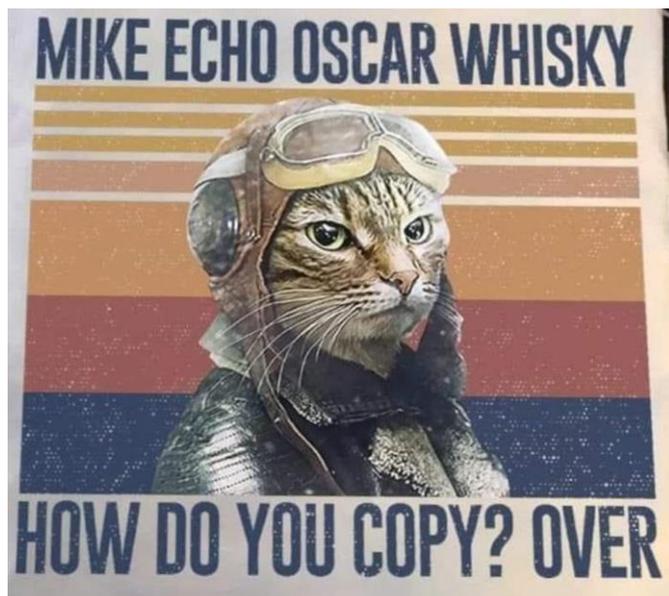
Thinking



Thoughtful



Worried



An OM will pay \$2 for a \$1 item he needs.

An XYL will pay \$1 for a \$2 item she does not need.



Who is the most dangerous person in the world?

A ham with an idea, some wire, and a bow and arrow in his hand!

Answers to sample test questions on page 13.

T7D07: C (Voltage and Resistance)

T2C01: A (Never, FCC rules always apply)

G4B15: D (Linearity)

G1C02: D (1500 watts PEP output)