April 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

MVARC
PO Box 372
Mount Vernon, OH 43019

Web Page:
www.mvarc.net

Email:
MVARC.K8EEN@gmail.com

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.

Inside this issue

MVARC Information

MVARC monthly meetings meet on the K8EEN 146.790 MHz repeater. **The next MVARC meeting is April 12, 2021.**

Visit us on Facebook:
Mount Vernon Amateur Radio Club

Visit our Webpage:
https://mvarc.net

Email for inquires and information:
MVARC.K8EEN@gmail.com

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. They 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 Newsletter: https://arrl-ohio.org/news/index.html

The ARRL Ohio Section calendar:

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

MVARC President: And now for a Word!

G. Michael Jacobs, KE8HGE

April is here!

Warmer weather has finally started to arrive. And with the warmer weather comes the return of those fun outdoor projects, like new antennas, towers, and all the other projects that the Great Indoors just does not have the space to accommodate. It will be a great time to get back outside. And with the COVID restrictions hopefully starting to ease in the next month or so and the vaccinated population getting larger, it will be the perfect opportunity to start getting back together again for group projects and events.

We are still several months away from looking at holding our meetings in person again, but I am looking forward to that restarting. Watch the weather forecasts for Friday mornings; with warmer weather, we are looking to start having these breakfasts take place in person, again.

In the meantime, please consider joining the events we have planned for later this year. The Gravel Grinder is coming up on May 1 (yes, yes, I know; but I promise, this will be the last time I plug the Grinder in this commentary this year), and while we may have enough people to fulfill our responsibilities, more will be merrier. We also have the Knox County Parks on the Air event that also promises to be more fun with more people; stay tuned for more info on when that will be taking place.

I wish everyone a Happy Easter.

73.

February 8, 2021 Meeting Minutes

Terry Windsor, KI8N

Opening (G. Michael Jacobs, KE8HGE)

The repeater was placed into Net Mode by Michael, KE8HGE Net Control / MVARC President at 7:00 PM with 17 check ins (12 MVARC members) including Net Control checked in.

Reports / Minutes

The minutes of the February meeting were accepted as presented in the MVARC Newsletter without objection.

Treasurer (Terry Windsor KI8N)

The Treasurers report was accepted as submitted. A copy of the report is available upon request.

Repeater and Mesh Report (Don Russell W8PEN)

Everything is working as expected; there have been no changes or improvements. Both repeaters and the MESH net are running as expected.

ARES (Bill Stroud KD8WHQ)

Bill emailed Emergency Coordinators in surrounding counties asking for interest in assisting with the Black Fork Gravel Grinder. He had received no replies to his request.

Old Business

Field Day (Don W8PEN)

Frank (KC8EVS) received permission from Apple Valley to use the field by the ball field. Plans are being developed for holding the FD picnic. Currently 4 on the air stations are anticipated; 2 – SSB, 1 – CW and 1 – digital. Anyone who wants to operate this year is welcome to attend and sit at one of the stations.

Knox County Parks on the Air (Frank KC8EVS)

Frank contacted the Knox County Parks director and they are happy to allow us to hold this event. Still need confirmed participants. Contact Frank to be included.

Black Fork Gravel Grinder

Mohican Wilderness Campground; May 1. Discussion on setting up the club's backup repeater to provide communications. Set up a mobile unit as a cross band repeater so everyone is on 2 meters. Plans to test communications at the start/stop and aid stations. Terry, KI8N asked about using the Loudenville repeater. Frank, KC8EVS stated we still needed more information from the event organizers regarding their expectations.

KC8EVS, W8PEN, KI8N, W8DOH, KE8HGE, N8LRW, AC8YE, KD8HSA, and KD8EVR have expressed an interest in supporting this effort.

New Business

Barry, N8PPF told how using smile.amazon.com allows picking a charity to support when purchasing items from Amazon.com. He has selected the ARRL as his charity. Amazon donates 0.5% of the purchase to the ARRL.

Terry, KI8N asked for members input on the ARRL Ohio Section Newsletter contest. Does anyone have specific 2020 monthly newsletters they would like to have submitted?

Coming Events

NVIS Day is Saturday, April 24, is there any interest in participating?

Knox County Parks event tentative in May.

June 26/27 is ARRL Field Day

Ohio State Parks on the Air is September 11

Social Updates (G. Michael Jacobs KE8HGE)

Dinner at R&M Southside Diner, Wednesday; table in the Immediate Seating area, ordering at 4:45pm.

Friday Morning Breakfast Net on the K8EEN Repeater at 10:00am

Meeting Adjourned

No further business and without objection, Michael adjourned the meeting at 7:43 PM.

Radio Active

Don Russell, W8PEN

60 Meter Fun

My friend Lynn Drown KG8D and I have been experimenting with different bands and different times of the day during our scheduled QSO's, which have been three to four times a week.

Lynn and I first QSO'd in the mid to late 1960's and quickly became friends. Although we lost contact with each other when Lynn went into the Navy and I graduated from High School, we found each other about five years ago during a North American QSO party contest. Even though both our calls had changed, Lynn found out I was from Mt. Vernon, Ohio and asked if I used to be WA8YRS. The answer was affirmative. Calls change, but friendships rarely do. Lynn and I immediately started catching up with each other by a once weekly schedule on 80-meter SSB.

Lynn and I found that we still have much in common. We both enjoy building antennas to try, old radios, and doing what hams do best: experimenting with the bands to determine the best band and times to communicate. Lynn lives in Monroeville, Ohio about 65 miles to the North / Northwest of Mt. Vernon.

While propagation is generally good between us on 80 meters just about every day, the actual times we can communicate often varies as the seasons come and go. Sometimes the change is even daily.

With this in mind, Lynn and I have been experimenting with different bands. We decided that 6 meters would be a good place to start our search for a band that would provide virtually a 24-hour gateway between us. I

already had a five element 6-meter beam up 50 feet. Lynn bought a Moxon 6-meter beam, which is a shortened and lightweight two element beam for 6 meters. This Moxon is up about 30 feet and permanently pointed towards Mt. Vernon. Lynn hopes to add an antenna rotor soon.

Success was immediate. We are now able to talk on 6-meter SSB just about any time of the day or night. However, it is not the consistent pipeline we were hoping for. Signals are usually S4 or better for us when we communicate. There are times though when there is a lot of QSB and each of us are constantly fading into the noise, then gradually building back up until the next fad. This is just the nature of VHF signals. Lynn is hoping to get a better antenna soon, but our present system seems to work about 75 percent of the time.

So, for times when 6 meters is not effective, we searched for another band to operate on. We already knew 80 Meters was reliable for at least part of the day. We wanted to try another band so we could have three choices. 40 meters was tried but was generally awful for us. This is surprising because Lynn and I originally met on 40 meters back in the 1960's and signals were particularly good between us most afternoons after school. Back then, we used AM modulation. SSB was just getting started.

So, Lynn and I decided to try out 60 meters. This band is in between the 80-meter and 40-meter bands and is the only HF frequency that is channelized. Hams share this band on a secondary basis. I am unsure who the primary user is, but I believe it is the government, at least in part.

60 meters also has a power limit of 100 watts ERP relative to a dipole antenna. In other words, you can run 100 watts and a dipole. If you are using an antenna with gain, then you must reduce your rigs power to compensate for the extra gain.

Because of this ERP limit, Lynn and I decided to put up dipoles and give 60 meters a try. That way we did not have to worry about calculating power. This decision was made after we did some test transmissions using my 160-meter windom and Lynn's 80 dipole. Not knowing how much gain my antenna had on 60 meters, I reduced power to 50 watts for a test transmission and Lynn heard me well at S9 plus. Lynn was a bit weaker on my end. In part due to his dipole having a high SWR on 60 meters. His transceivers internal antenna tuner would not tune the 80-meter dipole and therefore Lynn had to reduce his power to protect the transceiver. So on to the next phase, building the antennas.

After both of us got 60-meter dipoles up, Lynn and I found we could easily communicate on 60 meters with very good signal strengths each way. While we have not checked out 60 meters at night, it seems that the band is excellent for us during the day.

60 meters would probably be a good band for MVARC club members to consider. The antenna is simply an 88-foot antenna cut and fed in the middle. Hang it anywhere above 20 feet and you have an effective 60-meter antenna.

Amateurs are permitted to operate on five frequency channels, each having an effective bandwidth of 2.8 kHz. Hams may use Upper Sideband (USB) only on these channels:

Channel 1: 5330.5 kHz Channel 2: 5346.5 kHz Channel 3: 5357.0 kHz
Channel 4: 5371.5 kHz Channel 5: 5403.5 kHz

These frequencies are what the radios dial should display when in the USB mode of your transceiver. Remember, you are only allowed to operate 100 watts ERP relative to a dipole. If you hear anyone other than hams on the channel you are operating on, you must stop transmitting immediately. Hams are not the primary user on this band.

In addition to USB, hams may operate CW on these frequencies:

Channel 1: 5332.0 kHz Channel 2: 5348.0 kHz Channel 3: 5358.5 kHz
Channel 4: 5373.0 kHz Channel 5: 5405.0 kHz

Before using CW on 60 meters, one should consult their transceiver user manual. Some transceivers transmit exactly on their display frequency, others use an offset of 600 Hz or so.

Apparently, hams can also use some digital modes on 60 meters. I am unsure of this though so am not going to comment other than one needs to check it out before doing so.

For expanded insight into the 60-meter band, visit http://www.arrl.org/60m-channel-allocation.

Repeater / Mesh Report

The 2 meter and 70cm repeaters are working well. I am rather surprised how much better coverage we have had since repairing the repeater antenna last Fall. Let us hope that this continues.

The local mesh network is running smoothly. This Spring, I am hoping to finish off the mesh node at Centerburg and with luck, we will start on the node for Fredericktown. Setting up these two nodes will expand our coverage greatly.

Once again, I encourage individual hams to participate in this project by setting up their own nodes. I still have equipment and antennas left for those interested.

Also, as Covid-19 gets under control, I would like to test our mesh system using some disaster scenarios. This could be done locally with planning from the Knox County ARES.

That is it for this month. "Hear" you at the April meeting. With luck, perhaps our May meeting can be held in person. I suggest that the May meeting be held at Foundation Park in the main shelter.

Knox County ARES EC

Bill Stroud, KD8WHQ

Amateur Radio Operating Class Starting April 15

The National Electronics Museum is sponsoring its well-received Operating Course again starting April 15, 2021 and running each Thursday for 11 weeks from 6:30 to 9:30 EDST on Zoom. There is no charge for participation. The purpose of these classes is to provide information to help licensed radio amateurs to participate in the many on-the-air activities available in the hobby. The presenters are very experienced in their topics—many are nationally known experts — and they will be available to answer your questions following the presentations.

The exact order of presentations will be determined and published in the next few weeks. These are independent presentations, and participants are free to participate in any or all of the evenings. Feel free to pass this announcement along to others, but we request that all prospective attendees register by emailing Tom Christovich at tom.christovich@gmail.com. You will receive confirmation of enrollment and the Zoom link for attendance by reply email. Here is a tentative list of topics:

- All About Operating-an Introduction
- Amateur Radio Organizations: Local, National, and International clubs, societies and groups devoted to specific aspects of amateur radio

- Ham Radio Operating Award Hunting—from working Lighthouses to the DXCC Challenge
- DXing
- QSLing
- VHF/UHF Weak Signal Work
- Remote Station Control Over Internet
- CW in the No-code Era
- Digital modes
- Imaging Operating
- Contesting
- Logging Software
- HF Propagation
- Amateur Satellite Comms
- Portable (backpacking) Operation, including Park and Summits
- Setting Up an HF Station
- Emergency and Public Service Communications (ARES and RACES)
- Traffic Handling
- Lightning Protection and Grounding

From Stan Broadway about the ARES Conference

The Ohio ARES Conference – We are still not able to hold an in-person event this year as you probably suspect. We are hoping to take advantage of Zoom to even expand our reach this year! Honestly, we do not have our act together yet to provide a lot of specifics, but I can suggest this. Keep your calendars open for April 12 and 13. We are planning two evenings (two sessions each) to get together and present some information you can use! The good news is- it will not involve travel for you, it allows far greater attendance so everyone can join, and you can attend in stocking feet!

Help Wanted

G. Michael Jacobs, KE8HGE

With other obligations making it difficult to make the nets, Louie has asked to step down from his weekly Net Control of the Sunday Night ARES Net.

I am looking for a volunteer that is willing to take on the 2nd Sunday ARES Net. I am also looking for an ARES Net "understudy," someone that would be willing to take the occasional 5th Sunday ARES Net. This would be 3 or 4 times a year; it would allow someone not so familiar with the Net to get a little bit of experience, and perhaps put them into a position to step up to a more regular Net if someone else decides to step down.

The Nets are every Sunday evening at 9pm on the 146.790 MHz repeater. If you are interested, I will take volunteers during the meeting. Or you can email me at g.m.jacobs@gmail.com. The script is straightforward, but a copy can be emailed to you if you want. I hope to be able to fill the primary vacancy for the 2nd Sunday no later than the next meeting, and the understudy whenever it can be.

Frank's Notes

Frank Counts, KC8EVS

Black Fork Gravel Grinder

It is still a go!

Check their web page: www.blackforkgravelgrinder.com.

I know all of us are looking forward to working an outdoor event. Several of us (W8PEN, KI8N, N8RLW, KD8HSA, KD8EVR, AC8YE) ventured out on March 15th and did some basic determinations as to what our coverage of the area will be. We plan to return to make the final determinations, and what frequencies we will be using. Our return is more important to test our coverage as there has been a change of location for aid station 2.

They want us to provide communications:

- so that they may direct the EMT team quickly to provide necessary assistance to the participants of the event.
- relay information as to aid station needs.
- provide participant info such as first rider through the aid station (male and female) and when the last rider leaves the aid station.

We will be providing communications at the three aid stations and the Start/Finish line. Aid stations 1 & 3 are in the same location so only three stations will be in operation. We may have someone roving or posted elsewhere if needed and we have enough volunteers to cover.

We will be expected to provide our own necessary supplies such as table, chairs, battery power, cover (in case of rain) so we need to think about that as well as our radios.

The race starts at 10:30am and expect the last rider through at approximately 3pm. So, we will need to be set up and running approximately by 10am at the start/finish line and shortly thereafter at the aid stations. We will break down after the last rider and the sweep vehicle come through. The Start/Finish station will be the last to close and will be the Net Control for the day.

I have a list of operators who are interested in participating and would like to see more. If you are interested in participating, please contact me (KC8EVS) or Terry (K8IN) as soon as possible. You do not have to have experience as we will team you up with someone who has. I will contact everyone participating in the event the week prior with the final details.

One last final note (probably the most important) to all who plan to work the event, I have been informed that after the race they will have cold beer and a BBQ meal for the team, so we will not go away hungry.

VE Testing

COVID has put a lot of restrictions on testing. Currently, I do not feel comfortable hosting any testing. 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 two organizations are giving exams. There is another option, online testing.

You can find online testing sites here: Find an Online Exam (arrl.org) 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.

As the situation changes with the pandemic or when the weather gets better, we will resume in person testing in Mount Vernon.

Quick Updates

Black Fork Gravel Grinder Race

MVARC has been asked by the race organizer to coordinate emergency services and monitor various points along the race routes. This is an opportunity for us to exercise our capabilities and demonstrate our ARES involvement. We have not had an event in a couple of years, and it is time we used our amateur equipment to assist the community.

Several MVARC members did go out to check on setting up radio communications from the start/stop and aid station locations this month. Using HT's and mobile radios we were able to confirm it is possible to communicate with each other. The consensus was we will set up a repeater at a high point to ensure good communications.

To find more information and maps about the ride/race go here: https://www.blackforkgravelgrinder.com/

This is a gravel road race and ride that spans some of the most scenic, grueling, and diverse gravel roads in Ohio. There are three route lengths offered: a **23- and 30-mile ride and 54-mile race loop.**

The following was received via the ARRL VE Newsletter March 2021

$35 FCC application fee in the Federal Register – does NOT take effect yet.

The final rule change was published in the Federal Register today March 19, 2021: Federal Register - schedule-of-application-fees-of-the-commissions-rules.

Even though the document has an effective date of April 19, the Amateur Radio fees will **not yet be required**.

The fee changes outlined in this order **will not take effect** until the requisite notice has been provided to Congress, the FCC's information technology systems and internal procedures have been updated and the Commission publishes notice(s) in the Federal Register announcing the effective date. This will most likely be in the summer.

The following application types will be subjected to the fee when the rule finally takes effect.

New, Modification (Upgrade and Sequential call sign change), Renewal, and Vanity callsign requests will be subjected to the $35 application fee. There will be no fee for Administrative Updates (email or mailing address changes, name changes).

The instructions on the FCC Fee Schedule are for the applicant to pay application fees directly to FCC via the License Manager System or Fee Filer System. VECs and VE teams will not have to collect the $35 fee at the session.

The ARRL VEC exam fee will remain at $15.

When the FCC application fee eventually takes effect, new and upgrade applicants will pay the $15 exam session fee to the VE team as usual and then pay the $35 application fee directly to the FCC.

FRNs Only at Exam Sessions

The FCC has indicated VECs/VE teams should no longer be accepting social security numbers at exam sessions.

Examinees should register in the FCC CORES registration system and receive an FRN before exam day.

FCC CORES User Account and Registration: https://apps.fcc.gov/cores/userLogin.do

Morse Code Instruction

In the last few months, we had added resources to learn morse code.

https://cwops.org/cw-academy/

General Exam Sample Test Questions:

G5C03 Which of the following components increases the total resistance of a resistor?

A. A series capacitor
B. A series resistor
C. A parallel capacitor
D. A parallel resistor

G9B10 What is the approximate length for a ½ wave dipole cut for 14.250 MHz?

A. 24 feet
B. 8 feet
C. 33 feet
D. 16 feet

Extra Class Exam Sample Test Questions:

E7D03 What device is typically used as a stable voltage reference in a linear voltage regulator?

A. An SCR
B. A tunnel diode
C. A Zener diode
D. A varactor diode

E0A01 What is the primary function of an external earth connection or ground rod?

A. Lightning protection
B. Reduce RFI to telephones and home entertainment systems
C. Reduce RF current flow between pieces of equipment
D. Reduce received noise

These test questions are from the current test pools for their respective license classes. How did you do? The answers are on Page 21. Practice tests for all license classes can be found here: https://www.qrz.com/hamtest/

Member Information

At the end of March, the Secretary/Treasurer has purged the MVARC Membership list and removed the names of personnel that have not paid their dues for this year. Those that have not renewed their membership will receive an email alerting them personally of this action. FYI: Last year there were 60 members and this year there are 36. Wonder if not having in person meetings and activities has led to this steep decline?

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.

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.

Please note that Terry has changed the contact email for the MVARC newsletter to MVARC.K8EEN@GMAIL.COM. If anyone sent an idea to the previous email address it was never forwarded, I apologize for not having used your input. Please try again using the gmail address.

How about sending us your member profile? We would like to highlight a current MVARC member each month.

Member Activity

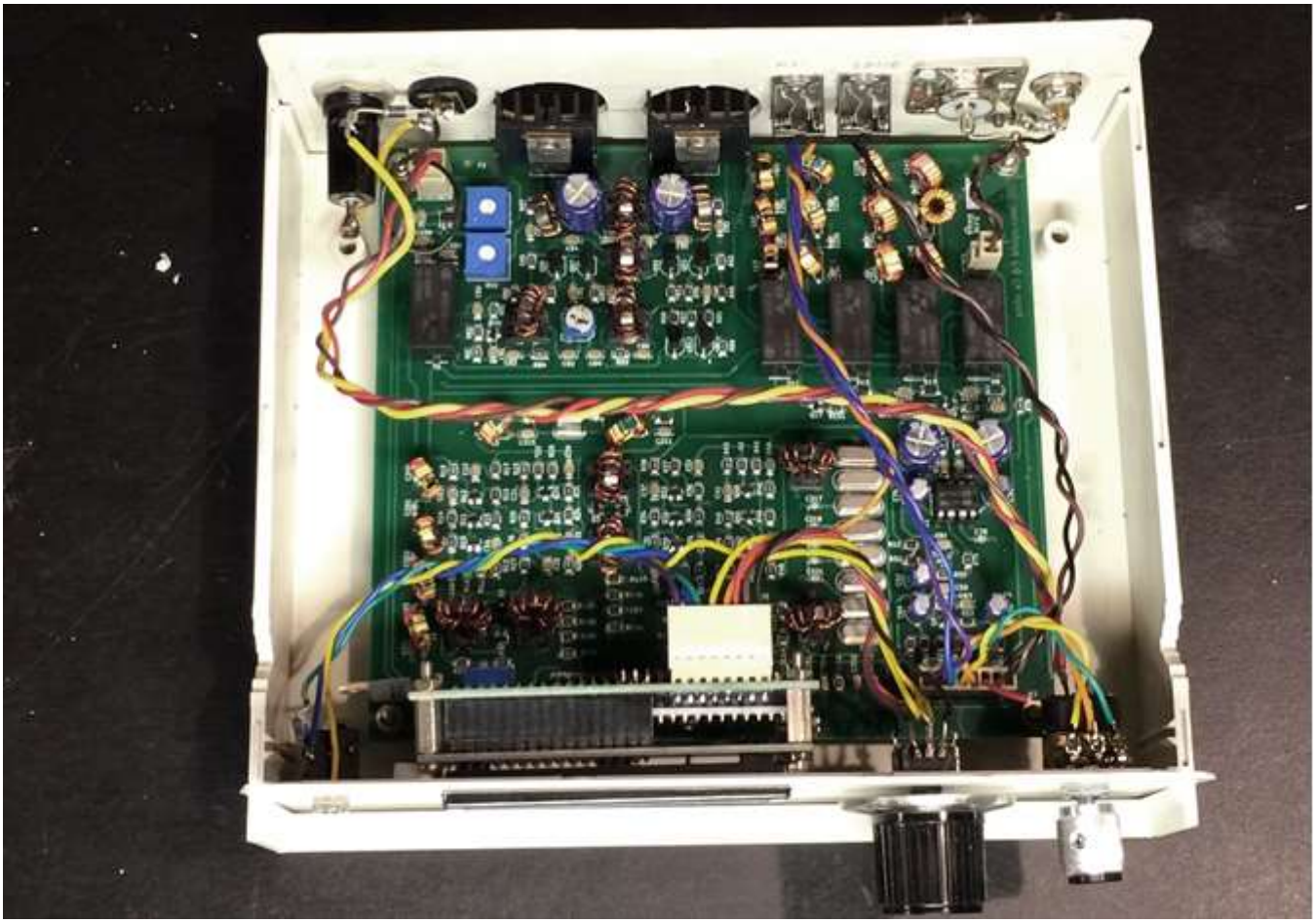
Barry Butz, N8PPF

KIT BUILDING - µBITX

Back in the days when we had in-person club meeting, three years ago, Louie, NT8I brought a rig that had built from a kit to show and tell. It is called a µBITX. I was impressed by the finished product and its price and decided to buy one myself. The kit rested on the shelf for quite a while, but I finally went to work in it last month.

The radio is a QRP transceiver covering 160-10 meters on SSB or CW. It comes as a partially assembled kit comprising a fully populated motherboard, an Arduino based display and logic module, and numerous small parts to be put together by the builder. The builder also must provide a case and knobs. I also installed an internal fuse holder and a crowbar circuit for reverse polarity protection.

Since I did not plan to write this article the first picture is a partially assembled unit. On eBay I found a case that others had used for the project. It makes a snug but nice fit. The plastic box was just a plain box with some ventilation slots on the bottom. I was careful to do a good job drilling and filing in just the right places. The tricky part was making the rectangular opening for the display. In all there were 12 holes to be made. The motherboard gets mounted to the bottom with the display module plugged into it. Premade wire bundles were provided plug in to the motherboard. The loose ends of the wires had to be soldered to the controls and input/output jacks



The front panel of the µBITX.

On the front panel the small knob is the on/off and volume control. The large knob is a multi-function dial, the default function being tuning. Pushing the knob selects other functions, such as band and frequency step. The small button on the left started as a drilling mistake. It worked out ok though because I installed an additional function selector which works two-handed with the large knob to change settings more easily. On the rear are the connectors.

The kit came with a BNC antenna connector. I added a UHF connector. Either can be used. The large black holes are ventilation for the output transistor heat sinks just inside. For the labels I used a label maker with clear tape. The clear tape practically disappears leaving nice looking letters.

The radio is powered by 12vdc. Either battery or power supply can be used. It is not recommended to go higher than 12 volts so 13.8 is nixed. On eBay I bought an 8000 mAh lithium-ion battery. This was the largest that would be allowed on an airplane. Whether it will be taken on a plane is yet to be seen.

Lithium-ion batteries have strict charging rules, so it came with its own built-in charger with an LED that turns from red to green when charging is complete.

In the interval between my eagerness to buy and my non-eagerness to build, the µBITX advanced from version 3 to version 6. Bugs were found and improvements made. There are recommended mods to improve the spectral purity of older versions. I have the needed components on hand but have not yet installed them. It will be another learning experience – soldering SMDs on a motherboard not expecting them. It should be done before I go on the air. In the meantime, I have found the receive works well, although it does not have the fancy stuff like noise blanking or DSP. Transmit power measured into a dummy load is 11w on 160m, dropping down to 1w on 10m, making 30m and up genuine QRP. This I think is a characteristic of the output transistors.

Firmware can be updated in the Arduino. That was an adventure, but worth it. I had never tinkered with an Arduino before and had to learn how. The upgrade is much better than the included original.

The version 3 kit I bought does not have an actual assembly manual. Instead, I had to study numerous pages and links to understand the details. All this research probably doubled or tripled my building time. I did make a couple mistakes but was able to correct them without any damage. In perusing the web page, it looks like the current version 6 is much simpler to build and might be completed in an hour or two. As to the firmware update, if necessary, I would probably have to learn the procedure all over again.

So, would I recommend building one yourself? It's up to you.

If you want more information, here are some resources:

http://ubitx.net/ - General Information, including old versions

https://www.hfsignals.com/index.php/ubitx/ - lots of info from the international seller,

https://www.gigaparts.com/ubitx-version-6-hf-ssb-and-cw-transceiver-full-kit.html - US sales

https://groups.io/g/BITX20/topics - User group

There are also many YouTube videos.

By the way, the actual name is µBITX (micro BITX), not uBITX (you BITX). I guess because there are not Greek letters on American keyboards most people use a u instead.

Miscellaneous Rambling

Terry Windsor, KI8N

One of the on-air club activities I always enjoy is NVIS day. In previous years I researched and then built an NVIS type of antenna. A couple of them were utter failures but a couple worked well. This year my plan is to use a 66' end fed dipole positioned horizontally at 6 to 8 feet above the ground. I have two of them to try; one I built and another I purchased; Chameleon ENCOMMII.

In the March 21 Ohio Section Journal Stan Broadway, N8BHL listed 6 goals for this year's April 24th NVIS activity.

Goal 1: Construct a working NVIS antenna (or several) and try them out for performance.

Goal 2: Operate with a completely off-grid power source (battery, solar, generator, whatever).

Goal 3: Make contact with your district net or DEC on HF (DEC's make your info known!).

Goal 4: Make contact with the Sarge on 3902.

Goal 5: Send a message to W8SGT:

- Use ~any~ system possible- voice, fldigi, Winlink, CW, doesn't matter just send us a note:
- Your callsign is operational at your location using your antenna type with how many operators
- You can use your local/district net with a normal message format (they can upload to Buckeye Net, OHDEN or voice contact with Sarge.
- Lacking the above, you can send direct to Sarge while making your test contact above.

Goal 6: Have fun; take a break for the grill and lunch!

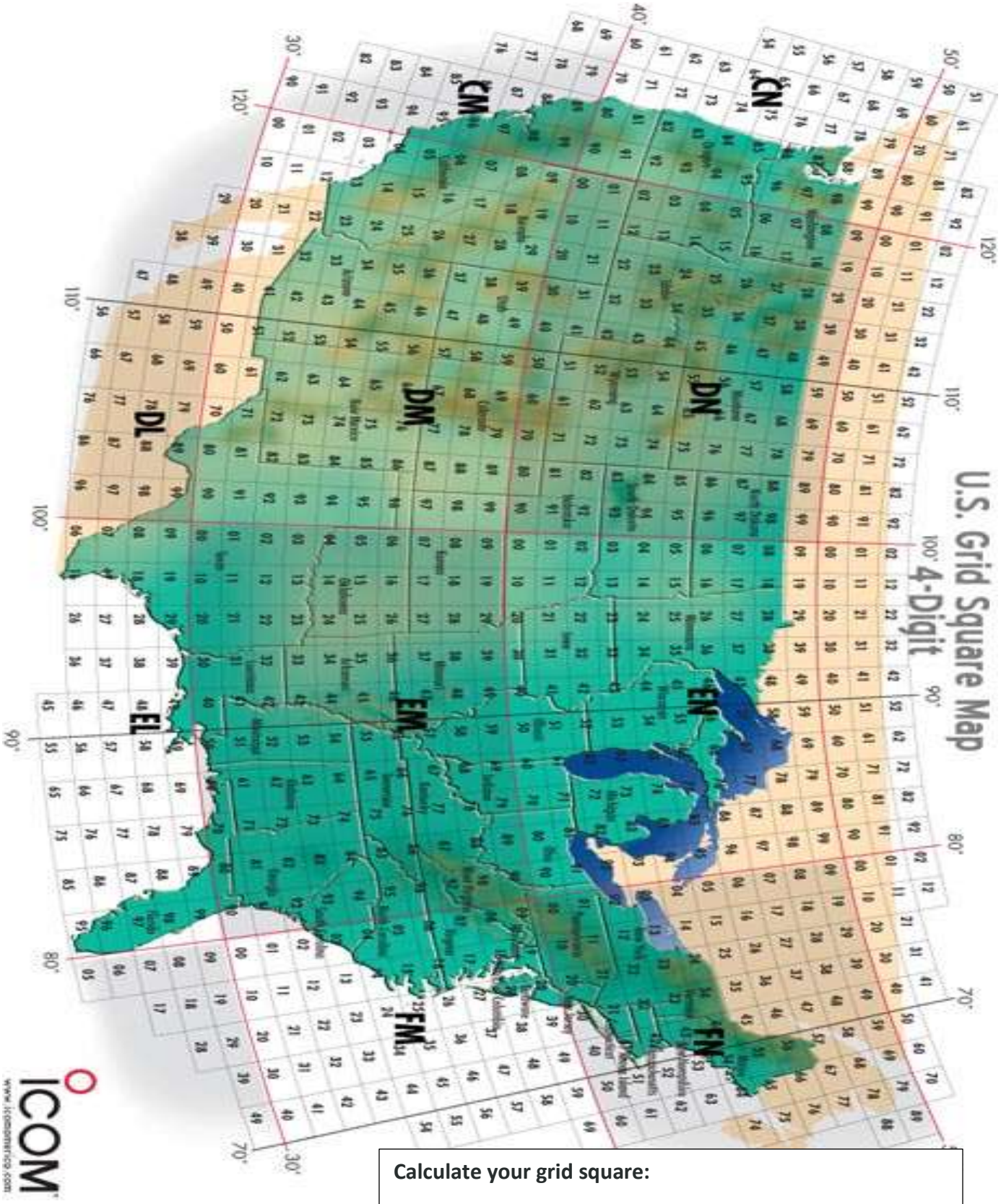
I will probably be doing this activity from the back yard since MVARC is most likely not participating this year. I am sure I can do four of the listed goals but not so sure of numbers 3 and 5.

As stated last month I am in process of connecting my Yaesu FTM-300DR dual band radio through the internet via my PC using Yaesu's SCU-40 Portable Digital Node WIRES-X Kit. I have the SCU-39 components and even initially had it connected earlier this month but was unhappy with the way things were configured so I did a complete radio reset and have just started hooking everything back together.

I also completed the mobile dual band antenna change over on my truck. I was unhappy with the magnetic mount affecting (scratching) the paint on the top of the cab. I bought and installed a front fender mount bracket between the hood and fender and put an NMO mount with a new dual band Comet antenna. This configuration is working well, and no cables are exposed nor is anything scratching the paint.

Until next month stay safe and, “Ham it UP”!

U.S. Grid Square Map



Calculate your grid square:

https://www.levinecentral.com/ham/grid_square.php

MVARC Calendar

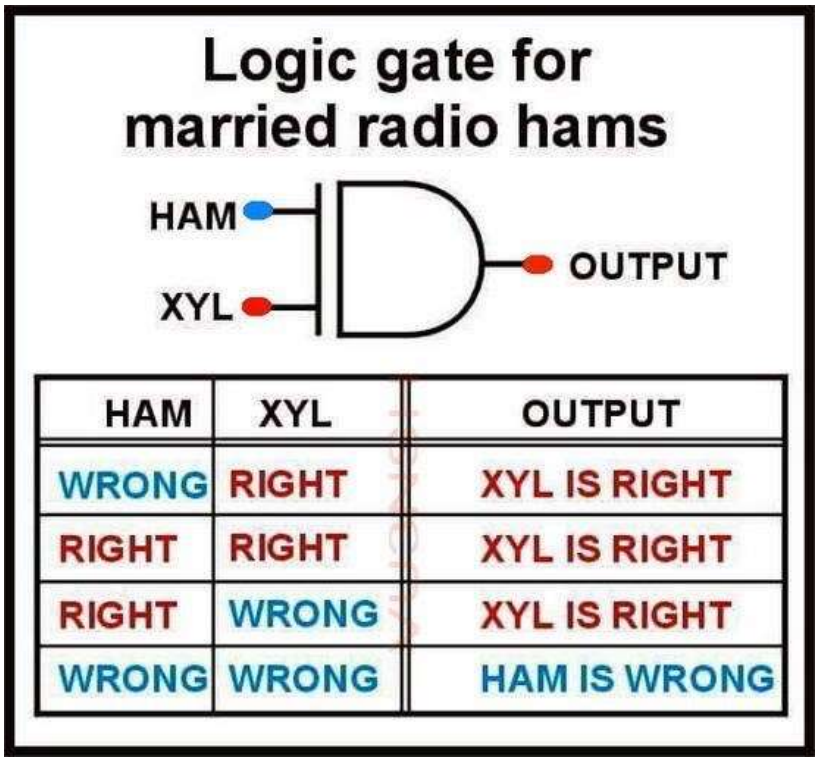
April 2021

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

Final Takeaway

Antenna Rotator

Q: How do you greet a ham radio operator?
A: With a short wave!



Three guys stranded on a remote island find a lamp with a Genie. The Genie gives them each a single wish.

The first guy wishes he were home riding his bicycle – poof he is gone.

The second guy wishes he were home fishing on his lake – poof he is gone.

The third guy wishes the other two were back with a spool of wire, a battery, coax, and an HF rig.

Answers to sample test questions on page 11.

G5C03: B (A series resistor)

G9B10: C (33 feet)

E7D03: C (A Zener diode)

E0A01: A (Lightning protection)

Market Place

A column dedicated to amateur radio items you have, do not need, and would like to sell, trade or give-away.

- Yaesu FT-70DR; dual band 5-watt HT. Includes:
  - Antenna
  - 7.4 V 1,800 mAh Lithium-Ion Battery Pack (SBR-24LI)
  - Battery Charger (SAD-18B)
  - Belt Clip
  - USB Cable
  - Warranty Card
  - Operating Manual
  - RT Systems ADMS-70D software and USB-57B programming cable

  $190.00 - Contact Terry Windsor ki8n.tw@gmail.com