



April 2020
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Website:

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

The Voice Coil
Newsletter of the
Mahoning Valley Amateur
Radio Association
Established 1919

The Voice Coil

Since last we met, the world has become quite a different place. We are being asked to restrict all of our activity away from our homes. Businesses all over are closed only the essentials such as grocery stores, hardware stores, gas stations and restaurants for carry out only are open.

If you have been out, there is tape all over the floors of places showing social distancing. How long we stay like this is really any ones guess at this point the best thing to do is stay home only venturing out when you have to for food. If you can support the local places that are open depending on how long this goes on I see a much different world on the other side.

We had a very interesting board meeting last night since we can't meet in person we did it over Zoom. It worked very well except for one person but he thinks he fixed the problem.

Of course the main topic of conversations is what do we do during this coronavirus epidemic? According to the Governor, we are non-essential and cannot meet. I cannot ask you to come to a meeting and possibly expose you and your family to that kind of danger. That being said we have had to think outside the box--way outside the box.

For our meeting in April we're going to meet on the repeater at



7:00 PM. I will be net control and we're going to do something a little different. I'm going to leave that as a surprise. At 8:30 PM we are going to have another net on Zoom for those interested. I will be sending out a schedule with times with varying hours and days so if you want to test your zoom connection you will be able to. You will need a camera if you want to be seen but if you just want to listen you can do that to with just your speakers.

We are still working on things to do for you. We are working on the final details for a 6 meter net.

(continued pg. 2)

Next Meeting:

April 9, 7:00 pm
On the W8QLY
repeater,
146.745

Zoom conference
instruction to follow.

2020 Officers

President: Scott Wilton, KE4UHC
Vice President: Dave Brett, KD8NZF
Secretary: Mike Malarky, W8IWD
Treasurer: Nancy Brett, KD8QNY
Trustees: Dean DeMain, W8YSU (1)
Jerry Goddard, KC8EFO (1)
Mike McCleery, K8PRR (2)
Bryan Bartzi, KF8G (2)

Newsletter Editor: Mark Haverstock,
K8MSH

Awards Manager: Dave Fairbanks,
N8NB, 330.759.6993, 4770 Logan
Ave. Youngstown, OH 44505

The Mahoning Valley Amateur
Radio Association, Inc, meets the
second Thursday of every month.
Location and time are subject to
change. Dues are \$20.00 per year,
\$10.00 each for additional family
member. Contact Nancy,
kd8qny@zoominternet.net for
membership details.

The club call is **W8QLY**;
equipment operated under this call
includes a two meter voice
repeater at 146.745 (-600, 110.9
PL). Club email:
mvara.w8qly@gmail.com

MONDAY NIGHT NET operates
every Monday at 9:00. PM on
146.745 MHz.

SKYWARN NET - First
Wednesday of the month at 8:30
PM on 146.745 MHz as weather
warrants.

ARES NET- First and third
Mondays of each month at 8:30
PM on 146.745 MHz; prior to the
Monday Night Net.

Some of the advantages are: 6 meters is available to all class licenses, operation is similar to HF bands, and the antenna is relatively small and compact. I happen to know that when we are able to meet again we are going to be building some of these antennas.

I would like to ask all of because I know only a few of you will do it, but I would like you to come up with a short bio of yourself. We are going to be starting a new section in the *Voice Coil* with new member's bios in there so we can get a chance to know them better. But we don't always have a new member every month, so we hope to fill some of the blank spaces with your bios. Tell us a little about yourself, your interests--even the ones that aren't ham radio.

If there are any Technicians out there that have thought about it or are bored to death, now's the time to get your General ticket. Contact me at mvara.w8qly@gmail.com, 330-333-2761 talk only, 727-501-5195 talk or text.

Folks, please take care of yourselves and your families. Stay home unless you have to go out. Wal-Mart does the shopping and loads it in the car for you. Use hand sanitizer and wash your hands, wash your hands, wash your hands, I can't say it enough. Please take care of yourselves and your families.

Scott, KE4UHC



Current Activities

April 9: Meeting on the W8QLY repeater, 146.745, 7:00 pm

Contact Us:

Email: mvara.W8QLY@gmail.com

Snail-mail: MVARA, P.O. Box 14141, Poland, OH 44514

Meeting ideas/ suggestions? Contact Dave, KD8NZF,
KD8NZF@zoominternet.net

Hamfest Calendar



Due to the coronavirus epidemic, there are no hamfest listings for this issue.

Know of any regional events that should be included in the Voice Coil? Send the information to: MVARAVoiceCoil@gmail.com

Hamvention QSO Party

The Dayton Hamvention for 2020 has been cancelled. The World Wide Radio Operators Foundation, in cooperation with the Hamvention organizers, wanted to create a fun way for people to celebrate the Hamvention experience over the air – the Hamvention QSO Party.

This event is in memory of Ron, W8ILC, who became a silent key just two days after the Hamvention 2020 cancellation announcement. Ron had attended every Hamvention since the beginning.

On Saturday, May 16, 2020, we'll celebrate the Dayton Hamvention by working as many Amateur stations as possible during the QSO Party period. The event will run 8 AM to 8 PM EDST (1200 to 2400 UTC), May 16, 2020. For more details visit: <https://wwrof.org/hamvention-qso-party/>

How the National Bureau of Standards helped make “radio”

This was originally published as “NIST’s Role in the Early Decades of Radio (1911-1933)” on the National Institute of Science and Technology’s blog, Taking Measure.....Dan, KB6NU



Even if you weren’t able to watch the recent Super Bowl on TV, you could still listen to the play-by-play commentary on the radio. But radio does more than just broadcasting sporting events or playing music. It plays a major role in emergency response, navigation and science.

The word “radio,” however, didn’t become part of our regular vocabulary until 1911, and it happened thanks in part to J. Howard Dellinger, a radio scientist at the National Bureau of Standards (NBS), the agency that became the National Institute of Standards and Technology (NIST). This came about when the second International Radiotelegraph Conference was being planned in London, and a professor sent Dellinger a paper that he was going to present to the conference for review.

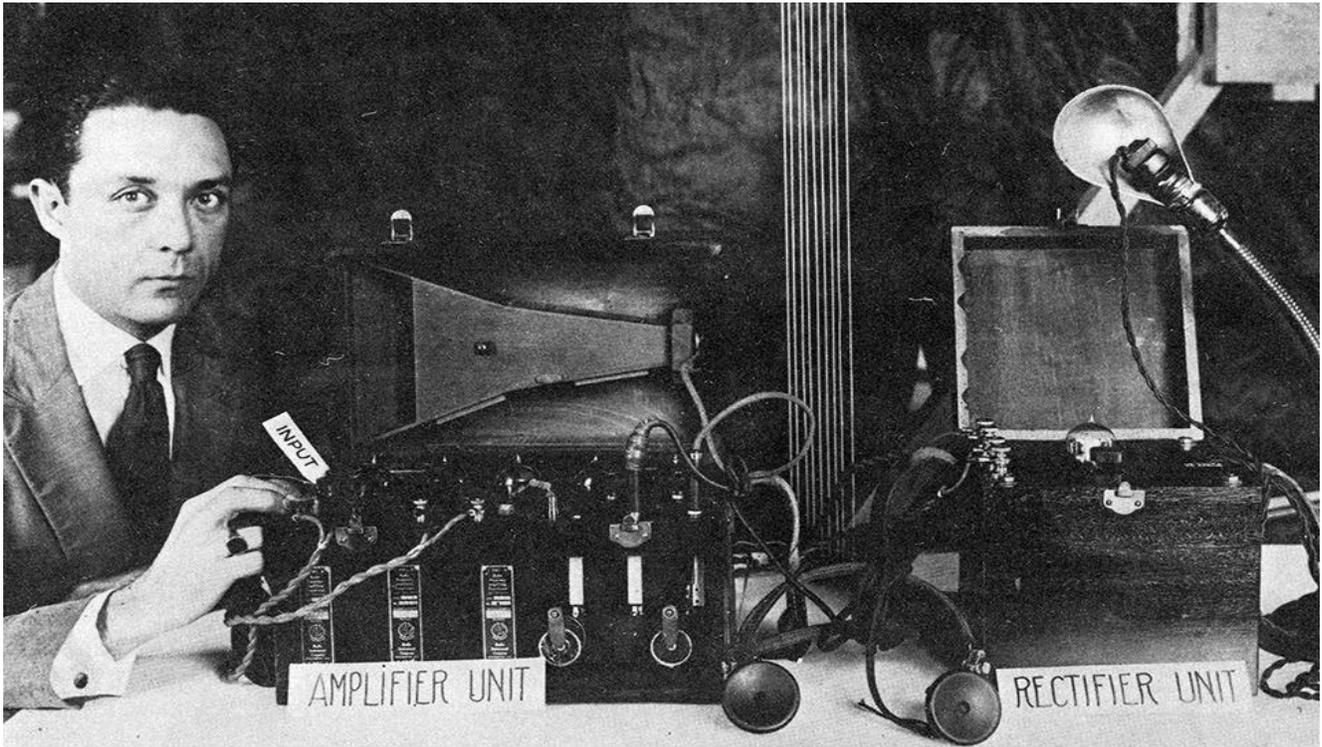
At the time, “wireless” was used as the term for radio communication, especially by the British. However, NIST was charged with revising standards in preparation for the conference, and Dellinger suggested that the professor use “radio,” which was already becoming a popular word in the U.S., instead of “wireless.” The professor agreed, and the word “radio” went on to become the universally accepted term.

Dellinger not only played a role in popularizing the word “radio,” but he also played a role in the first radio work done at NIST. A commercial company asked NIST to calibrate a wavemeter, a device developed by one of its engineers that measures electromagnetic waves like those of radio. Dellinger was known as the wireless expert and took on the project of calibrating the first radio instrument at NIST.

A New Type of Radio Receiver

But for radio to become mainstream, it first had to be commercialized, which began with its introduction into households. However, the challenge was building a radio set that used the electrical current, called alternating current (AC), which powered lights, fans and kitchen appliances when plugged into wall sockets. The predecessor to this technology was developed and patented by two researchers, Percival D. Lowell and Francis W. Dunmore, at NBS in 1922. They called their invention the “mousetrap.”

The “mousetrap” was a receiver for a radio amplifier that could run on AC. This was considered a breakthrough because at that time radios were only able to be powered by direct current (DC) provided by batteries. These batteries were bulky and heavy, had to be charged from time to time and were considered dangerous because of the acid used in them. The researchers’ prototype meant the radio could be used in homes without causing damage and with the same performance quality. Lowell and Dunmore filed two more patents together for other innovations, and for the “mousetrap” they sold the rights to the Dubilier Condenser Corporation. Little did they know that, because there was no uniform policy on



patents issued to government employees, their actions would result in more than a decade of litigation over who legally had the rights to the patent.

While they were tied up in court, the Radio Corporation of America (RCA) developed its own model of the AC radio in 1926. Its model later became the first AC-powered radio sold to consumers.

Flying by Radio

During the early years of flight navigation, NIST was doing research to assist pilots while they were flying and landing. Pilots needed three things to get their bearings when flying “blind,” meaning it’s foggy, too dark or too cloudy to see. They needed to know the longitudinal position, altitude and speed of the aircraft, which were all achieved by various beacons installed in the plane. The remaining issue was that there were two frequencies the pilot constantly had to switch between the frequency that the Department of Commerce used to send weather information to planes and ships, which sometimes caused interference for pilots, and the frequency the radio beacon operated on, which gave altitude and other information.

Dunmore created a prototype, but Harry Diamond, a radio engineer who joined NIST in 1927, completed the device, called the radio guidance system. Diamond solved the problem by developing a separate device that allowed for voice communication to the pilot without receiving any outside interference from ships’ radios.

A Curtiss Fledgling, a trainer aircraft developed for the U.S. Navy, was equipped with the device, and flight tests were performed between NIST’s experimental air station at College Park, Maryland, and Newark Airport in New Jersey in foggy weather. After a series of successful tests were performed, the device was turned over to be used by the Department of Commerce in 1933.

Praise From a Famous Inventor

While mostly intended for serious users, some of NIST’s journals and publications were popular with the public. One such book, titled *The Principles Underlying Radio Communication*, covered topics such as

elementary electricity, radio circuits and electromagnetic waves and was also published as a textbook for soldiers in the U.S. Army. The famous inventor Thomas Edison received a copy from NIST and wrote a letter thanking the first director, Samuel W. Stratton, for publishing it, saying it was “the greatest book on this subject that I have ever read.”

As these and other examples show, NIST had a significant influence on radio research between 1911 and 1933. However, NIST’s radio work didn’t end with the first blind landing. NIST would continue to contribute to the field leading up to and during World War II, and research continues to this day in areas such as 5G, public safety communications and spectrum sharing.

ABOUT THE AUTHOR

Alex Boss is a general assignment writer in the NIST Public Affairs Office and covers standard reference materials (SRM). She has a B.S. in biology from Rhodes College and an M.A. in health and...

MVARA Members attend CW Academy

It gives me great pleasure to congratulate John K8WAM and Frank WB8YHD who both successfully completed the Cwops CW Academy beginner level course. Here are their thoughts on the class.



John K8WAM:

If you are interested in beginning Morse code, brushing up, or pushing yourself to the next level, I recommend that you take a moment and check out the CWops CW Academy. They have a series of 8 week courses designed to meet a student at any level. The courses are free but they do expect you to practice at least 30 minutes a day and attend two 1hour classes per week during the semester. There is a waiting list to get into a session but it is worth it.

I recently completed the beginner class, and I was actually amazed with my progress. The class focuses on instant character recognition, the idea that you don't listen to the dots and dashes but instead recognize the sounds and associate them with a letter. It works very well as long as you put the practice time in.

The sessions are held using a teleconference software called Zoom. There are 5 students and an instructor in the session. The instructor sends some code and the student tells the instructor what was sent, then the student gets his turn “pounding the brass” (they actually recommend you use an iambic key...) sending the code back to the instructor. Each session adds a few more characters and you quickly move through the alphabet, numbers, basic punctuation and pro-signs. By the end of the beginners class we were practicing whole sample QSOs. The other nice thing about the class is the instructor spent some

time explaining the abbreviations and flow of working CW. By the end of the eight weeks I got brave and got on the air to make some CW contacts.

The CW Academy curriculum is posted on their website for each level. They also have an amazing Morse code tutor program online. The CWops website is: <https://cwops.org/>

Frank WB8YHD:

I always admired the ease the “old timers” like Jack Chapman, WA8GLF and Jim Hartzler, K8EIJ had copying CW at Field Day. They made it look like so much fun. I found out with the right code course it is fun.

When I was young I struggled learning Morse Code looking at “dot and dash” charts. Later, when I passed the 12 wpm CW test to get my Advanced License I swore I’d throw away the key and never touch CW again. That’s all changed. My experience with the CWops CW Academy has been very positive.

The CWops CW Academy has a great way of getting you comfortable with the “language” of Morse Code. Their approach takes practice, but they give you the tools and the encouragement that makes it easy and fun. My CW skills improved vastly over a short 2 month period. That progress came from the CW Academy beginner’s level course.

I’ve signed up for the next “basic” level course and can’t wait to see how much fun that is. I really enjoyed the way the CW Academy “classes” are done. They use Zoom, a video and audio online chat system that makes Skype look ugly. With Zoom we took part in real time, on the Web meetings with folks from all over the world. Most importantly, the instructor that ran the classes was great--very understanding, supportive and helpful and a super CW operator. The Academy is a great way to learn CW or brush up your CW skills. I’m going back for more.

I highly recommend CWops CW Academy to those even mildly interested in CW. It’s the real deal and best of all, it’s free! The only thing it costs you is a bit of time.

The CWops is an organization that for over 10 years has been promoting the unique art form of Morse code. If you would like to attend CW Academy or for more information on CWops, go to their web site at www.cwops.org.

Rich KB8GAE CWops #2123

Links

Old timers will remember the Russian Woodpecker that drove low band operators crazy in the 70's and 80's. Here is a link to a interesting 6 minute BBC video on the site near Chernobyl.

<https://www.bbc.com/reel/video/p0864g3p/the-secret-soviet-radar-hidden-in-chernobyl-s-shadow?ocid=ww.social.link.email>



HAM HUMOR

NRRL LAUNCHES NEW PROGRAM TO CONVINC LIBRARIES TO PURCHASE MIMEOGRAPH MACHINES



NEWINGSTEAD, VT – The National Radio Retransmission Legion (NRRL) is launching a new program designed to encourage young people to enter the ham radio hobby.

“We’ve got to capture the imaginations of these young people – who have grown up with technology like smartphones and tablets – and get’em hooked on ham radio,” says NRRL interim CEO Larry Kelley.*

Thanks to a large donation from the Edison Electric Lamp and Amberola Company, the NRRL will begin selling mimeograph machines to colleges, libraries, private schools and literally any other organization that wants to purchase one.

At a lunch hour press event with finger sandwiches and melon slices, NRRL President Bill Gilligan emphasized, “Our hope is that organizations purchasing these mimeographs will make copies of amateur radio periodicals – observing applicable copyrights, of course – and make them available to interested young folk. Perhaps they’ll read them at the drive-in or sock-hop.”

Reporters at the event remarked that organizations would need to make time-consuming mimeograph stencils of all documents prior to printing and copying. NRRL leadership encouraged each other to Google this for discussion at future Board of Directors meeting.

Dubbed “Campaign 2020 – Plant Yesterday’s Technology For the Future Today, the machines will be available through NRRL at a cost of \$475 each. Interested parties may act now and get 10 gallons of lovely smelling mimeograph ink for 50% off.

“Crank phonographs for Morse practice and NRRL branded telegraph card stock are also available!” exclaimed Gilligan.**

Hotlines are open to take your phone call and explain what a mimeograph machine is.

*Editorial Note: Kelley recently took over for the former CEO, Bob Michaels, who simply disappeared one day.

**Editorial Note: Despite two years of restructure, turnover and general confusion at the NRRL, Gilligan remains president of the organization, though even the Board of Directors was unaware that he was still on the payroll.

(Photo courtesy Queensland Museum – Own work, CC BY 3.0,
<https://commons.wikimedia.org/w/index.php?curid=15367715>)

Amateur License Refresher

Dave, KD8NZF



It's probably been awhile since you took your Amateur License exam. Here are a few sample questions from the current question pools just to keep those synapses firing.

Extra Pool

E6C01 (A)

What is the function of hysteresis in a comparator?

- A. To prevent input noise from causing unstable output signals
- B. To allow the comparator to be used with AC input signal
- C. To cause the output to change states continually
- D. To increase the sensitivity

E6C02 (B)

What happens when the level of a comparator's input signal crosses the threshold?

- A. The IC input can be damaged
- B. The comparator changes its output state
- C. The comparator enters latch-up
- D. The feedback loop becomes unstable

General Pool

G2D01 (A)

What is the Volunteer Monitoring Program?

- A. Amateur volunteers who are formally enlisted to monitor the airwaves for rules violations
- B. Amateur volunteers who conduct amateur licensing examinations
- C. Amateur volunteers who conduct frequency coordination for amateur VHF repeaters
- D. Amateur volunteers who use their station equipment to help civil defense organizations in times of emergency

G2D02 (B)

Which of the following are objectives of the Volunteer Monitoring Program?

- A. To conduct efficient and orderly amateur licensing examinations
- B. To encourage amateur radio operators to self-regulate and comply with the rules
- C. To coordinate repeaters for efficient and orderly spectrum usage
- D. To provide emergency and public safety communications

Answers pg. 2

Dues are Due!! MVARA 2020 Membership

Date _____

Name _____ Call _____

Spouse/Family _____ Call _____

Street Address _____

City _____ State _____ Zip _____

Home Phone _____ Cell Phone _____

Email _____

(This is the email where your *Voice Coil*, the club newsletter, will be sent)

ARRL member? Yes, expiration month & year _____ No

Do you want the following to be included in the membership list available to all members?

- | | | |
|---------------|------------------------------|-----------------------------|
| Name and Call | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Address | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Phone | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Email Address | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

Membership

Renewal New Member Individual membership \$20 \$ _____

Renewal New Member Family members, \$10 each \$ _____

W8QLY Repeater Support

\$12 Basic Support Donation \$ _____

\$50 Gold Level Donation \$ _____

\$ _____ Other \$ _____

Total Enclosed \$ _____

Make checks payable to: Mahoning Valley Amateur Radio Association. Please bring this form and your payment to the next meeting or mail to: MVARA, P.O. Box 14141, 125 West McKinley Way, Youngstown, Ohio 44514

Contest and Special Event Operating Information

Dave Fairbanks N8NB

Data below as well as more information courtesy of the following website:

<http://www.hornucopia.com/contestcal/index.html>.

April 2020

+ QRP Fox Hunt	0100Z-0230Z, Apr 1
+ Phone Fray	0230Z-0300Z, Apr 1
+ CWops Mini-CWT Test	1300Z-1400Z, Apr 1 and 1900Z-2000Z, Apr 1 and 0300Z-0400Z, Apr 2
+ UKEICC 80m Contest	2000Z-2100Z, Apr 1
+ NRAU 10m Activity Contest	1800Z-1900Z, Apr 2 (CW) and 1900Z-2000Z, Apr 2 (SSB) and 2000Z-2100Z, Apr 2 (FM) and 2100Z-2200Z, Apr 2 (Dig)
+ SARL 80m QSO Party	1700Z-2000Z, Apr 2
+ SKCC Sprint Europe	1900Z-2100Z, Apr 2
+ NCCC RTTY Sprint	0145Z-0215Z, Apr 3
+ QRP Fox Hunt	0200Z-0330Z, Apr 3
+ NCCC Sprint	0230Z-0300Z, Apr 3
+ LZ Open 40m Sprint Contest	0400Z-0800Z, Apr 4
+ PODXS 070 Club PSK 31 Flavors Contest	1000Z, Apr 4 to 0400Z, Apr 5
+ Nebraska QSO Party	1300Z, Apr 4 to 0100Z, Apr 5 and 1300Z-2200Z, Apr 5
+ Missouri QSO Party	1400Z, Apr 4 to 0400Z, Apr 5 and 1400Z-2000Z, Apr 5
+ Florida State Parks on the Air	1400Z-2200Z, Apr 4 and 1400Z-2200Z, Apr 5
+ Mississippi QSO Party	1400Z, Apr 4 to 0200Z, Apr 5
+ Louisiana QSO Party	1400Z, Apr 4 to 0200Z, Apr 5
+ SP DX Contest	1500Z, Apr 4 to 1500Z, Apr 5
+ EA RTTY Contest	1600Z, Apr 4 to 1600Z, Apr 5
+ North American SSB Sprint Contest	0000Z-0400Z, Apr 5
+ UBA Spring Contest, 6m	0600Z-1000Z, Apr 5
+ RSGB RoLo SSB	1900Z-2030Z, Apr 5
+ IQRP Quarterly Marathon	0800Z, Apr 6 to 2000Z, Apr 12
+ 144 MHz Spring Sprint	1900 local - 2300 local, Apr 6
+ RSGB 80m Club Championship, CW	1900Z-2030Z, Apr 6
+ ARS Spartan Sprint	0100Z-0300Z, Apr 7
+ Phone Fray	0230Z-0300Z, Apr 8
+ CWops Mini-CWT Test	1300Z-1400Z, Apr 8 and 1900Z-2000Z, Apr 8 and 0300Z-0400Z, Apr 9
+ NCCC RTTY Sprint	0145Z-0215Z, Apr 10
+ NCCC Sprint	0230Z-0300Z, Apr 10
+ QRP ARCI Spring QSO Party	0000Z-2359Z, Apr 11
+ JIDX CW Contest	0700Z, Apr 11 to 1300Z, Apr 12
+ FTn DX Contest	1200Z, Apr 11 to 1200Z, Apr 12
+ F9AA Cup, PSK	1200Z, Apr 11 to 1200Z, Apr 12
+ SKCC Weekend Sprintathon	1200Z, Apr 11 to 2400Z, Apr 12
+ OK/OM DX Contest, SSB	1200Z, Apr 11 to 1200Z, Apr 12
+ New Mexico QSO Party	1400Z, Apr 11 to 0200Z, Apr 12
+ Georgia QSO Party	1800Z, Apr 11 to 0359Z, Apr 12 and

+ Georgia QSO Party	1800Z, Apr 11 to 0359Z, Apr 12 and 1400Z-2359Z, Apr 12
+ North Dakota QSO Party	1800Z, Apr 11 to 1800Z, Apr 12
+ Yuri Gagarin International DX Contest	2100Z, Apr 11 to 2100Z, Apr 12
+ WAB 3.5/7/14 MHz Data Modes	1000Z-1200Z, Apr 12 (FT8) and 1200Z-1400Z, Apr 12 (RTTY) and 1400Z-1600Z, Apr 12 (PSK) and 1600Z-1800Z, Apr 12 (FT8) and 1800Z-2000Z, Apr 12 (RTTY) and 2000Z-2200Z, Apr 12 (PSK)
+ International Vintage Contest HF	1200Z-1800Z, Apr 12
+ Hungarian Straight Key Contest	1500Z-1600Z, Apr 12
+ 4 States QRP Group Second Sunday Sprint	0000Z-0200Z, Apr 13
+ 222 MHz Spring Sprint	1900 local - 2300 local, Apr 14
+ NAQCC CW Sprint	0030Z-0230Z, Apr 15
+ Phone Fray	0230Z-0300Z, Apr 15
+ CWops Mini-CWT Test	1300Z-1400Z, Apr 15 and 1900Z-2000Z, Apr 15 and 0300Z-0400Z, Apr 16
+ RSGB 80m Club Championship, SSB	1900Z-2030Z, Apr 15
+ NCCC RTTY Sprint	0145Z-0215Z, Apr 17
+ NCCC Sprint	0230Z-0300Z, Apr 17
+ Holyland DX Contest	2100Z, Apr 17 to 2100Z, Apr 18
+ ES Open HF Championship	0500Z-0559Z, Apr 18 and 0600Z-0659Z, Apr 18 and 0700Z-0759Z, Apr 18 and 0800Z-0859Z, Apr 18
+ Worked All Provinces of China DX Contest	0600Z, Apr 18 to 0559Z, Apr 19
+ YU DX Contest	0700Z, Apr 18 to 0659Z, Apr 19
+ QRP to the Field	0800-1800 local, Apr 18
+ CQMM DX Contest	0900Z, Apr 18 to 2359Z, Apr 19
+ Texas State Parks on the Air	1400Z, Apr 18 to 0200Z, Apr 19 and 1400Z-2000Z, Apr 19
+ Michigan QSO Party	1600Z, Apr 18 to 0400Z, Apr 19
+ EA-QRP CW Contest	1700Z-2000Z, Apr 18 (10-20m) and 2000Z-2300Z, Apr 18 (40-80m) and 0700Z-0900Z, Apr 19 (40m) and 0900Z-1200Z, Apr 19 (20-10m)
+ Ontario QSO Party	1800Z, Apr 18 to 0500Z, Apr 19 and 1200Z-1800Z, Apr 19
+ Feld Hell Sprint	1800Z-2159Z, Apr 18
+ ARRL Rookie Roundup, SSB	1800Z-2359Z, Apr 19
+ Run for the Bacon QRP Contest	1900Z-2400Z, Apr 19
+ SKCC Sprint	0000Z-0200Z, Apr 22
+ Phone Fray	0230Z-0300Z, Apr 22
+ CWops Mini-CWT Test	1300Z-1400Z, Apr 22 and 1900Z-2000Z, Apr 22 and 0300Z-0400Z, Apr 23
+ 432 MHz Spring Sprint	1900 local - 2300 local, Apr 22
+ RSGB 80m Club Championship, Data	1900Z-2030Z, Apr 23
+ NCCC RTTY Sprint	0145Z-0215Z, Apr 24
+ NCCC Sprint	0230Z-0300Z, Apr 24
+ 10-10 Int. Spring Contest, Digital	0001Z, Apr 25 to 2359Z, Apr 26
+ SP DX RTTY Contest	1200Z, Apr 25 to 1200Z, Apr 26

+ Helvetia Contest	1300Z, Apr 25 to 1259Z, Apr 26
+ Florida QSO Party	1600Z, Apr 25 to 0159Z, Apr 26 and 1200Z-2159Z, Apr 26
+ BARTG Sprint 75	1700Z-2059Z, Apr 26
+ QCX Challenge	1300Z-1400Z, Apr 27 and 1900Z-2000Z, Apr 27 and 0300Z-0400Z, Apr 28
+ RSGB FT4 Contest Series	1900Z-2030Z, Apr 27
+ Phone Fray	0230Z-0300Z, Apr 29
+ CWops Mini-CWT Test	1300Z-1400Z, Apr 29 and 1900Z-2000Z, Apr 29 and 0300Z-0400Z, Apr 30
+ UKEICC 80m Contest	2000Z-2100Z, Apr 29

DX Operating Information

Dave Fairbanks N8NB

Credit for the below information and further information on these operations and others can be found at the following website: <http://www.ng3k.com>

April						
2020 Apr06	2020 Apr14	St Vincent	J88PI	GW4DVB	DXW.Net 20190625	By GW4DVB fm Palm I, Grenadines (IOTA NA-025); 40-6m; mainly SSB FT8
2020 Apr10	2020 Apr13	Svalbard	JW	DC8TM Buro	DXW.Net 20200217	By DC8TM as JW/DC8TM fm IOTA EU-026; HF; SSB FT8
2020 Apr17	2020 Apr25	Philippines	DU2	LoTW	425DXN 20200208	By SP5APW as DU2/SP5APW fm Calayan I (IOTA OC-092); HF; SSB FT8 FT4; QSL also OK via SP5APW



Station Loaner Program

If you're a new ham/newly upgraded and want to get on the HF bands, MVARA has a loaner program for club members. The club has two complete stations with radio, power supply, microphone, CW key, and antenna tuner. All you need to do is supply your own coax, antenna, and keep the equipment in good condition while you have it.

Loan period is up to 6 months. However, you will be responsible for returning the station temporarily for use during Field Day weekend in June.

With the new ARRL proposal, it looks like even Tech class amateurs may soon have more phone privileges on some of the HF bands. Contact MVARA at our email address: mvara.W8QLY@gmail.com

Swap and Shop

1. Drake 2B receiver and 2BQ q multiplier. Antique ham band receiver and speaker q multiplier. Works great for its age. Cabinets need repainted but ok. \$235.

2. HA8KF Magnetic Keyer Paddle Iambic keyer with red paddles and large metal base. It features a solid brass polished hub with unique machining markings, mounted on a heavy steel base with a variegated black powder coating. It is pre-wired with a ¼ in. phone plug (6.35mm male TRS). Hand-made in Hungary to bring "easy-to-send" CW joy to your shack. New. \$190.

3. BaoFeng UV-5R Dual Band Two Way Radio 128 Channels 50 ctcss and 104 CDCSS dual-band display, Dual Freq. Display, dual-standby, a/B band independent operation | High/low TX power selectable: busy Channel lock-out (bclo). Tri-color background light selectable: 0-9 grades vox selectable | FM radio (65.0Mhz-108.0MHz) | large LCD display. Keypad Lock: channel step: 2.5/5/6.25/10/12.5/25Khz | voice Companding: 50 ctcss/ 104DCS coder & tone searching. Emergency alert: 25Khz/12.5Khz switchable | LED flashlight: high/low RF power switchable. New in unopened box, \$20.

Call Dave Fairbanks, N8NB, at 330-501-5031 if interested in these

- 1---ALPHA DELTA: dx-40
- 2---PAR ELECTRONIC: ef-30
- 3—IMD METER (kk7uq): w/ps & mnl
- 4---TRUE TALK (wa2nan): g5rv w/coax & ll
- 5---MAXCON: ocf-3k80 w/isltr
- 6---PALSTAR: at1kp tnr w/mnl
- 7—YAESU sp-101b speaker

Ken.....KC8Y, Email cct66000@gmail.com

Got 6 Meters?

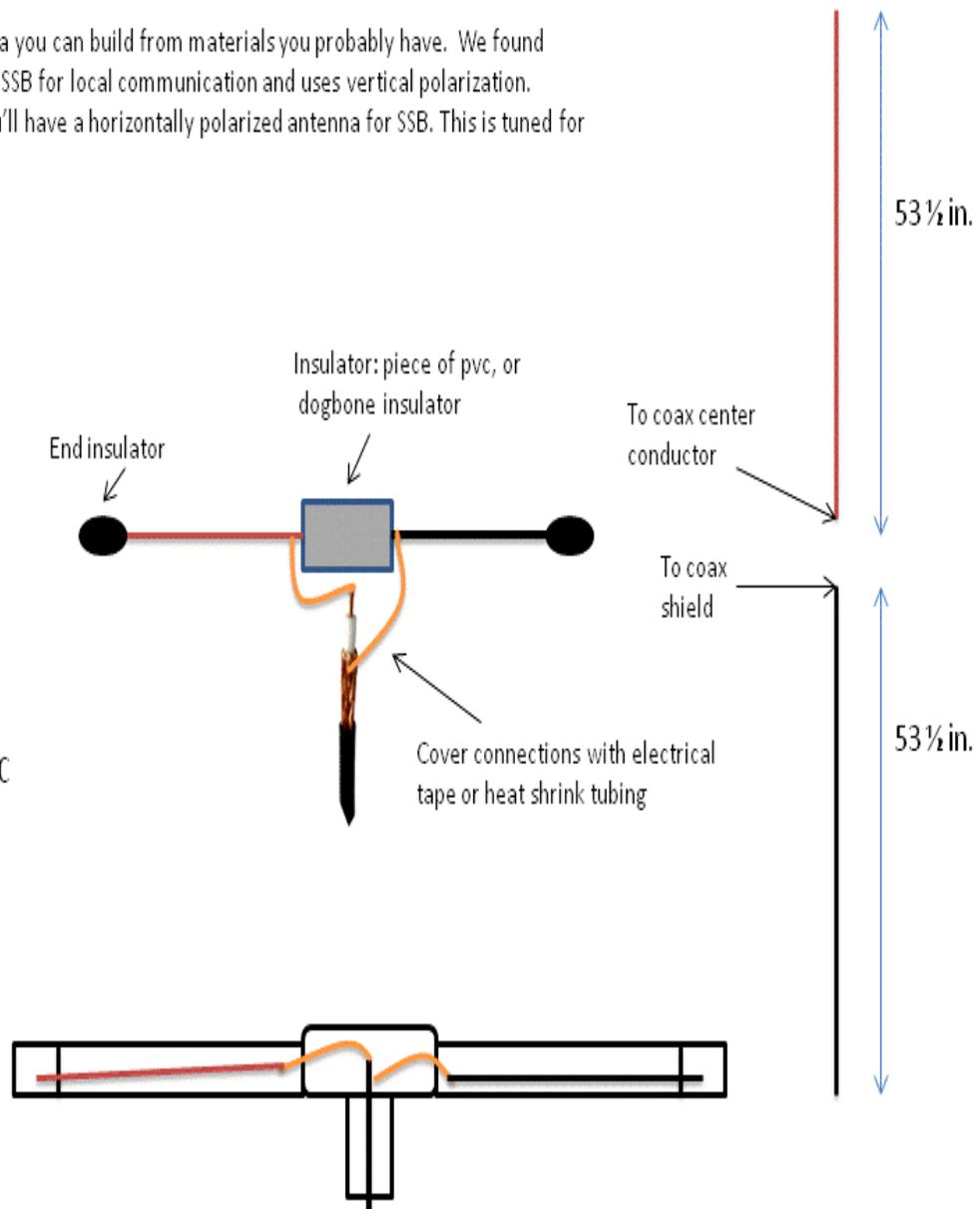
Here's a simple 6m antenna you can build from materials you probably have. We found that FM works better than SSB for local communication and uses vertical polarization. Turn it 90 degrees, and you'll have a horizontally polarized antenna for SSB. This is tuned for approx. 52.500 MHz.

Materials list:

- 107 inches of wire, at least 18 awg
- coaxial cable
- solder/soldering iron or butt connectors
- center insulator
- end insulators

Optional:

- 10 ft. ¼" sched. 40 PVC
- 2 end caps
- tee



You can also enclose in PVC pipe. Instead, strip enough coax to push through the PVC tee connection. Connect antenna wires to the coax as shown above-- don't use the insulator. Cover with electrical tape or heat shrink tubing. Slide PVC tubing over wire and cap ends. To tower mount, slip an 18" piece of PVC in the end of the tee and run the coax through it. Connect to tower with U-bolts.

Watch your email for news on the new 6m FM nets.

Mahoning County ARES Update—Dave, KD8NZF

Like all organizations, MC ARES is adapting to life with the Corona Virus. Here is a roundup of what is coming up.

Ohio ARES Annual Meeting. Each year The Ohio Section of ARES holds a meeting of all the county teams. The meeting this year was scheduled for April 4 but has been cancelled. In place of the meeting, each county has been asked to participate in a multi-mode all Ohio check in net. The nets are scheduled as follows:

On April 4th

11 AM: Checkin net on 40 meters 7.240 +/- QRM

11:30 AM: Checkin net on 80 meters 3.902 +/-

12:15 PM: Checkin net on 80 for OHDEN 3585

1:00 PM: Checkin net on DMR Ohio (3139) and Fusion "Ohio Link: 31399"

In addition, Mahoning County is doing a local check in net on the 146.745 repeater between 9:00am and 10:00am. We are asking all Amateurs to check in and provide their location, the type of antenna and power level they are using.

In announcing this activity, Stan Broadway N8BHL, Ohio Section EC, commented:

Let's imagine for a moment that it really does hit the fan. The Governor shuts everything down. Nobody moves (except responders). This is a situation where we might easily become very important!

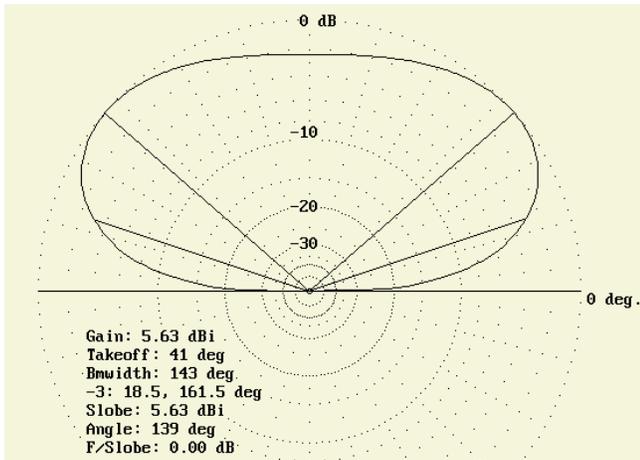
Stan was a couple days ahead of the curve – as we now know this is exactly what is happening.

NVIS Day. April 25 is Ohio ARES NVIS day. The last communication from Stan was that NVIS day would continue but should be done in small groups from homes. Since then Ohio has notched up the restrictions on groups and ordered all Ohio residents to stay at home. In light of that, Mahoning County will participate in NVIS day, but as individuals from our homes. Please do not invite other Hams to join you.

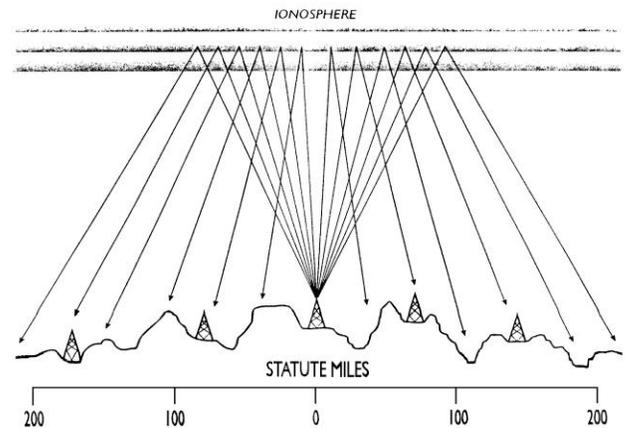
The purpose of the event is to get volunteers thinking about how to communicate within the state. Normal VHF/UHF rigs are mostly limited to less than a 50 Mi radius even when using a repeater and are considered to be line-of-sight. For greater distances we rely on the HF bands and SSB/CW/DIGI.

The rub is that most vertical and horizontal antennas for HF have a relatively low launch angle. Check the attached diagram for a pattern with greatest strength at an angle of 41°. The problem is the signal is weak for stations that "under" the pattern, and frequently creates a situation where you can easily talk to Texas but can't copy Columbus. NVIS antennas are designed to have a very high launch angle that shoots almost straight up, hits the Ionosphere, and is returned to earth in a

cone shaped pattern that does a better job covering stations within a couple hundred miles. See the pattern in the second drawing.



Normal Pattern



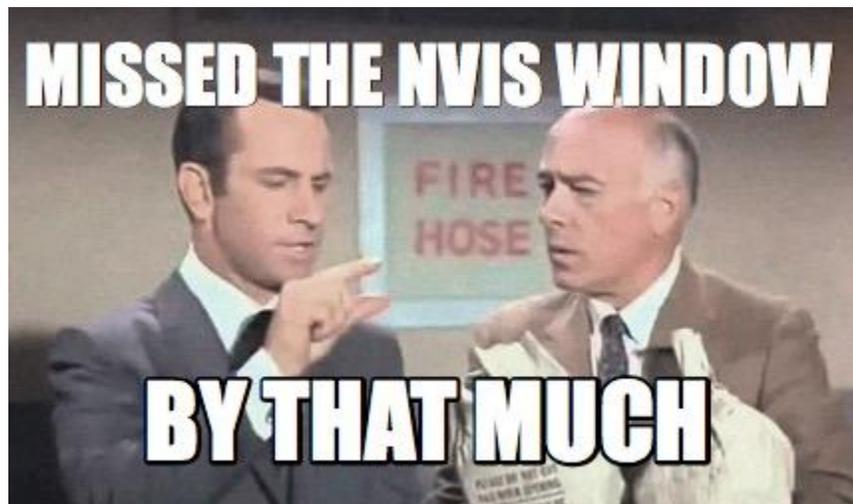
NVIS Pattern

What do you do to get an NVIS pattern? The good news is it's not hard and can be as simple as taking an existing antenna and lowering it to only 10'-15' above ground. You can find details on the DX Engineering Website here:

<https://www.dxengineering.com/techarticles/miscinfo/learn-how-to-build-a-nvis-antenna> and on the Ohio ARES website here:

<http://arrl-ohio.org/SEC/nvis.html>. A search for NVIS Antenna on your favorite search engine will also give about 120,000 web pages dealing with NVIS.

This event is open to all interested Amateurs and runs from 10:00am to approx 4:00pm, primarily on 40M & 80M SSB. As with most events of this nature you can expect most of the activity between 10:00am and noon or a little after. We hope you will try out a NVIS antenna.

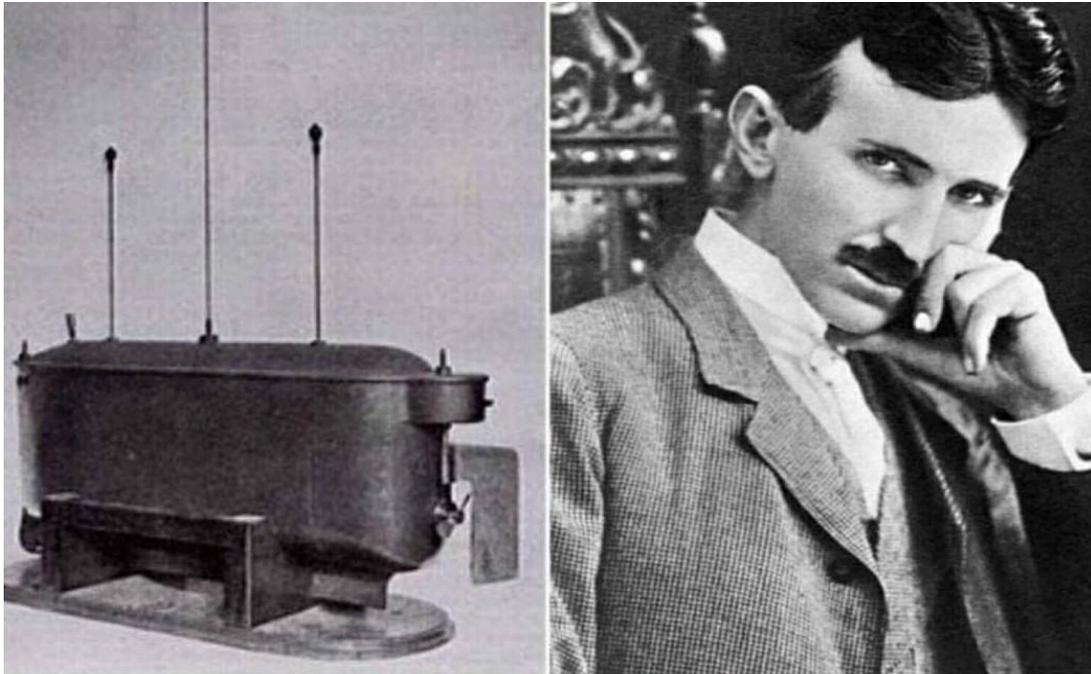


Got Pictures/Video?



If you didn't get to participate when the MVARA joined the Boy Scouts to celebrate the 100 year anniversary of Camp Stambaugh, be sure and check out the audio visual presentation of the on our home page at www.mvara.org You'll feel like you were part of the festivities.

The MVARA can use your pictures and videos of club activities. We would love to have pictures and or video of JOTA, the Christmas Parade, Santa Net, etc. You can submit an edited video file to us or we can put together and edit your raw files. Email your pictures to MVARAVoiceCoil@gmail.com. Video files will be too large to email, so contact Dave kd8nzf@zoominternet.net or Rich kb8gae@yahoo.com to make file transfer arrangements.



In 1898 Nikola Tesla once tricked an entire crowd into believing they could control a toy boat by shouting commands - he had in fact invented Radio Control and was piloting the boat himself.

THE LAST WORD

“The most beautiful people I’ve known are those who have known trials, have known struggles, have known loss, and have found their way out of the depths.”– **Elisabeth Kübler-Ross**



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The ***VOICE COIL*** is the monthly publication of the Mahoning Valley Amateur Radio Association, Inc. (MVARA) and is intended to present news, issues and opinions of interest to MVARA members and the Amateur Radio Community. We encourage contributions of articles, letters to the editor, etc. and welcome newsletter exchanges with other clubs from around the country and around the world. Permission is granted to reprint material contained herein as long as proper credit is given to this newsletter and the author. Ideas for and contributions to the VOICE COIL should be submitted to:

MVARAVoiceCoil@gmail.com

Submissions must be received **no later than the 24th** of the month prior to the month of issue, unless otherwise specified. **Submissions should be in MS Word format or ASCII text—no PDF, please!** Material received after the deadline will be used in the next month’s VOICE COIL if it is still current and /or newsworthy.

Swap and Shop Policies

Swap and Shop listings are open to all licensed Mahoning Valley Hams, based on space available—you don’t need to be an MVARA member. Please submit your list to mvara.w8qly@gmail.com **AND** mvaravoiccoil@gmail.com for placement in both *Voice Coil* and website. MVARA assumes no responsibility for transactions made or inaccuracies in ads. You are responsible for checking your ad and notifying us of any corrections. Ads will run for two consecutive issues unless notified otherwise.

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