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## From the Technical Coordinator

Jeff Kopcak – K8JTK TC

[k8jtk@arrl.net](mailto:k8jtk@arrl.net)

Hey gang,

With the continuation of ‘ronaFest 2020 and the latest blah-blah-blah from our GOV, individuals who didn’t have time to study for their ham exam have found themselves doing just that and passing their test! I’m hearing more new hams on the bands. Welcome. Most want to purchase a new radio as a reward. A new VHF/UHF handy-talky (or HT) is on many-a-new-ham’s shopping list. Great idea. There is a vast and wide range of features and options. For a while now, many new hams, and even current hams, have been purchasing Baofeng radios. Please don’t.



It’s been awhile since I’ve written about my objection with Baofeng radios. Since then, they haven’t improved at all. Baofeng UV-5R radios cover the 2m and 440 ham bands and are available for about \$25. Sounds great except nearly all of their radios do not comply with Amateur Radio service regulation, known as [Part 97](#). Part 97 acknowledges the operator is responsible for operating all equipment within the limits set forth for the Amateur Radio service under FCC regulation. Other regulations, such as Part 90 (public service and business band, among others), certifies the specific piece of equipment stating it passes technical requirements. Each Amateur Radio license holder is responsible for the proper operation of all equipment.

It’s a very compelling argument, \$25 for a handheld. Perfect options for new hams, young hams, or public service events where radios are prone to damage and misuse. Destroy it and it is \$25 vs. a couple hundred, or \$700, to replace. Newer, less expensive, radios could replace older radios that maybe didn’t have PL, low power TX, or were single band. Baofeng manufactures radios targeted at radio operators, including hams, for next to nothing. Inconsistencies in firmware versions lead to differing sets of features, programming software is in Chinese, issues getting the programming cable to work, complaints about the lack of support, and lack of a usable manual. I’m not installing software from China on my PC. You get what you paid for and even more than you bargained.

Baofengs have this nasty habit of transmitting everywhere at once. That’s tongue-in-cheek for they decimate radio spectrum by producing spurious emissions up and down the RF spectrum, which interferes with other licensed services.



Yaesu FT-60R

Part 97 specifically addresses this type of emissions in 97.307(e):

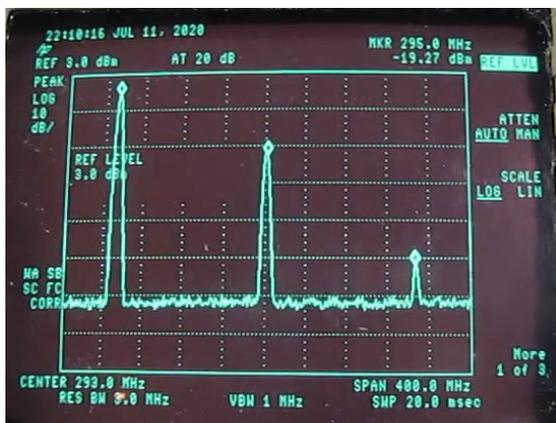
*The mean power of any spurious emission from a station transmitter or external RF power amplifier transmitting on a frequency between 30-225 MHz must be at least 60 dB below the mean power of the fundamental.*

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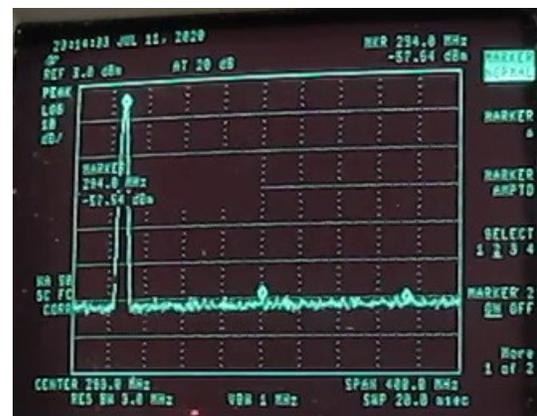
*For a transmitter having a mean power of **25 W or less**, the mean power of **any spurious emission** supplied to the antenna transmission line must not exceed  $25 \mu\text{W}$  and **must be at least 40 dB below the mean power of the fundamental emission**, but need not be reduced below the power of  $10 \mu\text{W}$ . A transmitter built before April 15, 1977, or first marketed before January 1, 1978, is exempt from this requirement.*

Boldness added for emphasis. As hams, we are given plenty of leeway in how we use our frequencies and the ability to self-regulate. It's up to each of us to make sure our radios are compliant, and we are good stewards of the spectrum we've been afforded. It's funny because I've been in radio club meetings where hams are the first to complain about interference, pirate stations, and unlicensed devices in the amateur spectrum. Yet, it seems, very few follow regulations minimizing interference to other devices and services. By not following Part 97, hams are in violation of their license which could lead to fines and even revocation.

The ARRL published their findings in a November 2015 QST article and another in January 2020. I came across yet another [video demonstrating the non-compliance](#) of these radios with Part 97. In this video, he keeps mentioning the 60 dB requirement. I believe that is incorrect because these radios are 25 watts or less and would fall under the 40 dB requirement.



*Baofeng UV-5RX3 on a Spectrum Analyzer. Left most spike is the fundamental frequency. Next spike to the right of the fundamental is the first spurious emission. This emission is only -19 dBm (upper right) from the fundamental. These emissions are nowhere near -40 or Part 97 compliant. (The Radio Mechanic YouTube video)*



*Alinco DJ-F1 on a Spectrum Analyzer. Left most spike is the fundamental frequency. The diamond marker in about the middle of the noise floor is the first spurious emission. This emission is -57 dBm (upper right) from the fundamental. This radio is compliant with Part 97 as it is beyond -40. (The Radio Mechanic YouTube video)*

Every transmitting device has these spurs. The manufacturers employ filtering within the radio to knock down these spurs to a level that complies with regulations. Baofengs likely have none of this filtering or very, very, very poor-quality filters. The ARRL found units tested from big name manufacturers are [100% compliant](#). I stopped using and recommending Baofeng radios because they do not come close to meeting FCC requirements. No way would I transmit using one of these radios. Only receiving is fine, transmitting is the problem. Many tests from both amateur and professionals have validated these radios are not worth the money. Better off taking your money and throwing it out the window.

What radio, that meets Part 97 requirements, is available for the price? About the cheapest dual-band hand held radio is the \$80 [Yaesu FT-4XR](#) or the \$160 [Yaesu FT-60R](#), which are fantastic entry level radios and very much Part 97 compliant. DMR radios compete on price and most were found to be compliant.

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Many usual ham features are missing, and programming difficulty have not really put DMR radios on the same playing field.

Few years ago, I found another option. Unfortunately, the company has “Baofeng” in the name which doesn’t help its cause. A company called “Baofeng Tech,” or BTEch, is a US based company offering the [UV-5X3](#) for under \$60! They have comparable offerings to other Baofeng models too. BaoFeng Tech not only sells improved Beofeng radios, but they also support their products directly. It even ships free and supports the ARRL if bought using Amazon Smile.



*BaoFeng Tech UV-5X3 and*

The radio looks and acts like a UV-5R. BaoFeng Tech updates the firmware, modifies the radio by installing better filtering on the transmitter, and includes an easy-to-read, nicely printed, 85-page manual. The UV-5X3 comes with all the same accessories including belt clip, antennas, charger, and ear piece. All original Baofeng accessories work too. To my surprise, they even squeezed in the 220 MHz (1.25m) band into the radio making it a tri-band radio!

BaoFeng Tech assured me their radios meet spectral requirements for Part 97. I had mine tested a few years ago at the Cleveland Hamfest by AD8G (ex KD8TWG). On VHF, one harmonic was a little higher than 40db down, UHF was spot-on. I feel very comfortable transmitting with this radio knowing it is compliant.

The CHIRP free programming software will program the UV-5X3. If you’re into the RT Systems programmers, the BTS-5X3 programmer is needed. The RT UV-5R programmer (BAO-5R-3) will not work with the UV-5X3. However, the same cable (USB-K4Y) will work on both radios.

Now there’s no excuse to get a compliant radio that is reasonably priced like the Yaesu FT-4XR, Yaesu FT-60R, or a BaoFeng Tech UV-5X3. These are great entry-level VHF and UHF radios. They can replace older radios, be a Christmas/holiday gift, and are options for young hams or new hams that just received their ticket. If you would like to check radio compliance, a number of Technical Specialists have equipment that can validate if it follows regulations. Also look for “test and tune” nights at a local club meeting – maybe when we’re all seeing each other again.

**Thanks for reading and 73... de Jeff – K8JTK**

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**Late Breaking News!!!**



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## *Please configure a personalized security password for your hotspots!*

What are hotspot passwords?

As you may know, hotspots connecting to a BrandMeister master server using homebrew or MMDVM protocol require a password to connect. Currently most of you use the “master server password” which is typically published on the corresponding country’s [BrandMeister wiki](#) page. Some software packages include those default passwords, relieving the users from needing to research and input this password.

It is also possible, and now strongly recommended for each user to setup their own personalized password from within the [BrandMeister Selfcare](#).

Why setting up a personalized hotspot password for your own callsign?

If you did not setup a personalized password for your hotspot, anyone can configure their hotspot with your personal DMR ID and connect with the master’s publicly documented default password and start using the hotspot with your callsign!

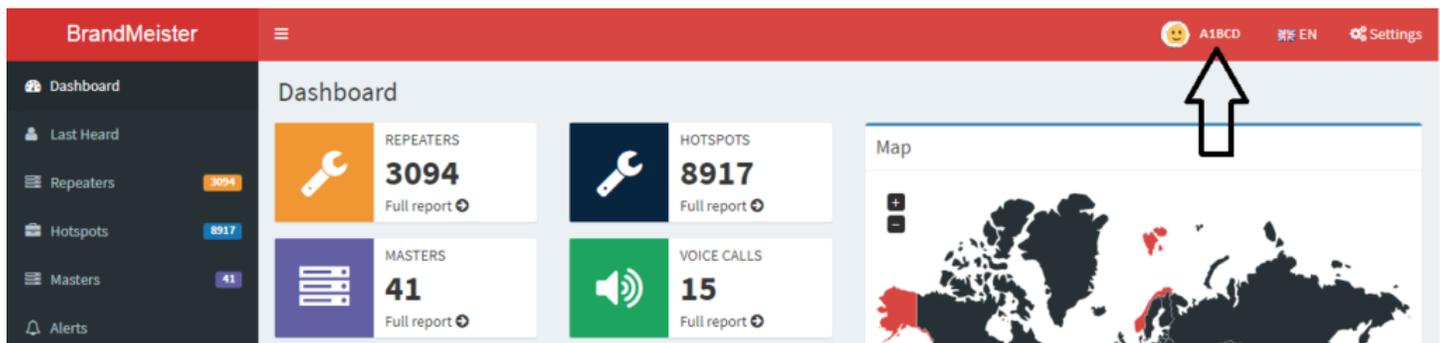
Unfortunately, this is happening more and more, thus our recommendation for everyone to setup a personalized password. By creating your own password, you ensure that you are the only one able to use your DMR ID to setup a hotspot.

Also setting up your own password will prevent your hotspot connection to stop working when the password is changed on the master you are connecting to.

How to proceed?

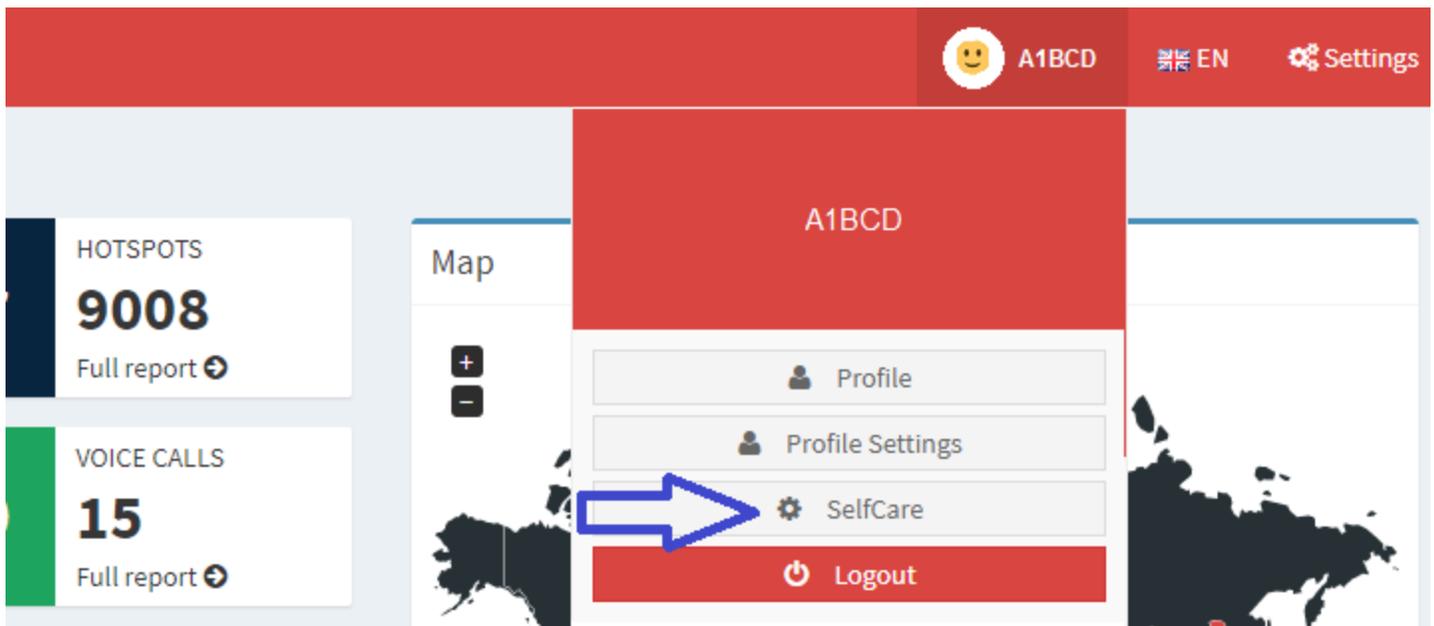
First, create a personalized password in your BrandMeister selfcare.

1. [Login](#) to your BrandMeister Selfcare
2. On the top right, click on your Callsign

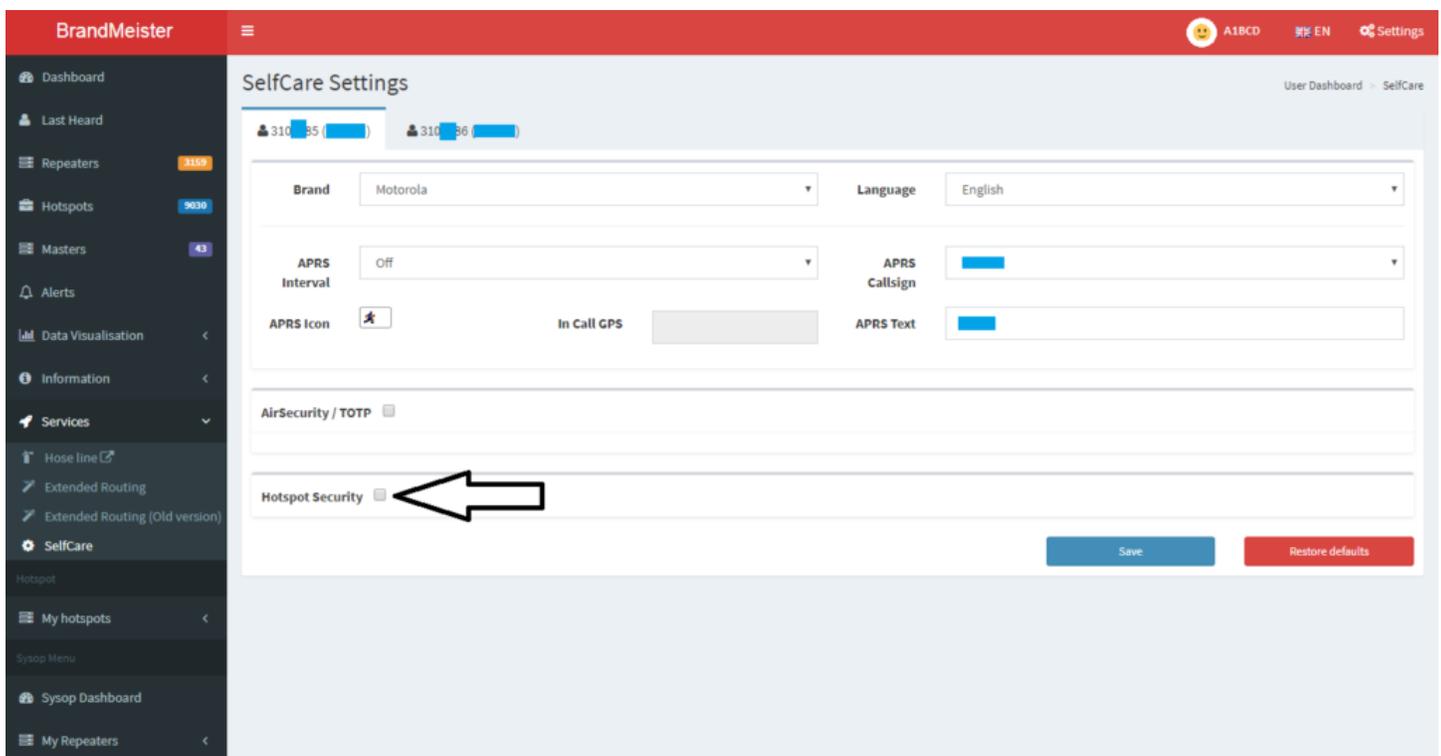


3. Click on the “SelfCare” option

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4. At the bottom of the page, check the box “Hotspot Security”



5. A password box will appear. Enter your personalized hotspot password and click “Save”.

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Hotspot Security

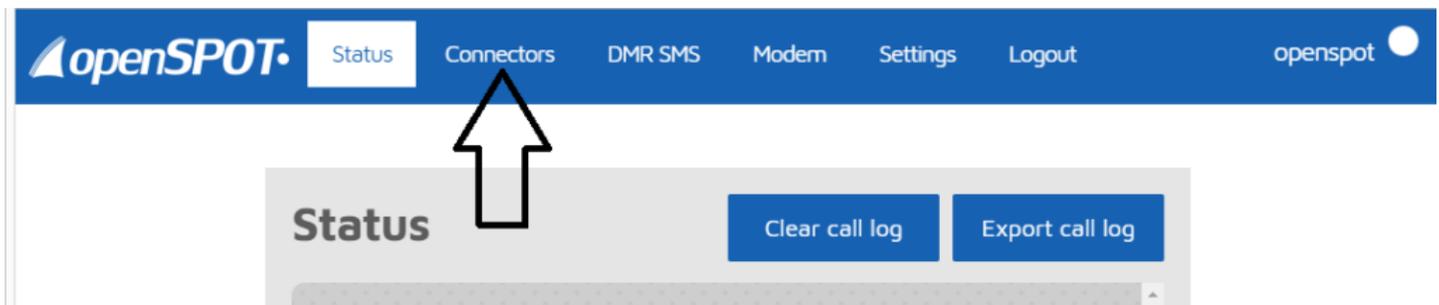
Password

Save Restore defaults

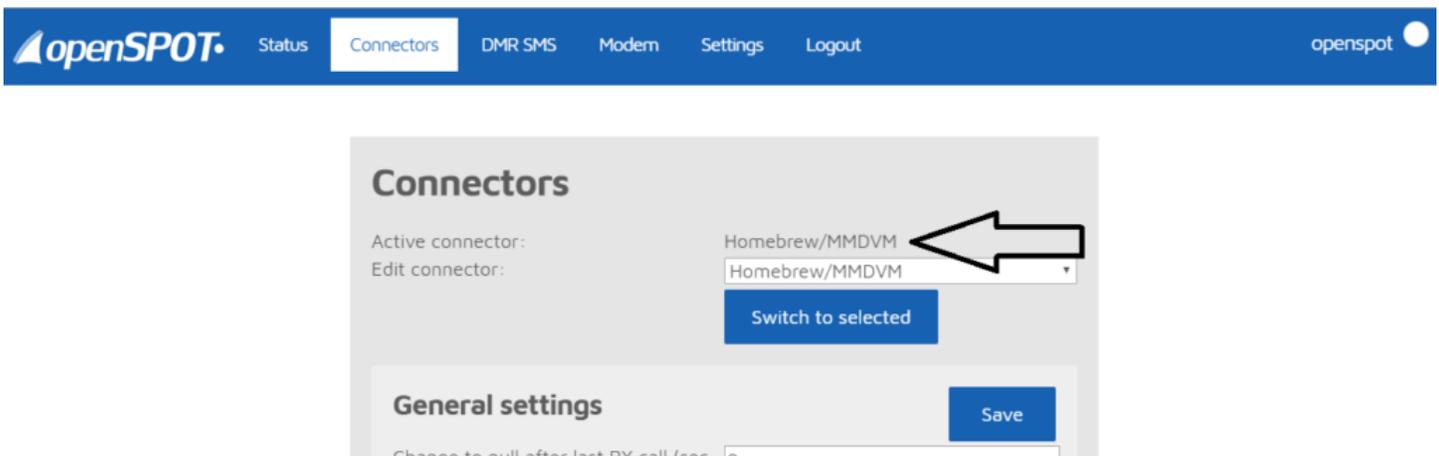
Setup the password on your hotspot

## OpenSpot

1. Login to your OpenSpot web interface, and click on the “Connectors” option



2. Make sure your Active Connector is “Homebrew/MMDVM”. (If not, select it from the “Edit connector” dropdown, and click ” Switch to selected”



3. Scroll down to the “DMR/Homebrew/MMDVM” section. The current “Server Password” is the generic one for the master you are currently connected to. Change this field to your customized password.

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openSPOT Status **Connectors** DMR SMS Modem Settings Logout openspot

### DMR/Homebrew/MMDVM Save

Modem receive frequency (MHz):

Modem transmit frequency (MHz):

Protocol:  Homebrew  MMDVM

Server:

Callsign:

DMR ID:

Server password:

Auto connect to ID (0 to disable):

Group call  Private call

Disconnect TG/ref. on auto connect

4. Click the “Save” button **pi-Star (Raspberry-based hotspots such as JumboSpot, Zumspot, etc.)**

1. Login to your pi-Star web interface, and click on the configuration page.

Hostname: pi-star Pi-Star:4.0.0-RC3 / Dashboard: 20190428

## Pi-Star Digital Voice Dashboard for

Dashboard | Admin | Configuration

Modes Enabled	
D-Star	DMR
YSF	P25
YSF XMode	NXDN
DMR XMode	POCSAG

Gateway Activity								
Time (PDT)	Mode	Callsign	Target	Src	Dur(s)	Loss	BER	
Local RF Activity								
Time (PDT)	Mode	Callsign	Target	Src	Dur(s)	BER	RSSI	

2. Scroll down to the “DMR Configuration” section, and input your hotspot password in the “Hotspot Security” field

System Time Zone:	America/Toronto
Dashboard Language:	english_uk
<input type="button" value="Apply Changes"/>	
DMR Configuration	
Setting	Value
DMR Master:	BM Canada 3021
Hotspot Security:	<input type="text"/>
BrandMeister Network:	Repeater Information   <a href="#">Edit Repeater (BrandMeister Selfcare)</a>
DMR Colour Code:	1
DMR EmbeddedLCOnly:	<input type="checkbox"/>
DMR DumpTAData:	<input checked="" type="checkbox"/>
<input type="button" value="Apply Changes"/>	
Firewall Configuration	
Setting	Value
Dashboard Access:	<input checked="" type="radio"/> Private <input type="radio"/> Public
Firewall Category Remote:	<input type="radio"/> Private <input type="radio"/> Public

3. Click on the “Apply Changes” button below the field.

Note that if the field Hotspot Security is empty, it will revert to using the default password from the DMR Host file provided with pi-Star updates.

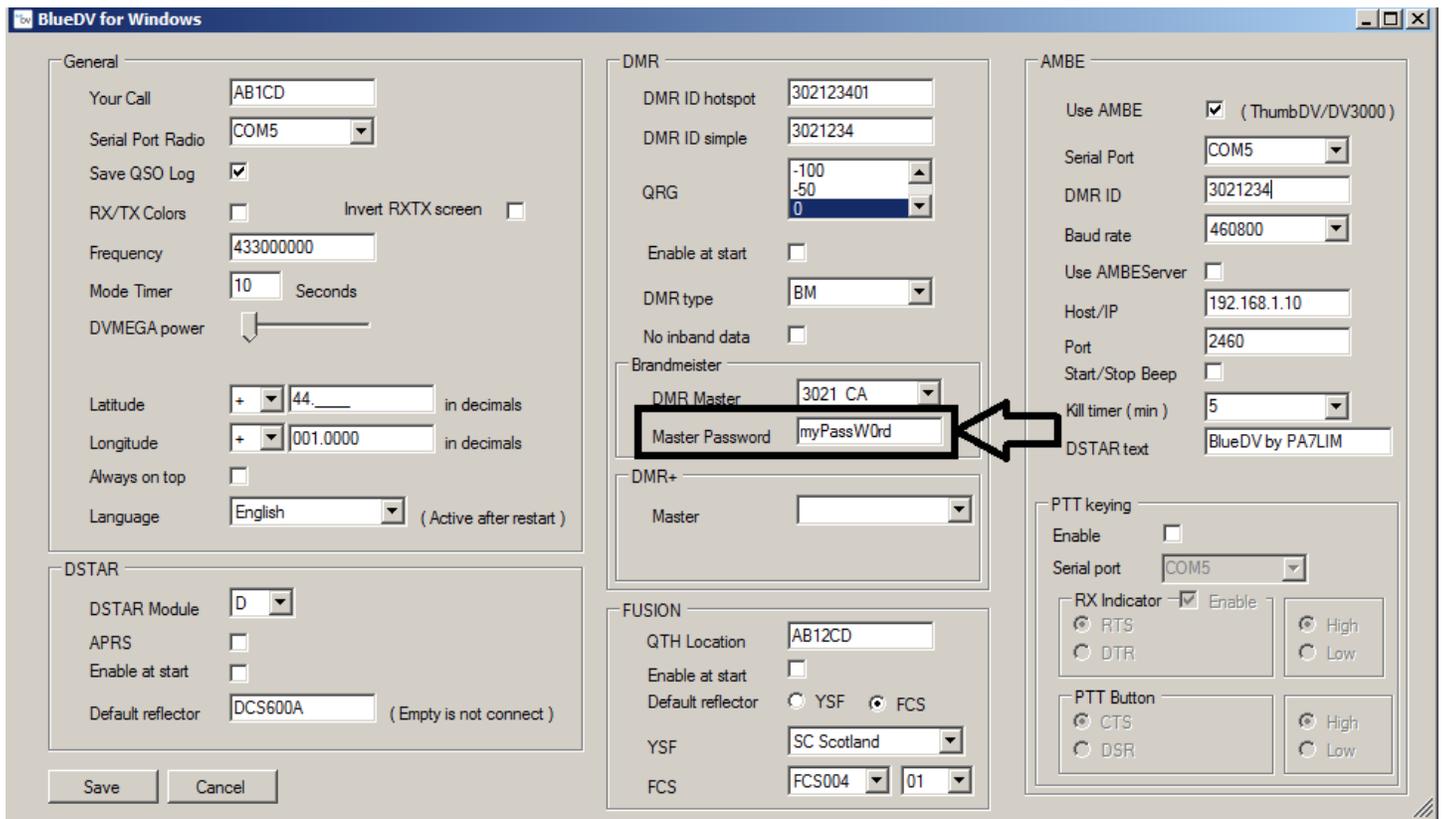
## Blue-DV

1. Click on the “Menu” option at the top, and then “Settings”



2. Enter your personal password in the “Brandmeister” section, in the “Master Password” field.

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### Questions / Issues ?

If you have any question or issue, contact us using the [BrandMeister support](#) platform.

### From the Section Emergency Coordinator

**Stan Broadway, N8BHL - SEC**

[broadways@standi.com](mailto:broadways@standi.com)

### Ohio SET gets some good press

The “Black Swan 20” SET for Ohio has received a lot of notice- both prior to and now after the event. SHARES, IPAWS and FEMA newsletters all carried reports on the exercise which was the first time ever to show that an IPAWS (“Nukes are coming!” warning system) message can be transmitted via amateur radio HF communications. This is an important event to show that amateur radio (specifically ARES) can actually grow into new areas of our nation’s communication systems.



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While some other states are getting on the government radio bandwagon and their amateur radio service wanes as a result, our objective is to keep amateur radio and ARES as a viable, recognized backup communications partner! As you'll read later, we've been successful in Ohio, and now in the nation, at showing amateur radio capabilities.

For many of us in ARES this whole "Now you're a traffic guy" thing was completely new to us and many felt they were being dragged into that arena. For some, it lit a spark that opened a whole new aspect of the hobby! We're hearing more and more of digital nets, and traffic systems in Ohio are seeing more participation by individual ARES members. Great job, folks! And praise to Matt, KD8TTE, for persevering and spending months making it happen. We are not losing our ability to alert, set tactical nets, and communicate for our agencies. We are merely adding another much-needed skill (both voice and digital) to our service. Your work will pay off!

### **The "2020 Effect"**

What are your meetings like these days? If anything like ours, they can be very quiet when it comes to the "Activities" portion. Calendars are empty of support events. Even exercises have gone away. What's an EC to do? Well, there are several counties who have become really interested in digital net and message handling. Here in Delaware County, our group took it upon themselves prior to SET to launch nightly digital practice. In the wake of SET, they are still working two nights a week to learn the foibles of fldigi, the impossibilities of 10-meter HF, and the fun of this whole digital environment. I know there are a number of counties in District 9, in Eastern Ohio, who have also become very interested in digital modes. That might be something new and interesting for your group! Could be Winlink is the answer to your doldrums- Winlink is grabbing a lot of attention these days as a viable emergency system; it has a lot going for it. Some groups may need to go back to basics: nets, net control, portable operation, emergency power and temporary antennas. All of these would make a great training meeting. And- operating under the "don't use it you lose it" premise, they will keep you ready when the call does come!

### **Where is DMR/Fusion?**

This past year we increased our exposure on DMR and Fusion. We have standard plans now under the "Watch Desk Project" to bridge the two systems together for a statewide digital network. Then, just like Spandex events, it got really quiet in 2020. But don't sell your MD-380 just yet. There have been at least three occurrences in which behind-the-scenes moves were taken to launch the statewide systems on a moment's notice. Because nothing came of the events in question, we kept the radios silent. Recently, DMR came into play as Pennsylvania staged a FEMA-rated nuclear plant exercise for the Beaver Valley plant. That's less than an hour's drive from Youngstown, so Ohio's EMA was partially activated as a part of the drill.

Turns out the exercise was held on a Tuesday evening- very convenient since the Sarge would be lit up for a regular net. First, you should know that we (amateur radio) are on the 'callout' list for such events...that's witness to amateur radio being an integral, accepted part of Ohio's response. Second, with the band conditions playing every part of 2020, we were unable to contact anyone on the PA HF 80-meter net. In fact, they were not on at all. So, we did grab the DMR radio, which has the PA statewide channel, and make a call for any station around Beaver County. Coming right back to us was the radio operator for that county who was involved in their drill! We were able to indicate Ohio EMA was active and involved, and he was able to tell us their level of operation. We entered the contact into WebEOC (the official EMA activity/incident log). That gets points from the FEMA evaluators.

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One of the radiological Analysts took the time to email a “thank you” for our participation. We will be involved on March 30 with the Davis-Besse exercises next year. So DMR is still active for us, and the occasion serves as a reminder that should something on a statewide level take place, we still plan on using the bridged system for broad situational awareness. This might be in addition to HF voice/OHDEN or in the case of a nasty weather system (which tends to obliterate 80 meters) might be our mainstay.

**\*\* You can view all of the SEC’s monthly reports on the website.. <http://arrl-ohio.org/SEC/default.html>**

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### ***From the Affiliated Club Coordinator***

***Tom Sly, WB8LCD - ACC***

[tomsly29@gmail.com](mailto:tomsly29@gmail.com)

I don’t want to get all sentimental and misty-eyed on you, but this is the “Thanksgiving” issue of the Section Journal.

Even before I became a Ham, Ham Radio had an impact on my life. I was fascinated by radio. I built crystal sets. I participated in Broadcast Band DX’ing. I was a short-wave listener. In late 1967, at age 14 I passed my Novice test and received the call-sign WN8AAB. Because of my family moving from Parkview (on the west side of Cleveland – near Hopkins airport) out to Aurora (Portage County) it took me awhile to get my first station put together and my first QSO happened in February 1968. Since then I have always been a Ham – and for all except a couple years out of that, an *active* Ham.



In those years I have been a ham, I have had the opportunity to experience many things that I would not have if I hadn’t been a ham. I am thankful for those experiences – because they have made me who I am today. They have had a profound impact on my life. In those years I have been a ham, I have had the opportunity to get to know hundreds of really fine people that I otherwise would have never crossed paths with. Many have been my best friends through the years. I have many friends from around the globe. I have many friends and acquaintances who are famous! I have many friends who are just good, everyday people, who I share a common interest with. I am thankful that I have had the opportunity to know all of you!

I’ve mentioned this before, and it bears repeating: one of the first people I ever got to know, who was a Ham, was Mr. Hillman (W8FZS – sk) who lived behind us in Parkview. When I got my Novice ticket, Mr. Hillman was one of the first people I gave the news to. He told me “you no longer have to call me Mr. Hillman. You call me Stan. *You are now one of us!*” That comment has stuck with me through all the years. As a 14-year old kid I can’t tell you how that made me feel. I was now a part of something! I’m Thankful that I still have that feeling about Ham Radio today. I’m a part of something that a pretty small percentage of our population shares. It deserves a special feeling, and we should all work hard to make sure that all new hams, young or old, are given that feeling too. It’s like being a member of a fraternity. It’s a common bond that brings us together despite any other differences we may have. You too are a part of this special fraternity, and it’s your (our) responsibility to make sure that newcomers to the hobby are welcomed and embraced as fellow fraternity members.

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November is also being celebrated as the 15<sup>th</sup> anniversary of PCARS. I'm proud to be a PCARS member, for a lot of good reasons. One of the most special reasons is that from our very first year we have supported a local charity – The Center of Hope – that provides meals and groceries to disadvantaged citizens of Portage county. Our very first year, when we decided that it would be a worthy cause to get behind, we raised \$350 plus a couple bags of canned food. We've continued supporting Center of Hope every year since then, and most years our contributions have grown. This year, we presented them

with a donation of \$10,210. Our cumulative total over the 15 years is over \$57,000! This is something we can (and will) promote in the local papers, and other media outlets, showing the community that Ham Radio is alive and doing good things beyond just our own self-interests. The people of Portage county will see that we are an integral part of our community. (Let me interject here the words of American writer and historian Studs Terkel: "It ain't bragging if it's true".) My real point here is that lots of clubs in the OH section do good things for their communities. We should all be proud of the contributions that Ham Radio, and Ham Radio Operators make in our society. But we also need to make those contributions known to the general public.

Does your club have an active Public Relations policy? As Ham Radio operators and club members, this is probably one of our weakest areas. We need to be more pro-active with promoting our hobby. This would include traditional media – newspapers, TV & Radio – and new media (aka "Social Media"). Used to be that having a Website was something hams excelled at, after all, we've got a lot of computer geeks in our ranks. How about a Facebook page?

Your PR efforts should be part of your club's agenda. Got an early part of the year License or Upgrade class? Put that on the calendar to make sure announcements go out. Have some members going to Hamvention? It's one of the biggest events in the world – that's newsworthy. Participate in Filed Day? Ohio State Parks on the Air? Put these on the PR calendar. Throughout the year does your club provide communications for "thons"? Immediately afterwards you need to get something out. Put it on your calendar as something that needs to be done. Got a member who participated in an actual "EmComm" event – can't really put it on the calendar, but you can write it up! Anytime you write a press release you want to give the details of what you are doing or have done. But you also want to have a short paragraph explaining what Amateur Radio is. Many people don't even know it exists and what it's all about. \*\*\*\*1

I'm going to just guess here, but I'm willing to bet that approximately 50% of all current licensees are not active in the hobby. I believe that there are a lot of people who had a license at one time but have let it lapse. These are people that we want to see our message that Ham Radio is alive and well! If they start seeing and hearing about it on a regular basis, they just might be motivated to check it out again. Good for the hobby, good for your club!

Most clubs have regular meetings. Doing something special? Send an invitation to the public in the form of a press release. The object is to become more familiar to the public. Once they see, on a repetitive basis that we are out there and doing things, their interest and curiosity just might get the best of them and they show up at a meeting wanting to know more about the hobby.

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Right now, we have an opportunity to reach out to young people that could change their lives for the better and bring more youth into the hobby. Our kids are not getting the educational opportunities they need to keep current and compete in the world. Schools are shut down, learning through zoom, or maybe not learning at all. This is an area where we can step in and make a difference. Most hams are pretty good at math and science. Most kids aren't getting this – especially in a “hands on” environment. Why not put together some small, local events, where kids could learn and have fun with science and math. This could be done. Maybe outside (even in the winter) or inside in small groups – wearing a mask and properly social distanced. Think in terms of your own kids and/or grandkids. Could you get them together with a couple of their friends in a small group? Reinforce what they are supposed to be learning in school, then add just a bit more to it. Kids like computers and kids like learning about space and space travel. Ham Radio is heavily involved with both. Let's come up with some ways that we can share our unique knowledge and skills to help keep our kids interested in learning, especially in math and science. \*\*\*\*2

I hope that all of you stay safe and happy through this coming holiday season. I hope that all of you enjoy the blessings of your family relationships, good health and good DX. There is a lot of talk about a world-wide “reset”. I think that if we make it an “intentional” effort, not something that just happens by accident, we can make Ham Radio one of the premier “social networking” hobbies again.

73,

Tom – WB8LCD

\*\*\*\*1 - *I would like to see how you would explain what Ham Radio is to someone who is unaware. I'm looking for a 3-6 sentence paragraph that hits most of the high points. Or, if you want to make the classic “Elevator Introduction”, a 1 to 2-minute script to do the same thing.*

\*\*\*\*2 - *How about some examples of short programs you could do along with a math or science review group that would add Ham Radio topics to the activity. As a starting point, check out all the material Anthony – K8ZT has available!*

Send me your suggestions – [wb8lcd@arrl.net](mailto:wb8lcd@arrl.net)

73, Tom WB8LCD

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***From the Public Information Coordinator***

***John Ross, KD8IDJ - PIC***

[john.ross3@worldnet.att.net](mailto:john.ross3@worldnet.att.net)



**FROM THE PIC**



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## 2021 OHIO SECTION NEWSLETTER CONTEST

The great Ohio Section Newsletter Contest for 2021 is ready to launch!

Beginning December 1<sup>st</sup> if you issue your club's January newsletter in December it will count for one of the two required entries for 2021. The rules are still same, and the deadline is June 30<sup>th</sup> midnight.

This year we went to an all-electronic judging system because of COVID 19 and, surprisingly, it worked very well. Depending on how the year and the world are doing come June 2021 we may need to use that system again.

Actually, the judges liked it a little better because they were able to retrieve and view the newsletters just as readers would. They offered a couple of suggestions:

1. If your newsletter is on your club's website, make sure access is easy and visible. A big easy to see "button" that goes directly to the newsletter would be the best. If readers have to hunt for the news...they may give up...not good!
2. Make sure the link to you your club's website is working...and works with all devices like tablets, cell phones as well as regular desktop computers.
3. Look at your newsletter's layout to make sure it's compatible with all of the different devices...columns flow, pages turn or scroll properly, and the type face is easy to read.
4. Consider, to some degree, what might be considered sensitive information. Don't include it...but remember if your club is a 501c(3) organization all information is considered "public"...don't try to hide anything!

How do you enter? Well, you can just email me your clubs' website link with the month of the newsletter you want to enter. You can also send me a printed copy if you like. I will scan it and make it available to the judges.

Here is my contact information:

EMAIL- [john.ross3@att.net](mailto:john.ross3@att.net)

Address: John Ross KD8IDJ

3860 Ritamarie Drive

Columbus, Ohio 43220

Also make sure you email our section Manager.

Our judges are back, and I know 2021 will another great year for our contest!



**CLEARLING OUT YOUR CHILDHOOD HOME...ham radio style**

If you ever had a chance to clear out or clean up your childhood home...you might be surprised what you might find...especially if you were an electronic "geek" and a ham radio operator.

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My parents' basement is a treasure trove of old memories, memorabilia and...junk!! Lots of good junk though. In my Dad's old workshop, I found old capacitors, big transformers, and instruction manuals. There was a manual for the Simpson analog voltmeter I used as a kid...model 240! I still have that meter and three other Simpson meters and now of all the proper operating procedures!!!

I also found old antenna parts, cable, soldering guns and a vintage Teletype machine! My collection is now up to five...as soon as I can sneak it the house! I actually found an old commercial FM antenna...the kind the old FM radio stations used. I think I can re-tune for six meters! Boxes of old telephones and two Western Electric switchboards round out my finds so far...and still more places to look.

I guess the point of all this is how lucky I was to be able to experiment, to be encouraged to enjoy my hobby while not blowing up or burning down the place! Amateur Radio has been along for the ride for the past 70 years or so and I'm glad it has. I have never met a ham who did not have a similar experience. Keep making the memories, keep keeping the junk and encourage new hams to dive in and immerse themselves in a great experience and hobby...Amateur Radio!



### **THE LATEST ON CONVID 19...FOR HAM RADIO**

By the time you read this the news will have broken about a state-wide mask order to help stop the spread of COVID 19. In some counties...like Franklin...residents have been asked to stay at home for 28 days unless it's critical.

We have been through this "hunker down" procedure before...and as ham radio operators it means another chance to pick up the microphone and start calling CQ.

We are fortunate enough to have the ability to communicate all over the world from our homes and we need to make good use of it. Not only will it keep us from getting bored...it will keep us safe.

Have a great THANKSGIVING...burn up the air....not the turkey!

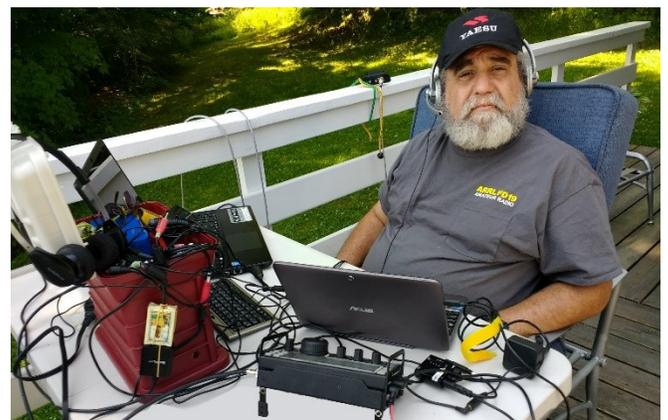
73, John, KD8IDJ

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***From the Section Youth Coordinator***  
***Anthony Luscre, K8ZT - SYC***  
[k8zt@arrl.net](mailto:k8zt@arrl.net)

### ***Let's Talk***

Although it is great to have the monthly Ohio Section Journal as a way to communicate with hams around the state of Ohio (and beyond), it is mostly a one-way conversation, with me writing and you reading. I think it is time to expand it to a two-way conversation.



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Over the next few months, many radio clubs will continue to have online meetings. During this time, I would like to suggest your club have me as a speaker for one of your club programs. I would love to present my slide show “Youth In Amateur Radio- Information & Resources for Clubs or Individuals

Interested in Working with Youth In Amateur Radio”. You can preview the full slideshow here- [tiny.cc/yiar](https://tiny.cc/yiar). Don't worry when you see how long this slideshow is; I have a shortened version I will use for your club's presentation! In addition to or in place of the presentation, I would be happy to hold a question and answer session with your club about Youth in Amateur Radio.



I know you are probably thinking there are major limitations on any type of activity involving youth during our current pandemic situation. I agree opportunities are definitely hampered by COVID, but this is actually a great time for planning future youth-related activities and strategies. It is also a great time to initiate online activities that can include youth. Finally, it is a great time for me to get feedback from across the state to help me better function as Section Youth Coordinator.

If you are not interested in the “Youth in Amateur Radio” presentation but would still be interested in a program, I have many other sessions I would be happy to do for your club:

- [FT8 & FT4- Digital Soundcard Modes](#)
- [Introduction to Amateur Radio Contesting](#)
- [State QSO Party Challenge](#)
- [QSLing in Online World](#)
- [Having Fun with Morse Code](#)
- [Top Secret- Techniques to work DXCC and WAS](#)
- [Software & Web Resources for Contesting](#)
- [Field Day in Social Distancing](#)

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### *Elmering Days*

The [Cuyahoga Falls ARC](#) will be starting a new activity in December 2020-- “**Elmering Days.**” Elmering Days are online sessions designed to help hams interested in a new aspect of Amateur Radio operating and activities. Sessions will focus on one activity or a group of related activities. Sessions are not just passive presentations; instead, participants will be doing hands-on activities such as installing and configuring software, programming a radio, building an antenna, etc.



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Our first Elmering Day will be **Sunday, Dec 6th, at 4:30 PM** (hopefully after the Brown's game has completed). We are setting aside 3 hours to cover the topic, help everyone and answer questions thoroughly. The topic will be **N1MM+ Contest Logging Software**.

N1MM+ is a free program that runs on Windows computers (Mac and Linux can be supported if running a Windows emulator, such as Wine-[link](#)). Planned activities for the day include:



- Installing N1MM
- Configuring N1MM
  - Setting up your station information
  - Choosing N1MM sub-windows to View
  - Connecting to your radio
  - Connecting to accessories
- Setting up the software for a new contest
  - Creating new Databases
  - Creating new Logs
  - Configure contest exchange
  - Configure Function Keys
- Configure Helpful Features
  - Setup & configure Bandmap
  - Setup & configure Telnet
  - Super Partial Check window
  - Contest History Text Files
  - Multiplier windows
- Learning Your Way Around
  - Contact Entry Window
  - The Log Window
  - Logging Essentials
  - Editing Contacts
  - Bandmap Usage
- Voice/CW Exchange Keying
  - Interface N1MM to send CW from keyboard & macros
  - Setup Voice Memory keying
    - Recording Voice responses
  - Adjusting Keying Macros
- Using N1MM with WSJT-X for Digital Contesting
- A Simulated On-Air Mini-Contest to practice everything
- Post Contest Activities
  - Creating Cabrillo Log to send to contest sponsors
  - Export Contacts (.ADIF) to Import into your...
    - Station Log
    - LoTW
    - eQSL

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- Advanced features
  - Fonts & Colors
  - Spectrum Map
  - Statistics & Log Analysis
- Questions & Answers

Hopefully, the session will have something for everyone. This session is open to both members and non-members of [Cuyahoga Falls ARC](#). We encourage both newbies and even seasoned N1MM+ users to participate. If you are interested in participating, please register at this [link](#).

73, Anthony K8ZT

*From the Section Traffic Manager*  
 David Maynard, WA3EZN – STM  
[wa3ezn@att.net](mailto:wa3ezn@att.net)



With the cancellation of the Mansfield Midwinter Hamfest the Ohio Single Sideband Net is once again going to have to find a way to hold their next meeting. Keep tuned in and checking into the OSSBN for discussion and updates on the next meeting.

**OHIO SINGLE SIDEBAND NET**

"Specializing in the first and last mile of NTS delivery in Ohio."

<b>Morning session</b>	<b>10:30 AM</b>	<b>3972.5 KHz</b>	<b>every day</b>
<b>Afternoon session</b>	<b>4:15 PM</b>	<b>3972.5 KHz</b>	<b>every day</b>
<b>Evening session</b>	<b>6:45 PM</b>	<b>3972.5 KHz</b>	<b>every day</b>

**OHIO HF CW TRAFFIC NETS**

<b>HF CW NETS</b>	<b>NET TIMES</b>	<b>FREQUENCY</b>	<b>NET MANAGERS</b>
<b>Buckeye Early</b>	<b>6:45 PM</b>	<b>3.580</b>	<b>WB8YLO</b>
<b>Buckeye Late</b>	<b>10:00 PM</b>	<b>3.590</b>	<b>WB9LBI</b>
<b>Ohio Slow Net</b>	<b>6:00 PM</b>	<b>3.53535</b>	<b>W8MAL</b>

All net frequencies plus or minus QRM. .

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REMINDER, If you start now you can be ready for Straight Key Night in January. You could also be ready for that next CW DX contest.

### OHIO LOCAL VHF TRAFFIC NETS

VHF NETS	NET TIMES	FREQUENCY	NET MANAGERS
BRTN	9:30 PM DAILY	145.230 PL 110.9	W8DJG
COTN	7:15 PM DAILY	146.970	KD8TTE
MVTN	7:00 PM Mon	146.640	KC8HTP
NWOHARES	6:30 PM DAILY	147.375	N8TNV
TCTTN	9 PM Sun, Tues, Fri	146.94	WB8YYS
TATN	8:00 PM DAILY	146.670 PL123	WG8Z

These VHF net times and frequencies are those that have been reported to me by the net managers.

While on the subject of nets the West Virginia Mid-Day Net meets daily at 11:45 AM Local Time 7.235 or 3.810 MHz. And the West Virginia Fone Net meets daily at 6:00 PM Local Time on 3.810 MHz. I mention this as a possible resource for them when there is no West Virginia representative on 8RN to take their traffic. Also, as a reminder there is no digital station for West Virginia traffic and seldom is there a representative on the Interstate Sideband Net ISBN.

### *And now more on the business side of traffic handling.*

#### **Public Service Honor Roll**

Each month in *QST*'s Field Organization Reports column, the Public Service Honor Roll (PSHR) recognizes the efforts of Amateur Radio operators who are active in many aspects of public service. This includes net operations, traffic handling, emergency operations and public service communication support. There are chances that you're already involved with some aspect of Amateur Radio that would apply to the Public Service Honor Roll (PSHR).

Take a look at these categories and descriptions to see where your Amateur Radio activities fit in. At the end of each calendar month, just add up your qualifying points. If it reaches the 70-point level (or more), you've qualified for the Public Service Honor Roll! Report the good news with your call sign and monthly PSHR point total to your ARRL Section Manager or Section Traffic Manager. The ARRL section leaders, in turn, would forward the report onto ARRL Headquarters so that Headquarters staff may prepare these for listing in the Field Organization Reports segment of *QST*. You can send your report due no later than the 5th of each month via a Radiogram through any of the Traffic Nets listed above, or you can use the on-line reporting form..

<http://arrl-ohio.org/stm/fsd-210.html>

This listing is to recognize radio amateurs whose public service performance during the month qualifies them for **70** or more total points in the following 6 categories (as reported to their Section Managers). Please note the maximum points for each category:

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- 1.) Participating in a public service net, using any mode. --1 point per net session; **maximum 40**. HF like OSSBN, OSN or Buckeye nets. Include one point for each net you attend including each VHF Amateur radio net like BRTN or COTN etc.... and note the maximum allowed.
- 2.) Handling formal messages (radiograms) via any mode. --1 point for each message handled by amateur radio; **maximum 40**.  
  
1 point for each of the following:
  - Each message you get from third party (not yourself) and send by amateur radio.
  - Each message you receive via amateur radio and relaying or delivering.
  - Each message you deliver to the message recipient
- 3.) Serving in an ARRL-sponsored volunteer position: ARRL Field Organization appointee or Section Manager, NTS Net Manager, TCC Director, TCC member, NTS official or appointee above the Section level. -- 10 points for each position; **maximum 30**.
- 4.) Participation in scheduled, short-term public service events such as walk-a-thons, bike-a-thons, parades, simulated emergency tests and related practice events. This includes off-the-air meetings and coordination efforts with related emergency groups and served agencies. - **5 points per hour** (or any portion thereof) of time spent in either coordinating and/or operating in the public service event; **no limit**.
- 5.) Participation in an unplanned emergency response when the Amateur Radio operator is on the scene. This also includes unplanned incident requests by public or served agencies for Amateur Radio participation. - **5 points per hour** (or any portion thereof) of time spent directly involved in the emergency operation; **no limit**.
- 6.) Providing and maintaining a) an automated digital system that handles ARRL radiogram-formatted messages b) a Webpage or e-mail list server oriented toward Amateur Radio public service -- **10 points per item**. This includes websites of general amateur radio interest, websites containing information on getting a license, where to find a test session etc.

You can find more information about the Public Service Honor Roll at:  
<http://www.arrl.org/public-service-honor-roll> or <http://arrl-ohio.org/stm/fsd-210.html>

After preparing your PSHR report don't forget to send you traffic count to the traffic manager WA3EZN. Unlike the PSHR report there is no limit on the number of points you claim for this activity. Your traffic report should be a simple three-word message

Let us not forget that amateur radio got its start as a public service. Amateur radio exists today because it is a public service. "An amateur trains until he gets it right; a professional trains until he cannot get it wrong!"



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Until next time remember to obey the state 10PM curfew, don't assemble in large groups, wear you masks and try to have a good Thanksgiving.

**David, WA3EZN**  
Ohio Section Traffic Manager

You can view the STM's monthly report on the website.. <http://arrrl-ohio.org/stm/stm.html>

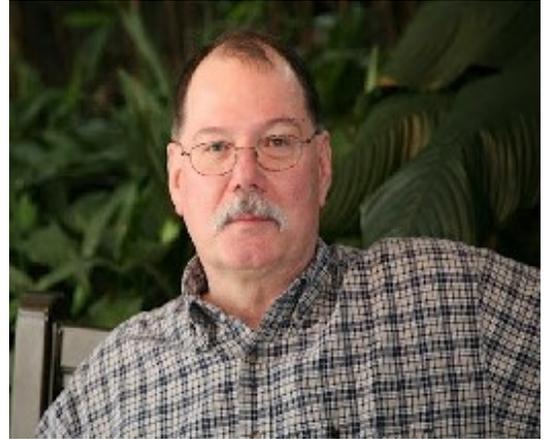
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## ***ARES Training Update***

***Jim Yoder, W8ERW – ARES Data Manager***  
[w8erw@arrrl.net](mailto:w8erw@arrrl.net)

### ***ARES Training Update***

“Cause and Effect”, an interesting concept that can and does become relevant especially when you innocently do something you should have either thought out more completely, forgot the details or avoided altogether. No doubt we have all been there. I Know I have. One Saturday morning with coffee in hand, I was ready to jump into a regular weekly session on 40 meters with several of my Amateur friends.



The TS-530SP was lit up and I made my first transmission. No response. After a few more attempts, I checked the usual, antenna connected and on the proper band. The transmit relay was clicking. Oh yea, it works much better with the heater switch operated. Fess up... Have you not done the same? Those 6146 finals surely were groaning.

My first vehicle soon after I began my career at Ohio Bell was a 1967 Ford Econoline Van. It was plain although it had doors on both sides and in the rear with an automatic transmission. When you opened up all those doors and the two for the driver and passenger side, there wasn't much left but light. I had a lot of fun in this van. It was quite handy and back in the day, it was the ride of choice for us “Hippie Wannabe's”. Uncle Sam then decided it was my turn to serve and I found myself soon out of Army basic training and stationed at Fort Ritchie, Md. I took the van and arrived early in June and began my assignment doing similar work as I had done with Bell. I was quite fortunate. The trip back to Fremont was about 400 Miles and with my schedule and a three-day pass or leave, I was able to return home often. One of those trips really got dicey after I had taken the cover off the instrument panel to clean the glass and wipe the dust out of the gauges. I should have paid more attention and been more careful with that chore. A day or so later, I left the post for Fremont. It was winter and it was very cold. This was a cargo van with nothing but bare metal sides behind the driver seat. The heater was on full blast the entire trip and my feet felt like they were hanging outside. I made it to I believe what was then exit 8 on the Ohio turnpike. The engine began to sputter and died.

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Now what, fuel line frozen? I couldn't be out of gas, the gauge said I still had a quarter of a tank. It was some kind of luck that this happened right at the ramp into a service plaza. Somehow my attention was drawn to the fuel gauge and I noticed the pointer was bent. Yes indeed, bent when I was cleaning it and a quarter of a tank towards full. I was out of gas. I had about \$11 in my pocket which was just enough to buy a gas can and a gallon of gas which got me into the plaza where I filled up using a credit card. Now I was totally frozen after walking to the plaza and back and pouring that gallon of gas into the van. Caused by my haste, the effect was running out of gas when it was 5 degrees above zero on the turnpike.

Not being satisfied, sometime later I decided the idiot light that indicated the battery was getting a charge needed changed. It was pretty dim and silvered like an automotive type lamp can become. Again, I should have left well enough alone. I got a generic 12V bulb of the right size and replaced it. Much improved until a day or so later when I took off for Ohio again. I soon began to smell the strong odor of Sulphur. What smells like Sulphur? A battery being over charged in the battery box under the driver seat does. There was little I could do but wait until I got home to Fremont and go to the Ford garage and inquire. Yes, that bulb needed to be one especially calibrated to regulate the charge. They had one and laughed with me at my ignorant mistake. But the correct bulb was also nice and clear unlike the original and worked as it should too. That episode also cost me a new battery not long after as well.

I have learned a few things over time, and I take a little more time to learn the details. Well mostly I do. I trust this all gave you a chuckle and perhaps a reminder of a thing or two you might have done. The thought of doing something like this with one of the newer vehicles now with all the computerized function is a bit scary. I do have a few more of these misadventures that I just may share.

ARES training numbers have slowed a bit during October. The database contains 1,867 members. Of that number, 1,744 are active with an ARES group. 1,465 have signed up with ARES Connect. 939 are at Level 1, 728 are at Level 2 and 200 are at Level 3.

There is also a handful that have become inactive and with sadness, I report we have 46 Silent Keys. In total there are 9,707 course certificates on file.

As you can see we have many who although actively supporting ARES, have not yet signed up with ARES Connect. There are also many who have not yet taken the FEMA NIMS courses and advanced to Level 2. I think we can be proud of the numbers. The amount of effort realized in our Ohio Section is remarkable. We do however have some room to grow in both membership and training. Let's see if we can again show the world our Ohio Section leads the nation in ARES training and ARES Connect registrations.

Thank you again for the amazing effort and please let me know if I can be of any help. I wish you all well, stay safe but have fun.

73,

**Jim W8ERW**  
[w8erw@arrl.net](mailto:w8erw@arrl.net)

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## *From the Assistant Section Manager*

*John Perone, W8RXX – ASM*

[w8rxx@arrl.net](mailto:w8rxx@arrl.net)

Some Tips for new hams on VHF-UHF Operation  
(The old timers already know all this)



Be sure the frequency is "clear" before you transmit.

- Recommendation: when you select a repeater or a simplex frequency, listen for at least ten seconds before transmitting

Q-signals have a very valuable place in our hobby; however, they are not normally used on F.M. voice channels.

- Recommendation: use Q-signals sparingly.

Calling another amateur, using their call sign and yours, and that person does not answer, it is not necessary to advise "clear." You have already identified your station.

- Recommendation: If you attempt to contact someone and there is no answer, you can notify others that you are finished by saying, "KE7xxx clear," or "no contact, this is KE7xxx clear W7ABC repeater." This allows someone who may have been standing by to go ahead and make their call.

Using the term "for I.D." is not necessary. There is no reason to transmit your call sign other than to identify your station. Identification is required every 10 minutes during a conversation and at the end of a conversation or series of communications.

- Recommendation: while talking, say your call sign once every ten minutes. Don't say "For I.D., this is KD8xxx." or "For license preservation purposes, this is KD8xxx" more than once or twice per year.
- Contrasting Recommendation: if you hear someone say "for I.D.," they may be trying to gently remind you that 10 minutes have passed and you should identify your station. Take the hint and say your call sign the next time it is your turn to talk.

Long ago, the rules required mobile hams to say where they were operating, giving both the city and the call sign area. You may hear some saying, "...mobile 6" or "...mobile 3" after their call sign. This means that they are operating "mobile, in call sign area 6" or "mobile, in call sign area 3." This is no longer required.

- Recommendation: it's not necessary, but it's not incorrect.

Certain types of jargon are recognizable as being "CB" terms. "What is your personal?" when you mean "what is your name?" "I'm on the side," when you mean you are "listening" or "monitoring." Although there is nothing "wrong" with CB, these terms are neither generally used on Amateur Radio frequencies.

- Recommendation: avoid CB-style jargon and terms. Generally speaking, plain English is better: "my name is xxxx, what is yours?"

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In this day of scanners, dual, triple and quadruple-band radios and multiple radios in the car or shack, you could miss making a contact because your radio is scanning. If you know that the person you are calling is sitting next to the radio waiting for you, you can make your call very simple: say their call, then your own. However, if your friend listens to several radios, it is possible that they may miss your call. You should call twice: say the other station's call twice, then your own. Pause for a half-minute and try again. It may also be a good idea to try again in 4 or 5 minutes, in case they were on a different frequency.

- Recommendation: call twice.

Sometimes while talking it is necessary to ask the other station to "stand by." This may be the result of a driver needing immediate attention, a spouse or child walking into the "shack", or placing an order at a drive-up window, etc. The proper response, when requested to "stand by," is silence. Generally, it will only take a moment and the other station will be back.

- If you feel it necessary to say something, then say, "[call sign] standing by."

One of the most important things for new hams to learn is to "K-H-T." That is "Key, Hesitate, Talk." You must learn to push the microphone button, pause slightly, and then begin speaking. If you push the button and speak simultaneously, the first word or syllable may be cut off.

This does not facilitate effective communications.

- Learn to do it correctly from the first day and soon you do it automatically.

Try to keep your language polite. Generally, other hams and their family members do not want to hear conversations that are not of the "G-rated" variety.

## 73, John W8RXX

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### *National News*

*(from arrl and other sources)*

### ***ARRL Announces Director, Vice Director Election Results***

On November 20, ballots were counted in four contested elections in three ARRL Divisions. The results of the votes are as follows:

#### **DAKOTA DIVISION DIRECTOR**

Vernon "Bill" Lippert, AC0W – 982

Matt Holden, K0BBC – 435

Mr. Lippert was declared elected.

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## **GREAT LAKES DIVISION DIRECTOR**

Dale Williams, WA8EFK – 1840

Michael Kalter, W8CI – 1398

Mr. Williams was declared elected.

## **GREAT LAKES DIVISION VICE DIRECTOR**

Scott Yonally, N8SY – 1670

Jim Hessler, K8JH – 975

Frank Piper, KI8GW – 611

Mr. Yonally was declared elected

## **MIDWEST DIVISION VICE DIRECTOR**

Dave Propper, K2DP – 1164

Lloyd Colston, KC5FM – 623

Mr. Propper was declared elected.

All newly elected officials will take office at noon on January 1, 2021.

#####

## ***ARRL Seeks Waiver of Proposed FCC Amateur Application Fees***

ARRL has urged the FCC to waive its proposed \$50 amateur radio application fee. The Commission proposal was made last month in a *Notice of Proposed Rulemaking* ([NPRM](#)) in MD 20-270. The proposal already has drawn more than 3,200 individual comments overwhelmingly opposed to the plan. The fees, directed by Congress and imposed on all FCC-regulated services, are to recover the FCC's costs of handling and processing applications.

“Amateur radio applications were not listed when the Congress adopted its 1985 fee schedule for applications, and therefore amateur license applications were excluded from the collection of fees,” ARRL said on November 16 in its [formal comments](#) on the proposal. “Similarly, a decade later when regulatory fees were authorized, the Amateur Service was excluded, except for the costs associated with issuing vanity call signs.” The new statutory provisions are similar. Amateur radio license applications are not addressed in the application fees section and explicitly excluded from regulatory fees,” ARRL said, and there is “no evidence of any intent by Congress to change the exempt status of amateur applications and instead subject them to new fees.”

ARRL argued that the FCC has explicit authority to waive the fees if it would be in the public interest, and should do so for the Amateur Radio Service. Unlike other FCC services, the Amateur Radio Service is all volunteer and largely self-governing, with examination preparation, administration, and grading handled by volunteers, who submit licensing paperwork to the FCC, ARRL pointed out.

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“Increasingly, the required information is uploaded to the Commission’s database, further freeing personnel from licensing paperwork as well as [from] day-to-day examination processes,” ARRL said. “The addition of an application fee will greatly increase the complexity and requirements for volunteer examiners.”

The Communications Act, ARRL noted, also permits the FCC to accept the volunteer services of individual radio amateurs and organizations in monitoring for rules violations. In 2019, ARRL and the FCC signed a memorandum of understanding to renew and enhance the ARRL’s Volunteer Monitor program, relieving the Commission of significant time-consuming aspects of enforcement.

These volunteer services lessen the regulatory burden — including the application burden — on the Commission’s resources and budget in ways that licensees in other services do not, ARRL said.

Amateur radio’s role in providing emergency and disaster communication, education, and other volunteer services also justifies exempting radio amateurs from FCC application fees. For example, ARRL noted, last year more than 31,000 participated as members of the ARRL Amateur Radio Emergency Service (ARES), and local ARES teams reported taking part in more than 37,000 events, donating nearly 573,000 volunteer hours, providing a total value of more than \$14.5 million.

Amateur radio also has motivated many students to develop critical science, technology, engineering, and mathematics (STEM) skills. ARRL noted that the Amateur Radio Service contributes to the advancement of the radio art, advances skills in communication and technology, and expands the existing reservoir of trained operators, technicians, and electronics experts — all expressed bases and purposes of the Amateur Radio Service.

“Accomplishing these purposes entails working with young people, many of whom may have difficulty paying the proposed application fees of \$50, \$100, or \$150,” ARRL said. “The \$150 fee would be the cost of passing the examinations for the three amateur license levels in three examination sessions,” ARRL said. “Such multiple application fees to upgrade would dampen the incentive to study and demonstrate the greater proficiency needed to pass the examinations for the higher amateur classes.”

ARRL concluded that the FCC should exercise its authority to exempt amateur radio from application fees generally. If the FCC cannot see its way clear to waive fees for all amateur radio license applications, the fees should be waived for applicants age 26 years and younger. Such individuals, ARRL contended, have the most to contribute to the future of radio technology and other STEM-related activities and are the most likely to find the proposed application fees burdensome.

#####

***Dear Friends Of Universal Radio,***

Time waits for no one, and that includes Barbara and myself. We have decided to retire and our current location in Worthington will close on November 30, 2020. Even though the store is closing we will fulfill all existing customer orders and have a large amount of inventory to close-out.



The Universal Radio website will be maintained for the foreseeable future to sell this remaining stock, publications and some select products. Unfortunately, the lack of a store front showroom will preclude us from carrying some manufacturers' products.

I am very fortunate to have been in the radio business for over 50 years, 13 at Radio Shack and 37 at Universal Radio. We have met many wonderful people along the journey who have supported me personally as well as Universal Radio. It has been a privilege to have a continuous career in the fascinating field of radio since 1969.

Please accept our sincere "Thank You" for your support of Universal Radio for these many years, and for the months to come.

Our new address for correspondence and mail order is below. This is not a store front.

Universal Radio Inc.  
752 N. State St. Unit 222  
Westerville, OH 43082  
Phone: 614 866-4267

Thank you.

73, Fred Osterman N8EKU and Barbara Osterman KC8VWI

####

### ***Santa Net Coming Soon***



For the 15th consecutive year, The 3916 Nets will be presenting The Santa Net on 3.916 MHz. Good girls and boys can talk to Santa Claus, via amateur radio, nightly at **7:15 PM (Central) starting Friday, November 27, 2020**. The Santa Net will run nightly at 7:15 PM Central through Christmas Eve, December 24, 2020.

Pete Thomson (KE5GGY), of The 3916 Nets, commented on The 3916 Santa Net. He said, "Christmastime and Santa Net are the best time of the year on 3916. We enjoy helping young people and their families have a shared Christmas experience that they'll always remember. And we get to introduce young

people to the magic of amateur radio."

Youngsters can talk to "Santa at The North Pole" via strategically placed operators who relay the voice of Santa. Thomson said that The Santa Net is a team effort that involves the efforts of a number of 3916 Net members. He said, "In our first year, we connected 10 kids to Santa on Ham Radio and it's grown steadily since. This year we should connect over 800 children with Santa Claus."

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Prior to each night's Santa Net, pre-net check-ins can be made at [www.cqsanta.com) Third party rules and regulations apply.

The Santa Nets are presented annually by The 3916 Nets. The Rag Chew Crew, The Tailgaters and The Freewheelers are all amateur radio nets that meet on 3.916 MHz nightly. For more information on The 3916 Nets, go to: <http://www.3916nets.com> For more information on The Santa Net, email KE5GGY at Gmail dot com.

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### ***NORAD Santa Tracker***

Yes, NORAD is going to do the Santa Tacker once again this year. NORAD will start there famous tracking of that wild and crazy guy for his travels around the world starting on **December 1<sup>st</sup>**...

Here's a link. <https://www.noradsanta.org/>

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***THE GATHERING*** - is our theme for **Hamvention 2021**. Do you get it?

We have spent the better part of a year without being able to get together with our friends from around the world. By the time we gather at Hamvention in May, the pandemic will be in sufficient control for us to safely gather together in 10s of thousands – face to face!

With medical advances, especially in safe vaccine development, we will first be able to gather together for Gatherings of our own families. Soon Ham Radio Clubs will be able to Gather together in person. Finally, state and national leaders will open the world back up for large Gatherings like Hamvention.



Hamvention 2021 will be a Gathering that will emotionally affect us – a gathering of victory over the COVID pandemic. It will be a Gathering full of joy to remember for the rest of our lives.

The Logo of Hamvention 2021 expresses all the excitement about Gathering together at Hamvention. The location of Hamvention is shown by the red pin in Ohio. The airplane crossing the globe reminds us of the many international hams who will be able to join us in Xenia. And the simple words THE GATHERING are there to help us anticipate our getting together to celebrate Amateur Radio and our ability to be together once again.

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## ***SKYWARN Recognition Day 2020 - Making Adjustments for COVID-19***

Each year, SKYWARN Recognition Day is the day where radio amateurs celebrate the long relationship between the amateur radio community and the National Weather Service SKYWARN™ program. The purpose of the event is to recognize amateur radio operators for the vital public service they perform during times of severe weather and to strengthen the bond between radio amateurs and their local National Weather Service office.



The event is co-sponsored by ARRL and the National Weather Service. Normally radio amateurs participate from home stations and from stations at National Weather Service (NWS) forecast offices, and the goal is to make contact with as many NWS forecast offices as possible during the event. However, this year, due to COVID-19 restrictions, participation from NWS forecast offices will be minimal at best. So, the focus will shift to contacting as many SKYWARN™ trained spotters as possible during the event.

New for this year, SKYWARN™ Recognition Day will be open to all SKYWARN Spotters. Additionally, a [SKYWARN™ Recognition Day Facebook page has been created](#) and will host a variety of live and recorded segments throughout the day. All SKYWARN™ Spotters who wish to participate may sign up for a SKYWARN™ Recognition Day number by completing the form found on the SKYWARN™ Recognition Day 2020 website.

During the event, amateur radio operators are encouraged to exchange their name, location, SRD number, and current weather conditions with other participating stations. See the event website for the full operating guidelines. Additionally, all SKYWARN™ Spotters will be encouraged to participate by sending weather reports, images and attending various live stream events via social media.

**SKYWARN™ Recognition Day 2020 will be held from 0000 UTC to 2400 UTC December 5.** To learn more, [visit the SRD website](#).

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## ***Be Red Cross Ready Presentations – December 2020***

*(Northern Ohio Region)*

Hey Gang,

Here's some really great and **FREE** Red Cross classes that you can take on-line in December.

**Be Red Cross Ready: General Preparedness & Home Fire Safety**

Event address for attendees: [Fire 121](#)

Date and time: **Tuesday, December 1, 2020 3:00 pm** Eastern Standard Time



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Description:

The Be Red Cross Ready: General Preparedness will share suggestions on how you and your family can be better prepared for all types of emergencies. We will also cover Fire Safety preparedness information and share information on how home fires happen and steps you can take to avoid fires in your home.

Event number: **172 370 1880**

Event password: **Prepare20**

**Be Red Cross Ready: General Preparedness & Winter Safety**

Event address for attendees: [Winter 122](#)

Date and time: **Wednesday, December 2, 2020 10:00 am** Eastern Standard

Description:

The Be Red Cross Ready: General Preparedness will share suggestions on how you and your family can be better prepared for all types of emergencies. We will also cover Winter safety preparedness for you and your family to understand techniques to deal with winter storms and how to avoid being a victim when winter storms happen.

Event number: **172 599 3378**

Event password: **Prepare20**

**Be Red Cross Ready: Winter Pet Safety**

Event address for attendees: [Winter 123](#)

Date and time: **Thursday, December 3, 2020 10:00 am** Eastern Standard Time

Description:

The Be Red Cross Ready: The American Red Cross Winter Pet Safety presentation will help remind dog and cat owners of hazards which could present themselves to their pets. The presentation will provide emergency care tips until veterinary assistance is available. Owners also learn the healthy signs of a dog or cat so that they can recognize health problems early and precautions we need to take to keep out dogs & cats safe during the winter.

Event number: **172 483 2481**

Event password: **Prepare20**

**Be Red Cross Ready: Holiday Home Safety**

Event address for attendees: [Holiday 128](#)

Date and time: **Tuesday, December 8, 2020 10:00 am** Eastern Standard Time

Description:

The Be Red Cross Ready: Holiday Preparedness will present important information on how your family can avoid mishaps during the holiday season and discuss General Preparedness suggestions on how you and your family can be better prepared for all types of emergencies.

Event number: **172 665 6315**

Event password: **Prepare20**

**Be Red Cross Ready: Holiday Gatherings & Covid**

Event address for attendees: [Holiday 129](#)

Date and time: **Wednesday, December 9, 2020 3:00 pm** Eastern Standard Time

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Description:

The Be Red Cross Ready: Holiday Gathering & Covid will discuss how the covid virus is still very around us and the proactive actions you can take for your family during gatherings during the holiday season to keep them safe.

Event number: 172 743 5795

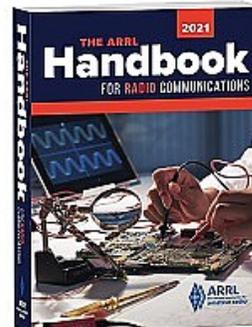
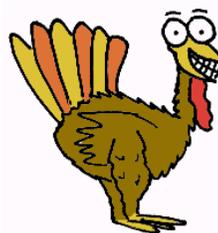
Event password: Prepare20

### Thanksgiving Handbook Give Away

Hey Gang,

Have you registered for the “Handbook Giveaway” drawing yet? If you haven’t, go to:

<http://arrl-ohio.org/handbook-thanksgiving.html> and get yourself registered.



Hey.. We’re gonna’ have some extra fun this month. If you register before November 26th (Thanksgiving) you’ll be eligible for a special drawing on Thanksgiving morning. Yup.. I’m going to give away an additional Handbook just to make someone’s Thanksgiving really Thankful!! Will it be you? Who knows!! One thing is for sure, if you don’t register, you can’t win!

And.... This month, if you register early, before Thanksgiving, you’ll have 2 changes at winning a book. We won’t dump the entries from the Thanksgiving drawing. We’ll keep them and continue to take registrations until the end of the month! This gives you 2 changes at winning!!

What’s the catch? I want to get everyone checking in to the Ohio Section website as often as possible, and in order to register each month, you have to visit the website often! There’s nothing else to it!!



Many of you ask me just how do I know when the drawing is on? Well, that’s easy all you need to do is check in on the Ohio Section Website on a regular basis and watch for the big **RED** Arrow that will appear on the left side of the page. This is the sign that the drawing is on and you need to get registered. So, keep a sharp eye out on the website and check in often! <http://arrl-ohio.org>

### Club Corner

This is YOUR corner of the newsletter. Send me what your club is doing and I’ll make sure that it gets in. Got a special event or club project that you want everyone to know about? Send it to me!. Need help with a project? Send it to me.

Let me know what you club is up to. Are you going to have a special guest at your meeting or are you having a special anniversary? Just sent it to: [n8sy@n8sy.com](mailto:n8sy@n8sy.com)



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## Online General License Course

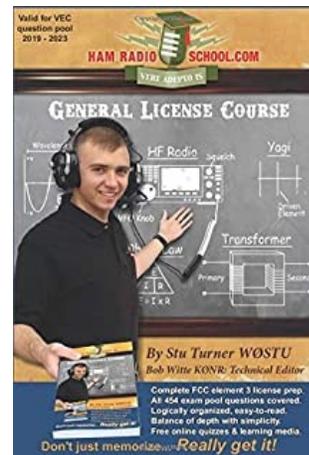
The Cuyahoga Falls Amateur Radio Club is offering an online General Licensing Course starting 10 January 2021.

There is no fee, but the students are responsible for purchasing a copy of Ham Radio School's General License Course book.

The six consecutive Sunday classes will start at 1:30 PM and go to 3:30 PM.

Most sessions will be followed by a demonstration of amateur radio activities. To register, go to <https://cfarc-edu.org/course/>.

For more details contact [education@cfarc.org](mailto:education@cfarc.org).



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## Paulding County Ohio Amateur Radio Club Has a New Communications Trailer

(from Fred Pieper, N8OXQ)

Our trailer is a 32-foot Jayco Eagle that was DONATED to the club. *The couple wishes to remain anonymous.*

The "radio room" was the master bedroom. It has taken us a couple years to get it to this stage. During the process we received a couple grants from WalMart and a couple from our local rural electric company (Paulding Putnam Electric).

One of the neat features is the fold up roof mounted antenna rack. No one has to get on the roof or climb a ladder to mount antennas every time we go out. Just pull a rope and all nine antennas rotate up or down!

As you can see by the picture to the right, we have a fully equipped operating position all ready to go, including a MARCS radio.





I approached a local plastic file manufacturer that runs a digester and asked if they would install us a power panel. They were very glad to do it. The digester makes its own AC power and helps run the plant. If the grid ever goes down and emergency communications are needed, we can pull the trailer out there and operate for weeks without the need for a portable generator.

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### ***Highland ARA Repeater Work***

Yesterday afternoon, KD8VUY and K8TDA swapped out the backup power system batteries for the 147.21 Hillsboro repeater with brand new deep cycle marine ones. The old batteries were at least 10 years old and showing evidence of failure. Now should the usual winter power outages hit our area, at least the repeater should keep on ticking as if nothing happened.

This brings to mind that each of us should be prepared for those snow, wind and ice conditions that seem to hit us each winter. Plus, if you have an HT, make sure it is charged and/or you have spare batteries.



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### ***DX This Week***

*(from Bill, AJ8B)*

***DX This Week – K9LA Monthly  
Bill AJ8B (aj8b@arrl.net, @AJ8B, or www.aj8b.com)  
CWOPs Member #1567***

I have a lot of information to share this week. First is the regular run down of spots “seen” in the Midwest. Secondly, there is some Sad News from Belgium. The main topic comes next. Carl, K9LA, has an excellent monthly article entitled “Late Afternoon Openings in the Fall Months to Scandinavian Countries on 15m and 10m.” Next is a new feature that I would like your feedback on. 160M, or “Top Band”, has always been a mystery to me.



[TOP^](#)

I am going to make a serious run at getting some entities in to the Logbook this winter. Between now and mid-April, I will give you weekly updates on my success (or lack thereof). To ensure that there is some real benefit to this feature, I have asked two 160M DXCC hams to provide weekly insights and advice. Dave, K8DV, and Chuck, K8CR, will be coaching us up each week on the How and When of working entities on 160M. I really am looking forward to that!

W8GEX, Joe, provides the latest tidbits on 60M. Next is a DX update from the guru, W3UR – Bernie and then we wrap things up with the Contest Corner.  
Enjoy!

The Midwest DX Cluster spots that were posted last week included Andorra, Asiatic Turkey, Austria, Belgium, Bulgaria, Chile, Crete, Croatia, Cuba, Czech Republic, Dodecanese, East Malaysia, England, Estonia, European Russia, Faroe Islands, Fed. Rep. of Germany, Fiji, Finland, France, Greenland, Guernsey, Ireland, Isle of Man, Israel, Italy, Jersey, Kenya, Kuwait, Latvia, Madagascar, Malawi, Mali, Malta, Mauritania, Mexico, Montenegro, Netherlands, North Cook Islands, Northern Ireland, Norway, Philippines, Poland, Portugal, Serbia, Singapore, Slovenia, South Africa, Spain, Sweden, Switzerland, Venezuela, Wales, and West Malaysia. Sunspots are increasing and propagation is getting better. Let me know what you are up to!

### ***DAH DIT DIT DIT DAH DAH DIT DIT DIT DAH***

Sad News: John, ON4UN, passed away. John was a great ham, a great supporter of the hobby and made many technical contributions. I have a copy of Low-Band DXing on my shelf and would not be without it. Nothing I might say could have the impact of what was sent out by his daughter. This is reprinted with the permission of Bernie, W3UR.

ON4UN

Dear amateur radio friends,

It is with sadness, but also gratitude and pride, I have to let you know my father John ON4UN, has become silent key. John's health has steadily deteriorated throughout the year, but in the last few weeks he was home with us where he peacefully passed away, November 9<sup>th</sup>.

Ham Radio, and especially Low Band DX-ing, were my father's lifelong passion and always had a strong presence in our house. Sometimes literally, when many of you paid us a visit or a group of DX'ers came over for a weekend of contesting. At other times in the background, when my dad was working on a project or experimenting with new equipment or antennas.

Though I don't have a call-sign, I very much feel part of the big radio family and always will. I am very proud of everything my father has accomplished together with you, and I am grateful to the many of you who have given him so much joy over the years. We will miss him dearly, but we take comfort looking back on the beautiful life he lived as a member of the wonderful Ham Radio community.



[TOP^](#)

We are planning a digital farewell ceremony on Saturday Nov 21st and will keep you updated on practicalities.

If you would like to send us a message please mail to [ON4UN.SK@gmail.com](mailto:ON4UN.SK@gmail.com) – John’s old e-mail account is not in use anymore



*One of myON4UN QSL Cards - AJ8B*

In the meantime, you can pay him a visit at [QRZ.com](http://QRZ.com) where he always kept his resume up to date.  
Marleen Devoldere

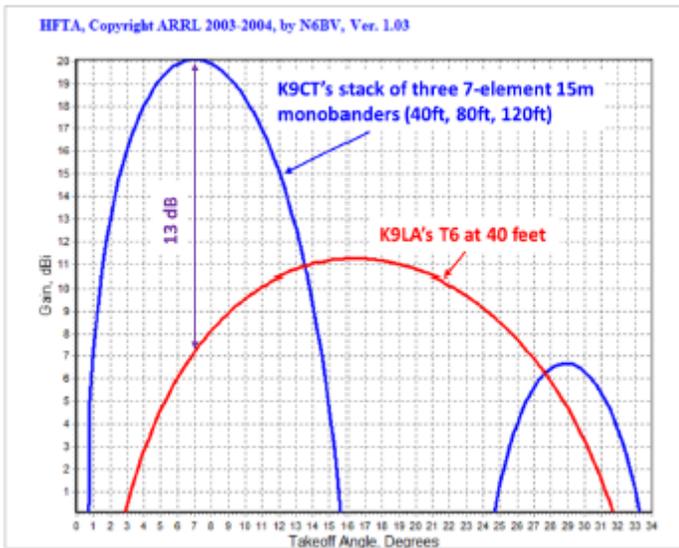
### ***DAH DIT DIT DIT DAH DAH DIT DIT DIT DAH***

Carl, K9LA, is a prolific author and expert on antennas and solar activities. Every month he publishes an article on his website, [K9LA.us](http://K9LA.us). Carl has given me permission to reprint these articles each month. They are far better than anything I might concoct so I thought I would just pass them along to you each month. Here is the November edition.

#### **Late Afternoon Openings in the Fall Months to Scandinavian Countries on 15m and 10m - Carl Luetzelschwab K9LA November 2020**

Our 15-meter band was a very pleasant surprise in last month’s CQ WW DX Phone contest. There were many great scores – even by stations in the Midwest (affectionately known as the black hole). For example, Craig K9CT near Peoria, IL did a Single-Band 15m High-Power Assisted effort from his Multi-Two contest station. He had 1475 QSOs, 32 zones and 108 countries for a claimed score of 502,040. That works out to 2.43 points per QSO. Barring any major logging problems, that should set the new W9 record for the Single-Band 15m High Power Assisted category set by W9RM (then WB9TIY) in 1990 (just after the peak of Cycle 22) with 986 QSOs, 36 zones and 134 countries for a score of 456,790. I did a part-time effort on 15 meters, with my goal of seeing how many zones I could work. I ended up working 19 zones. I heard six more zones but couldn’t work them with my 400 Watts to my little Tennadyne T6 LPDA (log periodic dipole array) at 40 feet. The six zones I couldn’t work were 16 (UT Ukraine), 25 (JA Japan), 27 (KH2 Guam), 36 (ZD7 Saint Helena), 37 (5Z Kenya) and 40 (OX Greenland). I saw spots for some more zones, but I couldn’t hear them. I wondered how many dB K9CT had on me. First, he was running 1500 Watts, so that’s almost 4 dB more than my 400 Watts. And his stack of three 7-element 15-meter monobanders (at 40 feet, 80 feet and 120 feet) have a gain of about 13 dB (from N6BV’s HFTA software) over my T6 at low elevation angles. That results in about 2 S-units on receive (since receive doesn’t have the 1500-Watt amp) and about 3 S-units on transmit.

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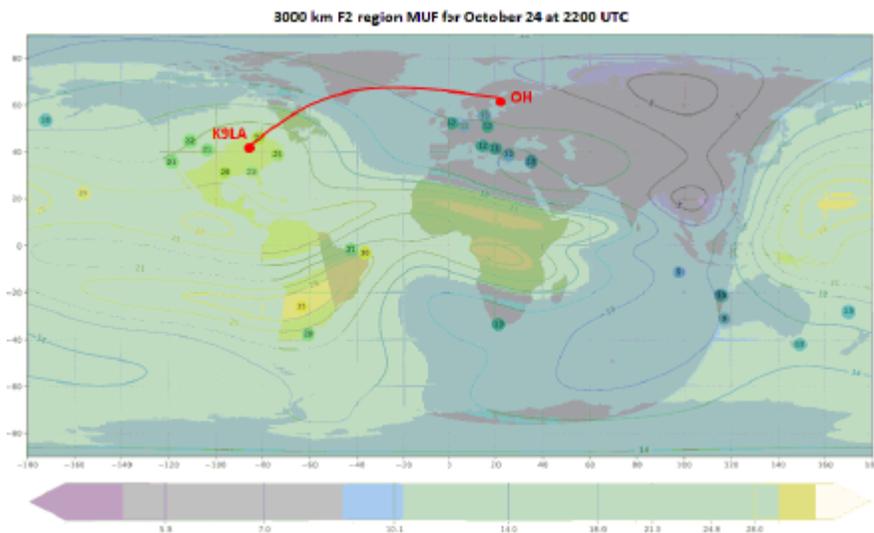
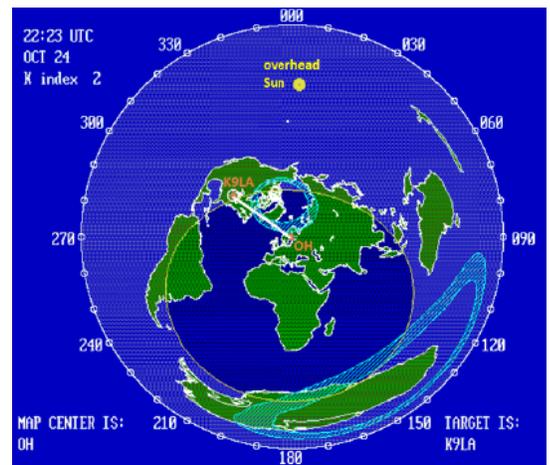
That's a bunch when signals are somewhat marginal. The following plot shows the antenna gains. If you think I had the advantage over K9CT if a signal was arriving around an elevation angle of 20 degrees, think again. K9CT could select an individual antenna in the stack, so his lowest monobander (at 40 feet) would still beat me by about 1 S-unit. C'est la vie.

In spite of this disadvantage, I did work the path to Scandinavian countries that can occur in the fall months in the late afternoon on 15 meters (and on 10 meters, too). K9CT worked his share of OHs on this path in the contest, as did other Midwesterners and even Jim K5RX in North Texas.

For example, I worked OHØZ at 2223 UTC on

Saturday with ease as hardly anyone else was calling. This leads me to believe that many contesters (and non-contesters, too) aren't aware of this path that is somewhat consistent. You can work LAs, SMs and OHs while not hearing any farther south Europeans (I'm sure there are exceptions to this – perhaps via a scatter mode). So, what makes this path tick? The following image details this scenario.

This is an azimuth equidistant map (also referred to as a great circle map) with OH in the center. Any great circle route out of OH is a straight line. The distance from OH to the perimeter is half the circumference of the Earth – 20,000 km. This map comes from the old DOS program DXAID by Peter Oldfield.



The path shown (the white line) is from OH to K9LA at the time of my QSO on Saturday October 24. The auroral ovals are shown for a K index of 2 (from the 21-24z data on October 24 at: <https://www.swpc.noaa.gov/>). Note that the southern auroral oval and Antarctica are highly expanded – that's because this type of map projection distorts items near the outer perimeter.

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The path from OH to K9LA is around 6900 km, and at 2223 UTC OH has been in darkness for about 8 hours. The latter fact strongly suggests that a hop via the F2 region on the OH end is highly unlikely. But it's still possible on the K9LA end, since the K9LA end hasn't been in darkness very long. Is an F2 hop on the K9LA end possible – in other words, is the F2 region MUF high enough? Here's a worldwide 3000 km MUF map from <http://prop.kc2g.com/> with the OH-to-K9LA path added by me.

The contour lines of this map are the F2 region MUFs for the midpoint of a 3000 km hop, and the contours are interpolated/extrapolated from the individual ionosonde data values that are in the dots.

To answer the question “is the F2 region MUF high enough on the K9LA end of the path,” we see that the MUFs are indeed in the ballpark of 21 MHz to the northeast along the path from K9LA to OH. We can also confirm that an F2 region hop on the OH end is not very likely.

Assuming a 3500 km F2 hop on the K9LA end (the MUF for 3500 km would be a bit higher than the MUF for a 3000 km path because of the lower elevation angle out of the transmit antenna and a subsequent lower grazing angle on the F2 region of the ionosphere), that leaves  $6900 - 3500 = 3400$  km. As mentioned above, a second F2 hop is not likely due to the F2 MUF being too low. That leaves two E hops, each of about 1700 km. What likely makes this last 3400 km possible is the auroral-E mode.

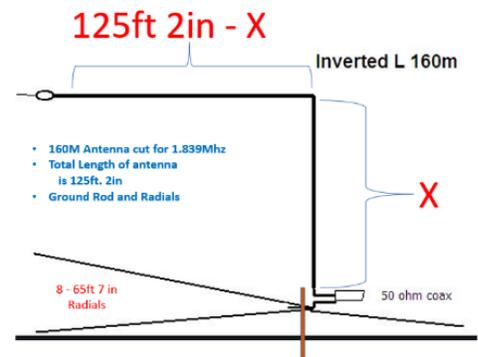
In short, the auroral-E mode is when the path is tangential to the nighttime portion of the auroral oval (revisit the second image), and the ionization in this portion of the oval can be high enough to refract 15 meters (and even 10 meters when there are more sunspots). There must be a link to the auroral-E mode, and the F2 region is likely in the fall months in the northern hemisphere when the ionosphere is “best”.

For more about the auroral-E mode, read my Propagation column in the March/April 1999 issue of NCJ (the National Contest Journal) and my Propagation column in the September 2004 issue of WorldRadio. I can supply these two documents – e-mail me at [k9la@arrl.net](mailto:k9la@arrl.net) if you'd like them.

## *DAH DIT DIT DIT DAH DAH DIT DIT DIT DAH*

**Top Band Soap Box** - As I mentioned at the beginning, starting this week and running until April 15th, I will include news and notes about activity on 160M. The two guys that will be providing me with the scoop will be Dave, K8DV, and Chuck, K8CR. Both have achieved DXCC on 160 and both are active on 160M. Here are the soapbox items for this week...

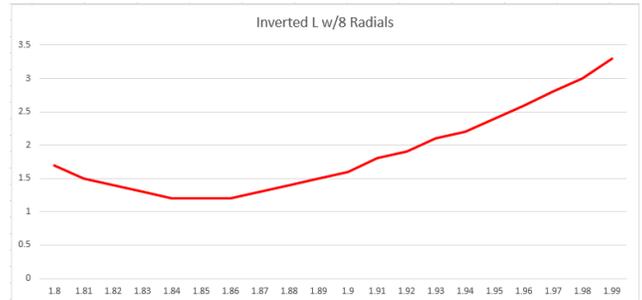
- I have taken their advice and put up an inverted "L" as shown in the diagram. This antenna was described by K9LA in the article we published a few weeks ago. It can be found on the K9LA website. ([www.k9la.us](http://www.k9la.us)) The vertical part is about 45 feet and the horizontal part is about 80 feet. I have 8 65 ft. radials arranged every 45 degrees.





*Feed Point*

The first picture shows the feed point. As you can see, it is a very simple connection. The second picture shows just the first 4 radials, but you can see the basic layout. The chart shows the resulting SWR curve taken with an MFJ Antenna Analyzer.



On paper, it looks pretty good. I will let you know how I progress this 160M season. I currently have a whopping 11 confirmed!!!! I can at least get some band slots!

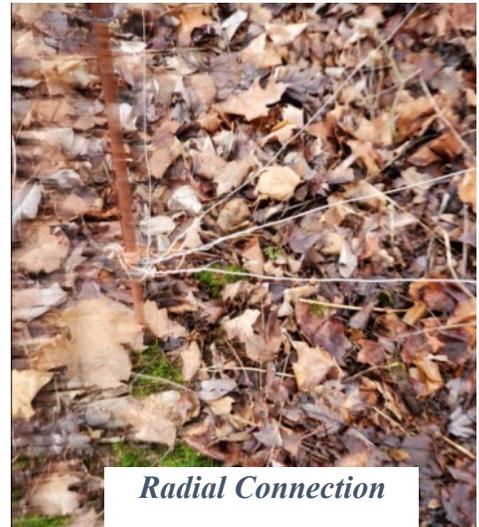
- 160 has been very busy on FT8, mostly North America stations. Some Europe UK. Easy to work.

- Propagation starts up about 1/2 hour before sunset and has been busy till 0600 - 0700.

- A great time to work on WAS 160 and easy into Europe.

- The CQ WW DX Contest (160 meters included) will be held on Nov 28 - 29

- The ARRL 160 Meter CW Contest will be held on Dec 4, 2020 start at 2200 thru Dec 6 2020 to 1600. This is a very popular contest!!!



If you have any items for this topic, or have questions, send them along to me and thanks to our Top Band guys for their input

***DAH DIT DIT DIT DAH DAH DIT DIT DIT DAH***

**From Joe, W8GEX, we get the most recent 60 Meter report.**

**60M Activity**

**Malawi 7Q7RU: Hello Joe!**

**Thank you for your message! It will be our first experience on 60M but we will try. Hope to see you soon on 60m and other bands!**

**Greetings from 7Q7RU team.**

73! Vasily, RA1ZZ

**KENYA 5Z4VJ: Another new one for everybody and they are going to try to get on 60m!**

**7Q7RU, MALAWI - Also a NEW ONE!**

**Operators from the Russian Robinson Club (RRC) will be active as 7Q7RU near Embangweni, Malawi, between November 7-18th. QSL via R7AL, LoTW or ClubLog's OQRS. For more details and updates, see: <https://dxpedition.wixsite.com/7q7ru>**

## ***CQDX CQDX CQDX CQDX CQDX CQDX CQDX CQDX CQDX***

Here is an update from Bernie, W3UR, of the DailyDX and the WeeklyDX, the best source for DX information. <http://www.dailydx.com/>. Bernie has this to report:

### **3D2 RBN - By 3D2AG, Antoine N'Yeurt**

Just to inform that as per yesterday (10 Nov. 2020) a new Reverse Beacon Network (RBN) node was setup at my station, with the 3D2AG callsign. The 16-band Red Pitaya SDR with CW skimmer, dedicated Intel NUC Mini-PC, high-speed internet router and DXE ARAV-4 active antenna setup was kindly sponsored by the YASME Foundation, and the equipment sent over through Ward N0AX, James 9V1YC and with the expert technical assistance of Bob, N6TV. This is the first RBN node active from the South Pacific islands; a similar setup will soon come on the air from Atsu 5W1SA's QTH in Samoa. Currently the node is activated only when I am off-air, but we are hoping to install some front-end protection on the Red Pitaya SDR to allow more extended operation. We hope that these new RBN nodes will provide much needed useful propagation information for the vast Oceania region.

### **Major server upgrade on VOACAP Online for Ham Radio by Jari Perkiömäki OH6BG**

A few weeks ago, VOACAP Online for Ham Radio, <https://www.voacap.com/hf/>, was moved to a new web platform, and this change forced me to re-factor the majority of the code in the back-end. I have now completed this task, and continuously fine-tuning it, but I am pleased to inform that the coverage area maps and point-to-point prediction graphs are now much cleaner & neater than before, using a different mapping library. In addition, most of the codebase has been optimized and hopefully is more robust than ever. Especially the Propagation Planner, the propagation planning tool for HF contests (e.g. CQWW) & DXpeditions, should now be faster and also, as a bonus, offers the predicted values as CSV files for a more detailed analysis. All the same changes have also been implemented on the site of the VOACAP DX Charts, <https://www.voacap.com/dx/>.

VOACAP Online for Ham Radio is a free HF propagation prediction service for the global ham community, running for more than ten years now, with integrations to the DX Summit and Club Log sites, for example. No registration required, no tracking on the site by Google Analytics, no ads on the pages, and no subscription fee for the service. Follow and subscribe to the latest VOACAP developments on Twitter, <https://twitter.com/VOACAP/>

**CQWW CW – November 28-29** - The big annual Morse event is two weekends from now, with the ARRL/RAC November Sweepstakes SSB event this coming weekend. Here are some of the upcoming operations for the CQWW DX contest:

[TOP^](#)

**KP2 – US Virgin Islands** - KP2B, with WP3A operating, plans to be on. He will be single op single band 20 meters. QSL via EB7DX.

**OH0 – Aland Islands** - OH0Z will be a multi-single in the CQWW CW with ops OH2N, OH6CT, OH6DD, OH6EI and maybe others. QSL via W0MM.

**OX – Greenland** -XP2I was to be a special callsign for the CQWW CW but OZ2I, Henning, has had to cancel. Instead, he will be part of the multiop team at OZ5E.

**OZ – Denmark** - As above, OZ2I will join the OZ5E CQWW CW team, a multi-single. The operators are OZ1ETA, OZ1ISY, OZ2I, OZ1ADL and OZ1JUX, operating from what they call “The Old Henhouse” at the Danish Contest Academy.

**VP5 – Turks & Caicos** - VP5M will again be operated by K4QPL, Jim, in the CQWW CW, single op, probably “24 Hour Classic Overlay.” He says “Work me when you hear me.”

**KP4 – Puerto Rico** - KP3DX is the call NP4Z, Felipe, will be using in the CQWW CW, single op all band.

**PJ4 – Bonaire** - KU8E will have PJ4/KU8E on in CQWW CW, single op high power. QSL via K4BAI. It will be a remote operation, only on 20, 15 and 10M “when PJ4A isn’t operating on 40 meters.”

**PJ4 – Bonaire** - PJ4A will indeed be single band 40 in CQWW CW, K4BAI, John, operating remote. QSL via K4BAI.

***DAH DIT DIT DIT DAH DAH DIT DIT DIT DAH***

## **CONTEST CORNER**

Below is a list of upcoming contests in the “Contest Corner”. I think this is important for someone who is trying to move up the DXCC ladder since entities that are on the rarer side and easiest to work in contests. Some of my best “catches” have been on the Sunday afternoon of a contest when the rarer entities are begging for QSOs. Of course, the gamble is that if you wait until Sunday, conditions may change, or they simply won’t be workable. However, it is not a bad gamble. Of course, why not work the contest and have some fun!

Check out the WA7BNM Contest Calendar page (<https://www.contestcalendar.com/>) for more contests or more details.

The contests in red are those that I plan to spend some significant participation time on. PLEASE let me know if you are working contests and how you fared.

Thanks!

[TOP^](#)

Nov. 21-23	ARRL SSB Sweepstakes	<a href="http://www.arrl.org/sweepstakes">www.arrl.org/sweepstakes</a>
Nov. 25	UKEICC 80 Meter Contest CW	<a href="http://bit.ly/2MbaURB">http://bit.ly/2MbaURB</a>
Nov. 26	RSGB Autumn Series, CW	<a href="https://bit.ly/2XF8mSB">https://bit.ly/2XF8mSB</a>
Nov. 28–29	CQWW CW	<a href="https://www.cqww.com/">https://www.cqww.com/</a>
Dec. 4 – 6	ARRL 160M	<a href="http://www.arrl.org/160-meter">http://www.arrl.org/160-meter</a>
Dec. 5-6	PRO CW Contest	<a href="http://www.procontestclub.ro/PCC%20Rules.html">www.procontestclub.ro/PCC%20Rules.html</a>
	FT Roundup	<a href="http://www.rttycontesting.com/ft8-roundup/rules">www.rttycontesting.com/ft8-roundup/rules</a>
	UFT Contest	<a href="http://bit.ly/2Mh0LDc">bit.ly/2Mh0LDc</a>
Dec. 7	K1USN Slow Speed Test	<a href="http://www.k1usn.com/sst.html">www.k1usn.com/sst.html</a>
Dec. 13	QRP ARCI Holiday Spirits Homebrew Sprint	<a href="http://www.qrparci.org/contests">www.qrparci.org/contests</a>
Dec. 12-13	ARRL 10M Contest	<a href="http://www.arrl.org/10-meter">www.arrl.org/10-meter</a>
	PODXS070 Club Triple Play Low Band Sprint	<a href="http://bit.ly/2L9eT1L">http://bit.ly/2L9eT1L</a>
	PODXS070 Club Triple Play Low Band Sprint	<a href="http://bit.ly/2Cq2yUA">http://bit.ly/2Cq2yUA</a>
	K1USN Slow Speed Test	<a href="http://www.k1usn.com/sst.html">www.k1usn.com/sst.html</a>
	AGB Party Contest	<a href="http://www.ev5agb.com/contest/contests_e.htm">www.ev5agb.com/contest/contests_e.htm</a>
	Russian 160-Meter Contest	<a href="http://www.qrz.ru/contest/detail/90.html">www.qrz.ru/contest/detail/90.html</a>
	RAC Winter Contest	<a href="http://www.rac.ca/rac-canada-winter-contest-rules-2019">www.rac.ca/rac-canada-winter-contest-rules-2019</a>
Jan 29 – 31	CQWW 160M	<a href="https://cq160.com/">https://cq160.com/</a>
Mar. 27 – 28	CQWW WPX SSB	<a href="https://www.cqwpw.com/">https://www.cqwpw.com/</a>
May 21	SWODXA DXDinner	<a href="http://www.swodxaevents.org">www.swodxaevents.org</a>
May 29 – 30	CQWW WPX CW	<a href="https://www.cqwpw.com/">https://www.cqwpw.com/</a>
August 28	Ohio QSO Party	<a href="https://www.ohqp.org/">https://www.ohqp.org/</a>
August 28	W8DXCC Convention	<a href="http://www.w8dxcc.com">www.w8dxcc.com</a>

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## ***DX News***

### ***ARLD047 DX news***

This week's bulletin was made possible with information provided by W2GD, The Daily DX, the OPDX Bulletin, 425 DX News, DXNL, Contest Corral from QST and the ARRL Contest Calendar and WA7BNM web sites.

Thanks to all.

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**OMAN, A4.** Members of the Royal Omani Amateur Radio Society may use the A450 prefix to mark Oman's 50th National Day.

**BAHRAIN, A9.** Members of the Bahrain Amateur Radio Society are QRV with special event station A91WTVD until November 21 to celebrate World TV Day. QSL via EC6DX.

**SAUDI ARABIA, HZ.** Members of the Saudi Amateur Radio Society operate special event stations HZ20G, 7Z20G and 8Z20G until November 23 to recognize the G20 Riyadh summit. QSL via operators' instructions.

**ST. VINCENT, J8.** Oleh, KD7WPJ will be QRV as J8/UR5BCP from November 21 to 28. Activity will be on 40 to 6 meters using CW, SSB, FT8 and FT4. QSL to home call.

**MINAMI TORISHIMA, JD1.** Take-san, JG8NQJ/JD1 has been QRV on 40 meters using CW around 0900z. QSL via JA8CJY.

**OGASAWARA, JD1.** Station JD1BHA has been active on 40 meters using CW around 1200z. QSL via operator's instructions.

**AUSTRIA, OE.** Members of the VIC Amateur Radio Contest DX Club are QRV with special call sign 4U2STAYHOME until December 31. QSL via UA3DX.

**ARUBA, P4.** John, W2GD will be QRV as P40W from November 23 to December 1. Activity will be on all bands as time permits. This includes being an entry in the upcoming CQ World Wide DX CW contest. QSL via N2MM.

**POLAND, SP.** Members of the Ostrow Radio Amateur Radio Club are QRV as SN3ISS until December 21 is to celebrate the 20th anniversary of active amateur radio communication service on the International Space Station. QSL via SP3POW.

**GREECE, SV.** Special event call sign SX40ARES is QRV to celebrate the 40 years of the Hellenic Amateur Radio Emergency Service. QSL via operators' instructions.

**SOMALIA, T5.** Ali, EP3CQ is QRV as 6O1OO until January 15, 2021 while working for the UN Department of Safety and Security in Mogadishu. Activity is in his spare time on 160 to 10 meters using CW, SSB and FT8. QSL direct.

**MALI, TZ.** Ulmar, DK1CE is QRV as TZ1CE and is here until December 8. QSL to home call.

**ASIATIC RUSSIA, UA0.** Vladimir, R0FP is now a resident on Iturup Island, IOTA AS-025, and is active on various bands and modes. QSL via RZ3EC.



**INDIA, VU.** Datta, VU2DSI is QRV with special call sign AU2JCB until December 15 to celebrate the birthday of scientist and radio pioneer Aacharya Jagadish Chandra Bose. QSL direct to home call. In addition, look for special calls AT2JCB, AU3JCB, VU5JCB and AU8JCB to be active as well.

**LAOS, XW.** Simon, XW0LP is now QRV on 160 to 10 meters, except 60 meters. QSL to home call.

**INDONESIA, YB.** Members of the ORARI Darerah Jawa Timur Lokal Surabaya are QRV as 8A10N until December 10 to celebrate Indonesia's National Heroes Day 2020. Activity is on various HF bands and modes. QSL via LoTW. In addition, members of the ORARI Tangerang Selatan Club are QRV as YH1RI, 8G12TS, 8H12TS and 8I12TS until November 25 to celebrate the 12th anniversary of South Tangerang city's independence. Activity is on 80 and 40 meters using mostly SSB. QSL via YH1RI.

**THIS WEEKEND ON THE RADIO.** The ARRL SSB Sweepstakes Contest, NCCC RTTY Sprint, QRP 80-Meter CW Fox Hunt, NCCC CW Sprint, YO International PSK31 Contest, LZ DX Contest, All Austrian 160-Meter CW Contest, RTTYOPS Weekend Sprint, REF 160-Meter CW Contest and RSGB 1.8 MHz CW Contest will certainly keep testers busy this upcoming weekend.

The K1USN Slow Speed CW Test is scheduled for November 23.

The Worldwide Sideband Activity Contest and RTTYOPS Weeksprint are scheduled for November 24.

The CWops Mini-CWT Test, UKEICC 80-Meter CW Contest, SKCC CW Sprint and Phone Fray are scheduled for November 25.

Please see November QST, page 74, and the ARRL and WA7BNM contest web sites for details.

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## *ARRL Contest Corner*

An expanded, downloadable version of *QST*'s [Contest Corral](#) is available as a PDF. Check the sponsor's Web site for information on operating time restrictions and other instructions.



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## *Special Events*

- **12/01/2020 | Best DAM Christmas**

**Dec 1-Dec 31, 0001Z-1159Z, KE0TGG**, Edwards, MO. D.A.R.K. Dam Amateur Radio Klub. 28.440 14.240 7.240 3.840. Certificate & QSL. Roger Henley, 32018 Hwy 7, Edwards, MO 65326. <https://damark.org>

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- **12/04/2020 | Pearl Harbor Day Commemoration**

**Dec 4-Dec 14, 1300Z-2200Z, W2W**, Baltimore, MD. Amateur Radio Club of the National Electronics Museum. 14.241 14.041 7.241 7.041. Certificate & QSL. W2W-Pearl Harbor, PO Box 1693, MS 4015, Baltimore, MD 21203. Amateur Radio Club of the National Electronics Museum (ARCNEEM) will operate W2W in commemoration of the anniversary of Pearl Harbor Day and the role of electronics in WWII. The Museum is closed, so Club members will work the Special Event from their home stations. Primary operation will be Dec 4-Dec 7 with additional operation possible during the Dec 8-Dec 14 period, as operator availability permits. Operation on 80M (3.541, 3.841) and digital modes possible during event. Frequencies +/- according to QRM. QSL and Certificate available via SASE; details at [ww-2.us](http://ww-2.us)

- **12/05/2020 | Celebrating the 21st Amendment to the US Constitution**

**Dec 5-Dec 6, 0500Z-0500Z, W8A**, Kent, OH. Breweries On The Air. 14.240 7.240. Certificate. Thomas R Sly, WB8LCD, 1480 Lake Martin Dr., Kent, OH 44240. [www.breweriesontheair.com](http://www.breweriesontheair.com)

- **12/05/2020 | Christmas in Bethlehem**

**Dec 5, 1300Z-2200Z, W9WWI**, Bethlehem, IN. Clark County Amateur Radio Club of Indiana. 14.240; all bands, all modes. Certificate. W9WWI, P.O.Box 201, Sellersburg, IN 47172. Celebrating A safe and healthy Christmas in Bethlehem. Operating from the school house in Bethlehem Indiana. SASE please. <https://www.clarkcountyarc.org>

- **12/05/2020 | Woronoco Heights Outdoor Adventure/SCOTA**

**Dec 5, 1300Z-1900Z, W1M**, Russell, MA. Western Mass Council--BSA. 14.290 14.060 10.115 7.190. Certificate. Tom Barker, 329 Faraway Road, Whitefield, NH 03598. All logging is done on paper and then uploaded to LoTW and eQSL. A QSL card can be had for a 4x6 SASE. W1M will operate on Brandmeister TG 3100 for demonstration purposes. Expect to see different call signs. Covid-19 may interrupt this event.

- **12/07/2020 | Pearl Harbor Remembrance Day**

**Dec 7, 1600Z-2130Z, W5KID**, Baton Rouge, LA. Baton Rouge Amateur Radio Club. 14.250 14.035 7.225 7.035. QSL. USS KIDD Amateur Radio Club, 305 S. River Road, Baton Rouge, LA 70802. Operation aboard the USS KIDD (DD-661). WW II Fletcher class destroyer. [qrz.com/db/w5kid](http://qrz.com/db/w5kid)

- **12/10/2020 | Commemoration of the Birth of PSK31**

**Dec 10-Dec 20, 1700Z-1700Z, K9Z**, Rochester, IL. Sangamon Valley Radio Club. 14.070 7.070; all bands, all modes. QSL. J. Mitch Hopper, K9ZXO, 536 E. Mill St., Rochester, IL 62563. All conversational modes will be used - all bands. [www.qrz.com/db/k9z](http://www.qrz.com/db/k9z)

- **12/12/2020 | USS Midway Museum Ship Special Event: Commemorating Pearl Harbor Remembrance Day**

**Dec 12, 1700Z-2359Z, NI6IW**, San Diego, CA. USS Midway (CV-41) Museum Ship. 14.320 7.250 14.070 (PSK31) D-STAR on various reflectors. QSL. USS Midway Museum Ship (COMEDTRA), 910 N Harbor Drive, San Diego, CA 92101.

- **12/17/2020 | Bethlehem on the Air**

**Dec 17-Dec 24, 1400Z-2300Z, KC5OUR**, Belen, NM. Valencia County Amateur Radio Association. 21.283 14.283 7.183 3.883. QSL. VCARA, P.O. Box 268, Peralta, NM 87068. For QSL card, SASE to VCARA. [kc5our@arrl.net](mailto:kc5our@arrl.net) or [www.kc5our.com](http://www.kc5our.com)

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- **12/17/2020 | WX3MAS Special Event**

**Dec 17-Dec 20, 1400Z-2200Z, WX3MAS**, Nazareth, PA. Christmas City Amateur Radio Club. 14.265 7.270 3.850; CW and PSK31 on 20 and 40 meters, and FT8. Certificate & QSL. WX3MAS, 14 Gracedale Ave., Greystone Building, Nazareth, PA 18064. For commemorative certificate: Send QSL and 9X12 SASE. [www.dlarc.org](http://www.dlarc.org)

- **12/18/2020 | 120th Anniversary of the First Wireless Voice Transmission**

**Dec 18-Dec 24, 0001Z-2359Z, W4F**, Vienna, VA. Vienna Wireless Society. 14.250 7.185. QSL. Vienna Wireless Society, W4F, PO Box 418, Vienna, VA 22183. W4F will be operating on 80, 40, 20,15,10, 6, and 2 meter amateur bands on CW, and SSB, as well as FT-8 using fox/hound mode. For QSL card, Please send SASE with your QSO information to : Vienna Wireless Society W4F PO Box 418 Vienna, VA 22183 <https://viennawireless.net>

- **12/18/2020 | Major Edwin Howard Armstrong Memorial special event operation**

**Dec 18-Dec 20, 0000Z-2359Z, W4A**, Bluff City, TN. N9EN. 14.040 7.020 3.530. QSL. via the bureau or direct to Brad Ambro, N9EN, 1118 Walnut Grove Road, Bluff City, TN 37618.

- **12/19/2020 | 130th birthday of Major Edwin H. Armstrong**

**Dec 19-Dec 20, 1400Z-2200Z, W2XMN & W2XEA**, Loxahatchee, FL. Major Edwin H. Armstrong Memorial Radio Club. 28.400 18.150 14.265 7.195. QSL. Major Edwin H. Armstrong Memorial Radio Club, PO Box 1584, Loxahatchee, FL 33470. [www.qrz.com/db/w2xmn](http://www.qrz.com/db/w2xmn)

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## ***“ARES Connect”***

### ***Connecting Amateur Radio Volunteers with a Purpose***

Hey everyone... please make sure to go in and register your time to all of the events that you have signed up for. Don't forget to get this done no later than **5 days** after the event has ended. I'm asking you to do this for our ability to run reports accurately.

***“ARES Connect”***

***Enter***

ARES Connect Helpful Instructions

**I want to remind all of you that you do not have to be an ARES or ARRL member to use this system. All licensed amateur radio operators throughout the country are welcome and strongly encouraged to use it.**

**Don't forget to check out the “Frequently Asked Questions” area that has been added to the Ohio Section website.** It's there to help you through any difficulties that you may have with ARES Connect. Now, if you don't any posts that relate to what you are having difficulties with, we now also have an on-line “Guru” area as well. This will allow you to ask any questions that you may have about ARES Connect.

**Let's get everyone in the Ohio Section on “ARES Connect!!!” Simply go to:** <https://arrl.volunteerhub.com/lp/oh/> and get yourself registered and using the system.

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*Here's the top 10 hour earners so far in November:*

	<b>Name</b>	<b>Events</b>	<b>Hours</b>
<b>1</b>	Dan Stahl (KC8PBU)	124	129.60
<b>2</b>	Dwight Bonifield (W8TJT)	111	129.50
<b>3</b>	James Yoder (W8ERW)	12	75.50
<b>4</b>	Christopher Domenick (KC8CAD)	16	72.80
<b>5</b>	Bret Stemen (KD8SCL)	25	69.25
<b>6</b>	Ron Wilch (KE8PX)	100	55.50
<b>7</b>	Daniel Schlick (KB8LKH)	6	55.00
<b>8</b>	Diane Snider (KD8SSX)	5	54.50
<b>9</b>	Alan Rothweiler (N8CJ)	22	52.70
<b>10</b>	Michael Lacumsky (W8MAL)	44	48.95

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### ***Matt's Corner***

(C. Matthew Curtin [KD8TTE@arrl.net](mailto:KD8TTE@arrl.net))

#### ***Sixty Meters Is Important But No Silver Bullet***

We're up and running! In the past week we've conducted Buckeye Net Mixed-Mode (BNM) sessions on 60 meters, showing that it's an effective band for daytime in-state communication at this point in the year and the sun cycle. The operation schedule now set; we've got the event listed in ARES Connect so you can report your activity with that as well as in the PSHR.



You can expect to hear us operating for NTS Cycle Two (1300 local time) on 60 meters most days. On Thursday, Saturday, and Sunday you'll hear the full net in operation. On Monday, Tuesday, Wednesday, and Friday you'll hear circuit checks being conducted. On Tuesday the 17th of November, we had a bulletin and were able to pass it, with a total of five stations receiving the message. Two days later during our normal session, we had a total of ten acknowledgements of traffic passed.

In the past week we've also migrated our Internet email list, made more general to the topic of radio messaging with emphasis in emergency communication. We welcome you to join us in the discussion at <https://groups.io/g/QTC>. This list supersedes the OhioRadioMessageTraining20 list that we were using this year as we developed capability building up to the BLACK SWAN exercise. The old list will be disabled at the end of November, leaving only the QTC list.

We have been practicing the use of FLAMP for the movement of messages to more than one station, for cases of bulletins and book traffic. We'll discuss those in more detail in future installments of this article.

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Our BNM operation throughout the year has validated the concept of controlling the net by voice and relay of traffic with FLAMP. Defining channels and standardizing modes has made it possible for us to operate efficiently while maintaining adaptability needed to work in HF conditions. The use of separate data channels from the control channel has also shown our ability to move a large amount of traffic in little time, because traffic can move not just between one pair of stations at a time, but as many circuits as the traffic sources and destinations will allow.

Operation in the early afternoon hours has long been difficult. As OSSBN's reps to Cycle Two 8RN can attest, sometimes it doesn't matter whether the net is operating on 75 meters or 40 meters: stations might be there but can't be heard. As we're seeing, 60 meters is an important option for us to support effective in-state operations. Not only do we get a midway point between 75 and 40 meters that helps to establish paths we otherwise can't, but we can mix digital and phone emissions on the same channel as needed, and of course we can interoperate with U.S. Government stations as needed in emergencies and the exercises to prepare for them.

Whatever its advantages, though, 60 meters will not solve all of our problems. First of all, it's very limited spectrum: we've got only five channels to work in. We're limited to one emission per channel, so no sliding in a narrow emission next to another to share the channel: the emissions must be centered on the specified center, period. Amateurs are also given only secondary allocation, which means that if there's a government station operating there, the amateur stations must yield, reducing access to the band even further. Finally, not all amateur HF stations are even capable of operating on the band. Some struggle to find an antenna that works well, and others don't have transmitters that will operate there, as the current amateur allocation for 60 meters in the U.S. was established in 2012.

This brings us to how to operate effectively in those early afternoon hours. If amateur radio is to be a viable emergency communications service, we need to be able to operate at any time. So if 60 meters is where we can work but it has such severe limitations, what are we to do?

Here we see the advantage of digital communication. Like CW, digital emissions can be very narrow, allowing for greater signal quality compared to broader emissions. Digital modes also can build in certain features for error detection and correction that become invaluable for handling noise, fading, and interference, all common with HF. All-digital operation can be difficult, as we've seen with nets with 10-15 stations taking more than 30 minutes just to call up the net, and twice that in poor conditions.

Using the advantages of each frequency and each emission type to suit the purpose at hand, we can make effective and efficient nets. Calling a net, even calling in all 10 Ohio ARES districts, having an assistant net control station, and a liaison to 8RN, including the listing of traffic, can be done by voice procedure in 10 minutes or so. Once the net has been established, net control can have other stations get to work.

When there is traffic for all stations in the net, digital transmission on the net control frequency makes sense. Thus, each station can receive the transmission and can report their reception. FLAMP makes this easy, reporting not just good or bad receipt, but can identify which parts (or "blocks") of the message were not properly received. When every block of traffic has been received by at least one other station, net control can direct the completion of the messages by relay. Critically, this means that the traffic is now held by other station(s), making that traffic now in a position that not every station needs to have the same transmission. Hold that thought, we'll come back to it.

Traffic for individual recipients likewise is unique between a pair of stations, and relay happens “unicast,” one station to one other station.

With the net now holding traffic that is unique, whether as parts that need to be relayed, or entire messages that are unique, net control can direct the transmissions needed to complete the relay of traffic to the intended stations. With digital emissions making possible the relay of traffic on bands where signals are not as strong at that time, those relays need not take place on the control channel, or even on the same band. As long as the pairs of stations that need to relay the traffic can decode each other’s digital transmissions, they can work.

In this mode of operation, the net is able to function as one under voice control on 60 meters, while traffic is exchanged as needed between stations on any other channel (including on other bands) where a good enough circuit can be established to carry digital traffic. With multiple channels active, on the band that best suits the purpose, the net is able to function efficiently, while also making efficient use of the spectrum.

Next week we’ll go into more detail on cross-band operation and how even stations that cannot work 60 meters can be productive members of a net controlled on 60 meters. Until then, I hope to hear you on BNM.

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## ***CTCSS/PL Explained***

*(by Jason McCormick, N8EI)*

Many hams know they generally need to use Continuous Tone Coded Squelch System (“CTCSS”) to access an FM repeater. CTCSS, or more commonly referred to as “PL tone” or “PL” which is an acronym for Motorola’s implementation of it branded Private Line, was introduced in the 1950s by Motorola to share frequencies used for land mobile radio. Much later, the radio industry standardized the various implementations into CTCSS and “tone” began to appear in amateur radio equipment in the 1980s as a standard component. However why it’s used and how it works is often not understood or misunderstood. This article attempts to clear things up. For consistency, the author will use “CTCSS” to refer to all types of analog “tone”.

Before the introduction of CTCSS to repeaters, the transmitters would open and begin transmitting when the receive radio believed it heard a sufficiently strong signal on the carrier frequency. The squelch control that every ham is familiar with was the original and manual way to adjust when a repeater would begin transmitting. However, there was a trade-off to this method. If the squelch was too tight, weaker signals would not always “break the squelch” to cause the repeater to transmit.

If the squelch was too loose, then transmissions would have very long, loud squelch tails and RFI would cause undesired transmission.

Motorola originally developed its Private Line product to enable the sharing of simplex frequencies for dispatchers in local communities. Each recipient would only hear the transmissions destined for them. However, the technology was quickly adopted for land mobile radio repeaters to enable customers to share a repeater frequency. Radios would only open their squelch when they heard the correct tone they should be listening for.

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Repeaters would pass all RF and the individual radios would be responsible for the CTCSS decoding and using it to decide when to make the received RF audible to the user. Eventually, the same technology was used to prevent multiple repeaters from interfering with each other and then technology moved into the amateur world.

When repeaters became a big deal in the 1970s, the 2m band was very crowded and frequency “pairs” were sparse given the 2m allocation was only 4 MHz wide. In order to more efficiently support high profile repeaters, the systems would be setup with their own CTCSS tone and only respond when it received a transmission encoded with its particular tone. Eventually the ham radios implemented CTCSS on the radio units as well to only open the audio when the radios received the tone from their local repeater. In ham radios, this is commonly called “Tone Squelch” or “TSQL”. This eliminated a lot of fiddling with the squelch. However, many hams don’t ever set it and some repeaters still don’t offer it or offer it uniformly.



For example, Silvercreek’s W8WKY repeater in Doylestown uses 147.390 MHz output and 147.990 MHz input. That’s the same frequency pair used by W8BHZ in Conneaut, OH and K3PSP in Burgettstown, PA. Given a sufficiently strong and/or high user, multiple systems may repeat the transmission that was only intended for one of them. Using CTCSS, the only repeater that will respond to the transmission is the one that decodes its CTCSS in the transmission. W8WKY uses 114.8 Hz (for historical reasons), K3PSP uses 131.8 Hz while W8BHZ has started using DCS. Thus, Silvercreek’s repeater will be the only one that transmits when it hears 114.8 Hz in the transmission.

Similarly, many repeaters will transmit the same tone out so that user radios can only open for their signals in the same way. This is the “Tone Squelch” mentioned earlier. W8WKY, for example, will also transmit a 114.8 Hz CTCSS mixed with the audio when it repeats the transmissions it hears. If one configures their radio for a 114.8 Hz “tone squelch” their radio will only play audio when it decodes the CTCSS tone. This greatly cuts down on spurious opening of the squelch – notably while mobile or with HT’s.

One of the caveats of Tone Squelch is that it is not always implemented consistently. In some cases, repeaters will retransmit the audio with the CTCSS code still in the information, but courtesy tones, repeater announcements, or remote base traffic does not have the CTCSS. When possible, repeater operators should send a CTCSS for all transmission as well as receive them. Radio users should determine which repeaters output CTCSS and setup tone squelch accordingly for a better user experience.

For a deep-dive on the history of CTCSS and a technical deep-dive into how it works, see [this article on repeater-builder.com](http://repeater-builder.com).

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## One Question Questionnaire



Hey Gang,

Survey Says”..... about 43% of you have started your Christmas shopping already. I guess the other 60% are like me and start their shopping around December 24<sup>th</sup>.. You’d be surprised what Speedway and the like have on them shelves just for US!!

Ok, now on to the next question... With the bands opening up a little lately, and Sweepstakes contest this past weekend, I was listening the other night to 2 German stations talking to others in their native language and it got me to thinking, a lot of folks in the European nations speak more than one language, so that’s the inspiration for this next question....

### *“Are you able to speak another language to make foreign contacts on HF??”*

You’ll find the “One Question” questionnaire on the Ohio Section Website! <http://arrlohio.org> It’s all in fun and it’s not a scientific survey in any way, but we are learning some things that we didn’t know from these questions. I hope that you are enjoying answering these “One Question” questionnaires.

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### *From The South 40*

(from John Levo, [W8KIW@arrl.net](mailto:W8KIW@arrl.net))

#### *Thanksgiving in The South 40*

The pandemic has taken some club’s traditional Christmas dinner gatherings. Because of the health emergency the **Greater Mason County (KY) ARA** has decided to forego the December event as has Huntington’s **Tri-State ARA**. However, each club’s regular business meeting will still happen on the normal meeting dates. The **Highland ARA** membership has voted to cancel the well-attended Christmas dinner party as has the **Queen City Emergency Net**. The **Grant ARC** has decided to postpone their Christmas dinner until a later date. According to Gary Caldwell, WX8G, the **Portsmouth RC**’s Christmas dinner does not look promising this year.



The **Tri-State ARA** has decided to cancel their long standing “Santa OnThe Air” program because of the pandemic. The Ironton Lions Club cancelled their annual Christmas Parade where members of the **Southern Ohio ARA** provide communications and assistance with the line-up.

The **Milford ARA** recently held elections with Ron Brooks, AC8MA, re-elected to another term as President. Jack Purdum, W8TEE, was re-elected Vice President. AB8KG, Raleigh Sizemore, becomes the Club Secretary and Mike Desmond, W8BEI, will serve as Treasurer. The newest known amateur in the area is Robert Allen, KE8PYG, of Sabina. Welcome!

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The **Athens County ARA** held a successful “tape measure antenna” building clinic in the Athens Red Cross parking lot on a recent Saturday. According to Kirk Groeneveld, KC8JRV, five individuals built the antennas. Although the antennas were built to allow members to participate in an upcoming **Hocking Valley ARC** foxhunt, one Noble County builder used his that evening to listen to the AO-27 bird. The ACARA also recently held a successful J-pole antenna building session.

**Highland ARA** VE Team Leader Tom Mongold, KE8LDS, announces Hillsboro’s Bill Cowie has the honor of being the first person to obtain a totally new license as the result of the Club’s first self- supporting test session. Bill is now KE8PWE. Three others were able to upgrade during the session. Unfortunately, a couple others didn’t quite make the grade.

An Eastern Kentucky amateur lost his life due to a tower accident. KE4OZS, Bill Pierce, of Perry County, fell approximately 40 feet from a tower where he was working on a digital repeater antenna. He was an experienced tower climber. A sudden medical issue has not been ruled out as leading to the fall. He was well known throughout the Eastern Kentucky and Northwestern West Virginia region for his climbing ability.

The **Southern Ohio ARA** held elections this past week. The officers for 2021 are: Tim Nicely, AC8VQ, President; Eddie Jenkins, N8URU, Vice President; James Reneau, N4REN, Secretary; Dave Bruce, KD8NYN, Treasurer and Mike Sullivan, K4IMU, Trustee. Michael Love, WB8YKS will continue as the Public Information Officer and Jerry Lockhart, W8HIC will serve as the Lawrence County EC.

A browse through the December QST’s listing of clubs participating and submitting entries in the June Field Day shows a number of clubs within our region participating. Some of the clubs identified were: the **Cambridge ARA, Hocking Valley ARC, Athens County ARA, Highland ARA, Portsmouth RC, Tri-State ARA, Mid-Ohio Valley ARC, Parkersburg ARK, Scioto Valley ARC, Clinton County ARA, Milford ARC, the Queen City Emergency Net, West Chester ARA, the Southwest Ohio DX Assn.** and the **Mid-Ohio Valley ARC**. Since the listing did not include the state the clubs were in, I’m certain some clubs were missed because of clubs in multiple states having similar names. Others may be unknown because entries were not submitted.

With old man Winter just around the corner, the **Highland ARA** has taken measures to assure their 147.21 repeater remains on the air should there be a loss of commercial power. On Thursday Tom Archibald, K8TDA, and Jeff Collins, KD8VUY, replaced the aging back-up power batteries with new deep cycle ones. The **Clinton County ARA**’s Daun Yeagley, N8ASB, has been a volunteer at Puerto Rico’s Arecibo Radio Telescope for many years where he assists with instrument calibration along with some other projects. He reports this week a second support cable broke and there is no safe way to repair it and the remaining support cables. Therefore the agency operating the dish has decided to decommission it which will lead to its demolition. A lot of the research being conducted there will now be transferred to the Green Bank, WV site. As Daun says “It’s a sad day”.

Although the CW portion of the November ARRL Sweepstakes was conducted a few weeks ago, as this is written the Phone portion is well underway. As you read it, the contest has just concluded. To paraphrase the “Sound of Music”—these Southern Ohio hills are alive with the sounds of contacts. There appears to be a lot more interest in the contest this year as is shown by the number of stations on the air.

It's been noted some operators have opened their home stations so new hams and others wanting to experience the rush of a contest can have that experience. A great Elmering event. Let's hope some decent scores and perhaps a couple of clean sweep mugs will come to the South 40 region.

With all that is going on in our State, Nation, World and within the region, there is a lot we can still be thankful for. Although we have been requested to change the way we gather to observe Thanksgiving, we can be thankful we still have the ability to use our radios and other electronic means to keep in contact and chat with family and friends. One day this stuff will clear up and we can get back to our normal ham radio activities, meetings, hamfests and gatherings.

HAPPY THANKSGIVING from W8KIW and N8ZNR

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### *V.E. Test Sessions*

Many V.E.'s have decided to start testing once again, but with restrictions that need to be adhered to for sure. Here's the link to find that V.E. Test session and what is expected of YOU before going. <http://www.arrl.org/find-an-amateur-radio-license-exam-session>



Hey Gang... have you seen the latest information about V.E. Testing from the ARRL?

Here's a link.. [http://arrl-ohio.org/club\\_news/Oct-20/ARRL%20VE%20Newsletter%20October%202020.pdf](http://arrl-ohio.org/club_news/Oct-20/ARRL%20VE%20Newsletter%20October%202020.pdf)

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### *Final.. Final..*



Hi Gang,

This week I want to start my article with a "Thank You" to all that voted in the Great Lakes Division elections! I hope that you read the article from ARRL Headquarters that appears in the "National News" section of our newsletter.

I appreciate everyone's trust and support in me as I take over the Vice Director's position come January. I've been in contact with Dale, WA8EFK who was re-elected as the Director and we've already begun making plans for the future. I know that I have some very big shoes to fill for sure and I will do my very best to not let you down.

Wow has this past week been cold or what. What a change from the week just prior! Well, as they say, "Don't like the weather? Just give it 5 minutes and it will change!" That's Ohio for ya'.

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Here in the big metropolis of Lexington we even had a dusting of snow this past week! Yes, I know that the folks in the snowbelt actually got some snow to report on. Lake Erie even had waves reported up to 30 feet! I'm glad I live inland for sure! I will say that the folks around the east side of the lake are a very hearty bunch for sure.

The National Weather Service in Cleveland even posted a plea for help with snow reports on their Facebook page. Sort of reminds me of last year (2019) when the Watch Desk at the State EOC asked us for help with snow and wind reports around the state, I believe Stan, N8BHL called it "Snowmagedden!" Anyway, any time that we can help one of our served agencies it's a good thing for sure.

For those of you who might have noticed, there's no Hamfest listings right now. That's because there's just no hamfests for the foreseeable future. And with the rise in numbers for COVID-19 lately I really don't expect to see another hamfest for some time to come. Let's all keep our fingers crossed that there will be a vaccine ready soon. I don't want to miss another Dayton or NOARS Fest or ....

Have you taken the time to check out the ARES Connect reports that are on-line? These reports are there for you. Take advantage of them to boost up your training as well as your ham radio participation! Here's a link to just one of the reports... <http://arrl-ohio.org/SEC/reports.html> You can also see how the Ohio Section is doing compared with the other Sections in the Great Lakes Division by [clicking here](#)

Whelp, that's going to do it for this week my friends! I'm still looking forward to visiting with all of you live or via Zoom, WebEX or whatever.

I really can't wait for that time when we can all get together in person once again. Those are the times I cherish the most!!! Stay safe! We will get through this and when we do, we'll have so much to talk about. Most of all... have FUN and get on the airwaves!!

73,

[Scott, N8SY](#)

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### *"Swap & Shop" on the website*



Hey Gang,

Have you taken a look at the **Swap & Shop** page on the Ohio Section webpage yet?? Here's a link that will take you there...

<http://arrl-ohio.org/sm/s-s.html>

Do you have equipment that you just don't need or want anymore? Here's a great venue to advertise it, and it's FREE!!

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Is your club doing a fund raiser to help raise money? After a lot of thought, it was decided that the Swap & Shop webpage could also contain these types of items as well.

The same rules will apply as do for the For Sales and Give-A-Ways and will only be posted for a month at a time. Please see the Terms & Conditions on the webpage.

If your club is doing a fund raiser and wants more exposure, please forward the information to me and I'll advertise it on the Swap & Shop webpage for you. Now, I still want to remind you that it won't be listed in this newsletter because it would take up way too much space, so your ad will only appear on the website. It is there for any individual to post equipment Wanted / For Sale or Give-Away as well as for Club Fund Raisers. No licensed vehicles/trailers or business advertising will be posted.

Postings are text only (no pictures or graphics) will be posted for a maximum of 1 month from date posting and require a contact phone number or email within the posting. Send your Wanted / For Sale or Give-Away post to: [swap@arrlohoio.org](mailto:swap@arrlohoio.org)

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### ***Welcome New Subscriber(s)***

**Steven, KC8MIW; Kyle Grathwol**



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### ***Want to Share your Club Newsletter With Others?***

We have a webpage where you can download and read all of the newsletters that I get from around the state and even other sections!

Here's the link to the page.... [http://arrl-ohio.org/club\\_news/index.html](http://arrl-ohio.org/club_news/index.html)

Please, if you don't see your club newsletter posted, it's because I'm not receiving it. Just have your newsletter editor contact me and I'll get your club's newsletter listed on the site!!

We all learn and steal (I mean, share) from each other's work. So, get me your newsletter!!! Send it to: [n8sy@n8sy.com](mailto:n8sy@n8sy.com)



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## ***Back Issues of the PostScript and Ohio Section Journal***

Hey, did you know that PostScript and Ohio Section Journal (OSJ) are archived on the website? You can go back and look at any edition simply by clicking:

<http://arrl-ohio.org/news/index.html>



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### Ohio Section Cabinet

Section Manager – Scott Yonally, N8SY	Assistant Section Manager – John Perone, W8RXX
Section Emergency Coordinator – Stan Broadway, N8BHL	Section Traffic Manager – David Maynard, WA3EZN
Technical Coordinator – Jeff Kopcak, K8JTK	Affiliated Clubs Coordinator – Tom Sly, WB8LCD
State Government Liaison – Bob Winston, W2THU	Public Information Coordinator – John Ross, KD8IDJ
Section Youth Coordinator – Anthony Lascre, K8ZT	

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## ***Our Thanksgiving.. A time for giving “Thanks” for all that we have.***

Thanksgiving is a national holiday celebrated on various dates in the United States, Canada, Brazil, Grenada, Saint Lucia, and Liberia, and the sub-national entities Leiden, Norfolk Island, and the inhabited territories of the United States. It began as a day of giving thanks and sacrifice for the blessing of the harvest and of the preceding year. Similarly named festival holidays occur in Germany and Japan. Thanksgiving is celebrated on the second Monday of October in Canada and on the fourth Thursday of November in the United States and Brazil, and around the same part of the year in other places. Although Thanksgiving has historical roots in religious and cultural traditions, it has long been celebrated as a secular holiday as well.



Thanksgiving in the United States has been observed on differing dates. From the time of the Founding Fathers until the time of Lincoln, the date of observance varied from state to state. The final Thursday in November had become the customary date in most U.S. states by the beginning of the 19th century, coinciding with, and eventually superseding the holiday of Evacuation Day (commemorating the day the British exited the United States after the Revolutionary War). Modern Thanksgiving was proclaimed for all states in 1863 by Abraham Lincoln. Influenced by Sarah Josepha Hale, who wrote letters to politicians for approximately 40 years advocating an official holiday, Lincoln set national Thanksgiving by proclamation for the final Thursday in November, explicitly in celebration of the bounties that had continued to fall on the Union and for the military successes in the war. Because of the ongoing Civil War, a nationwide Thanksgiving celebration was not realized until Reconstruction was completed in the 1870s.

On October 31, 1939, President Franklin D. Roosevelt signed a presidential proclamation changing the holiday to the next to last Thursday in November, for business reasons. On December 26, 1941, he signed a joint resolution of Congress changing the national Thanksgiving Day to the fourth Thursday in November.

Since 1971, when the American Uniform Monday Holiday Act took effect, the American observance of Columbus Day has coincided with the Canadian observance of Thanksgiving.

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## Chit – Chat, and All That!

Do you know someone that's not getting these Newsletters? Please, forward a copy of this Newsletter over to them and have them "[Opt-In](#)" to start receiving them. Heck just have them send me an email [n8sy@n8sy.com](mailto:n8sy@n8sy.com) and I'll get them added to the Ohio Section Emailing list.



We now have many thousands of readers receiving these newsletters weekly. Quite impressive, I'd say! I urge all of you to make sure that everyone, regardless of whether they are a League member or not, get signed up to receive these weekly Newsletters.



You can always "Opt-Out" at any time if you feel this is not what you were expecting. It's fun and very informative. All of your favorite past newsletters are now archived too. You can go back at any time and read them. Just go to: <http://arrl-ohio.org/news/>

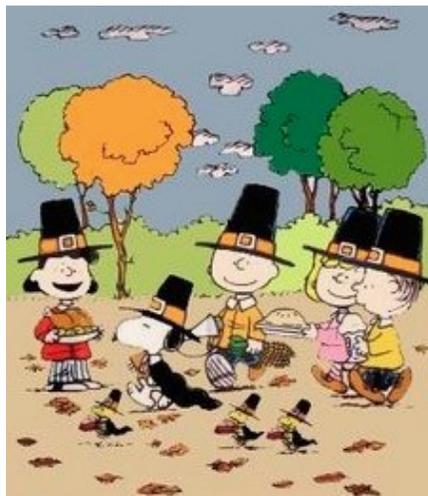
Got questions, concerns or would just like to sit and chat awhile? Heck, I'll even buy the coffee!! Give me a call at (419) 512-4445 or email me at: [n8sy@n8sy.com](mailto:n8sy@n8sy.com)

The pictures on the front page and throughout this newsletter are from various newsletters, Facebook posts and/or were sent directly to me in recent weeks. Take a good look at them, you just might be in one of the pictures! "SMILE... you're in the Ohio Section News!!"



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## Happy Thanksgiving!!



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*The Ohio Section Journal (OSJ) is produced as a comprehensive look at all the programs within the Ohio Section. I sincerely hope that you have enjoyed this edition of the OSJ and will encourage your friends to join with you in receiving the latest news and information about the Ohio Section, and from around the world!*