



- → From the Technical Coordinator
- → From the Public Information Coordinator
- → From the Section Traffic Manager
- → National News
- → DX This Week
- → Special Events
- → From The South 40

- → From the Section Emergency Coordinator
- → From the Section Youth Coordinator
- → ARES Training Update
- → Club Corner
- → Contest Corner
- → One Question Questionnaire
- → Final.. Final..



## From the Technical Coordinator Jeff Kopcak – K8JTK TC

k8jtk@arrl.net

Hey gang, New FCC RF exposure requirements went into effect May 3, 2021. Have you performed your station evaluation? There is much confusion and speculation around these requirements. Clarifications are still being sought as a good number of things remain unclear. Continuing research, observing presentations, and working with others have cleared up many concepts for me, while others remain clear as mud.



Since my article <u>last May</u>, everything there is still applicable: every ham needs to complete an assessment, the exposure rules haven't changed, hams are no longer categorically excluded from these calculations, nothing is submitted to the FCC. Calculations only need to be available when a station inspection is performed. Handy talkies manufactured before May 2021 are all grandfathered. All of the calculation tools found online are still valid and applicable. Use the tool or method most applicable to your situation or knowledge.

One thing that's been expressed, I've heard it through the Technical Specialists, is confusion on calculations or what exactly needs to be completed. Our Technical Specialists are asked for support. Jason – N8EI presented to his club, <u>SARA</u>, on adhering to the FCC exposure rules. Get in touch with Jason or I can forward the request if you're interested in having such a presentation for your group.

In my previous article, I presented an exception calculation. While still valid, it is a lot more effort than most need to complete. Take the <u>ARRL's RF Exposure Calculator</u>. It is a much simpler tool to complete an assessment. Returned numbers are very conservative estimates. Meaning they err heavily on the side of safety when compared to actual measured results. The minimum safe distance to an antenna maybe calculated at 40 ft. A full assessment might determine safe distance to be 33 ft. Don't assume 'I'm fine' without evidence to back it up.

Jason, in addition to his presentation, put together a simple step-by-step walk-through of the calculations. His assessment includes radio information, determining feed line loss, antenna gain, and duty cycles. Each step features a description and links to common information such as typical feed line loss for different types of coax. Available on his project site and on GitHub for learning, validating the code, fixing issues, including any new and relevant parameters, or customize for your site.

One should assume "worst-case" when using these calculators. Ever talked for 30 minutes in a single transmission on FM? Highly unusual, but none-the-less, that is worst-case. Those outliers should be factored in these calculations.

Consider an HF station:

1. Station transmits on many different frequencies. Highest frequency is the upper part of 10 meters (29.700 MHz). The radio can do, at most, 100 watts connected to a 3 dBi gain horizontal antenna (both manufacturer specs). While transmitting in the FM portion (100% duty cycle), the operator yaps for 30 minutes then listens for 10 minutes before repeating the cycle.

Pretty rough to have someone talking for 30 minutes straight in a single key-down let-alone using full power at 100% duty. Assume full output power reaches the antenna. These are not real-world, but again, fit a worst-case scenario. For **controlled environment**, minimum safe distance from a human to the station's antenna is **6.5 feet**, **uncontrolled is 14.6 feet**. If the antenna is more than 14.6 feet in the air, like on a 50 ft tower, that station's configuration is compliant. Print the results and include them with station records. This station's evaluation is done.

Unless right next to your house, neighbors' deck, a sidewalk, or other public area where the antenna is within the 14.6 ft minimum safe distance to the closest human, no additional work here is needed.

2. Same configuration, changing to SSB (20%) reduces the minimum safe distance to **2.9 ft controlled** and **6.5 ft uncontrolled**.



Minimum safe distance numbers are reduced with a reduction N8EI's RF Exposure Assessment Tool in duty cycle, frequency, gain, or power.

3. Changing the frequency from example #1 to the low end of 80m, 3.5 MHz, using AM (still 100% duty cycle). Minimum safe distances are **0.8 ft controlled** and **1.7 ft uncontrolled**.

This is an example showing how only a realistic change in frequency reduces the minimum safe distance to the same antenna.

## VHF/UHF:

- 4. Using a 50-watt mobile radio on 146.520 MHz, the 2m national simplex calling frequency (FM, 100% duty cycle, 30/10 talk time, 3 dBi gain) is **4.7 ft controlled** and **10.5 ft uncontrolled** minimum safe distances.
- 5. Using a 50-watt mobile radio on 446.000 MHz, the 440 national simplex calling frequency (FM, 100% duty cycle, 30/10 talk time, 3 dBi gain) is **3.8 ft controlled** and **8.6 ft uncontrolled** minimum safe distances.

However, there is a catch with this last one. While these numbers are good safety guidelines, absorption by the human body is not measurable above 300 MHz. Results above that don't mean much.

Remember uncontrolled is everyone in the general public and neighbors. Controlled is for hams, their families, and those who work with RF as an occupation.

Most stations with antennas in the air are going to be fine with the results from these tools. However, if the antenna is closer to the ground, in the house, or configured for NVIS, additional work would be needed. Not sure if people maybe within acceptable distances? Use a piece of string or rope to determine this. If anyone would be within 15 ft (rounded up, from the first example) while in operation, remediation suggestions are:

- use or calculate lower frequencies if higher frequencies are not used
- use or calculate lower duty cycles
- use or calculate lower power
- observe shorter transmit times
- perform a full station evaluation to obtain a more realistic minimum safe distance or use antenna modeling applications such as <a href="EZNEC">EZNEC</a>
- rope-off or otherwise isolate the antenna, keeping people away from the structure
- re-position the antenna in a better configuration/move further away from the environment
- not use it when people will be around or near the antenna
- point the elements in a different direction from the dwelling
- move antenna further away from vehicle passengers

Power at Antenna: (1)	Need help with this?) 100 (watts)
Mode duty cycle:	
FM (duty cycle=1	•
Transmit duty cycle:	
You transmit for 30	minutes then receive for 10 minutes (and repeat).
Antenna Gain (dBi):	(Need help with this?) 3.0
Operating Frequence	y (MHz): 29.700
Include Effects of G	Fround Reflections
	ive future announcements of any FCC news related to RF-exposure or the eurs to evaluate their stations, you may <b>optionally</b> provide an email address
Email Address:	(optional)
Comments:	/// (optional)
Calculate	
Results for a controlled	d environment:
Results for a controlled	
Maximum Allowed Pow	er Density (mw/cm²): 1.0203
Trouble for a controller	er Density (mw/cm²): 1.0203 e (feet): 6.5484
Maximum Allowed Pow Minimum Safe Distance	er Density (mw/cm²);   1.0203 e (feet);   6.5484 e (meters);   1.9960
Maximum Allowed Pow Minimum Safe Distance Minimum Safe Distance For an uncontrolled en	er Density (mw/cm²);   1.0203 e (feet);   6.5484 e (meters);   1.9960
Maximum Allowed Pow Minimum Safe Distance Minimum Safe Distance For an uncontrolled en	er Density (mw/cm²):   1.0203 e (feet):   6.5484 e (meters):   1.9960 vironment: er Density (mw/cm²):   0.2041
Maximum Allowed Pow Minimum Safe Distance Minimum Safe Distance For an uncontrolled em Maximum Allowed Pow	er Density (mw/cm²): [1.0203 e (teet): [6.5484 e (meters): [1.9960 vironment: er Density (mw/cm²): [0.2041 e (teet): [14.6427
Maximum Allowed Pow Minimum Safe Distance Minimum Safe Distance For an uncontrolled en Maximum Allowed Pow Minimum Safe Distance Minimum Safe Distance	er Density (mw/cm²): [1.0203 e (teet): [6.5484 e (meters): [1.9960 vironment: er Density (mw/cm²): [0.2041 e (teet): [14.6427
Maximum Allowed Pow. Minimum Safe Distance Minimum Safe Distance For an uncontrolled en Maximum Allowed Pow. Minimum Safe Distance	er Density (mw/cm²): [1.0203 e (teet): [6.5484 e (meters): [1.9960 vironment: er Density (mw/cm²): [0.2041 e (teet): [14.6427

ARRL RF Exposure Calculator

What's still not entirely clear with these requirements? Gain rating on many antennas, namely verticals, has been discouraged as it is hard to prove based on the mounting and radial systems. Gain is not published for many antennas. Now needed as part of calculations, hams are between a rock and a hard-place not having that information.

Absorption calculations of HTs are fairly complicated and responsibility of the manufacturer. It is unknown, though, what needs to be completed if the radio is modified, such as using a 3rd party aftermarket antenna.

There remains some confusion if "minimum safe distance" is from the center/feed point of the antenna or any part of the antenna. Those who have previously worked with these calculations indicate it is any radiating part of the antenna structure.

The ARRL has updated their <u>RF Exposure page</u> with more links and resources. Ed Hare – W1RFI wrote <u>an article</u> for the September 2021 edition of QST. He describes how to determine exception status and how to use the ARRL's new RF Exposure calculator. Ed is the author of the out-of-print book but available as a PDF, <u>RF Exposure and You</u>.

Remember, evaluations (exceptions or calculations) need to be performed by May 3, 2023. New stations or ones with significant changes (power output, antenna type, operating on a new band, operating with a new mode) all require an assessment be completed before operating.

Earlier this month, the FCC announced the winning bidders from its 5G spectrum auction of the 3.45 GHz band. The auction, which was structured to be "diverse" and have competition front of mind, was the highest grossing auction in the FCC's history at \$22.5 trillion. The entire allocation for ham radio wasn't lost (yet) as 3.3 – 3.5 GHz was the ham radio allocation with 3.45-3.5 GHz being the subject of the auction. Even though the spectrum was used mostly by AREDN mesh, hams didn't have much of a justification for that spectrum. We don't stand a chance as a group of hobbyists against \$22.5 trillion as part of a money grab in the name of

"competition." Use it or lose it. We kinda used it and still lost it. Please consider supporting the <u>ARRL</u> Spectrum Defense Fund and projects that are justifying use of our spectrum.



"Hoot" - WB8VUL

Over the holidays, we lost two hams that were close to me and very active in the amateur radio community. William G. "Hoot" Gibson – WB8VUL was a long-standing member of the <u>Wood County Amateur Radio Club</u>. He held many positions in the club, was always participating in actives and promoting the club. Being a BGSU grad, he was always asking me about the university and how school

was going. I would ask him how they used to do things and he would talk about history, which I always found fascinating. I enjoyed his stories and advice. Thomas A. Bishop – W8TAB was in a long-time battle with cancer. In our last E-mail exchange, he was not doing well and trying to manage. Tom was an alum of Westlake High School, as am I. He was fortunate enough to be part of the ham radio club



Tom – W8TAB (Busch Funeral)

which, unfortunately, was long gone by the time I roamed the halls. We were both in broadcasting and loved technology. He always had time to chat. Both will be greatly missed.

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

From the Section Emergency Coordinator Stan Broadway, N8BHL - SEC

broadways@standi.com

Get your schedules out!

We have some dates to pass along for activities in the Ohio ARES organization.

First, after some thoughtful discussion, we have agreed to hold off on an in-person meeting again this year. However, we do have the resources to gather on Zoom and launch the



2022 activity season! So we'll get more to you, but plan APRIL 9 to join us for some fun online stuff!

Another date to remember is April 23, a Saturday. This will be the date for the 2022 ARES NVIS Antenna day. Rules and guidelines will be basically the same. We'll try 40 and 75 meters as the mainstay. We'll put more information after we review life in general...but get your grills, hamburgers, frosty beverages, and some wire together for NVIS Day, 2022!

We are organizing as an important part of launching each year. One thing going on is that we've circulated a survey to each EC (if you haven't received one, ask your DEC!) in order to confirm two operating locations in your county: the EOC and your County Control Station. We would like to know what capabilities you have at

each location, and whether you have mobile resources available. We will try to keep this information at hand for quick referral in case we need to go regional or state wide. We are also confirming that the "master listing" on the ARES website is completely correct. That will be submitted to the ARRL to confirm who our movers-and-shakers are. Thanks for your cooperation in getting these completed.

Did you have fun operating the ARES VHF-plus simplex contest? I'm tallying scores at this writing, I will post the results as soon as they're wrapped up. Please try to get your scores into ohsimplex.org asap so you can be included. Remember, while a fun operating event it does serve a greater purpose- allowing us all to gather a good picture of where we could reach after a prolonged outage were to take down repeaters. I enjoyed hearing both on the air repeatedly and in the comments how much fun you all had operating this event!

We did operate The Sarge during the event, with moderate success. The problem is that our two-meter beams (co-phased 13 ele at 100'-ish) are *extremely narrow* so I couldn't hear a broad area at any one time. Beau was operating 440 on the dual-band vertical. We need the ability to "reach out" during a real emergency, but it kind of hinders operating in a contest environment. We've discussed going to the vertical next year for broader but not quite as distant coverage. The things you learn that apply to all operation!!

ARES is represented at the state planning level for the 2024 solar eclipse as I've written before. The state is now rolling out more local information sessions for county EMA's- and I urge you to make sure your county ARES leadership is represented in those meetings! This is shaping up to be an "all hands" event on the same scope as the Republican National Convention. So we need to be involved early and thoroughly as amateur radio will play a very large part in this event.

## 2021 Annual Report ARES Around Ohio

Ohio's amateur radio operators continued to train and supply important community service over the year 2021. Using their own radio equipment, these operators continued to educate themselves through NIMS and other sources to present a trained, ready resource to counties and Ohio.

According to independent sector, org, the 2021 hourly value of a volunteer was \$28.54.

Ohio ARES (Amateur Radio Emergency Service) members provided 58,202 hours of training, meeting, and service valued at \$1.661 Million. In addition, each of our over 955 members provided an average of \$300 in radio equipment, saving our communities and the state \$286,500.

ARES operators provided 17,000 hours of service for 678 "public service" events (parades, rides, runs, and competition) and they provided 6579 hours of service in 113 emergency events (the majority being weather-related).

ARES members work hard to present a trained resource to our partners. We have over 1,000 active members. 732 have completed the four NIMS courses (100, 200, 700, 800) to be considered "Level 2" operators. 196 have added either 300-400 or the Professional Development Series to qualify for management positions. 74 have completed Auxcomm training, 10 are COML, 2 COMN, and 4 COMT rated. Ohio ARES keeps an extensive training database on all ARES members. Including such credentials as firefighting, EMT/Medic, police and many other credits, we now have over 10,000 certificates on file. We submit this level of training across the state is unrivaled by any other state.

### The Ohio Auxcomm Team

The Ohio Auxcomm Team operates station W8SGT at the Ohio EOC. Over 2021, 139 unique Ohio operators contacted the station over 941 times during our 41 weekly readiness HF voice nets. There were numerous contacts from outside Ohio, including PA, SC, TN, VA, WI and WV. The station is set up for voice, digital

and Winlink operation on HF, VHF and UHF frequencies. Our operators are well trained and at the 'top of the list' for net control and emergency skills. Most have experience in the emergency services, all have experience participating in actual emergencies. Some represent our skills elsewhere, such as an annual trip for two of our operators to communicate with the New York Marathon. These operators are dedicated to the program, attending the EOC each Tuesday evening for the weekly readiness nets. Our operators develop and maintain antennas and equipment interfaces as needed.

## **Ohio Digital Emergency Net**

A critical service of amateur radio is transmitting formatted ICS forms. The Ohio Digital Emergency Net (OHDEN) is part of Ohio ARES with the purpose of operating digitally to send these messages. Holding weekly readiness checks over 12 months, 80 unique operators totaled 788 contacts averaging 65 per month. These Came from an average of 18 counties per month.

There are several layers of HF voice nets in Ohio to organize and send messages. These nets are mentioned because they are included as a part of our larger "Simulated Emergency Test" sponsored by the ARRL each October.

## **Local Emergency Nets**

Ohio counties in which there is an active ARES program conduct regular local nets on VHF/UHF frequencies. Many also conduct local digital nets. Ohio county ARES units conducted 4,319 voice nets and 693 digital nets accumulating 27,109 hours. These times are included in the general ARES report above. These local nets carry the specific purpose of service our county partners from EMA, hospital and other agencies. It should be noted that most "Skywarn" severe weather nets are conducted on a local basis, communicating with the National Weather Service. These times are in addition to activity cited above. However, ARES and the Auxcomm team continue a program aimed at providing blanket coverage of the state through digital voice systems when needed.

## The "Watch Desk Project"

Storm systems usually bring serious static and RF noise making communication on HF bands extremely difficult. By linking the two major digital voice repeater systems in Ohio (Yaesu's "System Fusion" and the P-25 based "DMR" system) we offer coverage through over 225 repeaters saturating the state. This creates a significant ability to communicate static-free with handheld radios. This "Watch Desk Project" has been used in cooperation with the EOC's Watch Desk during severe weather outbreaks. It is a valuable resource that stands ready when needed.

## **We Test Our Readiness**

In order to test our readiness to be a viable resource Ohio ARES participates in the ARRL-sponsored "Simulated Emergency Test" in early October each year. Ohio generally places in the top three ranking nationwide. This year's scenario was a derecho with heavy wind damage followed by days of sub-zero cold resulting in loss of power and communication. Thirty one counties and over two hundred operators were active for the exercise as was the Ohio Auxcomm Team and W8SGT. W8SGT received 35 digital messages (205, 213, others plus Winlink forms) 31 formal voice messages and many tactical communications over the daylong period.

Another important test is the "Ohio ARES VHF Plus" radio contest. Conducted as a contest, this event in early January is actually a test of residential VHF/UHF antennas and stations. It affords operators the chance to plot where their "simplex" signals (non-repeater) may be heard. This gives the knowledge of how they would participate in a large-scale disaster or prolonged power outage that would take away repeaters.

Members of our teams appreciate the cooperation and acceptance of our partners at all levels! We will continue to study and practice to maintain our service at acceptable levels.

From the Public Information Coordinator John Ross, KD8IDJ - PIC

john.ross3@worldnet.att.net





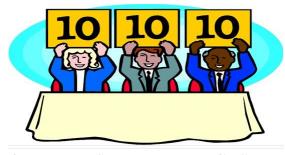


## 2022 NEWSLETTER CONTEST AT FULL SPEED

The 2022 Ohio Section Newsletter Contest is off to a record start. Already I have more entries for this January that any other January for the past 8 years!!!!

Remember you'll need to send copies from two DIFFERENT months to be entered and the deadline is June 30<sup>th</sup>, 2022. Judging this year is again electronic so you'll need either send a link to you clubs' webpage or a direct link to your newsletter.

Keep the entries coming...it's what makes our contest the best and biggest the country!!



## **OUR NEWSLETTER JUDGES**

For the past 8 years we have had a cadre of judges who were professionals, experienced and had good eyes for outstanding newsletters. Except for one all have now retired and we thank them for their help, time and willingness to share their expertise with us and their dedication to Amateur Radio.

This year we have three new judges who will carry on the tradition of good journalism and impartial decisions and selection. It also will also be a valuable opportunity for a new set of eyes on our newsletters to keep us at the cutting edge and at the top of our game.

Who are they? Here you go:

<u>ERIN CRIBS</u>...This will be Erin's 3<sup>rd</sup> year with us to share her experience in digital layout and design to help us make sure our newsletters look good on any screen big or small. Erin "retired" two years ago after 18 years with AT&T in the President's Office. She used her time away to earn two degrees...one from Columbus State and another for Capital University! Now she is back at AT&T as a Senior Manager and ready to use her skills for the 2022 Newsletter Contest.

JANE SMITH...Jane is a professional marketing and communications specialist based in the Medina/Akron and Cleveland Ohio Area. She has undergraduate degrees from the University of Akron and a Master's degree from Ashland University. She is also an Adjunct/Visiting Professor at Akron University. She has been responsible for marketing and PR campaigns for major companies and brings us a world of valuable experience and expertise.

<u>DOUG WEAKLY</u>... Doug is a Veteran and retired Warrant Officer from the United States Army/Army Reserves/Ohio National Guard. He holds degrees from The Ohio State University and Ohio University. He is the former Editor of the Ohio American Legion newspaper...the largest in the country and was voted the Number One publication in America! Doug's experience and attention to detail will be a valuable asset to our judging.

We also have a tentative commitment from a local television news anchor here in Columbus. Her station is currently undergoing some realignment and personnel changes and she should be able to join us once the dust has settled.

Form these folks to take the time and effort to help the Ohio Section is great news and shows their commitment to good journalism and their respect for Amateur Radio.



## NEWSPAPER CIRCULATION CONTIUES TO DECLINE

Over the last decade or so newspaper circulation continues to decline with some news organizations discontinuing printed newspapers altogether. Here in Ohio another major newspaper is cutting back.

The Columbus Dispatch, the oldest and once the largest newspaper in Ohio, will stop printing and delivering the Saturday edition in mid-March although their electronic edition will continue to be updated.

You are probably aware of cuts made by the Toledo Blade, The Cleveland Plain Dealer and the Cincinnati Enquirer and major newspapers across the county are following the same pattern. Also, as a result of the cutbacks, the smaller local newspapers are either going out of business entirely or moving to an all-electronic platform.

The media and how we get "news" has changed rapidly over the past two decades and so has the opportunity to get current and unbiased news. Radio and television has not been immune to cutbacks and consolidations either. Most local stations are now part of a conglomerate that emphasizes profit over impartiality.

All of this is just FYI and it's good to know that Amateur Radio still has the edge on communicating with it's members !!!



## MORSE CODE AND THE UNIVESAL ALPHABET CODE

Amateur Radio folks know a little of the history of Morse code and its demise for commercial communications. Hams are still using Morse code even though it's no longer a requirement for getting licensed.

But you might have missed a special holiday on January 11<sup>th</sup>... Learn Your Name In Morse Code Day!!! The day is celebrated on the second Wednesday every January and is a good opportunity for hams and non-hams to get back to the basics just for fun!

When I first began to learn the code...on my plastic key from Mattel...I had a little trouble with my last name which I quickly found out contained all of the letters for the International Distress signal SOS. Ross was not what I kept sending... it was John SOS!!! The ham guy up the street took great patience in helping me correct the error. To this day every time I send CW I think about how important it is to send the right letters in the right sequence!

So maybe next year you can celebrate the Learn Your Name In Code Day by making sure your fist is sending what your brain is thinking!!!

And while you're at it...run over the Universal Alphabet Code as well. I worked at a company for 28 years where some folks thought they knew everything but when it can to the alphabet code Alpha and Bravo became Apple and Bear! Better yet, Tango and Juliet ended up as Toothpaste and Jelly!!!

That's it for this month.

73

John E. Ross ARRL Ohio Section Public Information Coordinator KD8IDJ @ <u>ARRL.NET</u> 614-459-4292 Home 614-266-4292 Cell

From the Section Youth Coordinator Anthony Luscre, K8ZT - SYC k8zt@arrl.net

## **News from KE8LQR**

This month, I am sharing the column with Katie Campbell, KE8LQR, the Ohio Section Assistant Youth Coordinator. So take it away, Katie...



## Columbiana Exempted Village School District

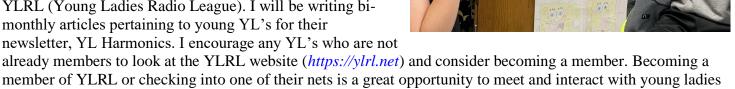
Recently, my school's amateur radio and electronics club presented to our school board about potentially getting a permanent station set up in the school to give us the opportunity to operate more often. To provide the school board members a better idea of some of the activities we participate in throughout the year, four of the club's members, including myself, attended the meeting to talk about our experiences and favorite parts of being in the club. Some of the club members' favorite things included getting to talk to hams around the world during the bi-annual ARRL School Club Roundups, making friends around the world, and



improving their geography skills during the School Club Roundups as we contacted different places. More information about the ARRL School Club Roundups can be found at http://www.arrl.org/school-club-roundup and https://limarc.org/school-club-roundup. If interested in joining the SCR mailing list, you can join using this linkhttps://groups.io/g/scr.

## YLRL (Young Ladies Radio League)

In other news, I am now the youth representative for the YLRL (Young Ladies Radio League). I will be writing bimonthly articles pertaining to young YL's for their newsletter, YL Harmonics. I encourage any YL's who are not



## Back to Anthony...

all over the world!

I know Katie has also been active in the following organization: The Long Island CW Club (LICWC). LICWC sponsors many CW learning activities, including regular sessions (which require paid club membership) and special youngster-only sessions (free). For more information on LICWC, you can view this slideshow-"Long Island CW Club- Much More Than CW Instruction & A Model for Future Organizations" at tiny.cc/licwc. The reason for the long title is that LICWC not only sponsors CW learning sessions but sessions on a wide range of Amateur Radio activities. You can also view the recorded interview I did with the founder Howard Bernstein, WB2UZE for the RATPAC Group in December 2021 at https://youtu.be/yhGLn3btTS0. The RATPAC has over 160 recorded sessions you view at *tiny.cc/ratpac-list*, plus new weekly events every Wednesday (General Ham Interest) and Thursday (Emergency & Public Service)



Please pass this on to possible candidates-

## **ARRL Teachers Institute on Wireless Technology**



As part of our educational outreach to schools through our Education & Technology Program, each summer the ARRL offers multiple sessions of the Teachers Institute on Wireless Technology. The Teachers Institute is an expenses-paid professional development program intended to provide teachers with tools and strategies to introduce basic electronics, the science of radio, space technology and satellite communications, weather science, and micro-controllers to their students. The curriculum is designed for motivated teachers and other school staff who want to learn more about wireless technology and bring that knowledge to their students.

## **Summer 2022 Applications**

Application submission deadline is May 1st, 2022.

TI - 1 Introduction to Wireless Technology @

TI - 2 Remote Sensing and Data Analysis @

Program	Location	Dates
TI - 1	<b>Newington, CT</b>	<b>June 27 - July 1</b>
TI - 2	<b>Newington, CT</b>	<b>July 11 - July 15</b>
TI - 1	Dayton, OH	<b>July 18 - July 22</b>
TI - 1	<b>Newington, CT</b>	July 25 - July 29

## "Let's Solve This."

Not too long ago ExxonMobil launched a TV ad campaign titled "Let's Solve This" with the focus on the need for more investment in teacher training to improve US student performance. The "Let's Solve This" campaign cites research that shows that students that are taught by teachers with a deeper understanding of the subject outperform those students taught by less capable teachers. Therefore, "we need to invest in our teachers as a means to improve student performance."

There has been a resurgence and aggressive emphasis upon STEM education in response to numerous economic challenges we face from our overseas economic competitors in high technology industries. Now it is being recognized that STEM instruction needs to focus on the connection between science and mathematics and engineering and technology, rather than a more compartmentalized focus on these content areas independently. It is the teacher's role to make these connections for students. To do so, teachers need to know the science and math content and understand the technologies in use in sufficient detail to make the connections for their students...thus, now the recognition of the core problem identified in the "Let's Solve This" campaign.

The ARRL ETP has identified this problem and has been doing what we can do to address it by offering the Teachers Institute (TI) over the past 10 years. From the first pilot TI conducted in 2004, and each year thereafter, this in-service training program supported entirely by generous philanthropic donations continues to evolve and flourish.

The Teachers Institute is only the beginning of a participant's exploration with wireless technology. The goal of the TI program is to equip each schoolteacher with necessary foundational knowledge, and through hands-on learning, generate the inspiration for teachers to continue to explore wireless technology and adapt relevant content into their classroom instruction.

This training serves as an excellent foundational preparation for schoolteachers interested in including classroom learning about radio communications and wireless technology as part of student preparation for



participation in the Amateur Radio on the International Space Station (ARISS) program.

Cost: Teachers Institute opportunities are virtually free for the participants. The grant to attend a TI covers transportation, hotel, a modest per-diem to cover meals, instructional resources for the electronics, microcontroller, and robotics segments of the course, and a resource library of relevant ARRL publications. There is a \$100 enrollment fee to attend the Teachers Institute.

## Travel and reimbursement guidelines **@**.



Graduate credits: Graduate credits are available through Fresno Pacific University upon completion of the TI-1 or TI-2 programs. These credits can be used to satisfy professional growth requirements to maintain teaching credentials. The class is self-contained and participants are expected to be able to complete all requirements during class time. Graduate credit forms may then be requested at the end of the Teachers Institute.

To qualify, applicants must be an active schoolteacher at an elementary, middle, high school or at a college or university, or in a leadership or enrichment instruction role in an after-school or collective homeschool program. An Amateur Radio license is NOT required for the introductory workshop (TI-1) but IS required for the advanced TI-2 program.

If you have additional questions or would like assistance please contact Ohio Section Youth Coordinator Anthony Luscre, K8ZT at k8zt@arrl.net

That's it for this month, 73 Anthony, K8ZT (k8zt@arrl.net)

## From the Section Traffic Manager David Maynard, WA3EZN – STM

wa3ezn@att.net

The OSSBN has changed the start time for the evening net to 6:00 PM. Do to propagation and the frequency going long the net manager, Mike KC8WH, has asked that if you are bringing traffic to the net that you check in and list you traffic immediately and not wait for the rotational call-up. Often the band goes long by 6:15 so it is necessary to pass the traffic quickly. Hopefully this situation will pass with the time change to Daylight Savings time.

# o to has a oes

## **OHIO SINGLE SIDEBAND NET**

Morning session	10:30 AM	3972.5 KHz	every day
Afternoon session	4:15 PM	3972.5 KHz	every day
Evening session	6:00 PM	3972.5 KHz	every day

Mike, KC8WH is the OSSBN Net Manager. Note time change because of propagation.

## **OHIO HF CW TRAFFIC NETS**

HF CW NETS	NET TIMES	FREQUENCY	NET MANAGERS
<b>Buckeye Early</b>	6:45 PM	3.580	N2LC
<b>Buckeye Late</b>	10:00 PM	3.590	WB9LBI
Ohio Slow Net	6:00 PM	3.53535	N2LC

All net frequencies plus or minus QRM

## **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 PL 123.0	KD8TTE
MVTN	7:00 PM Mon	146.640	КС8НТР
NWOHARES	6:30 PM DAILY	146.10	N8TNV
TCTTN	9 PM Sun, Tues, Fri	147.015	WB8YYS
TATN	8:00 PM DAILY	146.670 PL 123.0	WG8Z



On the 15TH of the month North West Ohio ARES Traffic Net meets on the alternate frequency of 146.94.

A tornado is a violently rotating column of air that is in contact with both the surface of the Earth and a cumulonimbus cloud or, in rare cases, the base of a cumulus cloud. It is often referred to as a twister. Tornadoes come in many shapes and sizes, and they are often visible in the form of a condensation funnel originating from the base of a cumulonimbus cloud, with a cloud of rotating debris and dust beneath it. Most tornadoes have wind speeds less than 110 miles per hour and are about 250 feet across and travel a few miles before dissipating. The most extreme tornadoes can attain wind speeds of more than 300 miles per hour, are more than two miles in diameter, and stay on the ground for dozens of miles.

My first encounter with a tornado was when as a youngster I and my siblings were awaken, told to get dressed and get downstairs. We lived in a two-story farmhouse on a road with only two other houses on it. My father instructed that if he started yelling for us to get to the basement and get into the coal storage room. It would be dirty with coal but was a small heavy constructed cement block room with no windows. There was no tornado that evening.

My second encounter with a tornado was much more serious and we were lucky we were not hurt. On a sunny Sunday afternoon in 1977 while I was watching football on the TV and the family was napping we were affected by a tornado. My first encounter with this tornado was to see a piece of aluminum siding spinning around just a few feet off the ground and moving down the middle of our street in front of our house. Damages to our home and the homes on our street were slight

At this point the power went off for a short period of time. When it return my fire monitor was screaming with alert tones as every fire company in the area was alerted and their sirens set to blowing. I checked the safety of

my family and our home then responded to my fire department.

During the early evening hours of that Sunday September 19, 1977, an F2 tornado touched down just west of Lake City, PA. After heavily damaging Elk Valley Elementary School, the tornado traveled east along Martin Avenue, destroying homes and injuring several people.

At the time of the tornado, several sporting events were underway in the ballfields immediately adjacent to the schools. Concerned parents from all over the area converged on the scene, complicating traffic and rescue efforts.

Operators at West County Fire Control in Girard dealt with widespread telephone outages and communication failures in an era before cell-phones. They maintained communication with police, fire, EMS and emergency management officials despite terribly overloaded voice radio channels. They called on the ARES for communication support for Monday, the next morning. As my duties with the fire service was not needed I volunteer my ham radio and myself to help. We toured the damage to home in the area which existed of cement slabs and basements, all were totally destroyed. We then turned our attention to the destroyed school.

## \$5 Million Damages By Tornado LAKE CITY, Pa.

Officials estimate a tornado caused as much as \$5 million worth of damage when it cut a swath of destruction through this Lake Erie shore community. "It's quite a mess," said Walter Cashdollar, mayor of Lake City borough where a violently whirling column of air touched down Sunday afternoon and destroyed or damaged dozens of buildings including the state's third largest elementary school.

A tornado and two funnel clouds were sighted in Erie County according to the National Weather Service report later Monday. Erie County Civil Defense Director Max Gill estimated that damage to residences and industry in the approximate 75 yard path of Sunday's tornado would total \$1.2 million. "I only live a block away. All the homes have debris." Gill said Monday. "We went door to door and 95 per cent of the damage affecting people occurred in a two block area." Gill said 65 homes were damaged and nine were destroyed, including a house and barn in nearby Fairview. He also estimated that \$500,000 damage was done to the Parker-White Metal Co. plant in Fairview when the tornado ripped off its roof."

Adjacent to Parker-White was a little Griddles football field with active games. Fortunately the Fairview Fire Department had an ambulance stationed at the field. The fireman used their ambulance speaker system to inform people that a tornado was approaching. This caused the field to be cleared as everyone left for safe cover.

The next day in Erie Pa in the Millcreek Mall the parking lot was littered with the library books and other material sucked up from the Elk Valley Elementary school. It was very fortunate that this did not happen when school was in session as many children including our own first grader would have been in the school. In touring the inside of the school the strings of classroom lights laid on the classroom floors in as S shape. The student desks and all classroom material was strewn around the sides of the rooms. If students would have been in those seats and classroom their would have been many injuries if not deaths.

## Tornado Information for Lake City, Pennsylvania

Lake City, PA is a Low-Risk area for a tornado. Tornado risk is calculated from the destruction path that has occurred within 30 miles of the location. In September 1964, 1,020 students started classes at Elk Valley

Elementary. The school sustained damages totaling \$2,000,000 on September 18, 1977, when a tornado hit, which also caused \$3,000,000 in damages to the town.

## **December 2021 Tornado Outbreak**

Nearly 70 out-of-season tornadoes ripped across several states on Friday, Dec. 10, and Saturday, Dec. 11, 2021, leaving death and destruction in their wake. The National Weather Service (NWS) confirmed 69 tornadoes. As of Jan. 13, they had verified one – EF-U (unknown), 17 EF-0, 28 EF-1, 15 EF-2, six EF-3, two EF-4 and no EF-5 tornadoes making landfall across ten states: Alabama, Arkansas, Georgia, Indiana, Illinois, Kentucky, Mississippi, Missouri, **Ohio** and Tennessee.

The NWS issued more than 149 tornado warnings. This was the single, deadliest tornado outbreak in December in U.S. history, however, a <u>larger tornado outbreak</u> occurred just a few days later on Dec. 15. While not unheard of, <u>December tornadoes</u> are rare and usually not as destructive as the Dec. 10-11 storms. While larger, the system on Dec. 15 did not produce as many strong tornadoes and saw fewer deaths and less damage.

The current death toll of 90 people (plus 3 non-tornadic deaths) from this outbreak, plus the previous tornado deaths in 2021, made 2021 the deadliest year for tornadoes since 2011 when more than 500 people were killed, including a tornado outbreak in May 2011 which killed more than 170 people. An additional five people were killed directly (and two indirectly) by the second outbreak on Dec. 15.

One tornado – dubbed the Quad-State Tornado – was originally believed to be on the ground for approximately 230 miles (200 miles in Kentucky alone) across four states: Arkansas, Missouri, Tennessee and Kentucky. It would have become the longest tornado in American history, replacing 1925's Tri-State tornado, however, it did not stay on the ground continuously. It was composed of a family of tornadoes book ended by two EF-4 tornadoes with three smaller and weaker tornadoes in the middle. It was still a very long storm cell. The debris field was recorded at above 30,000 feet (the height commercial planes fly) across much of its path.

The most significant concerns were a nursing home in Monette, Arkansas; a candle factory and the towns of Mayfield and Bowling Green, Kentucky; and an Amazon warehouse in Edwardsville, Illinois.

The Washington Post said, "Increasingly accurate and timely weather forecasts and warnings have brought about a significant downward trend in tornado fatalities. But the extreme toll of the Dec. 10-11 outbreak illustrates that vulnerable areas still face a serious risk of highly lethal storms. The outbreak was by far the deadliest on record in December, more than doubling the previous toll from a 1953 tornado in Mississippi. No tornado event this decade has produced as many fatalities. In fact, this outbreak killed more people in a single day than in the three years from Jan. 1, 2016 to Dec. 31, 2018."

Unseasonably warm and humid weather created the perfect weather conditions for catastrophic thunderstorms. Climate change has moved the location of tornado alley and is likely to have impacted the strength of the late-in-the-year storm. Nighttime tornadoes are twice as deadly as daytime tornadoes because of people sleeping through warnings; the twisters are also more difficult to see.

They have assessed the insured losses at \$3.9 billion. This does not cover the rebuilding cost or total costs, as not all damages were covered by insurance. It may rise as high as \$5 billion according to some insurers estimates.

Approximately 90 people died across five states, with 76 in Kentucky including 12 children, and 14 deaths outside of Kentucky. On a single street in Bowling Green, 12 people died, eight of them children. The ages of victims in Kentucky ranged from 2 months to 98 years. One person from the candle factory died as a result of injuries but is counted as tornado related. In Tennessee, the total deaths were 15. In Illinois, the six deaths were all in the Amazon warehouse and there were two deaths in each of Missouri and Arkansas. There were three indirect deaths including a man who suffered a heart attack while cleaning debris.

The town of Mayfield, population 10,000, was decimated. The Mayfield Consumer Products candle factory had less deaths than originally anticipated. Seven inmates from the Graves County jail working at the factory survived although a jail deputy was killed. Survivors from the factory filed a class-action lawsuit against the company saying they were told they would be fired if they left, despite the impending weather.

Two tornadoes struck the Bowling Green area. This included an EF-3 which killed 17, and EF-2 which caused significant damage. At least 500 homes were destroyed and another 500 homes across the state were also flattened.

Starting in Arkansas and traveling northeast, an EF-4 long-track tornado ripped the roof off the 86-bed Monette Manor nursing home, killed at least one person and injured five others. At least one other person died in the state at a Dollar General in Leachville. The tornado continued through Missouri where it killed a 9-year-old girl and injured her family. It then moved into Tennessee where officials reported three deaths: two in Lake County and one in Obion County. This tornado traveled from Monette, Arkansas to Reelfoot Lake/Samburg, Tennessee a distance of 80.3 miles and had a path up to 1,800 yards.

In Illinois, there were six confirmed deaths in an Amazon warehouse. That tornado was given a preliminary ranking of an EF-3. Like the candle factory, Amazon workers raised concerns about safety during the tornadoes with one driver sharing text messages of her boss requiring her to stay on route while others said they were not given adequate warnings. Amazon said that those who died were not in the designated shelter-in-place locations.

## Learn More

- Washington Post: <a href="https://www.washingtonpost.com/photography/interactive/2021/see-damage-caused-by-deadly-quad-state-tornado/">https://www.washingtonpost.com/photography/interactive/2021/see-damage-caused-by-deadly-quad-state-tornado/</a>
- National Oceanic and Atmospheric Administration: https://www.noaa.gov/news/december-2021-tornado-outbreak-explained
- 2. CBS News: <a href="https://www.cbsnews.com/news/kentucky-december-10-11-tornado-outbreak-60-minutes-2021-12-19/">https://www.cbsnews.com/news/kentucky-december-10-11-tornado-outbreak-60-minutes-2021-12-19/</a>
- The Weather Channel: Photo Essay of damage

Source of Kentucky information: Center for Disaster Philanthropy.

I have run out of time. Tune in next month for the rest of the story.

73

David WA3EZN

Ohio Section Traffic Manager

## ARES Training Update Jim Yoder, W8ERW – ARES Data Manager w8erw@arrl.net

## **ARES** Training Update

Hello January, Hello snow. It has been minimal here in Fremont this year. Elsewhere not so much. The white stuff can at least be pretty to look at. It's the cold however that really doesn't agree with me these days. You'd never know I once worked outside in it all day and that I loved to ice skate and to go after perch under the ice on the Sandusky



Bay. It's quite likely that the ravages of time now tell my body to avoid what was in the time a pleasure although the thought occasionally crosses my mind still. To be honest, I am anxious for spring to arrive so that I can get after the outdoor chores again.

I can see another technician class forming in the near future as well as some interesting activities to get us active in this hobby of ours. The local clubs are planning on some new and perhaps exciting things this year including guest speakers, a field trip to DX Engineering, training opportunities for message handling, DMR, and the use and application of various other tools to help us improve our station environment. Personally, I plan on constructing a desk/work area suitable for all the station equipment and accessories that I have accumulated over the years. And yes there is always antenna work to complete. It seems there is no perfection in Amateur Radio, just contemplations, revisions, additions and all that comes with it, all of which will and does consume a lot of time for mentally engineering and planning with good hot coffee in hand.

I predict we will have a very productive year ahead and the interest in Amateur Radio will continue to grow. Each of us can help this happen by encouraging new Hams, showcasing our abilities with events that we support and a bit of active recruiting anywhere that we can do so. Let's make it happen in 2022.

We had a great 2021 for ARES training. The usual slow down during the holidays never happened this year and the certificates continued to flow into my in box throughout the entire year. The ARES training database now has 10,151 certificates logged. There are 745 at level 2 and 212 at level 3. Another 888 are at level 1 which leaves a lot of room for continued growth and training attainment. Thus far this year we have 22 additional certificates on file. This is a great start and I hope to see the trend continue.

My sincere thanks go to everyone who has completed training and submitted certificates. Please don't hesitate to ask if you have any questions.

73 and Happy New Year,

Jim w8erw@arrl.net



	Members	Active	Level 1	Level 2	Level 3	PDS	Aux Comm	Com (L)	COM (N)	COM (T)	SK
Total	1934	1093	888	745	212	69	74	11	2	4	58

## **Training Certificates Submitted**

Prior 2014	4959
2014	380
2015	389
2016	879
2017	995
2018	1215
2019	677
2020	414
2021	218
2022	20
Total	10151

Total member records in the database

Total active members submitting training documents

Level attainment and ancilliary training submissions.

Level 1 members have not completed NIMS although may have submitted some certificates. Level 2 members have completed NIMS.

Level 3 members have completed NIMS and ICS-300-400 or the alternate courses online.

PDS references attainment of the Professional Development Series certificate.



The ARES training initiative provides a framework that will allow ARES members to integrate our communications skills and experience into the structure of the National Incident Management System NIMS which is widely used by our served agencies.

W8ERW

22-Jan-22

## National News

(from arrl and other sources)

## ARLB005 Amateur Operation in 3.45 - 3.5 GHz Segment Must Cease by April 14, 2022

QST de W1AW ARRL Bulletin 5 ARLB005 From ARRL Headquarters Newington CT January 19, 2022 To all radio amateurs

## SB QST ARL ARLB005

ARLB005 Amateur Operation in 3.45 - 3.5 GHz Segment Must Cease by April 14, 2022

The FCC has established April 14, 2022, as the date by which amateur radio transmissions must stop in the upper 3.45 - 3.5 GHz segment of the amateur secondary 9-centimeter band. Secondary operations are permitted to continue indefinitely in the remainder of the band, 3.3 - 3.45 GHz, pending future FCC proceedings.

On January 14 the FCC released DA 22-39, which announces the results of Auction 110 for the 3.45 - 3.55 GHz band. Release of this notice triggered FCC rules adopted last year requiring that amateur radio operations between 3.45 GHz and 3.5 GHz cease within 90 days of the public notice.

DA 22-39 can be found online at,

 $\underline{https://www.fcc.gov/document/fcc-announces-winning-bidders-345-ghz-service-auction/attachment-auction/at$ 

In October 2021, ARRL President Rick Roderick, K5UR, urged Congress to direct the FCC to preserve Amateur Radio's secondary use of the 3 GHz band in a written statement responding to H.R. 5378, the Spectrum Innovation Act of 2021, before the US House Commerce Communications and Technology Subcommittee.

A chronology of actions responding to amateur access on the 3.5 GHz band can be found on the ARRL website at, http://www.arrl.org/3-ghz-band.

## \*\*\*\* Editor's Note \*\*\*\*

I know this band was not heavily populated by Amateurs. Our history has included being allocated frequencies which at the time of allocation were not considered valuable. As technology has moved forward and higher frequencies are being shown to have commercial value, our allocations will always be in jeopardy. There is only one organization that represents *our* interests in these allocations, and that is the ARRL. Through the years they have done a remarkable job for us despite their limited funding compared to government and business interests. If we are going to help protect our interests in the future, we need to be involved in experimentation and usage of the higher bands. We need to support the ARRL's Spectrum Defense Fund. Finally, at the level that everyone of us can contribute at, we need to expand our hobby membership (make more hams) and support the ARRL through our membership and participation. No other organization is working on our behalf.

## FCC Seeks Attorney-Advisor for its Mobility Division

The FCC has <u>posted</u> an opening for an attorney-advisor in the Mobility Division of its Wireless Telecommunications Bureau in Washington, DC. As a principal attorney with mid-to-senior level responsibilities, the individual's job duties would include working on policy, rulemaking, and legal issues;

drafting Commission- and Bureau-level rulemaking and adjudication decisions, and reviewing proposed legislation, rulemakings, orders, and changes to regulations.

According to the FCC website, the Mobility Division is "responsible for developing policy and rules that facilitate rapid, widespread deployment of wireless communications services. Along with the Broadband Division, it oversees nearly 2 million licenses used to provide an array of wireless services. The Mobility Division helps carry out the [Broadband Personal Communications Service], to private land mobile used for dispatch and remote monitoring of equipment, to maritime and aviation, to personal use such as ham radio."

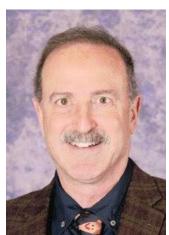


ARRL CEO David Minster, NA2AA, has suggested that the <u>position listing</u> be shared by ARRL members who know an attorney interested in communications law and who has an amateur license. "This non-supervisory position is at the top of the government pay scale. I would urge any amateur who is an attorney and has several years of experience to apply -- especially if they are interested in wireless," Minster said. The deadline to apply for this opening is January 28, 2022.

## Two Radio Amateurs Appointed to the FCC Technological Advisory Council (TAC)

FCC Chairwoman Jessica Rosenworcel named two prominent radio amateurs among her appointments to the FCC Technological Advisory Council (<u>TAC</u>) on January 19. Appointed were Greg Lapin, N9GL, and Michelle Thompson, W5NYV. Lapin chairs the ARRL RF Safety Committee and has represented <u>ARRL The National Association for Amateur Radio</u> on the TAC since 2001.

ARRL Laboratory Manager Ed Hare, W1RFI, noted that Lapin has been involved with RF safety and the FCC since the last FCC significant rules changes in 1998," he said. "He is again helping the FCC prepare information on OET Bulletin 65, Supplement B for amateur radio, giving guidance for amateurs who need to comply with the FCC rules on RF exposure. His work is highly respected by the FCC and the ARRL Lab, making it easier for amateurs to evaluate their stations."



Greg Lapin, N9GL



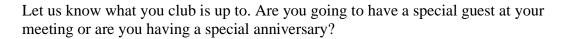
Michelle Thompson, W5NYV

Thompson is CEO of the Open Research Institute (ORI), which she will represent on the TAC. ORI is a non-profit research and development organization dedicated to open-source work that includes such areas as amateur satellites and digital communications. She is an ARRL Life Member. Thompson will discuss "Digital Communications Technology" on February 10 at the <u>ARRL National Convention</u> in Orlando, as part of the <u>Technology Academy</u> workshop Track.

The TAC serves to assist the FCC in identifying important areas of innovation and developing informed technology policies that support US competitiveness in the global economy. The TAC will consider and advise the FCC on topics such as 6G, artificial intelligence, advanced spectrum-sharing technologies, and emerging wireless technologies, including new tools to restore internet access during shutdowns and other disruptions. The TAC will hold its first meeting of the year on February 28.

## Club Corner

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



Send it to: webmaster@arrl-ohio.org



## **VE Sessions**

## **Alliance Amateur Radio Club**

AARC(W8LKY) will not be operating normal activities in the month of January 2022. We have canceled our January VE Session - January 22, 2022.

### **CARS**

VE testing from CARS - Cuyahoga Amateur Radio Society - at Elmwood Recreation Center, 6200 Wisnieski Parkway in Independence, Ohio 44131 Time: 9:15 AM (Walk-ins allowed) Always the 2nd Sunday of the odd month. Go to CARS <a href="www.2cars.org">www.2cars.org</a> for detailed map of location. Call Metro W8MET 216-520-1320 for details

## **Dayton Amateur Radio Association (DARA)**

If you are interested in testing for a new or upgraded license, please come see us at the DARA Clubhouse. If you have questions about testing, please email <a href="mailto:exams.w8bi@gmail.com">exams.w8bi@gmail.com</a>

## **Highland Amateur Radio Association**

Next testing session is February  $19^{th}$ . 9:00 am - 12:00 am at the Highland County EMA 1487 N High St. Hillsboro, OH 45133. You can get more information and register for your exam at:

https://www.signupgenius.com/go/10C0D48ADAC23A7FEC16-hara7

VE's are also needed for the exam, please contact John Levo: jlevo@cinci.rr.com

The Lancaster and Fairfield County Amateur Radio Club (LFCARC) hosts exam sessions at the FAIRFIELD County EMA, 240 Baldwin Dr in Lancaster Ohio, 43130, on the first Saturday each month at 10:00 am. Please visit our website at <a href="http://www.k8qik.org">http://www.k8qik.org</a> for exam dates on our calendar and navigate to our Learning Center/Taking the Exam link for information and requirements. Our VE team looks forward to serving the Amateur Radio community in Central Ohio and across our nation. We have an experienced team that has tested candidates from Alaska, Florida, Texas and points in between! Contact me at <a href="mailto:ve\_testing@k8qik.org">ve\_testing@k8qik.org</a> to register.

<u>The Milford Amateur Radio Club (MARC)</u> is now doing VE testing on the third Thursday of each month at 6:00 PM. Location; Miami Township Civic Center located at 6101 Meijer Drive, Milford, OH 45150. Please pre-register at <a href="https://www.milfordhamradio.org">www.milfordhamradio.org</a></u>

## Portage County Amateur Radio Service (PCARS)

The first Saturday of every even numbered month -10 am - at the PCARS club site in Ravenna. Please visit the PCARS web site and check out the information about VE testing in the latest newsletter at <a href="www.portcars.org">www.portcars.org</a>. If you have any questions, don't hesitate to contact me at KB8UUZ@gmail,com

<u>US Coast Guard Auxillary</u> January 22, 2022 at 0900 (local) at the Shrine Building, 6401 Fruit St. Huntsville, OH 43238. For more information contact Sam Holland – KD8JJJ at 937-592-2412 or Michael Robinsons – KI0DE at 614-744-4469 <u>msrobin1980@gmail.com</u>

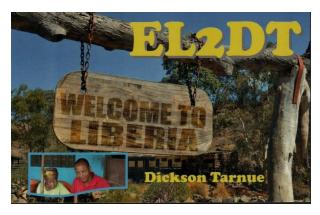
DX This Week

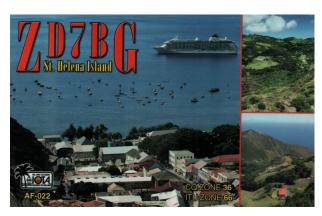
DX This Week – K9LA Bill AJ8B (aj8b@arrl.net, @AJ8B, or www.aj8b.com) CWOPs Member #1567

I received several nice cards this week including OK1XV-Josef in the Czech Republic, EL2DT-DX pedition to Liberia, and ZD7BG-G ilbert on St. Helena Island. Let me know what you worked!









## DAH DIT DIT DAH DAH DIT DIT DAH

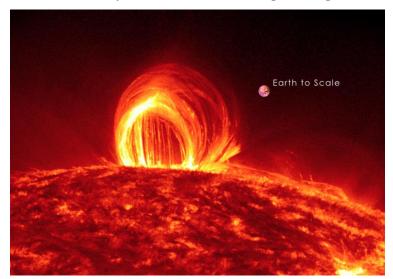
Last week was installment #1 of the discussion of Solar Numbers and when they mean by Carl, K9LA. Below is the second installment. Thanks to Carl for permission to reprint.

## Solar Numbers – What they Mean Part 2: By Carl Luetzelschwab, K9LA

A CME is an explosive ejection of a large amount of solar matter and can cause the average solar wind speed to take a dramatic jump upward--kind of like a shock wave heading toward Earth. If the polarity of the sun's magnetic field is southward when the shock wave hits Earth's magnetic field, the shock wave couples into Earth's magnetic field and can cause large variations in Earth's magnetic field. This is seen as an increase in the A and K indices.

In addition to auroral activity, these variations to the magnetic field can cause those electrons spiraling around magnetic field lines to be lost into the *magnetotail*. With electrons gone, maximum usable frequencies

(MUFs) decrease, and return only after the magnetic field returns to normal and the process of ionization replenishes lost electrons. Most of the time, elevated A and K indices reduce MUFs, but occasionally MUFs at low latitudes may increase (due to a complicated process) when the A and K indices are elevated.



Solar flares and CMEs are related, but they can happen together or separately. Scientists are still trying to understand the relationship between them. One thing is certain, though--the electromagnetic radiation from a big flare traveling at the speed of light can cause short-term radio blackouts on the sunlit side of Earth within about 10 minutes of eruption. Unfortunately, we detect the flare visually at the same time as the radio blackout, since both the visible light from the flare and the electromagnetic radiation in the 1 to 10 Angstrom range from the flare travel at the speed of light--in other words, we have no warning. On the other hand, the energetic particles ejected from a flare can take up to several hours to reach Earth,

and the shock wave from a CME can take up to several days to reach Earth, thus giving us some warning of their impending disruptions.

Each day the Space Weather Prediction Center (a part of NOAA, the National Oceanographic and Atmospheric Administration) and the US Air Force jointly put out a Solar and Geophysical Activity Report. The current and archived reports are at **SWPC page**. Each daily report consists of six parts.

Part IA gives an analysis of solar activity, including flares and CMEs. Part IB gives a forecast of solar activity. Part IIA gives a summary of geophysical activity. Part IIB gives a forecast of geophysical activity. Part III gives probabilities of flare and CME events. These first three parts can be summarized as follows: normal propagation (no disturbances) generally occurs when no X-ray flares higher than class C are reported or forecasted, along with solar wind speeds due to CMEs near the average of 400km/sec.

Part IV gives observed and predicted 10.7-cm solar flux. A comment about the daily solar flux--it has little to do with what the ionosphere is doing on that day. This will be explained later.

Part V gives observed and predicted A indices. Part VI gives geomagnetic activity probabilities. These last two parts can be summarized as follows: good propagation generally occurs when the forecast for the daily A index is at or below 15 (this corresponds to a K index of 3 or below).

WWV at 18 minutes past the hour every hour and WWVH at 45 minutes past the hour every hour put out a shortened version of this report. A new format began March 12, 2002. The new format gives the previous day's 10.7-cm solar flux, the previous day's mid-latitude A index, and the current mid-latitude three-hour K index. A general indicator of space weather for the last 24 hours and next 24 hours is given next. This is followed by detailed information for the three disturbances that impact space weather: geomagnetic storms (caused by gusts in the solar wind speed), solar radiation storms (the numbers of energetic particles increase), and radio blackouts (caused by X-ray emissions). For detailed descriptions of the WWV/WWVH messages, visit www.swpc.noaa.gov/noaa-scales-explanation.

Normal propagation (no disturbances) is expected when the space weather indicator is minor. A comment is appropriate here. Both the Solar and Geophysical Activity Report and WWV/WWVH give a status of general solar activity. This is *not* a status of the 11-year sunspot cycle, but rather a status on solar disturbances (flares, particles, and CMEs). For example, if the solar activity is reported as low or minor, that doesn't mean we're at the bottom of the solar cycle; it means the sun has not produced any major space weather

## disturbances.

In order to predict propagation, much effort was put into finding a correlation between sunspots and the state of the ionosphere. The best correlation turned out to be between SSN and monthly median ionospheric parameters. This is the correlation that our propagation prediction programs are based on, which means the outputs (usually MUF and signal strength) are values with probabilities over a month time frame tied to them. They are not absolutes; they are statistical in nature. Understanding this is a key to the proper use of propagation predictions.

Sunspots are a subjective measurement. They are counted visually. It would be nice to have a more objective measurement, one that measures the sun's output. The 10.7-cm solar flux has become this measurement. But it is only a general measure of the activity of the sun, since a wavelength of 10.7-cm is way too low in energy to cause any ionization. Thus 10.7 cm solar flux has nothing to do with the formation of the ionosphere. The best correlation between 10.7-cm solar flux and sunspots is the smoothed 10.7-cm solar flux and the smoothed sunspot number--the correlation between daily values, or even monthly average values, is not very acceptable.

Since our propagation prediction programs were set up based on a correlation between SSN and monthly median ionospheric parameters, the use of SSN or the equivalent smoothed 10.7-cm solar flux gives the best results. Using the daily 10.7-cm solar flux--or even the daily sunspot number--can introduce a sizable error into the propagation predictions outputs since the ionosphere does not react to the small daily variations of the sun. Even averaging 10.7-cm solar flux over a week's time frame can contribute to erroneous predictions. To reiterate, for best results use SSN or smoothed 10.7-cm solar flux and understand the concept of monthly median values.

For short-term predictions, the use of the effective SSN (SSNe) may be helpful. In this method, an appropriate SSN is input to the propagation prediction software to force it to agree with daily ionosonde measurements. Details of this method can be found at <a href="http://www.nwra.com/spawx/ssne24.html">http://www.nwra.com/spawx/ssne24.html</a>

## DAH DIT DIT DAH DAH DIT DIT DAH

## 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. <a href="http://www.dailydx.com/">http://www.dailydx.com/</a>. Bernie has this to report:

**8Q** – **Maldives** - 8Q7CQ is planned for March 4-18 by G0VJG, Nobby. He will have an FT857, FT450D, and Juma 1000-watt amp to a Butternut HF6 vertical and dipoles. He plans to be on SSB and digital modes, including operating in the ARRL DX SSB weekend March 5-6. This is his third 8Q operation, this one from Innahura Island, IOTA AS-013. He will be on 80-10 including 60. QSL through M0OXO OQRS or direct to the G0VJG home QTH

**J6 - St. Lucia -** Under the J68HZ callsign from Soufriere will be ops J68HZ, J69DS, KA4RRU, WA4PGM and W0CN, March 1-7. Their radios will be Elecraft K3s, 160-10M. For confirmation of your contacts they prefer that you use LoTW, but direct via K9HZ will work, and Club Log too, no bureau. <a href="https://www.qrz.com/db/j68hz">www.qrz.com/db/j68hz</a>.

**3B8** – **Mauritius** - SP2JMB and XYL SP2TO will put 3B8GY on the air February 5-25. Their last time there was in 2011. Look for them on HF SSB, CW and digital modes. QSL direct to SP2JMB.3

**NCDXF** - From the Northern California DX Foundation, there is an update on the US Fish and Wildlife Service Pacific Remote Islands Marine National Monument. That organization is open to public comments about amateur radio operations and a management plan for these DXCC entities. N1DG, Don Greenbaum, represents hams on a Citizens Group, discussing the "recreational uses" of the islands. NCDXF highlights the previous operations from the islands and members of their board who have gone to Midway, Kure, Palmyra, Kingman, Jarvis, Johnston, Wake, Navassa, Desecheo and Baker.

Says W0GJ, Glenn Johnson, for NCDXF, "Let's help make DX happen in these rare entities. The more input and interest shown by the amateur radio community can only help but gain periodic access to these rare entities." http://www.ncdxf.org

**VP2M** – **Montserrat** - W2APF, Thaire, gives us an update on his VP2MDX operation, which runs from January 5 to February 18. He is running a KX3, not a KX1 as previously reported, and a KPA1000 to a BuddiPole Hexbeam. Listen for him on CW and SSB on 80 through 10 meters. Thaire has setup his LoTW account and QSOs will be uploaded upon his return home. QSL via W2APF.

**PJ2** – **Curacao** - Yesterday PJ2ND (previously operating as PJ2/K8ND), Jeff Maass, worked his 100,000th QSO from Curacao. Since 2002 Jeff has made 39 trips to the island and over "the past few years" done some remote operation. F6JON was the one giving Jeff that milestone. "This doesn't include any of the thousands of QSOs I've made using the PJ2T callsign in contests, single-op or as a part of multi-op teams over the years", says Jeff. In an effort to work on "the next 100,000 QSOs he will be operating PJ2ND until February 2nd, including the CQ WW 160 Meter CW Contest, as PJ2T. QSL PJ2ND via K8ND or LoTW. QSL PJ2T via W3HNK or LoTW.

## DAH DIT DIT DAH DAH DIT DIT DAH

# CORNER

details.

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/) and CQ Magazine for more contests or more

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!

Feb 12-13	CQWW WPX RTTY Contest	www.cqwpxrtty.com
Feb 25-27	CQWW 160M SSB Contest	http://cq160.com/rules.htm

## DX News

### ARLD003 DX news

This week's bulletin was made possible with information provided by 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.

MAURITIUS, 3B8. Ray, HB9DNG is QRV as 3B8HH. Activity is on 80 to 2 meters, and possibly 160 meters, using CW and some SSB. He will soon be active using RTTY and PSK. QSL via bureau.

KENYA, 5Z. Ferdy, HB9DSP is QRV as 5Z4/HB9DSP until January 31. Activity is on 20, 15, and 10 meters using SSB and some FT8. QSL via LoTW.

JAMAICA, 6Y. Neville, G3RFS is QRV as 6Y5FS for two months. Activity is on the HF bands. QSL via G4BWP.

GUADELOUPE, FG. Members of the Radio Club de Montceau Les Mines are QRV as TO6S from Terre de Haut, IOTA NA-114, until February 1. QSL via EA5GL.

ST. MARTIN, FS. Peter, G4HSO is QRV as FS/G4HSO until January 31. Activity is on various HF bands using mainly CW. QSL via LoTW.

ENGLAND, G. Special event stations GB1900HA and GB1900HW will be QRV from January 24 to December 23 to commemorate the 1900<sup>th</sup> anniversary since the beginning of the construction of Hadrian's Wall. QSL via LoTW.

ST. LUCIA, J6. Operators K9HZ and K8SD are QRV as J68HZ from Soufriere until February 8. This includes being an entry in the upcoming ARRL SSB DX contest. QSL via LoTW.

JAPAN, JA. Take, JI3DST is QRV as JI3DST/5, JJ5RBH, and JS6RRR/5 from Shodo Island, IOTA AS-200, until February 24. Activity is on 160 meters to 70 centimeters using CW, SSB, RTTY, FM, and FT8. QSL to home call.

FAROE ISLANDS, OY. Operators Cornel, YP5C and Mihai, YO6SM are QRV as OY/YP5C and OY/YO6SM, respectively. Activity has been mainly on 20 meters using SSB. Their length of stay is unknown. QSL to home calls.

ARUBA, P4. Mathias, DL4MM will be QRV as P4/DL4MM from January 23 to February 1. Activity

will be on the HF bands using CW, SSB, and FT8 with a focus on the low bands. This includes being active as P40AA in the upcoming CQ World Wide 160 Meter CW contest. QSL to home call.

BRAZIL, PY. Special event station PR200IND is QRV to celebrate the 200th anniversary of Brazil's independence. QSL via LoTW.

ANTARCTICA. Alex, UG1A is QRV as RI1ANC from Vostok Station until early February. Activity is in his spare time using mainly CW. QSL via RN1ON.

EUROPEAN RUSSIA, UA. Special event stations R900BL, R900DM, R900DV, and R900RO are QRV from St. Petersburg and the Leningrad Oblast until January 31 to mark the annual commemoration of the end of the 900-day siege of Leningrad in World War II. QSL via operators' instructions.

INDONESIA, YB. Stations YB6ABO/p, YC1BIQ/6, YD0AVE/6, and YE1AR/6 are QRV from Pulau Rondo, IOTA OC-245, until January 27. Activity is on 160 to 10 meters using CW, SSB, and FT8. QSL via N2OO.

ST. HELENA, ZD7. Station ZD7MY has been QRV on 10 meters using FT8 around 1800z. QSL direct.

CAYMAN ISLANDS, ZF. Jim, WB2REM is QRV as ZF2OO until January 2023. Activity is holiday style on 80 to 10 meters using mostly FT8 and FT4, as well as CW and SSB. QSL via LoTW.

The Worldwide Sideband Activity Contest, RTTYOPS Weeksprint, Australia Day Contest, SKCC CW Sprint, QRP 40-Meter CW Fox Hunt, Phone Weekly Test, CWops Test, Mini-Test CW 40, Mini-Test CW 80, UKEICC 80-Meter CW Contest and AWA Linc Cundall Memorial CW Contest are all scheduled for January 24 to 27.

Please see January QST, page 76, and the ARRL and WA7BNM Contest web sites for details.

## ARRL Contest Corner

An expanded, downloadable version of *QST*'s' <u>Contest Corral</u> is available as a PDF. Check the sponsor's 'Website for information on operating time restrictions and other instructions.



## **Upcoming Hamfests**

We **DO** have some hamfests scheduled for 2021!! Yes, take a good look at the list, it's growing every day!



Be sure to keep your eyes on this schedule as that when things start getting better and the vaccine rolls out to more and more, hamfests will surely get back to their normal schedule. Don't see your hamfest listed?? Did anyone register it with ARRL? It's really easy to do and you get a lot of FREE publicity if you do.

Ohio Hamfests			
2022			
	03/12/2022 - MOVARC Hamfest Location: Bidwell, OH Sponsor: Mid-Ohio Valley Amateur Radio Club Learn More		
03/13/2022 - Winter Hamfest Type: ARRL Hamfest Sponsor: Northern Ohio Amateur Radio Society Learn More	03/20/2022 - Toledo Mobile Radio Association  Hamfest and Computer Fair  Location: Perrysburg, OH  Sponsor: Toledo Mobile Radio Association  Website: http://tmrahamradio.org  Learn More		
04/09/2022 - Sixty-Sixth Cuyahoga Falls Amateur Radio Club Hamfest Location: Cuyahoga Falls, OH Sponsor: Cuyahoga Falls Amateur Radio Club, Inc. Website: http://www.cfarc.org/hamfest.php Learn More	04/24/2022 - Athens Hamfest Location: Athens, OH Sponsor: Athens County Amateur Radio Association Website: <a href="http://www.ac-ara.org/">http://www.ac-ara.org/</a> Learn More		

## 05/20-22/2022 - **Dayton Hamvention**

Location: Green County Fairgrounds, OH Sponsor: Dayton Amateur Radio Association

Website: https://hamvention.org

**Learn More** 

06/04/2022 - FCARC Summer Hamfest

Location: Wauseon, OH

Sponsor: Fulton County Amateur Radio Club

Website: https://k8bxq.org/hamfest

Learn More

07/17/2022 - Van Wert Hamfest

Location: Van Wert, OH

Sponsor: Van Wert Amateur Radio Club

Website: http://W8FY.ORG

**Learn More** 

07/09/2022 - Mansfield Mid Summer Trunkfest

Location: Mansfield, OH

Sponsor: Intercity Amateur Radio Club

Website: http://www.w8we.org

**Learn More** 

08/13/2022 - Cincinnati Hamfest

**Location: Owensville, OH** 

Sponsor: Milford ARC

Website: https://CincinnatiHamfest.org

Learn More

09/25/2022 - Cleveland Hamfest

**Location: Berea, OH** 

**Sponsor: Hamfest Association of Cleveland** 

Website: http://www.hac.org

**Learn More** 

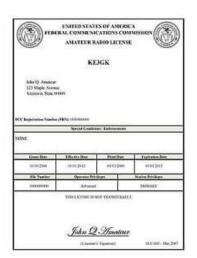
\_\_\_\_\_

## Print an Official or Unofficial Copy of Your Amateur Radio License

(By Anthony Luscre, K8ZT)

As of February 17, 2015, the **FCC no longer routinely issues paper license documents** to Amateur Radio applicants and licensees. The Commission has maintained for some time now that the official Amateur Radio license authorization is the electronic record that exists in its Universal Licensing System (ULS). The FCC will continue to provide paper license documents to all licensees who notify the Commission that they prefer to receive one.

Licensees also will be able to print out an official authorization — as well as an unofficial "reference copy" — from the ULS License Manager. I've created a set of instructions on how you can request an "official" printed copy of your license\*



Click here to download the instructions

## One Question Questionnaire

Hey Gang,

Survey Says: You are all really apathetic about this! Only 49 responses. Not enough to be significant even in this "non-formal" survey. I'm going to leave this one out there for another week and ask you to please check in and tell me what you think. This is about the future of our hobby!



## "DO YOU THINK YOU COULD ENLIST AT LEAST 1 NEW HAM TO OUR RANKS IN THE NEXT 12 MONTHS??" WOULD YOU SET THAT AS A PERSONAL GOAL FOR 2022?

You'll find the "One Question" questionnaire on the Ohio Section Website! <a href="http://arrlohio.org">http://arrlohio.org</a> It's all for 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.

## 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. <a href="http://www.arrl.org/find-an-amateur-radio-license-exam-session">http://www.arrl.org/find-an-amateur-radio-license-exam-session</a>



## From The South 40

(from John Levo, W8KIW@arrl.net)

**WELCOME TO THE SOUTH 40** 

OHIO'S





**January 23, 2022** 

The New Year seems to have gotten off to a bit of a rocky start. Between the weather and the COVID uptick some of our ham radio and other activities have either been cancelled or altered in some way. Additionally several Southern Ohio clubs have started the year with the loss of some long time members of their club family. However it was encouraging to hear of the success of last Sunday's **Sunday Creek ARF** Hamfest in Shade and the continuing addition of new hams throughout the region. Perhaps there is a light at the end of the tunnel.

The **Grant RC** met this Thursday evening in Georgetown. At that time nominations for the slate of 2022 officers was made. According to Club officials those officers will be voted upon at the February 17 meeting.

The first meeting of 2022 for the **Cambridge ARA** is to be at the county government building in downtown Cambridge on January 29. During the meeting nominations for the Club's 2022 officer slate will be taken. The actual elections will be held at the February 26 meeting.

Ken Lightner, KE8JEL, announces the February **Highland ARA** Brunch Bunch will be held on Saturday morning, February 12 in the Hillsboro McDonald's dining area as the Playland area is no longer available for use. It will start at 10 AM.

Ted Jacobson, W8KVK, tells us three new hams have been added to the region thanks to the test session at the recent SCARF Hamfest. Deborah Summers from McArthur is now a Technician with the KE8TSA call sign and Bethel's Yancey Jones also gained his Tech license and the KE8TSB call sign. Josiah Harrison not only earned KE8TSC but went ahead and passed his General. He hails from Bidwell. Also during the session, Mark Summers, KE8OFV, upgraded to General. He is from McArthur. Congratulations and welcome to all.

As reported last week, past **Highland ARA** President Floyd Colville, KD8SIK, became a silent key on Sunday afternoon. Under Floyd's guidance HARA placed an emphasis on gaining new amateurs, mentoring them in the hobby and making them feel welcome and involved in the Club. Services were held Friday in Hillsboro. It was learned Saturday of the passing of Michael Cahill, WN8C, of Circleville. He was a member of the **Lancaster Fairfield County ARA** and retired from General Electric. Services are Tuesday in Circleville.

**Milford ARA** President Ron Brooks, AC8MA, invites all amateurs within the coverage area of the Club's 147.345 (123hz tone) repeater to test their trivia skills each Wednesday evening at 7:30. That is when their weekly trivia net airs as a way to keep MARA members and other hams in touch with each other.

The Museum of Radio and Technology in Huntington, WV is conducting a raffle and on February 5 will award some lucky ticket holder with a completely restored 1953 H500 Zenith Transoceanic Shortwave Receiver. Tickets are \$5 each or six for \$25. Tickets may be obtained from any museum member or you may contact Mark Killen, KD8QIG, at 740-550-3778 for more information or to arrange to purchase your chances. Information can also be found on the Web at www.mrtwv.org.

**Highland ARA** VE Team Leader Tom Mongold, Jr., KD8LDS, says the Club will conduct a Laurel VE test session on Saturday morning, February 19 at the Highland County EMA Office in Hillsboro. Although walk-ins will be accommodated if time and space allow, pre-registration is requested. Additional information is available from Mongold at 937-272-4207. John Hartmus II tells us the **Scioto Valley ARC** will hold a test session on Saturday morning February 26 at the Ross County Service Center in Chillicothe at 9 AM. Pre-registration is

necessary and can be done through the <u>www.HamStudy.org</u> website. Each month the **Portsmouth RC** and **Milford ARC** each hold test sessions prior to their meetings. Portsmouth meets on the first Monday of the month while Milford meets on the third Thursday of the month. Please check their websites for details.

The **Tri-State ARA** announces the following club officers for 2022: Randy Walker, KE8KLT-President; Alan Washington, AB8AS-Vice President; Bud Cyr, KB8KMH-Secretary; Fred Herr, WD8AGH-Treasurer and Garry Richie, W8OI-Repeater Trustee.

As we all know, not all disasters and emergencies happen in ideal weather conditions. We have to look no further than the past few weeks when unusual winter storm conditions hit parts of the South and East that normally do not experience such conditions. In the past, our own section of the State has experienced massive loss of electricity and lengthy communications outages. Therefore some Southern Ohio clubs have announced they will be participating in the January 29-30 Winter Field Day exercise in order to experience and prepare for some of the unique conditions a winter storm may bring. The exercise will start at 2 pm on the 29<sup>th</sup> and continue until 2 on the 30<sup>th</sup>. The event's rules and further information can be found at www.winterfieldday.com.

For those who like to work special event stations and collect QSL cards or certificates, the **West Chester ARC** will operate such an event to recognize the 80<sup>th</sup> Anniversary of the First Voice of America Broadcast. Transmissions. W8O operations will take place between February 19 and 21 from the site of the former Bethany Relay Station near Mason, OH which is now a museum dedicated to the VOA. Other stations participating in the event are W3V from the master control in Washington, DC and W4A from the former transmitter site near Greenville, NC.

The **Mid-Ohio Valley ARA** has a new information/e-mail officer. He is Stephen Roush, KE8JGE. He lets us know the club's annual hamfest will be near Bidwell on March 12 at the Fellowship of Faith Church-Rio Grande. We will be sharing more information as the date gets closer.

Well that does it for another column and another week. Here's hoping everyone is keeping warm and safe. Just remember, being active on the radio is a very effective way to maintain social distancing.

John Levo, W8KIW, jlevo@cinci.rr.com

## Final... Final

I hope you're with me on this, but I think 2022 is going to be a great year!



Despite everything going on around us, as humans we learn to cope with our circumstances and always have the desire to make it better.

This year started out with a HAMFEST! (Ooops, not the one in the picture) I'm glad I was able to make it there and back home without incident. I had a really good time, met some really nice people, some old friends, and had the chance to talk with everyone who wanted to. Knowing that this year the Sunday Creek Amateur Radio Federation was at a new location, I can report that it was a success and will be able to grow and get better as we move into the future. Put it on your list for 2023 and get the year started out right. I live in NE Ohio and Shade is in SE Ohio. Who would have thought that my GPS would have taken me through W Virginia to get there? Turns out

that's the best way to go. I like to get off the beaten track, so on the way home I took a route that took me through some of the more rural areas of Athens County. I was on a gravel road when I crossed the covered bridge in my opening picture. Ohio is truly a state with diverse terrain.

At the fest I had a good chance to talk with Kirk Groeneveld - KC8JRV. We talked a lot about "Fox-Hunting". As a subset of Amateur Radio activities, fox-hunting has a lot to offer. It's easy and simple to get involved with and be successful. If you're interested in an activity that kids can get involved in – fox-hunting is a perfect fit. You don't even need a license to hunt the fox! Equipment is simple and inexpensive – much can be homebrewed or built as a club project. If your club has never participated in a hunt, set one up, or visit with a club that has one. It's an activity, and it's fun.

If you've read down this far in this Ohio Section Journal, you know that there are a lot of folks in the Ohio Section working to make your ham radio experience a good one. To be successful as a ham, as a club or even as an institution, there are two things we have to accomplish: 1) we need to provide a service to our communities, and 2) we need to enjoy what we are doing (have fun). I appreciate everyone who makes the effort to support that. And a lot of you do. Thank you.

Have you checked out the "Swap & Shop" on the Section website? If you're looking for something, or have something to sell, it could be a good place to start. It's free and easy — what could be better than that? When I go to hamfests, other activities and club meetings, I rarely take pictures. Actually, I'm a pretty good photographer (I used to shoot weddings back in the film days with my medium format system) and I enjoy taking photos, but, at any ham radio event I get caught up in the personal interactions that take place. So, if you are at an activity or event (whether I'm there or not) and you're taking some pics, send them along to me! I have committed myself to making at least weekly posts to the Ohio Section Facebook page, and I'll use your photos too! Please include a short explanation including the basic Who, What, Where and When. When you have a chance, visit that page and share it so we get it out there as a way to show the public how much fun we're having with our hobby.

I know a lot of you who are involved with Parks on the Air. That's a fantastic way to get out there and be a Ham and enjoy the OH parks all in one operation. Are any of you guys involved with County Hunting? Sounds pretty easy, but it's a much bigger challenge than you might think. There are 3077 US Counties that have to be contacted. Some are pretty easy, some are a lot tougher. Here's a challenge for you – Start out with OHIO. There are 88 counties in Ohio. The basic award is issued for contacting 22 of the 88, one of which *must* be Montgomery County. Endorsements are issued at 44, 66 and all 88. All bands and modes OK, except no use of repeaters or digipeaters. Cards must be in your possession and available on request. Award is FREE, send a

9x12" SASE with GCR list to: Ohio County Award, Dayton Amateur Radio Association, PO Box 44, Dayton, OH 45401-0044. There are a couple of counties in OH that are much rarer than the rest. Plan a DXpedition to one of those counties to make yourself the rare DX (Don't forget to promote your operation with the County Hunters so they know you're out there. Especially foreign Hunters will search you out.

So, now it comes down to this. I'm looking for some "experts". If you have an area of expertise and would like to write about it, I will use it in PostScript and/or the Ohio Section Journal. No subject is taboo. (I didn't really mean that literally – subject must be Amateur Radio related and appropriate). How about an article(s) on Foxhunting, County Hunting, Parks on the Air, Working the Satellites, Improving your Field Day Score, restoring old radio. There is no end to the subject matter. The important thing here is that Hams want to know what other hams are doing and how they can do it too! Ham Radio history is also an interesting topic. An article with a couple of photos. As usual, PLEASE, articles should be submitted as .dpcx using New Times Roman 12 font. Photos should be .jpeg. (That's just to make it easier on me!) You too can be a celebrated author in your field.

73, de Tom WB8LCD OH Section Manager WB8LCD@ARRL.ORG 330-554-4650

## "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... <a href="http://arrl-ohio.org/sm/s-s.html">http://arrl-ohio.org/sm/s-s.html</a>



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!!

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: <a href="mailto:swap@arrlohio.org">swap@arrlohio.org</a>

## 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



### **Ohio Section Cabinet**

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

## 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 an email to: webmaster@arrl-ohio.org to be added.

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/

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!!"



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!

TOP^