



# The Wave Bender

April 2019

AWARD WINNING NEWSLETTER



## PRESIDENTS REPORT

At the monthly meeting the membership overwhelmingly approved an increase in dues for the year 2020. Seniors dues will increase from \$16 a year to \$20. Others will increase from \$20-\$25. The increase will help us build a contingency reserve and allow us to spend a little more on activities for the club. This will help us be a more vibrant and secure Amateur Radio Club.

There was some concern that our club is too involved in activities relating to the community. The membership once again felt our activities were appropriate the way we have been conducting them. Therefore, we will maintain our involvement with the marathons and other activities.

It was great to see so many of our members voicing their opinion's and their enthusiasm for WRARC.



73 Brian, AB8BL





FROM OUR VP

Hello, All. This will be a short article this month. Spring is almost here and soon we will be getting ready for our various club events. First up will be the spring road clean up in May, date not set yet. The dates for our major public service events are: the Panerathon on Sunday, August 25, the Peace Race on Sunday, October 13, and the Youngstown Marathon on Sunday, October 27. Mark your calendars now. Lots of help will be needed for each of them. More information will be coming later.



Unfortunately the speaker I had scheduled for this month's general meeting, on the sixteenth, had to cancel at the last minute. I am working on finding someone to replace him. Listen to the Friday night nets for an update. If you have any suggestions please let me know.

Lastly, as I write this, here in late March, my surgery date of Monday, March 25 is fast approaching. Hopefully, all will go smoothly and I will be back in the saddle again quickly. Happy Spring, Happy Easter, and Happy Passover to all of you.

73, Maureen,,KD8NXS,  
VP/WRARC

USE YOUR LICENSE TO SERVE THE COMMUNITY - VOLUNTEER

**"I hope we once again have reminded people that man is not free unless government is limited. There's a clear cause and effect here that is as neat and predictable as a law of physics: As government expands, liberty contracts."  
— Ronald Reagan**



**Semi-Monthly  
Ham Community  
Breakfast  
Second and Fourth  
Tuesdays  
9:00 A.M.  
at Austintown  
Eat 'n Park  
Join Us!**

WHAT'S COMING UP?

- Apr. 06 YL Breakfast Thanos Restaurant, Canfield.
- Apr. 09 Board Meeting - Austintown Eat 'n Park  
Members welcome  
Ham Community Breakfast - C's Waffles, Boardman
- Apr. 16 Members meeting 7:00 P.M.
- Apr. 23 Ham Community Breakfast
  
- May TBD Semi-Annual Spring Road Clean-up
- May14 Board Meeting - Austintown Eat 'n Park  
Members welcome
- May 17 - 19 Dayron Hamvention  
Ham Community Breakfast - C's Waffles, Boardman
- May 21 Members meeting 7:00 P.M.  
Ham Community Breakfast
  
- June 22-23 2019 ARRL Field Day
- Aug. 26 PANERATHON
- Oct. 13 2019 Youngstown Peace Race
- Oct. 27 2019 Youngstown Marathon



**CONTACT WRARC ELMERS WITH YOUR QUESTIONS - [QUESTIONS@WRARC.NET](mailto:QUESTIONS@WRARC.NET)**



Beatty, Dave KC8WY  
 Fabry, Steve KC8SOY  
 Haren, Roy KD8IJF  
 Williams, Russ NR8W  
 Wojtowicz, Joe W0JO

anything  
 Yaesu FT8900, FT8800, Mobile  
 ???  
 Electrician, tele-data, Amateur Extra  
 ICOM radios, D-Star

kc8wy@zoominternet.net  
 kc8soy@yahoo.com  
 harens@juno.com  
 rwiliams@neo.rr.com  
 w0jo@arrl.net

**He who is afraid of asking, is afraid of learning**

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Articles from members for the Wave Bender are encouraged. They must be received by the editor by the 20th each month. Please send your articles to: [k8jaa@arrl.net](mailto:k8jaa@arrl.net), and put WRARC on the subject line of your email. You may also send your articles to the editor: Jane Avnet, 1440 Skyhawk Pl., Wright City, MO 63390

Join us for the WRARC Friday night Net 9:00 P.M.  
 KD8DWV - 145.270, PL -110.9  
 Upcoming Net Control Operators

4/05 Aiden, W0TIS  
 4/12 Rose, KD8TII  
 4/19 Ray, K8NVY  
 4/26 Dennis, KA8DJM

If your name has never been on this list  
 Contact Steve, KC8SOY to take a turn at Net Control  
 330-774-6346



WRARC Simplex Frequency 146.565

### Mahoning County ARES® Nets

1st Monday 8.40 PM ET W8QLY Repeater - 146.745 (PL 110.9)

&

3rd Monday 8.40 PM ET W8QLY Repeater - 146.745 (PL 110.9)

ARES thanks MVARA for the use of their repeater

W8SGT is facilitating The Ohio HF net every Tuesday - 7:00 PM

The net is run from the State of Ohio EOC on the

Ohio ARES Admin frequency 3875 kHz LSB

moves to 7240 Khz after 20-min.

All are welcome to check in.



The Ohio ARES/OES Digital Emergency Net held every Tuesday at 8:00PM.  
 held on 3585 kHz USB.

Please note all digital communications are Upper Side Band.

<http://www.http://ohden.org/> for net details. Net Manager Gary NJ8BB

*Get on the Air*

Thanks & 73 to all of our members (and others) look forward (hopefully) to getting this newsletter every month, so keep sending those articles, jokes, and suggestions! sending those articles, jokes, and suggestions!

Thanks goes out to this month's contributors; KD8TII, KA8DJM, N8SY, W5YI, the ARRL, FaceBook, and the World-Wide Web.



TREASURER'S MESSAGE

Here we are in the first full month of Spring. Although spring started March 20th, it still doesn't feel like it yet, but hopefully we can start having good weather for our first event coming up. That will be the WRARC road cleanup in May. Last year's weather turned out to be nice for that day. The weather was pleasant enough to not be constrained by wearing a coat. Let's hope it can be that good this year. The only problem we will have will be to not have enough volunteers other than the regulars, to work the cleanup. That's where you, are members, come in. We could use new younger members to participate. Won't you please consider joining the regular members this year in helping to clean the route 446 in Canfield and give WRARC a good name for doing a great job in the cleanup.



Our last Fall, Winter, Spring YL breakfasts will be held this month on Saturday, April 6 at 9:00 A.M. at Thanos Restaurant in Canfield. I hope we can close out the season with some new faces. Any of the ladies in WRARC are invited to join us. You do not have to have a Ham license. The topics that we discuss have nothing to do with Ham Radio. We just come to have a good time and a good meal.

As of the last Tuesday last month, March 26, we held our community breakfast at Eat 'n Park in Austintown. We hope to continue meeting there for the rest of the year. We have tried other restaurants the past two months since Eat 'n Park in Boardman closed their doors on February 17. We, the regulars, are striving to keep Eat 'n Park as our community breakfast, but if there should be a change, I will let Jane know and send an email to all the members as to whatever restaurant will be chosen. Happy Easter to All!

73 Rose, KD8TII  
WRARC/Treasurer

**"After every storm there's a rainbow no matter how long it takes to show up."**



MARCH YL BREAKFAST



AN EMAIL FROM DAVE

Hi Jane (she who begs for articles) and everyone else,

I am still the new guy in Ham and the club (WRARC). I have been having a few problems with my hand held radio (only radio.) I had the local repeaters in and it was working great, then decided to add more . . . oops. I played with it a while and then put it in my shack (on the floor in the bedroom.) Finally got myself back at it and also contacted "Elmer" Steve Fabry, KC8SOY. Luckily for me, when Steve got back to me a couple days later, I had kept working (playing) with it and got part of my problem figured out. Steve got in touch with Chris, W8FU, who he said new more about my Yaesu than him. I wanted to get a hold of one of two types of guys and I got lucky with Steve. I wanted either a guy who knew my problem, or a guy who knew he didn't know, even better though, was pointing me to another member who could probably help.



Now like I said, during that couple days 'till I heard from Steve, I did figure part of my problem out so that gave me confidence (some confidence) to try and do the rest by myself although by the time you read this, there is a good chance I have already called Chris.

So what I am working on saying is . . . As nice and convenient as it is to ask for help, it is good to keep trying buttons some times. I know I have learned 5 new things pushing the wrong buttons while finding the correct one. Of course maybe if I had asked for help a little sooner I would not have been tripping over the radio in the bedroom (radio shack) so long.

73 Dave, KE8JTS

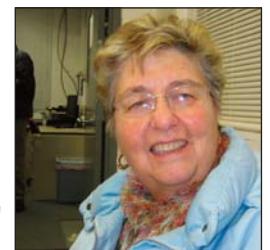
COULD THIS BE YOU?

Could this be YOU? This is the Wave Bender YOUR Newsletter. We have plenty of room for YOUR article(s)! If something is of interest to you, odds are that we all will enjoy your thoughts and activities! Have a favorite radio? Have some reminiscing to do? maybe you have a question for one of our Elmers. OR, a Tip or Trick you learned that would help one of YOUR WRARC friends. You are warmly invited to contribute! Don't worry about writing or formality - we can help you with that. Your article could go in this spot next month!!



I'm always asking for input by members. The following questions may give you something to think about. Tell us how you got interested, or how you got started. Maybe you had an Elmer you'd like to tell us about.

- What was your first station?
- How about a Shack Shot.
- How old were you when you got interested?
- How did ham radio shape your life? and/or
- Who was your First Elmer?



-ye ed

HOW TO CLEAN UP AFTER A BATTERY LEAK

Many hams have had the unfortunate experience of old batteries leaking in a piece of gear or a flashlight, creating a mess. Business technology news site ZDNet recently offered its procedure for cleaning it up. The brief online presentation recommends taking some precautions about coming in contact with the white discharge -- specifically potassium hydroxide in the case of alkaline cells, a caustic irritant. An old toothbrush or something similar can start the project, along with a small scraper, and cotton swabs dipped in water. Start by removing and properly disposing of the bad cells and then brushing out the worst of the material -- preferably outdoors or over a container to catch the remnants.



The article advises against using any sort of acid such as vinegar or lemon juice, lest it cause corrosion problems of its own. It suggests a fiberglass scratch brush for scrubbing the battery compartment contacts clean, although other tools may work as well. Deoxit D5 or similar contact cleaner also comes in handy, with a tiny dab of dielectric grease or silicone paste as a finishing touch to inhibit future corrosion if a leak occurs. Other tips to head off problems down the road include using only name-brand batteries, avoiding mixing old and new batteries, removing batteries from devices not in use, avoiding exposing batteries to extreme heat or cold, and minding battery expiration dates.



In Brief...



A known bug with the Apple version of the digital QST app may prevent some users from downloading issues of the magazine. ARRL has confirmed with the developer that version 5.0 of the app, introduced in early February, may produce instances where the app crashes on some devices when the user tries to download an issue of QST for offline reading. We apologize for this inconvenience, and we are working with the developer to resolve this issue as quickly as possible.



- David Ruck, N8YMZ
- Steve Fabry, KC8SOY
- Dave Wilms, KD8SDZ
- Kevin Stein, KD8NXR
- Rocky LeRoy, W8RKY



Amateur Radio Operator "Amateur means we're simply professional volunteers" ARRL reflector



## FCC INVITES COMMENTS

FCC Invites Comments on ARRL Technician Enhancement Proposal  
03/13/2019



The FCC has invited public comments on ARRL's 2018 Petition for Rule Making, now designated as RM-11828, which asks the FCC to expand HF privileges for Technician licensees to include limited phone privileges on 75, 40, and 15 meters, plus RTTY and digital mode privileges on 80, 40, 15, and 10 meters. Interested parties have 30 days to comment. The Technician enhancement proposals stemmed from the recommendations of the ARRL Board of Directors' Entry-Level License Committee, which explored various initiatives and gauged member opinions in 2016 and 2017.

"This action will enhance the available license operating privileges in what has become the principal entry-level license class in the Amateur Service," ARRL said in its Petition. "It will attract more newcomers to Amateur Radio, it will result in increased retention of licensees who hold Technician Class licenses, and it will provide an improved incentive for entry-level licensees to increase technical self-training and pursue higher license class achievement and development of communications skills."

Specifically, ARRL proposes to provide Technician licensees — both present and future — with:

phone privileges at 3.900 to 4.000 MHz, 7.225 to 7.300 MHz, and 21.350 to 21.450 MHz.  
RTTY and digital privileges in current Technician allocations on 80, 40, 15, and 10 meters.

The ARRL petition points out the explosion in popularity of various digital modes over the past 2 decades. Under the ARRL plan, the maximum HF power level for Technician operators would remain at 200 W PEP. The few remaining Novice licensees would gain no new privileges under ARRL's proposal.

ARRL's petition points to the need for compelling incentives not only to become a radio amateur in the first place, but then to upgrade and further develop skills. Demographic and technological changes call for a "periodic rebalancing" between those two objectives, ARRL maintained in his proposal. The FCC has not assessed entry-level operating privileges since 2005.

The Entry-Level License Committee offered very specific data- and survey-supported findings about growth in Amateur Radio and its place in the advanced technological demographic, which includes individuals younger than 30. It received significant input from ARRL members via more than 8,000 survey responses. "The Committee's analysis noted that today, Amateur Radio exists among many more modes of communication than it did half a century ago, or even 20 years ago," ARRL said in its petition.

Now numbering some 384,500, Technician licensees comprise more than half of the US Amateur Radio population. ARRL stressed in its petition the urgency of making the license more attractive to newcomers, in part to improve upon science, technology, engineering, and mathematics (STEM) education, "that inescapably accompanies a healthy, growing Amateur Radio Service."

ARRL said its proposal is critical to develop improved operating skills, increasing emergency preparedness participation, improving technical self-training, and boosting overall growth in the Amateur Service, which has remained nearly inert at about 1% per year.

The Entry-Level License Committee determined that the current Technician class question pool already covers far more material than necessary for an entry-level exam to validate expanded privileges. ARRL told the FCC that it would continue to refine examination preparation and training materials aimed at STEM topics, increase outreach and recruitment, work with Amateur Radio clubs, and encourage educational institutions to utilize Amateur Radio in STEM and other experiential learning programs.



[https://static.uglyhedgehog.com/upload/2018/3/3/369873-the\\_generation\\_gap.mp4](https://static.uglyhedgehog.com/upload/2018/3/3/369873-the_generation_gap.mp4)

SWAP 'N SHOP



5 gal plastic gas can & spout	\$ 5
ARRL Ham Manual 1975	\$ 2
Bird Moddel 43 Watt meter no slug	\$150
B&K Precision PS-500 Prescaler	\$ 5
Devry Institute VTVM	\$ 5
Eico Mod 1064S variable bench supply	\$ 10
Fluke Mod 8030A Dgital Multi Meter	\$ 10
Heathkit capacitor checker IT-11	\$ 75
Heathkit FET checker IT-121	\$ 20
Heathkit HW-2036 2mtr mobile & pwer supply	\$ 20
Heathkit IM 5228 VTVM	\$ 5
Heathkit Ocilloscope calibrator IG-4505	\$ 10
Icom O2AT with batteries,mic, ant	\$ 20
Icom O2AT with batteries,mic, ant	\$ 20
Icom 2AT with batteries, ant	\$ 10
Icom 2AT with batteries, ant	\$ 10
Icom 4AT with batteries	\$ 10
Icom IC-756 ProII service manual	\$ 10
Micronta VOM	\$ 5
Olson SWR & Power meter	\$ 5
Power Sonic 6v battery charger	\$ 5
Realistic HTX 202s meter HT	\$ 20
Winradio WR-G31DDC Excalibur SDR rcvr	\$500
Hewlett Packard 5381A freq counter	\$ 40
Daiwa CN-101L swr/pwr meter 1.8-150 mhz	\$ 45
Ten Tec Argonaut II	\$400
Kenwood TM-241 moblie 2 meter xcvr	\$ 40
Realistic Pro-2005 400 chan scanner rcvr	\$ 40
Kent Single Paddle CW key	\$100
DSI Model 3550 550mhz frequency counter	\$ 30
Large 12 inch Quatz 24 hour clock	\$ 10

Contact Frank Sole if interested, call or email  
 Phone 330-360-1551  
 <younghotdog@yahoo.com>

Amateur Radio Operator "Amateur means we're simply professional volunteers" ARRL reflector

THE WRARC NET NEEDS YOUR SUPPORT....

9:00 P.M. Friday evenings: 145.270 Mhz (minus offset), PL 110.9  
 You can advertise your Swap 'n Shop. You can ask our Elmers anything -  
 No Question too big or too small!  
 The only dumb question is one you don't ask Hope to hear you on the net.



**"TYRO" LICENSE****"Tyro" License Proposal Open for Comment**

The same day that the FCC put ARRL's Technician Enhancement petition on public notice, it also invited comments on another proposal, designated RM-11829, asking the FCC to create a "Tyro" license class that would require a minimal online examination and require mentoring by an Amateur Radio licensee of Technician class or higher. A "tyro" is a novice or a beginner. The petition was filed in August of 2017 by Gary A. Hampton, AD0WU, of Longmont, Colorado. Tyro licensees would earn operating privileges on 99 channels in a 70-centimeter "TyroSubBand." Applicants would have to be at least 11 years old. Hampton said in his petition that one goal would be "reliable, nationwide 70-centimeter interoperability" in the exclusive 430 - 440 MHz segment of the band.



"The Tyro license is exceptionally important to FEMA's CERT program," Hampton's petition asserts. "It allows ARES to solve CERT's communication problems. The TyroSubBand technical specifications easily double the capacity of typical 70-centimeter repeaters..."

Hampton maintained in his petition that Amateur Radio also "should be used to further scientific research that is published and quickly placed in the public domain."

Hampton expressed the belief that institution of the Tyro license would spawn growth within Amateur Radio, making entry into the hobby nearly as simple as obtaining a General Mobile Radio Service (GMRS) license.

The window for comments on the Tyro license petition is open for 30 days.

**COMMENTING ELECTRONICALLY**

SB QST @ ARL \$ARLB009  
ARLB009 Commenting Electronically on FCC Proceedings

From ARRL Headquarters  
Newington CT March 15, 2019  
To all radio amateurs

Those interested in posting brief comments on Petitions for Rulemaking (PRMs) to the FCC, such as the ARRL Technician Enhancement proposal (RM-11828) using the Electronic Comment Filing System (ECFS) should access FCC Electronic Comment Filing System Express at, <https://www.fcc.gov/ecfs/filings/express> .

In the "Proceeding(s)" field, enter the number of the PRM, e.g. RM-11828 (using this format), complete all required fields, and enter brief comments in the box provided. You may review your post before filing. All information you provide, including name and address, will be publicly available once you post your comment(s).

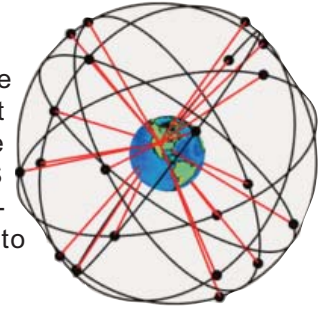
Visit "How to Comment on FCC Proceedings" for additional information at, <https://www.fcc.gov/consumers/guides/how-comment> .



## GPS NETWORK MAY EXPERIENCE ERRORS

### GPS Network May Experience Errors in "Week Number" Rollback

The GPS network will encounter a small millennium bug of its own in April when the network's "week number" rolls back to zero. This known issue especially could affect those who use GPS to obtain accurate Coordinated Universal Time (i.e., UTC). In the GPS network, the number of the current week is encoded into the message the GPS receives using a 10-bit field. This allows for weeks ranging from zero to 1023. The current period began on August 1, 1999. On April 6, 2019, the week number rolls over to zero and starts counting back up to 1023.



This should not affect later-model GPS receivers that conform to IS-GPS-200 and provide UTC, but testing carried out by the US Department for Homeland Security (DHS) raised the possibility that some units may misinterpret the rollover, shifting the date back to January 6, 1980, or possibly to another incorrect date. An affected GPS not only may report the incorrect date, but time accuracy that is critical to precise location data could be compromised. A nanosecond error in GPS time can equate to 1 foot of position (ranging) error, according to DHS-published guidelines that explain the issue and suggest how to address it.

[https://ics-cert.us-cert.gov/sites/default/files/documents/Memorandum\\_on\\_GPS\\_2019.pdf](https://ics-cert.us-cert.gov/sites/default/files/documents/Memorandum_on_GPS_2019.pdf)



## HISTORY OF THE CALL SIGN

### The Storied History of the Ham Radio Call Sign

Every legal amateur radio operator in the world has a government issued call sign, and many hams are better known to their radio friends by their call sign than they are by their given birth name. The uniqueness and prestige of a call sign is indeed one of the most important things that provide the persona that IS amateur radio. Remember when you first opened that letter from the FCC, it was not unlike Christmas day as you learned what your new call sign would be. From then on, you would be known by that call sign.

Call signs are important indeed. Think of the call sign W1AW, and 99% of hams would know that this once identified Hiram Percy Maxim, the founder of the ARRL. The call sign was so important that it became the official call sign of the ARRL. But, if one thinks about it, we don't really own these call signs, they're leased to us by the FCC for our use as long as we remain licensed. We are the caretakers, and when we become a silent key, they are passed along to the next caretaker. (This author is the fifth caretaker of the W7VO call sign, and seventh if one includes the original 7VO, which has been traced back to 1922.) However, this begs the question; where did our treasured call signs first originate, and what is the evolution of this most important moniker? Of course, one cannot discuss call signs without covering some of the storied history of amateur radio itself in the process.

The origins of amateur radio call signs go back to the earliest days of radio, informally at first, then more formalized as major world events transpired that changed the face of amateur radio itself. This evolution can be broken down into five distinct periods of history:

<https://www.eham.net/articles/38849>





## TECHNICAL PAPER RAISES VISIBILITY OF WIRELESS POWER

**Technical Paper Raises Visibility of Wireless Power Transmission Interference Potential**

03/05/2019

A technical paper drafted by International Amateur Radio Union Region 1 (IARU-R1) President Don Beattie, G3BJ, is the latest official step to increase the visibility of wireless power transmission (WPT) systems' interference threat to Amateur Radio. Submitted to the IARU-R1 Interim Meeting, set for April 27 – 28 in Vienna, the paper will update relevant committees on the topic. Beattie's paper offers an impact analysis of WPT-electric vehicle (WPT-EV) systems on Amateur Radio communications, with a primary focus on WPT systems operating in the 79 – 90 kHz range.

"IARU engaged with discussions in CEPT [the European Conference of Postal and Telecommunications Administrations] and ITU [the International Telecommunications Union] on WPT in 2017," Beattie's 20-page discussion notes.

Beattie's paper warns of "a widespread and serious impact on radio communications operating in the vicinity" of WPT systems if spurious emissions measured at a distance of 10 meters are at current CEPT Recommendation 74-01E and ITU Radiocommunication Sector Recommendation SM.329-12 limits, "given the planned density of WPT-Electric Vehicle Systems." Both the CEPT and ITU recommendations address "unwanted emissions in the spurious domain."

An IARU study of WPT-EV and its potential impact on radiocommunications services already has been submitted to the relevant ITU and CEPT study committees. "In CEPT, the IARU input has been carried forward in the recently published ECC Report 289," Beattie said in his paper. Broadcasters, land mobile services, and others have also expressed concern about spurious WPT-EV emissions. "Report 289 sets out the protection requirements for these radio services, but it stops short of proposing any regulatory action," Beattie's paper points out. "This, therefore, is the next challenge — to seek to bridge the divide between WPT manufacturers and the radiocommunications services."

Beattie's paper said further work remains regarding generic WPT systems such as cell phone charging, power tools, and household appliances. "As a part of this, manufacturers have offered projections on the installed density of these devices, which allows modeling of the minimum interference field strength to be expected in an urban/suburban environment populated with WPT devices at the projected density," Beattie noted in his paper. "This then allows IARU to make further input modeling these emissions."

IARU provided the same input to ITU, but, Beattie's paper says, ITU plans to include it in a separate report for discussion at a later meeting.



## WORD TO THE WISE.

**Falling Derrick**

A means of raising a tower using a (usually shorter) mast attached to the tower at a 90-degree angle, and guyed to the top of the tower, forming a triangle. Both can pivot about an anchored attachment point. Starting with the tower on the ground and the mast vertical, the mast is pivoted towards ground, pulling up the tower with the guy.

W9SN made a video of tuning the band during the ARRL International DX CW Contest... from his Maine-based station using four-stack of four-element 40m antennas. The Flex Radio SmartSDR screen is displaying call signs received via the spotting network right in the spectrum display.

Here's a video of YCCC members putting up a tower using the falling derrick method.

<https://www.youtube.com/watch?v=Fy4ztx7DkmU>



THE DOCTOR WILL SEE YOU NOW!

"Meet the Raspberry Pi" is the topic of the current (February 28) episode of the "ARRL The Doctor is In" podcast. Listen...and learn!

Sponsored by DX Engineering, "ARRL The Doctor is In" is an informative discussion of all things technical. Listen on your computer, tablet, or smartphone -- whenever and wherever you like!

Every 2 weeks, your host, QST Editor-in-Chief Steve Ford, WB8IMY, and the Doctor himself, Joel Hallas, W1ZR, will discuss a broad range of technical topics. You can also email your questions to doctor@arrl.org, and the Doctor may answer them in a future podcast.

Enjoy "ARRL The Doctor is In" on Apple iTunes, or by using your iPhone or iPad podcast app (just search for "ARRL The Doctor is In"). You can also listen online at Blubrry, or at Stitcher (free registration required, or browse the site as a guest) and through the free Stitcher app for iOS, Kindle, or Android devices. If you've never listened to a podcast before, download our beginner's guide.

Just ahead: "SWR Simplified."



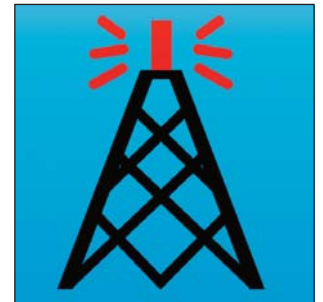
ALLSTAR NODE UPDATE  
3/8/19

Hi Folks so here's the update as you all know I have been working on setting up an allstar/echolink node, it is up and running on the internet.

Thursday as of 1:00 P.M., I made arrangements to purchase the link radio and fob board to complete the node with any luck it will be up and running by next Friday, it will be operating on 146.580 mhz no pl as soon as I have it up and running correctly, I will get you the codes to dial up nodes from the radio side.

I would like to thank you all for your support donations and expertise.

Ray, K8NVY



Gone but not forgotten POW/MIAS

DON'T MISS THE 2019 ARRL NATIONAL CONVENTION

The 2019 Dayton Hamvention® hosts the ARRL National Convention this year, and features a treasure trove of exhibits, programs and forums of interest to the Amateur Radio emergency/disaster response community - don't miss it! Special exhibits include a showcase of communications vans and strategies from across the country. Click here if you have a vehicle that you would like to have showcased at the event. There are many ARES and other groups that are building out vehicles and would benefit from ideas from the operators of the displayed units. Groups bringing their vehicles to exhibit should have their units fully staffed, functional and demonstrated so that its capabilities can be observed throughout the show.

The forums schedule is coming soon, according to the Hamvention forum schedule page. Check here for further information.

The 2019 ARRL National Convention at Dayton Hamvention® is Friday, May 17, through Sunday, May 19, at the Greene County Expo Center, 120 Fairgrounds Road, Xenia, Ohio, sponsored by the Dayton Amateur Radio Association. [I am hoping to meet and greet readers at Dayton in just a couple of months. See you there! -

K1CE

## FCC TAKES A NEW TACK

**FCC Takes a New Tack in Combatting Unlicensed Radio Broadcasting**

In what may be a first in the effort to crack down on unlicensed broadcasters, the United States has filed a civil action to stop a church-related pirate radio station from operating in Worcester, Massachusetts. The Massachusetts US Attorney's Office is seeking an injunction to shut down the station, operating on 97.1 MHz.



"This groundbreaking step, for an injunction to stop a pirate radio operator's illegal activities, is part of our continued efforts to combat illegal broadcasting," FCC Enforcement Bureau Chief Rosemary Harold said this week. "As we work with our law enforcement colleagues to use every tool in our toolbox to combat pirate radio, I welcome the Justice Department's renewed use of its Section 401(a) injunction authority. Along with fines, equipment seizures, and warnings, this action underlines our continued interest in combatting this serious problem."

The FCC already has fined operator Vasco Oburoni and Christian Praise International Church \$15,000 for repeated violations of its rules against unlicensed operation. The complaint recounts that Oburoni and the church first began operating an unlicensed station in Worcester on 102.3 MHz. After issuing multiple warnings, the FCC levied the \$15,000 penalty, and Oburoni agreed to a payment plan. But later, he began broadcasting again, this time on 97.1 MHz. At least one licensed broadcaster has complained to the FCC, citing interference concerns.

**NEW PODCAST**

The ARRL is sponsoring a new podcast (<http://www.arrl.org/news/new-arrl-podcast-g geared-toward-newcomers-to-amateur-radio-debuts-on-march-7>) that launched March 7. "SoNow What?" (<http://www.arrl.org/so-now-what>) is geared toward those who have obtained their license and need mentoring on the next steps to get the most out of the hobby. "Topics to be discussed in the first several episodes include getting started, operating modes available to Technician licensees, VEC and licensing issues, sunspots and propagation, mobile operating, contesting, Amateur Radio in pop culture, and perceptions of Technician license holders." I'm sure there will be ideas for new and old hams alike. Subscribe to this new podcast and get the most out of ham radio!

**2019 FIELD DAY**

I wanted to make sure that all of our PIOs and PICs are aware that the ARRL Field Day web site (<http://www.arrl.org/field-day>) has been updated with information for the 2019 event (June 22-23). If you scroll down to the "Rules, Entry Forms and Information Packets" listing and click on that, you will find the link to pdf files on "2019 Field Day Public Relations Packet" (<http://www.arrl.org/files/file/Field-Day/2019/2019%20New%20Field%20Day%20PR%20Kit.pdf>) and "2019 Social Media" (<http://www.arrl.org/files/file/Field-day/2019/2019%20Social%20Media.pdf>).



In addition, we have created the 2019 Field Day Facebook Group (<https://www.facebook.com/groups/fd2019/>). We are also still working on updating the PSAs for 2019 Field Day and plan to have those ready to roll out sometime in the next couple of weeks..

Also, please be sure to include you club's location information on the 2019 ARRL Field Day Site Locator (<http://www.arrl.org/files/file/Field-Day/2019/2019%20Site%20Locator.pdf>).

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**OHIO ARES MUSTERS FOR JANUARY SNOWMAGEDDON**

Ohio ARES members stared down "Snowmageddon" 2019, the mid-January blizzard that blanketed the lower Great Lakes region. Based on ominous forecasts and discussion with Assistant SECs across the state, Section Manager Scott Yonally, N8SY, and the Ohio Watch Desk, SEC Stan Broadway, N8BHL, asked ARES operators to provide observations and reports to assist decision makers at the Ohio state EOC and county EMA centers. Broadway said "We could do this safely from our homes, and integrate our reports (remotely) into the state's Web EOC management system, which could be read by the Ohio Watch Desk and any other emergency official around the state." Broadway said "We had never tried this, and it seemed like a great way to promote the Amateur service's ability to provide situational awareness on a wide scale." "Conditions could have resulted in an emergency," Broadway said, adding the storm warranted a statewide ARES response.

A statewide net was convened at 1500 local time on Saturday, January 9, as conditions deteriorated. Amateurs quickly began checking in and reporting their local conditions with specific details. The reports were compiled by Ohio's AuxComm Team station, W8SGT, which was operated from Broadway's residence from 1500 through 2130 on 80-meters, and the VHF/UHF Digital Mobile Radio (DMR) network (the Ohio Talk group), simultaneously. By nightfall, storm conditions had stabilized, and reporting slowed to the point that the statewide net could be closed. Many county-level nets were also in operation.

The Ohio "Snow Net" received 131 reports from 44 of Ohio's 88 counties, split evenly between HF and DMR. The short-notice net was entered into the ARES Connect system and more than 50 amateurs signed up for the net event. There were several other local snow nets entered for county events also. The statewide reports were logged and submitted every few hours to the state Homeland Security/Emergency Management Agency Watch Desk through WebEOC.

Broadway reported receiving compliments from EMA directors around the state who were impressed that the Amateur service could furnish reports with such detailed information. Broadway thanked the state's ARES volunteers for their enthusiastic response, and noted what went right and what could be done better for the next incident.

**What Went Right**

The HF (80-meter) capability to reach across the state was a proven asset, with effective communications in all directions. The DMR system functioned much like Ohio's public safety radio system, connecting nearly 80 repeaters across the state through the internet. This service had been untested and this event created the perfect proving ground: "we needed dependable statewide communication where all stations would benefit by hearing reports as they were filed," Broadway said. "The Ohio Talk Group was used with great success -- we had no known problems with dropout or system faults. Communication proved reliable even with the severe weather threatening power loss and antenna corruption."

Ohio ARES operators provided a broad range of information including snow depths, wind speeds, and "Level 3" declarations, closed airports and more. [Under Level 3, non-essential personnel on roadways are subject to arrest.]

Specific entries were made to WebEOC on major items, and the entire log was submitted in three segments over the time period. ARES leaders were able to stay logged into WebEOC and to the Wilmington and Cleveland National Weather Service chat channels to pick up on any reports there. ARES filed specific reports to Wilmington as blizzard conditions worsened.

**What Could Be Better**

More aggressive alerting of District and county ECs would have given them more time to prepare. More guidance for local nets might have contributed to more realistic expectations and efficient operation -- the specific weather information sought and time frame of operation anticipated.

"Winter storms are part of the Ohio landscape, and we don't propose ramping up a net for every snowfall. But when the forecasts call for extreme conditions, ARES operators have now proven we can be a true asset for our served partner agencies. Additionally, we've tested DMR operation under heavy load successfully". -

Stan Broadway, N8BHL, COML, AUXCOMM,  
Ohio Section Emergency Coordinator





TAKE TIME TO LAUGH FOR IT'S THE MUSIC OF THE SOUL AUTHOR: --FROM AN OLD ENGLISH PRAYER

### TRAVEL PLANS FOR 2019

I didn't get old on purpose, it just happened. If you're lucky, it could happen to you! I have been in many places, but I've never been in Kahoots. Apparently, you can't go alone. You have to be in Kahoots with someone.

I've also never been in Cognito. I hear no one recognizes you there.

I have, however, been in Sane. They don't have an airport; you have to be driven there. I have made several trips there, thanks to my children, friends, family and work.

I would like to go to Conclusions, but you have to jump, and I'm not too much on physical activity anymore.

I have also been in Doubt. That is a sad place to go, and I try not to visit there too often.

I've been in Flexible, but only when it was very important to stand firm.

Sometimes I'm in Capable, and I go there more often as I'm getting older.

One of my favorite places to be is in Suspense! It really gets the adrenalin flowing and pumps up the old heart! At my age I need all the stimuli I can get!

I may have been in Continent, but I don't remember what country I was in. It's an age thing. They tell me it is very wet and damp there.

### MURPHY'S LAW

- Any given program costs more and takes longer each time it is run.
- Any given program, when running, is obsolete.
- If a program is useful, it will have to be changed.
- If a program is useless, it will have to be documented.
- Any given program will expand to fill all the available memory.
- The value of a program is inversely proportional to the weight of its output. •Program complexity grows until it exceeds the capability of the programmer who must maintain it.
- Every non-trivial program has at least one bug  
 Corollary
  - 1 -A sufficient condition for program triviality is that it have no bugs. Corollary
  - 2 -At least one bug will be observed after the author leaves the organization.
- Bugs will appear in one part of a working program when another 'unrelated' part is modified

### THAT DARNED CAT

A man absolutely hated his wife's cat and decided to get rid of him one day by driving him 20 blocks from his home and leaving him at the park. As he was getting home, the cat was walking up the driveway.

The next day he decided to drive the cat 40 blocks away. He put the beast out and headed home. Driving back up his driveway, there was the cat! He kept taking the cat further and further and the cat would always beat him home. At last he decided to drive a few miles away, turn right, then left, past the bridge, then right again and another right until he reached what he thought was a safe distance from his home and left the cat there.

Hours later the man calls home to his wife: "Jen, is the cat there?" "Yes", the wife answers, "why do you ask?"

Frustrated, the man answered, "Put that darned cat on the phone. I'm lost and need directions!"



# April 2019

PREPAREDNESS LEADS TO READINESS - MATT W8DEC



Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 	2	3	4	5 WRARC Net 9:00PM 145.270 Swap n' Shop Ask the Elmers	6  Sorry Charlie Day
7	8 ARES Net 8:30 PM 146.745 PL 110.9	9 Ham Breakfast Eat 'n Park Austintown 8:30 A.M.  Board Meeting Eat'n Park Austintown 7:00 P.M.	10	11	12 WRARC Net 9:00PM 145.270 Swap n' Shop Ask the Elmers	13  Narional Peach Cobbler Day
14  Palm Sunday	25	16 WRARC Meeting 7:00 P.M	17	18	19 WRARC Net 9:00PM 145.270 Swap n' Shop Ask the Elmers	20   WaveBender Input Due
21  Easter  	22 ARES Net 8:30 PM 146.745 PL 110.9	23 Eat 'n Park Austintown 8:30 A.M. Ham Community Breakfast	24	25	26 WRARC Net 9:00PM 145.270 Swap n' Shop Ask the Elmers	27  Babe Ruth Day
28	29	30			WRARC Net 9:00PM 145.270 Swap n' Shop Ask the Elmers	