



The Wave Bender

October 2018

AWARD WINNING NEWSLETTER

PRESIDENTS REPORT

WRARC had a great Panerathon this year. Everyone did what they were suppose to, and it turned out to be an excellent performance. Special recognition goes to Joe, W0JO, for doing so much work making the Panerathon function flawlessly. Also, Bob, N8RCM, put in a lot of work developing instructions that helped each participant know what was expected of them. Rose, KD8TII, who did an outstanding job running net control, and to the many other volunteers who came out, fantastic job. Finally, I had the chance to go out with Roy, KD8IJF, to put the flags out on Saturday evening. He is another example of someone who puts in a great amount of work that goes on behind the scenes. Thanks to all, we were very successful.

At this month's meeting, Darrin, N8DMC, was nominated for a second Trustee term. Also, the group was informed that there is a moratorium on spending for the rest of this year and next year. We don't have the luxury of spending anything other than on operating expenses.



73 Brian, AB8BL.
President/WRARC



BECOME A MEMBER OF THE WRARC BOARD

We want to
hear from
YOU.

NOMINATIONS FOR TRUSTEE ARE STILL OPEN!

IN THIS ISSUE

2018 Officers:

President: Brian Lewis, AB8BL ab8bl@wrarc.net
VP: Maureen Stein, KD8NXS kd8nxs@wrarc.net
Secretary: Stan Adamski, KB3WPD kb3wpd@wrarc
Treasurer: Rose Marko, KD8TII kd8tii@wrarc.net
Past President: Bob Mitzel, N8RCM n8rcm@wrarc.net
Trustees:
 Darrin Cannon, N8DMC n8dmc@wrarc.net
 Roy Haren, KD8IJF kd8ijf@wrarc.net
 Steve Fabry, KC8SOY kc8soy@wrarc.net

Appointed Positions:

Social: Maureen Stein, KD8NXS kd8nxs@wrarc.net
 Publicity: Joe Wojtowicz, W0JO w0jo@wrarc.net
 Nets: Steve Fabry, KC8SOY kc8soy@wrarc.net
 Classes/Testing: Bob Mitzel, N8RCM n8rcm@wrarc.net
 Newsletter/Web: Jane Avnet K8JAA k8jaa@wrarc.net
 Historian: Rose Marko, KD8TII kd8tii@wrarc.net
 Badges: Darrin Cannon, N8DMC n8dmc@wrarc.net

Officer's Meeting:

October, 09 2018, 7:00 P.M. At Eat 'n Park,
 Austintown, Eat 'n Park,
 5451 Mahoning Ave
 All members welcome

Members Meeting:

October 16, Davidson's
 3636 Canfield Rd., Cornersburgh
Speaker: Mark Mellott from Mercy Health
Topic: cancer prevention



<http://www.wrarc.net/>

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**OTHER IMPORTANT WEB SITES****THE ARRL EXAM SEARCH PAGE**

<[HTTP://WWW.ARRL.ORG/FIND-AN-AMATEUR-RADIO-LICENSE-EXAM-SESSION](http://www.arrl.org/find-an-amateur-radio-license-exam-session)>

OHIO SINGLE SIDEBAND NET

<[HTTP://WWW.OSSBN.ORG/INDEX.HTML](http://www.ossbn.org/index.html)>

ANTENNA HEIGHT ABOVE AVERAGE TERRAIN (HAAT) CALCULATOR

[HTTPS://WWW.FCC.GOV/MEDIA/RADIO/HAAT-CALCULATOR](https://www.fcc.gov/media/radio/haat-calculator)

FROM OUR VP

The last quarter of this year is now here and soon it will be time to close out the year 2018. We just finished a club community activity on Saturday, September 15. It was the Annual Family Fun Day at Boardman Park and it was a very good event where we interacted with the public, letting them know we are here and educating people on Amateur Radio in general.

Those of us who were there were Darrin, N8DMC, Steve, KC8SOY, Roy, KD8IJF, Donna Haren, Stan KD3WPD, Aiden, W0TIS, and Maureen, KD8NXS. It went well with varying amounts of interest in radio from visitors to our "try it out" set up in a pavilion and our static display in the building. There was one young Boy Scout (age 12) who was extremely enthused about Amateur Radio and plans to get his license soon. Best of luck to him. We still have some of our usual activities to come before we close out this year.



We are at the time to start renewing our dues for next year and Rose, KD8TII, is collecting them starting now and we all should be paid up by Jan. 31, 2019.

Our next big activity will be the community service event of providing communications for the 2018 Peace Race on Sun. October 21, 2018. I will be in contact with the race organizers soon and will pass on information as I get it. We circulated the sign up sheet at the last general meeting Thank you to all who have signed up so far. This race also has a long course and we still need more volunteers. Anyone able to help can reach me at 330-398-1303 or at mfstein@zoominternet.net. Please help if you can we need you all! Also, in Oct. are the Haunted Hay Ride dates. Anyone who can bring an HT and help out, please contact Bill Eagan KD8HCQ.

Moving forward into the rest of the year, we will have the election of one trustee to serve on the board in November at the general meeting. Nominations are still being taken. November will also be the start of the holiday season. After that the year will come to a close very quickly and another winter will be upon us. Didn't we just get over the last one? - LOL Enjoy the next couple of months while you can!

Our next general meeting will be on Tuesday, October 16, our guest speaker will be Mark Mellott from Mercy Health speaking on cancer prevention. Please feel free to invite family, friends, or anyone you think might be interested in the topic or WRARC to come to any meeting. Happy Fall!

73, Maureen, KD8NXS
VP/WRARC



PANERATHON VOLUNTEERS



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

WHAT'S COMING UP?

| | |
|-------------|---|
| Oct. 09 | Board Meeting - Austintown Eat 'n Park Members welcome Ham Community Breakfast - Boardman Eat 'n Park |
| Oct. 16 | Members meeting 7:00 P.M. - Run for an office |
| Oct. 21 | Youngstown Peace Race - Please Volunteer |
| Oct.19 - 20 | Haunted Hayride - Please Volunteer |
| Oct.26 - 27 | Haunted Hayride - Please Volunteer |
| Nov. 03 | YL Breakfast 9:00 A.M. - Landmark Restaurant Boardman |
| Nov. 13 | Board Meeting - Austintown Eat 'n Park Members welcome Ham Community Breakfast - Boardman Eat 'n Park |
| Nov. 20 | Members meeting 7:00 P.M. - ELECTIONS |
| Dec. 01 | YL Breakfast - PTBD |
| Dec. 11 | Board Meeting - Austintown Eat 'n Park Members welcome Ham Community Breakfast - Boardman Eat 'n Park |
| Dec. 18 | Members meeting 7:00 P.M. |

CONTACT WRARC ELMERS WITH YOUR QUESTIONS - 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, 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

| | |
|---------|-------------------|
| Oct. 05 | Ray, K8NVY |
| Oct. 12 | Mike, KC8WUX |
| Oct. 19 | Ray, K8NVY |
| Oct. 26 | Rose, KD8TII |
| Nov. | This could be you |
| Dec. | This could be you |

If you don't see your name on this list
 Contact Steve, KC8SOY to take a turn at Net Control
 it's fun!



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



Thanks & 73

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

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

A WORD FROM OUR TREASURER

Ladies and Gentlemen. This year, 2018, is quickly coming to an end, which means it is time to start thinking of renewing your membership for 2019. I started collecting dues last month in an effort to start generating monies for next year. We have 52 members now, and I am hoping to see all of you still be a part of WRARC next year. If, or when you decide to renew, please fill out the membership form found on the club's website listed under Membership Information. Our yearly dues (January through December) are: One-time new member Initiation Fee of \$5.00; \$20.00 for an individual; \$5.00 for additional family members; \$16.00 for Senior memberships (65+). You can pay your dues by cash, check or money order (at the meetings) or



through the mail. Please make the checks or money orders out to WRARC. Dues must be paid on or before January 31, 2019 to maintain your membership for 2019. We are asking that you complete the membership form so that this information will allow us to keep your information current. If you can't make the meetings, you can send your check or money order to my mailing address: Rosemary L. Marko -Treasurer; 416 S. Edgehill Ave.; Austintown, OH 44515. If you have any questions, you can reach me at: (216)406-5769 or email me at: kd8tii@zoominernet.net.

Ladies, here we are getting ready for the Fall, Winter, and Spring YL Breakfasts. Our first breakfast will be the first Saturday in November, November 3. at 9 A.M.. I have chosen The Landmark Restaurant as our first pick. I am looking forward to getting together with all the ladies who have been part of this personal event and to having fun again. If you know of any ladies who would like to be joining us, please let them know that we really have a good time at the breakfasts.



73 Rose, KD8TII
Treasurer/WRARC



WOTIS receiving a certificate of achievement for his first HF contact on 40 meters during the boardman park family fun day..



*Birthdays
of the
Month*

Jane Avnet, K8JAA
Bill Davis, K8TUS
Chris Monske, WF8U
Bill Egan, KD8HCQ
Shirley Boles, KD8SSB
Maureen Stein, KD8SNX
Joe McElroy, K8STN
Doug Sage, KB8TPG



A WORD FROM STEVE

Hi Everyone,
 September 15, 2018 WRARC did the event at Boardman Park Family Fun day. We advertised WRARC and Amateur Radio. The few members that came out to talk to the public had a good time. Aiden Divilbiss, W0TIS, did a great job talking and showing the public about Ham Radio and WRARC.

I really Wish I could understand why the members in our club, and other clubs, become licensed Ham Radio Operators, but do not do anything for their clubs, not to even talk on a repeater! It is beyond me - Why you keep your license, and why you belong to a Ham Radio Club and don't volunteer to help run the club, or help with Public/Community Service? I am not talking to members of that cannot physically get around.

Just to say next year's Field Day will not be as it has been this year. Next year's Field Day will not be the same as it has been in the past.



73 Steve, KC8SOY
 Trustee/WRARC



BOARDMAN PARK FAMILY FUN DAY

Hard to believe that Summer has come and gone already and Fall is upon us! I personally, with a few other Hams from the club participated in a lot of events this year. If you were there, thanks For Your Participation! If not, why not?

Most recently, we had "Boardman Park Family Fun Day" and only SIX Hams Showed up, which were: Steve KC8SOY, Aiden W0TIS, Roy KD8IJF, Donna Haren, Maureen KD8NXS, Stan KB3WPD and me, Darrin N8DMC. All who came out did a great job! Speaking of a great job . . . Aiden W0TIS did just that, by being an excellent club spokesman by educating the public all about WRARC, and how one can become an Amateur Radio Operator. Steve Fabry, KC8SOY, brought out his HF setup and Eagle One HF antenna, in which Aiden, W0TIS, hopped onto 40 meters, and made his very first HF contact with N1TD in Hillsborough NH. I presented him with a Certificate of Achievement at our recent club meeting.

Hard to believe it has been three years already as your club's Trustee! - I've enjoyed it all the way !

This past meeting we held nominations for my upcoming Trustee position. Roy Haren, KD8IJF, *Continued page 8*

BOARDMAN PARK FAMILY FUN DAY - CONTINUED FROM PAGE 7

nominated me, as I accepted the nomination. President Brian Lewis, AB8BL, asked THREE times for any other nominations for this position, no one else stepped up. So at this time, I'm running by myself. I surely do not mind being Trustee again, but it would be nice if someone else wanted to step up and participate. You may contact either me, Steve, KC8SOY, or Roy, KD8IJF, to be nominated.

That's all for now. . . Hope to see YOU participating in our upcoming events, such as the Peace Race and the Haunted Hayride. . . It's not too late to sign up !!!

73 Darrin Cannon, N8DMC
Trustee/WRARC

**YOUNGSTOWN PEACE RACE****Youngstown Peace Race 10K & 2 mile Run**

Oct 21, 2018 9:30 AM EDT

Mill Creek Park

The Peace Race is not your ordinary Midwest road race. The Peace Race has attracted runners from all corners of the globe since its inception in 1975. The Peace Race is a USATF certified course.

**The Location:**

Enjoy the fabulous fall scenery at the setting of the Peace Race's course in Beautiful Mill Creek Park.

Peace Race Charities:

Proceeds from the Youngstown Peace Race benefit several area charities, including:

- Akron Childrens Hospital
- St. Vincent DE Paul Society
- Rescue Mission of the Mahoning Valley
- YMCA's Partner in Youth Program
- Farhaven School/Special Olympics
- The Beatitude House

**USE YOUR LICENSE TO SERVE THE COMMUNITY - VOLUNTEER****4H HAUNTED HAYRIDE**

OK, it is now time to start thinking about getting out the long-johns, and the HTs out of their boxes, check and charge those batteries, and go out into the woods. No, we are not going hunting for deer or rabbit. We are going out after creepy people. Now these creepy people will be hiding in Boardman Park. Yes, in Boardman Park! They are there after the little kids that go out on those October weekends to have fun in the woods by scarring people while on the Haunted Hay Ride.

The Haunted Hay Ride is a fund riser for the 4H kids in Mahoning County. This year it will be **October 19 - 20 and October 26 - 27**. (One night there'll also be pumpkin carving contest for the kids). NEVER ON SUNDAY!

We usually meet at the log cabin at 6:00 p.m. - at that time we see where, in the woods, volunteers will be stationed. Now if we have a lot of volunteers, then you can be with someone. If you want - YOU can scare the riders along with the kids. I hope that people will volunteer and join the fun. Yes, we do have fun, even if it's cold.

73 to all,
Bill Egan, KD8HCQ
330 565-4342



FALL SKYWARN TRAINING

I want to let you in on something brand spanking new to the National Weather Service. Here in Northern Ohio the NWS is introducing a "Spring" and "Fall" Skywarn training session. As proposed, it's gonna' be really useful, and from the information that I've gotten on this new fall class, it will also deal with some of our winter time issues in Northern Ohio. You know, Lake Effect snow and some other unusual occurrence that happen only in our area! Now here is how the classes are proposed to be scheduled, keep in mind, just because it is being introduced in Northern Ohio doesn't mean you folks from the southern end of the state can't join in as well. You are invited too, it's just gonna' be a lot further drive home for you. I think this idea is great! You'll now have the advantage to take both if you want. **This year Fall talks will be in the following counties:**

- Wood
- Marion
- Crawford, OH
- Seneca
- Ottawa
- Huron
- Knox
- Cuyahoga
- Ashland
- Stark
- Medina
- Geauga
- Ashtabula
- Mahoning
- Erie, PA

The Spring 2019 talks will be held in the following counties:

- Lucas
- Sandusky
- Erie OH
- Lorain
- Portage
- Hancock
- Morrow
- Holmes
- Summit
- Trumbull
- Wyandot
- Richland
- Wayne
- Lake
- Crawford PA

--

Christine Riley - Warning Coordination Meteorologist - National Weather Service - Cleveland, Ohio.



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!!



AMSAT REPORTS

Digital Mobile Radio Hotspots May Be Interfering with Satellite Uplinks,

This week, AMSAT News Service (ANS) cited an August 27 report from AMSAT Vice President-Operations Drew Glasbrenner, KO4MA, saying that a digital mobile radio (DMR) signal has been interfering with the AO-92 (Fox-1D) satellite's 435.35 MHz uplink frequency. Glasbrenner said hotspots, repeaters, terrestrial simplex, and "anything not satellite" should never transmit in the segments 145.8 - 146.0 MHz or 435 - 438 MHz by international band plan.



Well-known satellite enthusiast Patrick Stoddard, WD9EWK/VA7EWK, told ARRL that one DMR hotspot operating on the AO-92 uplink frequency in the St. Louis area has shifted to another frequency. But, he added, "I think there are still issues, since not all hotspots will report their frequencies and positions to websites such as BrandMeister or via APRS, where they appear on other sites such as <http://aprs.fi>."

"There are others surely operating near satellite uplinks," Stoddard added. "For many, the 435 - 438 MHz satellite subband is a big piece of quiet real estate in a busy part of the 70-centimeter band for weak-signal work, repeater links, amateur TV, and other possible uses."

Patrick Stoddard, WD9EWK, does a satellite demonstration at the Palm Springs Hamfest in 2017.

Stoddard points out that FCC Part 97 addresses Amateur Radio operation in these segments, although regulations in many other countries may not be as detailed. §97.3(a)(7) defines auxiliary stations as, "an amateur station, other than in a message forwarding system, that is transmitting communications point-to-point within a system of cooperating amateur stations."

Stoddard said this would include remote bases, EchoLink and IRLP nodes, and hotspots used for digital voice modes, as well as stations using these hotspots and nodes. Auxiliary stations may not transmit in the 145.8 - 146.0 and 435 - 438 MHz satellite subbands (among others in the 2-meter and 70-centimeter amateur bands), per §97.201(b). Further:

- §97.3(a)(40) defines a repeater as, "an amateur station that simultaneously retransmits the transmission of another amateur station on a different channel or channels." Stoddard said that because most hotspots operate on a discrete frequency, they would not qualify as repeaters, even if they operate like a repeater, per §97.205(b).
- §97.101(a) stipulates, "In all respects not specifically covered by FCC Rules, each amateur station must be operated in accordance with good engineering and good amateur practice." Stoddard remarked, "Whether the hotspot is interfering with a satellite downlink in a particular area, or it is interfering with the satellite uplink affecting a much larger area, this would not be good amateur practice."

In addition to subbands where hotspots are not permitted, Stoddard said, §97.101(b) is also relevant. It states, "Each station licensee and each control operator must cooperate in selecting transmitting channels and in making the most effective use of the Amateur Service frequencies. No frequency will be assigned for the exclusive use of any station."

Stoddard noted that frequencies used by satellites are usually incapable of being changed and are coordinated in advance of launch, while hotspots typically are frequency agile, and the frequencies used by those systems can be changed to avoid potential interference to satellites and other stations. -- Thanks to AMSAT News Service,

Patrick Stoddard, WD9EWK/VA7EWK



Patrick Stoddard, WD9EWK, does a satellite demonstration at the Palm Springs Hamfest in 2017.

Opportunity is missed by most people because it is dressed in overalls and looks like work. - Anonymous

9TH ANNUAL WORLD MAKER FAIRE

Ham Radio Was Represented at 9th Annual World Maker Faire in New York City

The Garden School, K2GSG, and Hall of Science Amateur Radio clubs (ARC) in New York City joined forces in September to put Amateur Radio on display during the 9th annual World Maker Faire NYC at the New York Hall of Science in Corona, Queens, September 22 - 23. Last year's World Maker Faire NYC drew some 90,000 attendees. The Garden School's Ham Radio Club advisor and science teacher John Hale, KD2LPM, said participating youngsters introduced Amateur Radio and help attendees construct small, electronic "Maker Key" Morse Code oscillators. The project helped Garden School win a blue ribbon at last year's Maker Faire.

Something new this year: visiting Radio Amateurs built a tape-measure Yagi antenna for satellite or terrestrial use. In cooperation with the Hall of Science ARC, Amateurs attempted to make satellite contacts with the antennas as a demonstration, Hale said.

The Hall of Science hosted a working HF Radio demonstration called "When Disaster Strikes, Amateur Radio is Ready." Radio Amateurs were on hand to operate the radios and encourage those attending the Faire to attempt to make contacts.

Established in 2016, the Garden School ARC is an integral part of the school's curriculum for educating students in STEM (science, technology, engineering, and math) disciplines. The Garden School ARC students are mentored by the co-exhibiting Hall of Science Amateur Radio Club (WB2JSM/WB2ZZO). Both are ARRL-affiliated clubs.

ARRL Marketing Manager Bob Inderbitzen, NQ1R, believes that Maker Faire events offer excellent opportunities to give greater exposure to Amateur Radio. "Exhibiting at a Maker Faire is a great way for Radio Club members to share their enthusiasm for Ham Radio with the public," he said.

Inderbitzen often gives tips to Ham Radio groups considering a Maker Faire exhibit. "Your exhibit should represent radio communication as innovative, hands-on, and cool," he advised. "Not everyone will want to become a Ham, but have radio club, class, and licensing information on hand for Faire attendees who seem especially interested."



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

OHIO OPERATORS ACTIVE FOR STORMS

Ohio Operators Active for Storms, Exercises: Lessons Learned

Northeast Ohio ARES operators were busy as they responded to an activation for damage assessment, and participated in two major exercises all on Wednesday, August 15, 2018.

The Youngstown area was hit by weekend storms beginning Friday, August 11. ARES District EC Dennis Conklin, AI8P, was notified by Mahoning EC **David Brett, KD8NZF**, that the county needed help in performing damage assessment for a large area. While Conklin made his way to Youngstown, Ohio SEC Stan Broadway, N8BHL, put out a call for volunteers from District 5 and District 10, which covered the majority of northeast Ohio counties.

More than a dozen ARES operators responded along with a contingent of CERT volunteers from a neighboring county. The volunteers held a short briefing, then began the long task of going door to door to inquire about damages. The surveys continued Thursday, with a morning crew made up of CERT and VOAD volunteers, and an afternoon crew of all ARES volunteers. The assessment was expected to continue.

That call came when other northeast Ohio counties were already involved in two major exercises - one at the Cleveland Burke Lakefront Airport where six ARES volunteers assumed the task of tracking patient transport in a multi-casualty drill. The other involved nearby Lake, Geauga and Ashtabula counties as the state conducted an exercise involving the Perry Nuclear Power Plant. More than two dozen amateurs there and five at the Ohio state EOC's station, W8SGT, followed the day long exercise. Primarily an EOC exercise, each of the counties dispatched ARES members to different locations as part of the drill.

The Ohio EMA confirmed later that the Ohio ARES volunteers helped assess 416 homes, four of which were totally destroyed, one had major damage and the other 411 homes sustained minor damage. Minor damage is considered anything with two feet of water or less in the basement, or first floor if it is a home without a basement. There were 74 city streets surveyed for damage.

ARRL Ohio Section Manager Scott Yonally, N8SY, said "It just shows how ARES groups can work together and help our local government agencies with manpower, even when it's not primarily a communications event."

On August 20, Mahoning County EMA Director Dennis O'Hara wrote to the county ARES group volunteers:

"I would like to thank you for assisting and coordinating with the ARES volunteers to conduct [the] damage assessment . . . We were able to make positive contact with over 400 homes and businesses on 70 plus streets in the affected areas." O'Hara wrote "I am proud of the coordination between the EMA and ARES. I look forward to working with ARES and continuing to foster the relationship between the organizations. . ."

Lessons Learned

Two important aspects came to light from this busy day. First, particularly in the middle of a work day, resources were scarce locally. More often we need to approach events on a regional basis. This applies to large events, or activity in counties with smaller ARES population. District EC's must keep up on their area plans! The second is that activations may come nearly instantly- there was no time to plan in advance. This means we must stay ready to go literally on a moment's notice! -- Stan Broadway, N8BHL, Ohio Section Emergency Coordinator

The ARES E-Letter for September 19, 2018



Ohio ARES members are briefed by emergency managers at the EOC on damage assessment tasking. (photo courtesy N8SY)



Why do I have to press one for English when you're just going to transfer me to someone I can't understand anyway?

FALL ROAD CLEAN UP 2018



On Sat., Sept. 22, 2018 on our "rain date" day the club did its fall road clean up for this year on Rte. 446 in Canfield - our road. The weather cooperated today and with temperatures in the 60's it was just the right kind of day for it. However, it would have been nice to have a little less water in the ditches and low areas from last evening's rain. Things went smoothly and I don't know of anything extra interesting turning up on the side of the road this time, kind of unusual.

Many thanks to those who came out to help. Your hard work is much appreciated. Those attending were: Rose Marko KD8TII, Roy Haren

KD8IJF, Stan Adamski, KB3WPD, Ted Filmer, KD8IJE, Darrin Cannon, N8DMC, Steve Fabry KC8SOY, Dave Moore, KE8ALR, Dennis Marko, KA8DJM, Maureen Stein, KD8NXS, Donna Haren, Liz Beatty, KD8DWV, and Roy Dyckman, KD8JMO. Kudos to all. That being said, we sure could have used more hands.

Those unable to be there today, please think about coming out for the next one in the spring, date not yet set. We need you! We started with breakfast at Bob Evans Canfield which most of us attended. Then we went over to the Experimental Farm parking lot to get our safety vests and placements and then to work. It was all done in a couple of hours. Dennis and Rose were drivers and the rest of us were road workers. It went well. This one is officially in the books, until next time we're all good.



73 Maureen, KD8NXS



You HAVE to check this out! <http://arri-ohio.org/news/index.html>

2018-HURRICANES

This page, www.arrrl.org/2018-Hurricanes, includes information and news summarizing the preparations and response by Amateur Radio (ham radio) volunteers who are supporting emergency communications in areas that may be (or have been) impacted by 2018 hurricanes. Ham radio operators provide a critical communications capability used for relaying life-saving information and to assist with reunification activities. Additionally, radio amateurs throughout affected regions often provide firsthand accounts of storm impact and ongoing recovery needs.

NOAA Expects Hurricane Season For 2018 To Be Near Or Above Normal

Hurricane Florence made landfall in North Carolina. While people along large swathes of the Eastern Seaboard were dreading the storm for days, you can say one thing: it arrived right on time. We are smack-dab in the middle of Atlantic hurricane season, which runs from June 1 to November 30. Nearly all tropical storm activity in the Atlantic basin occurs between those dates.

The season peaks between August and October, with September 10 as the day you're statistically most likely to find a tropical cyclone somewhere in the Atlantic basin.

Why? The answer has to do with both wind and water.

Wind shear is the variation of the wind's speed or direction over a short distance within the atmosphere. Stronger wind shear in the spring fades through June and July, and by late August, wind shear reaches a minimum. That's too bad, because wind shear can prevent weather systems from organizing into a tropical cyclone.

Climate Change Drives Bigger, Wetter Storms — Storms Like Florence

Environment - Climate Change Drives Bigger, Wetter Storms — Storms Like Florence

Then there's the temperature of the ocean. The water temperature in the deep tropics rises as summer goes on – the result of sunny days, warmer air temperatures, and more moisture in the atmosphere. Warmer ocean temperatures drive greater storm activity.

Lack of wind shear in the atmosphere? Check.

Tropical waters as warm as a bathtub? Check.

Put those together, and waves off of Africa can strengthen into a hurricane like Florence.

"Hurricanes start simply with the evaporation of warm seawater, which pumps water into the lower atmosphere," NOAA explains. "This humid air is then dragged aloft when converging winds collide and turn upwards. At higher altitudes, water vapor starts to condense into clouds and rain, releasing heat that warms the surrounding air, causing it to rise as well. As the air far above the sea rushes upward, even more warm moist air spirals in from along the surface to replace it."

In its most recent forecast released last month, forecasters at NOAA's Climate Prediction Center said that odds were good for a below-normal Atlantic hurricane season. They predicted nine to 13 named storms, four to seven hurricanes, and two or fewer major hurricanes during the entirety of the season.

To date, this hurricane season has produced ten named storms, of which four were hurricanes. So far, Florence is the only one classified as major. Despite Florence's outsize presence at the moment, NOAA says its forecast from last month still seems on target. "This year, despite the recent uptick in activity, the overall activity remains typical of a less active season," Gerry Bell, NOAA's lead hurricane season forecaster, wrote in an email to NPR. "The recent flare-up in activity is associated with an enhanced west African monsoon system, which has been helping to fuel the development of storms over the far eastern Atlantic."

But he said several environmental factors continue to suppress the overall activity, "which is why we have been seeing overall weaker and shorter-lived storms. These include cooler sea-surface temperatures in the tropical Atlantic, coupled with stronger wind shear, drier air, and increased atmospheric stability" in the Atlantic tropics and the Caribbean.



HURRICANES - CONTINUED FROM PAGE 14

Elsewhere on the planet, the patterns are different. In the Northwest Pacific basin, for example, tropical cyclones occur regularly, throughout the year. As a result, there is no "typhoon season" there, though there is a lull in February and March and a peak in August and September. In the North Indian basin, typhoons peak in both May and November.

Climate change is also having an effect on Atlantic hurricanes, causing storms that are bigger, longer-lasting, and more intense. The Two-Way Record Heat In The Gulf Fueled Hurricane Harvey's Deluge

One particular concern is that tropical cyclones are slowing down. Last year's Hurricane Harvey sat over Houston for days, dumping more than 60 inches in some areas. So far Florence is moving very slowly – just 3-6 miles per hour. That Harvey-like behavior could mean major flooding in the Carolinas.

The number of hurricanes drops precipitously in late October and November. As fall temperatures arrive, wind shear increases in the Atlantic basin. The air and the water both cool down, resulting in fewer areas where the storms can form. And we can breathe a sigh of relief — at least until next hurricane season.



AMATEUR RADIO VOLUNTEERS STILL DEALING WITH FLORENCE'S AFTERMATH

Conventional telecommunications are starting to return to normal in some communities affected by Hurricane Florence, but the now long-gone storm set up others for persistent and record-breaking flooding, primarily in eastern North Carolina and along several of the state's rivers. The storm, which made landfall near Wilmington, North Carolina, primarily affected the Carolinas, Georgia, and Virginia.

"Things are back to normal communication status, and demobilization is occurring for folks deployed," South Carolina Section Emergency Coordinator Billy Irwin, K9OH, said on September 19. At mid-week, the FCC reported that nearly all cellular service had been restored in South Carolina.

Over the weekend, ARES volunteers from several South Carolina counties had pitched in to support emergency communication in the face of power and telecommunication outages and heavy rainfall. ARES Richland County Emergency Coordinator Ronnie Livingston, W4RWL, said volunteers in his county staffed the county Emergency Operations Center (EOC) and Red Cross. operators at the State Emergency Operations Center (SEOC) kept in contact with field volunteers in Marion and Dillon counties after conventional telecommunications failed there.



ARES District Emergency Coordinator EMEA Area 3 Earl Dean, W4ESD, said ARES deployed assets as well as personnel who coordinated with the appropriate agencies. Horry County ARES and ARRL South Carolina Section Public Information Officer (PIO) Gordon Mooneyhan, W4EGM, said radio amateurs set up and organized communication networks to assist local government and emergency agencies, as well as to handle health-and-welfare traffic for affected residents, to let their family members outside the affected area know they were all right.

In North Carolina, storm surge had caused flooding in many communities. Ham radio volunteers responded in counties along the coast, including Wilmington, Topsail Beach, Jacksonville, and Morehead City, staffing both EOCs and shelters. Farther inland, numerous ARES teams activated in the face of river flooding to address a combination of sheltering needs for local residents and evacuees. Communication throughout the state has been supplemented by neighborhood-based operators, who reported emergencies to county EOCs. The FCC reported on September 19 that nearly one-third of cell service was out in Columbus, Pender, and Onslow counties. The storm also took out several broadcast outlets in the state.



The Salvation Army Team Emergency Network (SATERN) activated on September 14 and 15. The net's primary mission was the receipt and delivery of outbound health-and-welfare messages from affected areas.

Continued page 16

FLORENCE'S AFTERMATH - CONTINUED FROM PAGE 15



The Hurricane Watch Net (HWN) shut down its activation for Hurricane Florence after 38 hours, shortly after the storm made landfall. The HWN operated on two frequencies simultaneously -- its "home" 20-meter frequency of 14.325 MHz and its 40-meter frequency of 7.268 MHz.

"While propagation was not good on 20 meters for the period, 40 meters afforded a fairly consistent contact with stations in the area," HWN Assistant Manager Stan Broadway, N8BHL, recounted. Broadway said nearly 200 stations checked in, and the net took in approximately twice that number of reports, funneling important information via WX4NHC at the National Hurricane Center (NHC). "Many were not at severe levels, but all 'ground truth' [reports] assist in plotting the activity of the storm," Broadway explained. WX4NHC monitored the HWN and the Voice over Internet Protocol Hurricane Net (VoIPWX) on EchoLink Conference WX-Talk, node 7203 or IRLP 9219.

While the storm was still out in the Atlantic, ARRL shipped Ham Aid kits to the affected region -- the same ones that ARRL volunteers took to Puerto Rico a year ago to assist with disaster communications following Hurricane Maria. The ARRL Headquarters Emergency Response team activated on September 12 and remained operational into the weekend. W1AW suspended its scheduled bulletin and code practice transmission on September 14.



FCC GRANTS ARRL TEMPORARY WAIVER

FCC Grants ARRL Temporary Waiver Request to Permit PACTOR 4 Use in Hurricane Relief

The FCC has granted an ARRL request for a temporary waiver of §97.307(f) of the FCC's Amateur Service rules to permit the use of PACTOR 4 digital mode for Amateur Radio communication within the continental US related to Hurricane Florence relief. A formal order addressing the request for a 30-day waiver was released on September 17.

§97.307(f) of the Commission's Rules limits the digital data emissions of amateur stations operating below 28 MHz to a symbol rate not to exceed 300 baud, and in the 10-meter band (28.0 - 28.3 MHz) to a symbol rate not to exceed 1,200 baud, thus precluding the use of PACTOR 4.



PACTOR 4 is a data protocol that permits relatively high-speed data transmission in the HF bands, and many amateur stations active in emergency communications preparedness are capable of using PACTOR 4, which was used to great advantage, pursuant to FCC temporary waivers, in Hurricane Maria relief efforts, and, more recently in preparing for typhoon relief communications in Hawaii.

ARRL dispatched PACTOR radio modems with PACTOR 3 and PACTOR 4 capabilities to the Carolinas.

ARRL's request proposed limiting the use of PACTOR 4 to radio amateurs in the continental US who are directly involved with the hurricane relief efforts involving the US mainland. "This request is without prejudice to the resolution of Docket 16-239 [the so-called "symbol rate" proceeding], which is presently pending and addresses the rule section discussed herein," ARRL General Counsel Chris Imlay, W3KD, wrote in submitting the request.

In the September 17 formal Order, the FCC noted that the "symbol rate" proceeding is currently pending, "but there is consensus among submitted comments for eliminating the symbol rate limits."

In response to a 2013 ARRL Petition for Rule Making (RM-11708), the FCC proposed in 2016 to revise the Amateur Service Part 97 rules and invited comments. ARRL had asked the FCC to amend the Part 97 rules to delete the symbol rate limits in §97.307(f) and replace them with a maximum bandwidth for data emissions of 2.8 kHz on amateur frequencies below 29.7 MHz.



HOW DID I GET INTERESTED



How did I get interested in becoming a Ham? I think it was when I was a child staying for the summer with my Dad's mom, Grandma Jackson, in Austin, a suburb of Chicago. I was, hmm, can't remember, but I know it was in the late thirties. Yes, 1930 something. I was exploring in my Grandma's two story attic. I don't think she knew where I was. Anyway, I came across an old radio. Short Wave? Don't ask what kind, just know it wasn't like the one Grandma had in her parlor. That room was reserved for grownup company. The radio must have been plugged in, because I was able to turn it on. I heard voices, but didn't understand what they were saying, HF? Then, after turning the dial, there was a funny sounds, dots and dashes. CW was sure a mystery!

Let's skip a decade or three. Al and I had just moved to Southern California. We got to talking and decided we'd take the Amateur Radio class that was advertised in the local paper, and learn to become Hams. That was 1992. I think Al made Extra in about a year and a half. At the time that meant Tech. Tech+, General, Advanced, Extra, and 5, 10, 15, & 20wpm Code. Me? I got stuck a Tech., I just couldn't learn that code. I was told it was easy for women to learn, because it was so musical. Yeah! Sure! I finally learned enough code to become a Tech+, 5wpm. I finally upgraded to Extra in 2002 just before we moved back to OH. By that time all I needed was General. No More Code! I took the first Extra class Gordon West, WB6NOA, gave. I passed!

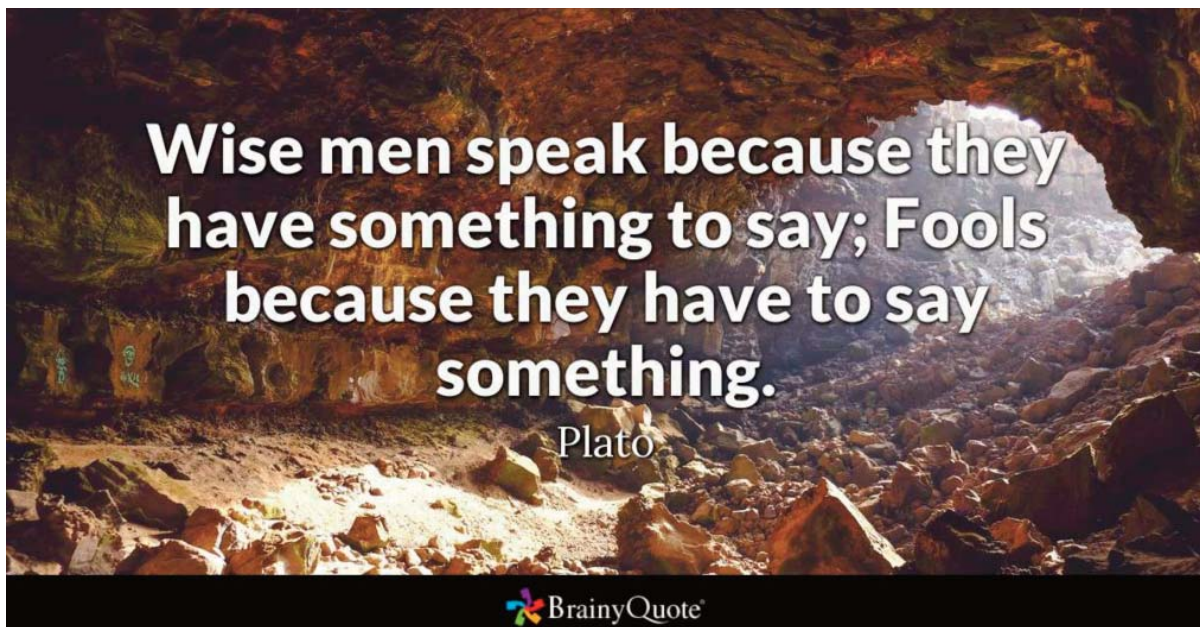
Public Service was what I loved to do. But, I hated having to get on the air, tho. One day our friend Joe Fahey, SK, asked me to 'temporarily' take the job of Public Service Events Coordinator for the club we belonged to at the time. He was going to Florida to participate in Children's Miracle Network. When he came back, he got too 'busy' to take that temporary job back. That was in the middle '90s. I still had the job when we left SoCal in 2002. When I left, I found out I was considered the Public Service Events Coordinator for the Orange Section. That's the way the job was advertised when they tried to fill my position after we left.

We've met some wonderful Hams over the years. Some, in SoCal I still hear from. Amateur Radio has been fun for me, but I still have major mic fright. When I asked Tim, K3LR, how to handle mic fright, after a meeting, he said "The more you do it – the less mic fright you will have!"

Now, if you have mic fright like I do, contact Steve, KC8SOY, and volunteer to do the club net. It's fun and it will help you get over your mic fright.

73, Jane, K8JAA
ye edito/WRARCr

Tell us how you got interested, or how you got started. Maybe you had an Elmer you'd like to tell us about. -ed



PANERATHON



"The American flag does not fly because the wind moves past it.....
 The American flag flies from the last breath of each military member who has died serving it."

Get on the Air



NINE YEAR OLD EXTRA

The DARA's VE team is extremely pleased to introduce new Amateur EXTRA Daniele Edgington, KE8JNU. Danielle IS A nine year old from Xenia and success! Fully tested for her EXTRA at the 7/18 test session.

Dannielle is shown being presented her CSCE for Extra by Phil Carter, WD8QWR.

from the DARA RF Carrier, August 2018

reprinted in the September-October Buckeye Burr the Buckeye Belle's newsletter

Susan Scott, N8CGM editor

THANK YOU FROM YE ED

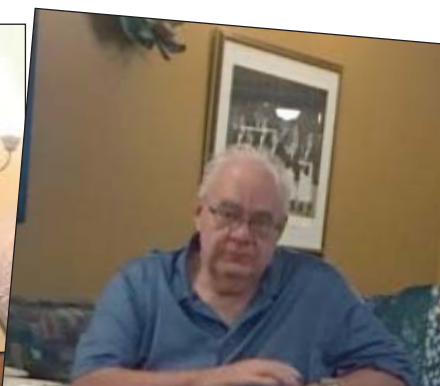
Just a sort note thanking those of you, who took the time to write an article this month, or take a picture. You are what makes your newsletter a winner, and my job so much easier. Now that I'm not there to participate in all the fun things you all are doing, so I can tell you all what a good time I had doing them with you. I have to rely on all of you to tell those fun stories. Please don't be shy. Those stories are more important than ever. So proud to be a member of WRARC! Thanks in advance.

73, Jane K8JAA
WRARC/NL Editor



No trees were killed to bring you this News Letter,
but millions of electrons were terribly inconvenienced.





October 2018

PREPAREDNESS LEADS TO READINESS - MATT W8DEC



| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|-------------------------------|--|---|-----------|--|--|--|
| | 1 ARES Net 8:30 PM 146.745 PL 110.9 | 2 | 3 | 4 | 5 WRARC Net 9:00PM 145.270 Swap n' Shop Ask the Elmers | 6 |
| 7 Bald and Free Day | 8 Columbus Day | 9 Ham Breakfast Eat'n Park Boardman 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 International Skeptics Day |
| 14 | 14 ARES Net 8:30 PM 146.745 PL 110.9 | 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 Babbling Day | 22 | 23 Eat'n Park Boardman 8:30 A.M. Ham Community Breakfast | 24 | 24 | 25 WRARC Net 9:00PM 145.270 Swap n' Shop Ask the Elmers | 26 Frankenstein Friday |
| 27 | 28 | 29 | 30 | 31  | WRARC Net 9:00PM 145.270 Swap n' Shop Ask the Elmers | |