



The
Wave Bender
July 2020
AWARD WINNING NEWSLETTER



DMR TRANSATLANTIC EMERGENCY CALL SAVES A LIFE!

Gregory Drezdzon, WD9FTZ)
Delaware Section—

On Monday, May 18, Kent County Amateur Radio Club member Ken Dix, KB2KBD, picked up an emergency call on the 146.91 MHz repeater: Richard Tashner, N2EO, of Massapequa, New York, was suffering a medical emergency and could not reach his phone to call for help.

He was close enough to grab the microphone to his DMR (Digital Mobile Radio) radio.

Tashner called for help and Maxis Johnston, GM0MRJ, answered his call.

Johnston then called for "anyone in the states" and was heard by Dix on the 91 machine, which was linked to the North American talk group. Dix called a police department in New York near Tashner, and help was sent.

Dix said the dispatcher in New York was able to hear part of the call and was amazed at how an amateur radio communication had gone from New York to Scotland to Delaware and then back to New York. The dispatcher was also surprised at how quickly the information had been relayed across the Atlantic.

The 146.91 MHz repeater near Woodside, Delaware, is set on C4FM Fusion and is linked to DMRon "America's Net." The repeater is located at the Delaware State Communications complex.

Kudos to the operators for their alertness and willingness to take the emergency call and get the information relayed to the proper personnel. Amateur Radio at its finest!

Jerry Palmer, N3KRX, Sussex County AUXCOMM Training Officer; ARRL Emergency Communications Course Mentor; and Assistant Emergency Coordinator, Kent County, Delaware



Stolen from The Ohio Section Journal - July 4th Edition
If you're not reading Scott's eNewsletters you're missing a lot of good information!
To start receiving these informative eNewsletters you can email him at:
n8sy@n8sy.com



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2020 Officers:

- President:** Chris Monske, WF8U wf8u@wrarc.net
- VP:** Maureen Stein, KD8NXS kd8nxs@wrarc.net
- Secretary:** Mike Cibella, KC8UNR kc8unr@wrarc.net
- Treasurer:** Bob Kramer, KE8HHH ke8hhh@wrarc.net
- Past President:** Bob Mitzel, N8RCM n8rcm@wrarc.net

Trustees:

- Steve Fabry, KC8SOY kc8soy@wrarc.net
- Darrin Cannon, N8DMC n8dmc@wrarc.net
- Rose Marko, KD8TII kd8tii@wrarc.net

Appointed Positions:

- Social: Maureen Stein, KD8NXS
kd8nxs@wrarc.net
- Repeater & Nets: Steve Fabry, KC8SOY
kc8soy@wrarc.net
- Classes: Chris Monske WF8U
kd8ely@gmail.com
- Testing: Darrin Cannon, N8DMC
n8dmc@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:

July 14, 7:00 P.M.
All members welcome

Members Meeting:

July 21, Davidson's
Canceled 'till further notice

Speaker: None

**New Extra Class Element 4 Exams
will take effect for
exam sessions
beginning
Wednesday, July 1, 2020**

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

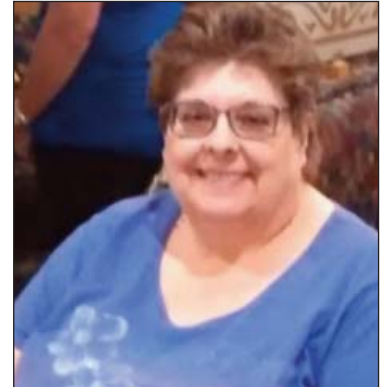
[HTTPS://WWW.FCC.GOV/MEDIA/RADIO/HAAT-CALCULATOR](https://www.fcc.gov/media/radio/haat-calculator)



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

FROM OUR VP

Wishing all of you a happy and safe Fourth of July. In spite of the many struggles our nation is facing right now, we need to remember all the good things there are about our country. Please be safe and healthy in how you all celebrate the holiday. We are still trying to find our way through the pandemic and how it is affecting our club. We need to follow state guidelines for gatherings and can try to resume general meetings in some restructured fashion when we are able to have more than ten people in any group, whether it is an indoor or outdoor venue. It is still all evolving and we don't know with any certainty when that will be. We will let you know when we can safely resume general meetings.



It is now officially confirmed that the 2020 Panerathon is cancelled due to COVID-19. Race organizers are planning to hold the event next year. The date has already been set for Sunday, August 29, 2021. I have been in touch by e-mail with one of the race organizers and they emphatically want us back as part of the team for next year's race. As we get information closer to the time as to how things will be done (if there are any changes in how they do things or not) we will let you know. There is no official word yet about the status of either of our other two public service events, the Peace Race on October 11 or the Youngstown Marathon on October 25. As we know more, we'll let you know about those too.

There is some good news on the horizon though. The scheduled second and fourth Tuesdays of every month breakfasts at Eat 'N Park, Austintown are starting up in July with some modifications from usual. Please see the QST message that Rose, KD8TII, sent out with all of the details. The restaurant has some new requirements to follow.

I am writing this before Field Day, but you likely will be reading this after it is over. Wishing a good time and good contacts to all who go out to participate. Hope everyone follows their safe procedures. Hoping for good weather too. Stay safe and well, everyone. I miss seeing you all. Take care!

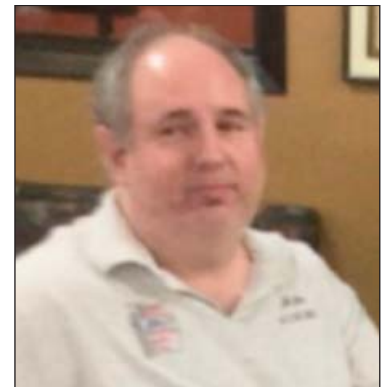
73 - Maureen, KD8NXS

Quote of the Month

"I have been frankly fascinated with that unpaid group of people with those ham radios, the Amateur Radio Emergency Service (ARES) makes available a wireless system that seldom if ever can be totally disrupted by a disaster -- ham radio operators are the heart, the soul and the life blood of that system." -- The Hon. Mayor Willie Brown, Mayor of San Francisco (1996-2004)

FROM THE SECRETARY MIKE KC8UNR

Hello to all, I hope everyone is safe and well. Not much new going on, so this would be a good time to maintain your generators, if you have them. When you run them, please remember to ground them properly and to run them underload, meaning hook up whatever you have to plug in to make it put out full voltage and amps. Also, you should check the outlets with a volt meter to make sure voltage is correct.



One note I have learned, if your generator causes RFI on your radios, you can use aluminum foil CAREFULLY WRAPPED around the spark plug wire. Many times I have seen this used and seems to work. You might want to give it a try. Also, using a surge/RFI reducer plug in strip will help. Have a fire extinguisher nearby, just in case.

73 Mike, KC8UNR

WHAT'S COMING UP?

- Jul. 04 Happy Birthday USA!
- Jul. 14 Board Meeting - PTBD (Boardman Park)
Members welcome
Ham Community Breakfast - Austintown Eat 'n Park
- Jul. 21 Members Meeting canceled 'till further notice
- Jul. 28 Ham Community Breakfast - Austintown Eat 'n Park



USA
KT8TAT, John Ricci



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



Used with permission

CONTACT WRARC ELMERS WITH YOUR QUESTIONS - QUESTIONS@WRARC.NET

Fabry, Steve KC8SOY
Haren, Roy KD8IJF
Williams, Russ NR8W

Yaesu FT8900, FT8800, Mobile
???
Electrician, tele-data, Amateur
Extra

kc8soy@yahoo.com
harens@juno.com
rwilliams@neo.rr.com

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

July This could be you
Please Volunteer

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



JUNE 2020 ARES INFORMATION



Again, a "Thank You" goes out to all of the ARES volunteers in the area. Mahoning County was ranked second in Ohio for the number of volunteer hours recorded in May, behind only Licking County. Great job!

Our Friday night nets are now listed on ARES Connect. If you're signed up there, make sure to register for the nets. If not, visit arrl.volunteerhub.com to sign up.

Lawrence County PA ARES is no longer holding daily roundtable nets, since pandemic restrictions are being eased across the region. Their K3ACS repeater (444.175MHz, + offset, PL 131.8) is still open for amateur use, and they have a weekly net on Thursdays at 5pm. All amateurs are encouraged to attend, and it's to everyone's benefit to have regular communication with our neighboring hams in adjacent counties.

As always, ARES is always looking for additional volunteers and for current volunteers to continue with their training whenever possible. For additional information, you can visit the Mahoning County ARES page at <http://mahoning-ares.org/>, the Ohio ARES page at <http://arrl-ohio.org/SEC/default.html>.

If you are an ARES volunteer, please consider taking the online training courses. Both ARRL and FEMA offer free online courses for volunteers. Often, the FEMA IS-100 (Intro to Incident Command) and IS-700 (Intro to NIMS) are the first two courses taken. Links to both are available at the county web site, under the Training tab.



73, Bob, KE8HHH
Mahoning County ARES AEC/WRARC Liaison



**Semi-Monthly
Ham Community
Breakfast
Second and Fourth
Tuesdays
7:30 A.M.
Eat 'n Park Restaurant
in Austintown
Join Us!**

DAVE'S TOWER

Hi Jane - this was at Liz, KD8DWV, and Dave Beatty's, KC8WY-SK, house where we, Steve, KC8SOY, Aiden, W0TIS, and I, picked up the tower. Others who helped, not sure, but I was told, Chris, WF8U, Bob, N8RCM, and Ed, KE8NSW, & Bill, KE8KZI, who are new members, arrived next day.

73 Mike, KC8UNR



HUGS AND HUMMMMMMS!

This column dedicated to giving an open forum for Articles from members — things to make us go “Hum-m?!” and evoke a thought, or “hugs” for good things done — 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! Do you have a favorite radio? Maybe you have some reminiscing to do, or you have a question for one of our Elmers. Do you have 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 with that. Your article could go in this spot next month, or one larger!!



PANERATHON CANCELED FOR 2020

Panerathon canceled for August, 2020

Covelli Enterprises and Mercy Health Foundation announced this morning they felt it was the best option for the Aug. 30 event because of the restrictions in Mill Creek Park through the end of the summer for large groups, and the uncertainty as to what restrictions on mass gatherings may be in place.



“The health, well-being and safety of our Panerathon community was at the forefront of this decision and we are deeply saddened but understand this is the right thing to do,” according to Sam Covelli, owner of Covelli Enterprises. “We will work tirelessly to make 2021 an amazing event that the Youngstown community can experience safely.”

The 10K race and 2-mile walk brings more than 12,000 participants to downtown Youngstown each year. Over the past 10 years it has raised \$3 million for the Mercy Health Foundation Mahoning Valley to help keep the life-saving services of the Joanie Abdu Comprehensive Breast Care Center accessible to all residents in the Valley.

Paul S. Homick Jr., president of the Mercy Health Foundation, said, “Panerathon is such an important event for our entire community and the funds raised have made a tremendous impact on the health of so many women in our Valley. We are saddened that we must cancel this year because of COVID-19, but we are looking forward to seeing everyone again next year at Panerathon 2021.

**Tim, K3LR, always seems to have a project going.
 His latest is the assembly of a two-element 40 meter Moxon beam.
 Tim talks about many of the small details that add up
 to a successful project.**

<https://www.youtube.com/watch?v=3jC3q76yuPI&feature=emb_logo>

THE NORTHWEST OHIO ARES TRAFFIC NET NEEDS HELP

The Northwest Ohio ARES Traffic Net is in need of General and/or Extra Class licensees with either voice or CW capabilities to relay traffic from the VHF net to the HF nets, no experience is necessary.

The NW Ohio ARES Traffic Net meets daily at 6:30PM on the W8RZM 147.375 repeater.

The Ohio Single Sideband Net meets daily at 10:30AM, 4:15PM and 6:45PM on 3.9725 MHz. The Ohio Section also has three CW Nets, the Ohio Slow Net meets daily at 6:00PM on 3.53535 and runs at approximately 10 WPM.

The Buckeye Net-Early meets daily at 6:45PM on 3.580 and runs between 15-20 WPM. Finally, the Buckeye Net-Late meets daily at 10PM on 3.590 and runs in the same range as the Early Net. Currently, there are only 2 volunteers that cover 7 days a week, and most nets there isn't a volunteer at all. Please consider volunteering for an hour a week, you never know, you may like it.

For more information on traffic handling, or volunteering to assist relaying traffic please check into the VHF net or contact Colleen Roth, N8TNV, Steve Denniss, KC8IDM, or Michael Lacumsky, W8MAL.

COLUMBUS HAMFEST CANCELLED

With the cancellation of the Columbus Hamfest there will be no annual meeting at the hamfest for the Ohio Single Sideband Net. During an on air discussion Mike KC8WH expressed a desire to still have the meeting. It was mentioned that the meeting could be held at a park or possibly at the Findley Hamfest. While no decision has been made at this time it is being considered and a possible location will probably be announced later. Keep checking into the OSSBN for any updates. While on the subject check into the OSSBN and some of these Ohio HF traffic nets:

OHIO SINGLE SIDEBAND NET
"Specializing in the first and last mile of NTS delivery in Ohio."

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

Ohio has three very fine CW nets. These nets are looking for new CW operators to check in and the Ohio slow Net is in need of a net manager. Thanks to WB8YLO for collecting the OSN net reports and sending the monthly report to the Section Traffic Manager

OHIO HF CW TRAFFIC NETS

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

All net frequencies plus or minus QRM. .

OHIO LOCAL VHF TRAFFIC NETS

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

These VHF net times and frequencies are those that have been reported to me by the net managers. The rest of this article is for informational purposes only. I do not endorse any products or procedures shown or listed and all information has been gleaned from the internet.

From the Section Traffic Manager
 David Maynard, WA3EZN –STM wa3ezn@att.net

FINGER MORSE STRAIGHT KEY

While I try to not advertise items that come into my email-box - I had to share this one - ye ed

Finger Morse Straight Key, For portable CW operating - Finger Morse is a fun, inexpensive, & ultra lightweight Morse code straight key that allows you to easily stay on the air making CW QSO's with your QRP rig while you are walking.



It's a great option for staying on the air while hiking to/from your next SOTA/POTA activation location or while on a backpacking trip.



It's also nice to have as an inexpensive backup straight key incase you forget your main straight key/paddle, or if your main key/paddle happens to fail while you are in the backcountry.



No more being stuck sitting down while operating. Go for a walk, get some exercise and keep making CW contacts! With the Finger Morse CW Straight Key by QuirkyQRP Ham Radios, you can finally try operating QRP pedestrian portable.



Link to product page: <https://bit.ly/FingerMorse>



NEW HF OPERATORS -- THINGS TO DO

Most radios these days have versatile built-in electronic keyers for sending CW. They can operate in a number of different modes, but if used with a dual lever paddle, the idea is that independently pressing one side of the paddle generates dahs, while pressing on the other side generates dits. DX Engineering's blog discusses different key or paddle options in "Choosing a Key or a Paddle." Once you're able to send dits and dahs with a paddle, everything else is practice and preference. There are conventions - for example, most of the time, the right lever is the dah, the left the dit. It's good to stick with conventions, just in case you find yourself in front of someone else's radio, or you share your station with a friend.

There are some sending styles for minimizing hand movement with a dual lever paddle, generally falling under the name of iambic sending. KB6NU discusses how to learn to send iambically, but it involves pressing the right or left paddle for more than one element time, and potentially "inserting" code elements by pressing the other paddle simultaneously. <<https://www.kb6nu.com/how-to-learn-to-send-iambically/>>

Conditions have been pretty good on 6 meters in the last week, with stations in the US able to work stations in the EU and AF due to sporadic e propagation. It's a seasonal thing, which is why the SMIRK and ARRL VHF Contests are this time of the year. This should be a hint that the higher bands, like 15 and 10 meters, could be open too.

The ARRL Contest Update for June 10, 2020

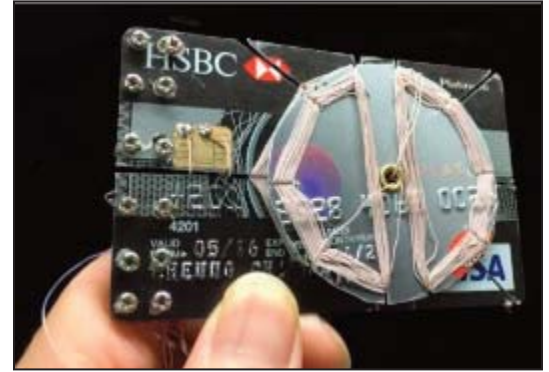
CREDIT CARD CHIP USED TO MAKE CRYSTAL RADIO

(Submitted by Gregory Drezdzon, WD9FTZ)

Hackaday reports a new use for expired credit or debit cards by re-purposing them into small, compact, carry able crystal radios thanks to the embedded smart chip.

This is possible because the smart chip on many credit and debit cards contains a diode. It is then a simple matter of hooking up the right pads on the credit card to the rest of a crystal radio circuit, and you're all set.

Read the Hackaday story and watch the video at:



<https://hackaday.com/2020/06/01/credit-card-chip-used-to-make-crystal-radio/>

**You Know You're Having a Bad Day When...
Your doctor tells you that you're allergic to chocolate.**

BALLOONS WITH APRS PAYLOADS TO RACE ACROSS NORTH AMERICA



Balloons with APRS Payloads to Race Across North America in Educational Challenge - It all began when Amateur Radio on the International Space Station (ARISS) educator Joanne Michael, KM6BWB —a science coach at the Wiseburn Unified School District in Los Angeles —challenged another ARISS partner group to a mid-altitude, cross-continent balloon race. Michael has led her students in several balloon launch attempts from the Los Angeles area each year.

Given the disruption caused to schools by the COVID-19 pandemic, Michael wanted to shake things up a bit and give students worldwide a unique distance-learning treat that could safely be accomplished during the pandemic. She challenged Ted Tagami, KK6UUQ, from ARISS partner Magnitude.io to a mid-altitude cross-continent balloon race, and Tagami accepted the challenge. Tagami plans to launch his balloon from Oakland, California. ARISS partner ISS Above inventor Liam Kennedy, KN6EQU, of Pasadena, California, got wind of the idea and asked to participate too.

ARISS, Magnitude.io, and ISS Above are ISS National Lab Space Station Explorer (SSE) partners that work to inspire, engage, and educate students in science technology engineering, arts and mathematics (STEAM) topics and to pursue careers in those fields.

The story caught fire on social media, inspiring one teacher to figure out how to initiate a launch from her school. "Let's get planning and get your thoughts and ideas and let's make this happen for the students," she said in a post.

Once the balloons are airborne, students can track each balloon's location, altitude, and temperature, which are fed automatically via the Automatic Packet Reporting System (APRS).

"Educators and parents around the globe can excite at-home youth with this initiative," ARISS said in announcing the challenge. "Students can tally and track the states each balloon travels through and plot altitude versus temperature [and other parameters). Also, by researching weather patterns, students can make assumptions from their own data. This could include speed variations due to weather. They also can predict each balloon's flight path and when they might cross the finish line."

For more information on the balloon launch, lesson plans, and the livestream video link visit the ARISS Mid-Altitude Balloon Race page. <https://www.ariss.org/mid-altitude-balloon-race.html>

July 2020

PREPAREDNESS LEADS TO READINESS - MATT W8DEC



Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3 WRARC Net 9:00PM 145.270 Swap n' Shop Ask the Elmers	4 
5	6 ARES Net 8:30 PM 146.745 PL 110.9	7 Chocolate Day or National Strawberry Sundae Day	8	9	10 WRARC Net 9:00PM 145.270 Swap n' Shop Ask the Elmers	11 National Blueberry Muffins Day
12	13	14 Ham Breakfast Eat'n Park Austintown 8:30 A.M. Board Meeting 7:00 P.M.	15	16	17 WRARC Net 9:00PM 145.270 Swap n' Shop Ask the Elmers	18
19  Last Day WaveBender Articles Due	20 ARES Net 8:30 PM 146.745 PL 110.9	21 WRARC Meeting 7:00 P.M.	22	23	24 WRARC Net 9:00PM 145.270 Swap n' Shop Ask the Elmers	25
26	27	28 Eat'n Park Austintown 8:30 A.M. Ham Community Breakfast	29	30	31 WRARC Net 9:00PM 145.270 Swap n' Shop Ask the Elmers	