

May 2023  
Vol VI Issue 5



# News Beacon

Medina County Amateur Radio Club

## Editor's Preface

*"How important it is for us to recognize and celebrate our heroes and she-rows."*  
Maya Angelou

Many of you have bravely served in the armed forces, thank you. I hope you find peace, respect, and enjoyment this Memorial Day.

Not unlike many families, ours celebrates a step-grandfather who fought in the Argonne Forrest during WWI; one uncle in WWII that had two destroyers blown out from under him, another injured as a Seabee; a father who came home from WWII with multiple sclerosis—as many did; another uncle served as a U-2 pilot during the Cold War at the time Gary Powers was shot down; a niece who, as one of the few women, repaired Air Force F-14 avionics during Desert Storm; and another niece who was an Air Force dentist during peacetime. I also have to mention a dear, dear, friend who left a WWII, US Japanese Internment Camp to fight in bloody France, and who admonished me the few times that I did not have Old Glory hanging on Memorial Day.

To all that served that we may enjoy the fruits of your courage and dedication, we bow before you.

73,

Jane@K8JGR.radio

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### Hmmmmmm...

*None of my European electronics worked properly in the US, until I prayed to God.*

*...Turns out they just needed a higher power.*

# April In-Person General Meeting Minutes

The monthly General Meeting, was held April 10, 2023, in-person at the Medina County Career Center (JVS). The meeting was called to order by President, Ed K8NVR and the Pledge of Allegiance was recited at 7:00 pm. The following fift (15) paid members attended, so quorum (9) was reached.



Fred K8FH	Gail KD8GGM	Ed K8NVR	Dave KE8APO	Doug KD8SST
Diane KD8SSX	Bob K8MD	Toby WT8O	Steve KE8BJD	Amy K2KSU
Ken K8TV	Baji K8IIT	Jane K8JGR	James KD8FHY	Bob Bordeaux K2BBX

**Secretary’s report:** Minutes of March meeting as published in the Club news- letter were accepted with no corrections.

**Treasurer’s report** for February was read by Treasurer, Toby WT8O. Motion to approve: Diane KD8SSX, Second: Doug KD8SST. Approved.

**President’s Report:** Ed K8NVR reminded everyone that RF exposure calculations must be completed by May of this year. It is fairly easy to do and links to the calculators will be made available.

**Membership:** Diane KD8SSX reported that we currently have 61 currently paid members (9 have not renewed). We have 4 new members. Last year we had 65 members.

**Repeaters:** No problems or updates.

**Net Control:** There are 3 slots available for the first half of this year. Many open slots available for the second half. See Baji (K8IIT) for info and to sign up.

**VP Report:** \*Jane K8JGR stated that Cuyahoga Falls Hamfest is April 15. \*Parma Radio Club is having an Earth Day event. \*Ed and Jane briefly discussed the club liability insurance which is due in May and that our State of Ohio Trade Name is still current.

**W8EOC.org:** Club website is being regularly updated.

**Technical presentations:** Ed stated that ideas for future technical presentations are needed. One future presentation will feature a discussion of modulation using the SDR play device.

**Hamvention:** Reminder that CARS club is again running a bus on Saturday May 20th for \$50. See Toby or CARS website for details.

**Field Day:** Field Day is June 24-25 in Valley City. Operators are needed during the day and at least three overnight operators are needed.

**ARES:** \*Bob K8MD mentioned that NVIS day is Saturday April 22nd and there will be a setup at Fred’s K8FH location using one station with multiple antennas.

\*Bob also stated that the Event Support Group N8ESD run by Matt Nicholson is needing volunteers. Volunteers have been declining since Covid. \*The Medina Half Marathon and Twin Sizzler will likely be supported by club volunteers again this year and tentatively organized by Rene KD8SSW.

**Meeting Adjourned:** Meeting was adjourned at 7:30 pm. Motion to adjourn made by Amy K2KSU.

*Respectfully submitted by Dave KE8APO*

## How to Perform RF Exposure Evaluations

Exposure to RF radiation has become a potential health concern in the past thirty years, since there have been so many wireless devices in service since that time. Before 2021, Amateur Radio stations were exempt from performing any RF exposure evaluations. As of May 3, 2021, that requirement has changed, and now all licensed amateurs must perform routine RF Exposure evaluations on their mobile and fixed stations. All stations in existence before May 3, 2021, had two years to perform these evaluations. Any new station construction after that date required immediate RF Exposure evaluations. As of May 3, 2023, the two year exemption period expires and all Amateur Radio stations must now be evaluated.

In most cases, amateur station RF emissions are basically safe. Some cases which may not be safe are stations using high power or stations with indoor antennas. The RF Exposure evaluations involve complex equations, but there are several web based applications that make performing these evaluations very easy. Evaluations must be performed on all amateur bands used by your station, using the following parameters: Frequency, Power to Antenna, Antenna Gain, & Duty Cycle which is mainly based upon the mode of operation.

I have performed evaluations for my station using the RF Exposure Calculator which can be found at <https://www.arrl.org/rf-exposure-calculator>. Once you have performed the necessary evaluations, verify that all antenna systems are located beyond the safe limit from human access as shown by the RF Exposure Calculator. These test results must then be kept in your station records, but do not have to be reported to the FCC. If you make any future changes to your station regarding TX power or new antenna systems, you may have to perform updated evaluations again.

I will demonstrate **How to Perform RF Exposure Evaluations at our May 8th General Meeting, at the Medina County Career Center (JVS). (See page 6.)** Until then, I would advise all club members to make themselves familiar with these new rules which can be found on the ARRL website at <https://www.arrl.org/fcc-rf-exposure-regulations-the-station-evaluation>.

By Ed Eyerdom K8NVR, MCARC President

## Dayton Hamvention May 19-21

If you have never experienced the historic **Dayton Hamvention** sponsored by the Dayton Amateur Radio Association, now is the time to make your plans. It is a well organized, and huge event.

It is held at the Greene County Fair and Expo Center, 210 Fairground Road, Xenia 45385. Coordinates are 39.702 N – 83.9420 W

Details are found at <https://hamvention.org/>

Many of our MCARC members attend, and Fred K8FH and Gail KD8GGM graciously reserve a gathering place at **Flea Market spots #7640-41-42**. Be sure to stop by.

A Saturday, chartered bus is offered by CARS for \$50.00. See <http://cars.clevelandcomputer.com/> or contact Toby WT80.

## Club Meetings

In the MCARC General Meetings will be held at the **Medina County Career Center (JVS) Room 246** at 7:00pm.

Should the rear entrance to the JVS is locked on MCARC meeting nights, you will have to enter through the front door and will have to provide personal computer input at the entrance kiosk in order to be allowed to enter.

Medina County Career Center, aka: JVS, is located at: 1101 W Liberty Street, Medina, 44256

## Member Birthdays

Nick Mahr KE8AKW	05/08
Kerry Winer K8KSW	05/10
Larry Stouffer N8RKE	05/11
John Hasenstab AD8DI	05/23
Doug McClure KD8SST	05/27
Dave Oravec N8JNX	05/28
Brandon Nilsson KD8ZEI	05/30

## MCARC Calendar

<b>May 1</b>	7:30pm Monday Night 2M Net
<b>May 8</b>	<b>7:00pm IN-PERSON MEETING at Career Center</b> (see pg 6)
<b>May 15</b>	7:30pm Monday Night 2M Net
<b>May 22</b>	7:30pm Monday Night 2M Net
<b>May 29</b>	7:30pm Monday Night 2M Net

## ARRL Ohio Hamfests

<b>05/07/2023</b>	Lucas County Amateur Radio Emergency Service Trunk Sale and Swap Meet Location: Toledo, OH Lucas County Amateur Radio Emergency Service Website: <a href="http://swap.lucasares.org">http://swap.lucasares.org</a>
<b>05/13-17/2023</b>	RV Radio Network Location: Berlin, Ohio, OH Sponsor: RV Radio Network Phone: 740-607-3323, Email: <a href="mailto:shrine94@aol.com">shrine94@aol.com</a>
<b>05/19-21/2023</b>	<b>Dayton Hamvention</b> , ARRL Great Lakes Division (see pg 3) Location: Xenia, OH Sponsor: Dayton Amateur Radio Association Website: <a href="http://Hamvention.org">http://Hamvention.org</a>
<b>05/27/2023</b>	Scioto Valley Amateur Radio Club Hamfest Location: Piketon, OH Sponsor: Scioto Valley Amateur Radio Club Phone: 740-701-8869, Email: <a href="mailto:D8CHP@cqohio.com">D8CHP@cqohio.com</a>

## Contests

May 27-28 CQ WW WPX CW Contest

## Saturday 8am Breakfast

Check with your friends to see if they will be joining you at the **Cracked Egg Restaurant** at 1475 Pearl Rd in Brunswick, opposite the Middle school, Saturdays at 8am.



## Dits and Dahs

- **NOTE TIME CHANGE— General Meetings now start at 7pm**  
Come join us at our **January 9th General Meeting** at the Medina County Career Center, Room 246, at 7:00pm.
- Our **2-Meter, Monday Night Nets** are still held at **7:30pm**, except for the second Monday of each month when we hold our General Meeting. More info on the MCARC Net is found on page 9.
- Ed K8NVR had **sad news** to report. Former club member, Dan Jenkins, W8DEJ, passed away on April 6. Dan was first licensed in 2010 and was active as a club member for the next several years after that. The OBIT is at <https://www.waitefuneralhome.com/obituary/daniel-jenkins>. There will be a memorial service on May 13.
- The Northern Ohio Amateur Radio Society (NOARS) will be holding a **NOARS Parks on the Air (POTA)** Party at Findley State Park on Saturday, May 13th at 10am. More info at <https://parksontheair.com>
- Also on May 13-14 is **CQ's Worldwide Foxhunting Weekend**. If you would like to read more about transmitter finding see <http://www.homingin.com/joek0ov/nfw.html>
- MCARC has been holding special **Radio Operation Training Courses** on the second Thursday of each month at the Medina County Career Center (JVS), Room 246. The schedule is open, so Ed is looking for subjects of interest from Club members. Subjects can be on various radio modes, computer control programs, specific radio model operation, or any other subject related to Amateur Radio operation. These sessions will involve live "on the air" operation using our antenna system at the school. Normal starting times will be 6pm. Contact Ed, K8NVR, [eyerdom@gmail.com](mailto:eyerdom@gmail.com), if you are interested.
- Ed K8NVR is looking for volunteers to present our **monthly Technical Sessions**. Please share your expertise with fellow members. Contact Ed at [eyerdom@gmail.com](mailto:eyerdom@gmail.com)
- A friend to the north, Tom Miller W1PD, has a tower, yagi, rotator, controller and accessories **for sale**. If you are interested in purchasing, they are listed on QRZ.com, <https://forums.qrz.com/index.php?threads/tower-yagi-rotator-controller-tower-accessories.861856/#post-6527089>
- Our **club patches**, illustrated below, are available from Jane K8JGR, at meetings for \$5.00.





Thank you to Dave KE8APO for this month's cartoon.

## Hamatuer Antix



*MCARC will be holding Technical Sessions during most of our in-person General Meetings on the 2nd Monday of each month.*

## May 8th General Meeting

Meeting will start at 7pm

Come join us at our **In-Person General Meeting on May 8th**, held at the Medina County Career Center, Room 246, at 7:00pm.

The Medina County Career Center (JVS), is located at: 1101 W Liberty Street, Medina, Ohio 44256

**Ed K8NVR** will present the Technical Session, *How to Perform RF Exposure Evaluations*. (See page 3 for Ed's article.)

The RF Exposure Calculator can be found at <https://www.arrl.org/rf-exposure-calculator>.

Until then, Ed advises all Club members to make themselves familiar with these new rules which can be found on the ARRL website at <https://www.arrl.org/fcc-rf-exposure-regulations-the-station-evaluation>.

## Artemis 2 Astronauts Flying to the Moon could Phone Home with Ham Radio

It's been 40 years since the first astronaut called an amateur radio operator on Earth. Now the moon is in the community's sights.

Most of the astronauts aboard the Artemis 2 mission, which will send a quartet of people around the moon in late 2024, are certified ham radio (amateur radio) operators. There's high hopes in the community that the astronauts may call home from deep space, the president of Radio Amateurs of Canada told Space.com.

"We feel it's important that anyone, especially kids as they determine what they want to do with their life, have that opportunity" to talk with astronauts, Phil A. McBride said in a recent interview. After four decades of communication with low Earth orbit, he added, the hope is ham radio will reach further out with the moon.

The first ham radio operator in space was NASA astronaut Owen Garriott (W5LFL), who on Dec. 1, 1968 called Lance Collister (WA1JXN) in Frenchtown, Montana. A ham radio was even aboard the Russian space station Mir, according to NASA (opens in new tab), during the shuttle-Mir program that saw NASA astronauts visit the orbiting complex.

Today's ham operators communicate with astronauts through Amateur Radio on the International Space Station (ARISS), largely aiming to let students directly talk with spaceflyers, according to documentation from the group (opens in new tab). As of 2022, NASA reports that more than 100 crew members (opens in new tab) have connected with 250,000 participants on the ground via ARISS.

It's unclear if ham radio equipment will be onboard Artemis 2 as the mission manifest is not yet decided, Space.com confirmed with Chief Astronaut Joe Acaba and two of the crew members (NASA's Reid Wiseman and the Canadian Space Agency's Jeremy Hansen) in interviews last month. In theory, though, the main requirements would be adequate power and storage space for radio equipment, spare time for the crew to devote to the radio during their 10-day mission and a line of sight with Earth.

Three of the four Artemis 2 astronauts are certified hams, however, with call signs for Wiseman (KF5LKT), Hansen (KF5LKH) and NASA astronaut Victor Glover (KI5BKC). The other crew member, NASA astronaut Christina Koch, was studying for a 2019 amateur license exam when her record-setting one-year flight was abruptly rescheduled six months earlier than expected, according to the National Association for Amateur Radio (opens in new tab). Koch delayed the certification in favor of completing the mission training for her 328-day sojourn that ended on Feb. 10, 2020.

Participating in the ham community requires precious resources: Time to study for the required exams, equipment space to accommodate chatting with others and money to buy said equipment and obtain certification. Costs vary considerably by region. U.S. operators must pay around \$35 to get their ham radio license from the Federal Communications Commission, according to Hamtronics.com (opens in new tab). Equipment costs can range from \$30 handheld devices to more professional units that start at \$400 and climb quickly into the thousands.

*Continued, next page...*



NASA astronaut Reid Wiseman, now commander of the Artemis 2 moon mission, speaks with amateur radio operators during the International Space Station's Expedition 40 on June 28, 2014. (Image credit: NASA)

## Artemis 2 Astronauts— Cont'd

The community is an international collective that McBride says is quite welcoming of people from all ages, genders, backgrounds and all countries, to the extent that operators will often donate old equipment to those in need. That said, the barriers of cost and time do tend to favor males worldwide; detailed statistics on diversity are not easily available. Diversity and inclusion were the stated priorities of the American Radio Relay League in a December 2022 [communiqué](#) (opens in new tab) from its CEO, David Minster.

The ham community is starting to think past the apparent conclusion of the ISS program in 2030, to a time when commercial space stations are expected to begin. McBride said conversations are ongoing about bringing hams onto these commercial venues, although the planning for the outposts are still in early stages.

Speaking to his own experience, McBride said ham radio tends to inculcate valuable cross-disciplinary skills in the community. Math skills are a definite must, along with comfort with technology. McBride, 43, said as an example that his interest in ham radio had him studying algebra ahead of his school-mates around ages 13 and 14.

"It encourages innovation," McBride said of ham radio, which was estimated to have three million participants worldwide (opens in new tab) in 2015. The previous decade before that, based on U.S. statistics, appeared to show that number is growing.

The current ARISS collaboration involves all the major partners: NASA, the European Space Agency, Roscosmos and the Canadian Space Agency. Artemis will have a similarly international approach for its crews, so presumably, if ham radio is brought on board those missions several countries will be involved.

The astronauts themselves have said how much ham radio means to them. "I get choked up every time I read a report about a ham radio contact," NASA astronaut Sunita Williams said in 2015 (opens in new tab).

"You go through the questions and it sounds like only 10 kids, then you read a report about how many people were at that event and how much preparation and time the kids took. It is nice to know it makes such a huge impact."

*Space.com* by Elizabeth Howell, 5/2/2023

Elizabeth Howell is the co-author of "Why Am I Taller (opens in new tab)?" (ECW Press, 2022; with Canadian astronaut Dave Williams), a book about space medicine. Follow her on Twitter [@howellspace](#) (opens in new tab). Follow us on Twitter [@Spacedotcom](#) (opens in new tab) or Facebook (opens in new tab).



An illustration of the Orion spacecraft in orbit around the moon.

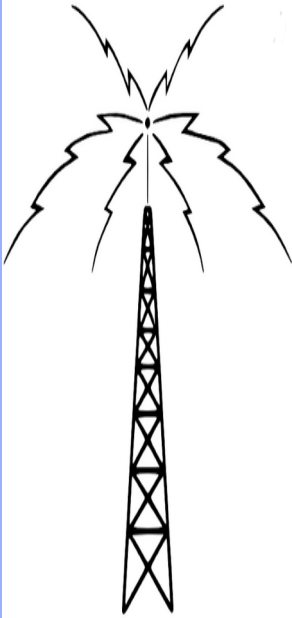
(Image credit: Lockheed Martin)



NASA astronaut Owen Garriott made the first amateur radio call from space in 1983. (Image credit: NASA)



## MCARC Repeaters



Call	Location	Function	Repeater Input	Repeater Out	CTCSS (PL)	Band
W8EOC	<b>Medina (Main Site)</b>	Repeater TX & RX	147.630	147.030	141.3 One Beep	2 Meter
W8EOC	<b>Brunswick (North)</b>	Receive only	147.630	From Main Site	131.8 Two Beeps	2 Meter
W8EOC	<b>Lafayette (South)</b>	Receive only	147.630	From Main Site	88.5 Three Beeps	2 Meter
W8EOC	<b>Lafayette (South)</b>	Split Site Repeater	51.160	51.660	N/A	6 Meter
	<b>Brunswick Hills</b>					
W8HN	<b>Medina Main Site)</b>	Digital C4FM TX & RX Repeater	147.885	147.285	(0)	2 Meter
		Analog TX & RX Repeater	147.885	147.285	(110.9)	2 Meter
W8EOC	<b>Medina (Main Site)</b>	Repeater TX & RX	223.260	224.860	-	1.25 Meter
W8EOC	<b>Lafayette (South)</b>	Repeater TX & RX	449.925	444.925	131.8	70 CM

*TRAVELING? Check out <https://repeaterbook.com/> for a free, worldwide repeater reference. It supports GMRS as well.*

### 2-Meter Net

Remember to join us on the 2-Meter Net on 147.030 Monday evenings at 7:30pm except for 2nd Monday of each month when we have our **In-person** meetings.

You do not have to be a member of MCARC to participate.

## MCARC Monday Night 2-Meter Net Control

24-Apr-2023	K8NVR	01-May-2023	KE8UUF
08-May-2023	<b>Meeting</b>	15-May-2023	KE8APO
22-May-2023	K8TV	29-May-2023	

Contact Baji K8IIT, [ohiobaji@gmail.com](mailto:ohiobaji@gmail.com), if you would like to serve as NCO.

NCO openings can be found at:  
<https://b.link/2023-nco>

# MCARC Membership

Please become a member or renew your **Medina County Amateur Radio Club** membership. Dues are our primary source of income and are used to pay for the administrative costs of liability insurance, website domain registration fees, web hosting for [www.W8EOC.org](http://www.W8EOC.org)., maintenance costs of repeater and towers along with passing on fun perks to you, our members. Our new/renewal Membership Form and information can be found on our website <http://w8eoc.org/membership>.

## ARRL Membership

Consider paying your dues for **ARRL membership** through our club Membership Chair, Diane KD8SSX. MCARC will retain \$15.00 for each NEW membership and \$2.00 for each renewal. A copy of the ARRL Membership Application/Renewal form can be obtained from Diane. Email her at [d.snider@frontier.com](mailto:d.snider@frontier.com).

*Please consider volunteering. We really would enjoy seeing fresh faces and hearing new ideas to keep the MCARC relevant and viable in 2022. Do you like designing or maintaining websites, organizing speakers for technical sessions, writing for the newsletter or teaching members new skills? Please let Jane K8JGR know. Thank you.*

## Who's Who

**President:**

Ed Eyerdom K8NVR  
<https://hamsci.org/node/677>

**VP:** Jane Reed K8JGR  
[jane@K8JGR.radio](mailto:jane@K8JGR.radio)

**Treasurer:**  
Toby Kolman WT8O

**Secretary:**  
Dave Swancer KE8APO

**W8EOC Repeaters:**  
Ed Eyerdom K8NVR  
Ken Koyan K8TV

**Sunshine:**  
Diane Snider KD8SSX

**Trustees:**

Doug McClure KD8SST  
Dave Oravec N8JNX  
Ray Orobona K2RWO  
Amy Panchumarti K2KSU  
Steven Stein KE8BJD

**Newsletter:**  
Jane Reed K8JGR

**Field Day:**  
Fred Helwig K8FH

**Membership:**  
Diane Snider KD8SSX

**Program:**  
Open

**Websites:**

Jane Reed K8JGR  
Jeff Crow KE8UUF

**Net Scheduling:**  
Baji Panchumarti K8IIT

**Social Events:**  
Gail Helwig KD8GGM

**Skywarn:**  
Tracey Liston W8TWL

**ARES:**  
Bob Mueller K8MD

**RACES:**  
Dave Rickon NF8O



MCARC on the World Wide Web

**[www.W8EOC.org](http://www.W8EOC.org)**

Also,  
"Like Us" on **Facebook**

[www.facebook.com/  
MedinaCountyAmateur  
RadioClub](http://www.facebook.com/MedinaCountyAmateurRadioClub)

## About Our Organization

The Medina Two Meter Group (M2M) Inc. DBA: the **Medina County Amateur Radio Club** is a nonprofit, ARRL Special Service registered, amateur radio organization based in Medina County, Ohio dedicated to communication, public service, education and fellowship.

Many of our members are also involved with Skywarn, ARES, RACES, and assist with emergency communication or community events such as bicycle and foot races.

We usually meet on the second Monday of each month at either the Medina County Senior Center (Sr) or the Medina County Career (JVS) Center.



Medina Two Meter Group (M2M) Inc.  
DBA:  
**Medina County Amateur Radio Club**  
  
1254 Hadcock Road  
Brunswick, Ohio 44212  
  
Admin@W8EOC.org

PLEASE  
PLACE  
STAMP  
HERE

TO: