

January 2024
Vol VII Issue 1

News Beacon



Medina County Amateur Radio Club

Prez's Preface

"A lot of people like snow. I find it to be an unnecessary freezing of water."
Carl Reiner

A snappy turn of phrase can highlight the humor in life. To endure the winter weather in Northeast Ohio one needs humor, resilience, layers of clothing and an appreciation for spontaneity. After all, 40-degree sunshine can yield to cloudy sleet an hour later!

There is a certain comfort in things that remain stable over time—things we rely on for consistency, our familiar understanding, their place in our lives and the soothing lack of unpleasant surprise. However, consistency does not necessarily mean a stale existence, there can be a consistent, steady rise to meet contemporary progress.

I'd like to think the MCARC will meet that challenge to remain fresh and relevant in 2024. Some thoughts are to encourage a larger audience for our technical sessions by providing interesting outside speakers like we had before the pandemic, again offering licensure classes to serve Medina County, and evangelizing the benefits of holding an Amateur Radio license to the community at large by participating in educational outreach and engaging media. These goals depend on the support of our current members, some of whom have already agreed. But all are needed.

Here's to a Productive, Happy, and Healthy New Year.

God Bless and 73,
Jane@K8JGR.radio

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Hmmmmmm...

What does a technician say when the multimeter gives a wrong reading?

...It could just be a Fluke.



December General Meeting Minutes

The monthly General Meeting, was held December 11th, 2023 in-person at the Medina County Career Center (JVS). The meeting was called to order by President, Jane K8JGR. The Pledge of Allegiance was recited at 7:00 pm. The following ten (10) paid members attended, so quorum (9) was reached. All members stated their names and call signs.

ED K8NVR	Dave NK0K	Steve KE8BJD	Jane K8JGR
Diane KD8SSX	Lou WA8DBP	Dudley WA1Y	Dave KE8APO
Amy K2KSU	Bob K8MD		

Minutes of previous meeting: Motion to suspend reading: Diane KD8SSX, Second: Dave (NK0K). November Minutes as published in the December News Beacon newsletter were approved.

Treasurer's Report: November report read by: Dave KE8APO. Motion to approve: Diane KD8SSX, second: Amy K2KSU. Approved.

President's Report: *Jane K8JGR stated that the Parma Radio club added two new members and now has a full slate of officers, so their club will continue to operate. *There was a discussion on a recent newsletter article by Dudley WA1X. *Jane has reached out to Kelly Dobeck (TV channel 19 meteorologist) about doing a presentation to our Club. There is also interest on getting a presenter from law enforcement to clarify the Ohio distracted driving law and the Amateur Radio exemption. *Jane expressed appreciation to Dave KE8APO for taking on dual roles of secretary and treasurer for this year as well as Diane KD8SSX for taking a trustee role in addition to her membership chair position.

Membership: Diane is currently collecting annual club dues.

Repeater status: All repeaters are currently working well with the 220 repeater having improved coverage to the south. Ed K8NVR has registered all our repeaters with OARC which coordinates frequencies. There followed a discussion on the Silvercreek coverage and linking. *The repeater schedule has been updated both on the website and newsletter.

Education: Jane raised the prospect of conducting technician license training classes next year. Several members volunteered to teach sessions and Bob K8MD stated he would host the exams. Ed also stated that he is willing to do one-on-one or small group sessions on specific radios and modes.

Dinner: The annual Club dinner will again be tentatively held in February or March of next year.

Announcements & Comments: Dave NK0K has a desk and credenza available for \$50 (buyer needs to pick up). It would be suitable for radio shack use.

Adjournment: Motion to adjourn: Dave NK0K, Second: Diane KD8SSX. Approved. Meeting adjourned at 7:30pm, followed by Ed K8NVR's technical presentation on FM transmitter and receiver theory as well as crystal oscillators and modern phase lock loop oscillators.

Respectfully submitted by Dave KE8APO

The New Distracted Driving Law Can Be Found in Section 4511.204 of the Ohio Revised Code.

Phones Down, It's the Law

Drivers over 18 years old can make or receive calls via hands-free devices, including: Speakerphone, Earpiece, Wireless headset, Electronic watch, Connecting phone to vehicle. In most cases, anything more than a single touch or swipe is against the law.

Drivers can listen to audio streaming apps and use navigational equipment if they turn them on before getting on the road or use a single touch or swipe to activate, modify, or deactivate them.

Remember, drivers under the age of 18 are still restricted from using their devices in any way, including hands-free features.

In Ohio, it is illegal to use or hold a cell phone or electronic device in your hand, lap, or other parts of the body while driving on Ohio roads. If an officer sees a violation, they can pull you over.

Enforcement

Beginning October 5, 2023, law enforcement will start issuing citations for violating this law.

Penalties

1st offense in two years: 2 points assessed to driver's license, up to a \$150 fine.*

2nd offense in two years: 3 points assessed to license, up to a \$250 fine.

3rd or more offense in two years: 4 points assessed to license, up to a \$500 fine, possible 90-day suspension of driver license.

Fines doubled if the violation occurs in a work zone.

* Completion of a distracted driving course can help avoid the fine and points.

What's Off-Limits?

With very few exceptions, anything that involves using, holding, or supporting a device while driving is off-limits. This could include:

Dialing a phone number, Sending a text message, Updating or browsing on social media, Video calls or face time, Browsing the internet, Watching videos, Playing games, recording or streaming video.

Exceptions include:

Drivers reporting an emergency to law enforcement, a hospital, health care provider, fire department, or similar emergency entity.

Drivers holding a phone to their ear only during phone conversations, if the call is started or stopped with a single touch or swipe.

Drivers holding or using cell phones and other electronic devices while stopped at a traffic light or parked on a road or highway during an emergency or road closure.

First responders (law enforcement, fire, EMS), using electronic devices as part of their official duties.

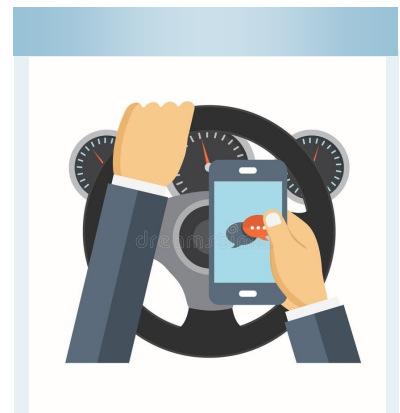
Utility workers operating utility vehicles in certain emergency or outage situations.

Licensed operators using an amateur radio.

Commercial truck drivers using a mobile data terminal.

<https://www.transportation.ohio.gov/phonesdown>

Ohio Department of Public Safety, ODOT



Club Meetings

The MCARC General Meeting for December will be held in at the Medina County Career Center (JVS), Room 246.

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

MCARC Calendar

- January 1** 7:30pm Monday Night 2M Net
January 8 7:00pm IN-PERSON GENERAL MEETING at MEDINA COUNTY CAREER CENTER (JVS) (see pg 7)
January 15 7:30pm Monday Night 2M Net
January 22 7:30pm Monday Night 2M Net
January 29 7:30pm Monday Night 2M Net

ARRL Ohio Hamfests

- 01/14/2024** Sunday Creek Amateur Radio Federation Hamfest
Location: Shade Community Center
2380 Old U.S. 33
Shade, OH 45776
Contact: Jeremy Duncan , KC8QDQ
jeramy_duncan30@yahoo.com

Radiosport Contests

Field Day 2023 Official Results as published in December 2023 QST magazine shows our W8HN in 12th place for Category 5A! Congratulations to all who participated.

- January 1** ARRL Straight Key Night
CQ DX Marathon Begins (runs until the end of December)
January 6 ARRL Kids Day
January 7-8 ARRL RTTY Roundup
January 21-23 ARRL VHF
January 26-28 CQ WW CW 160m Contest

“Old Timer’s” Lunch

Ray Pick W8MFU wants to remind us that the “Old Timers” (and not so old) meet monthly for lunch and natter on the third Tuesday at 12:00 noon, at Royal Buffet, 3835 Pearl Rd, Medina, OH 44256. It is at the SE corner of SR-42 and Fenn Road. You do not have to be a MCARC member.



10 Exhilarating Spaceflight Missions to Watch in 2024

From long-awaited rocket launches and lunar landers to crewed flights around the moon, here are a few exciting spaceflight missions to look forward to in 2024.

Next year is bound to be packed with exciting spaceflight missions, from long-awaited rocket launches to incredible moon missions — including some that'll dabble in lunar landers and crewed flights — a new Jupiter probe headed to the beyond and even a demonstration flight of a new International Space Station resupply spacecraft. With that in mind, here are a few particular missions we're looking forward to in 2024.

1. Moon Missions

The Japanese Aerospace Exploration Agency (JAXA) launched its Smart Lander for Investigating Moon (SLIM) mission on Sept. 6. Currently en route to the lunar surface, the spacecraft is scheduled for a Jan. 19 landing inside the moon's Shioli Crater. The SLIM mission aims to demonstrate a landing with a precision of less than 330 feet (100 meters) from the target. If successful, the spacecraft's touchdown will mark the first-ever soft lunar landing for a Japanese spacecraft, and make Japan the fifth country to soft-land on the moon after the Soviet Union, the United States, China and India.

A company named Astrobotic Technology is also targeting the moon next year, with plans to launch its first lunar lander on Jan. 8, followed by a Feb. 23 landing attempt. The Peregrine lunar lander will carry 20 commercial and government payloads, including a small lunar rover developed by Carnegie Mellon University scientists and a set of smaller rovers provided by the Mexican Space Agency.

The launch window for Intuitive Machines' IM-1 lunar mission opens mid-February. This spacecraft aims to touch down near the south pole of the moon, requiring specific lighting conditions that are only available in the region for a handful of days each month. In partnership with SpaceX, the IM-1 mission will be the company's first attempted lunar landing as part of NASA's Commercial Lunar Payload Services (CLPS) initiative, which will later support the space agency's Artemis program and plans to establish a sustainable human presence on the moon.

China's Chang'e 6 mission is expected to launch in '24, representing the country's second sample return mission. The lander will collect material from the South Pole-Aitken (SPA) basin on the far side of the moon. This mission follows the successful Chang'e 5 lunar sample return mission, which launched in '20.

2. Artemis 2

If all goes to plan, humans are also going to be headed back to the moon in 2024. NASA's Artemis 2 lunar mission will send the first astronauts around the moon in nearly 50 years. Slated to launch no earlier than November 2024, the eight-day mission will fly four astronauts around the moon aboard an Orion spacecraft using a Space Launch System (SLS) rocket.

Venturing some 6,400 miles (10,300 kilometers) beyond the far side of the moon, the Artemis 2 mission represents the first crewed mission beyond low Earth orbit since Apollo 17 in 1972. The Artemis 2 crew includes NASA commander Reid Wiseman, NASA pilot Victor Glover (the first person of color to leave low Earth orbit), NASA mission specialist Christina Koch (the first woman to make the trip) and Canadian Space Agency astronaut Jeremy Hansen (the first non-American to make the trip).

3. Vulcan Centaur Rocket

The Vulcan Centaur rocket's planned launch date is Jan. 8, 2024. (Image credit: United Launch Alliance)

After multiple delays over five years, the first flight of the United Launch Alliance's (ULA) Vulcan Centaur rocket is scheduled for Jan. 8. The rocket has been fully assembled at Cape Canaveral, Florida, in preparation for its inaugural flight, which will carry multiple payloads, including Astrobotic Technology's aforementioned Peregrine lunar lander.

Standing 202 feet (62 meters) tall, Vulcan Centaur is the successor to the ULA's Atlas V and Delta IV rockets with an advanced capability to carry a payload of up to 7.7 tons to geostationary orbit. For its Jan. 8 launch, the rocket will also carry a payload from the space memorial company Celestis, which

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The Vulcan Centaur rocket's planned launch date is Jan. 8, 2024. (Image credit: United Launch Alliance)

Spaceflight Missions ...continued

includes the remains of cast members of the original "Star Trek" television series — Nichelle Nichols, DeForest Kelley and James Doohan — as well as series creator Gene Roddenberry, his wife Majel Barrett Roddenberry and recurring series actor Majel Barrett Roddenberry.

4. Sierra Space Dream Chaser

NASA and Sierra Space expect to launch a demonstration mission of the company's Dream Chaser spacecraft in 2024 using the ULA Vulcan Centaur rocket. Dream Chaser is a private reusable spacecraft designed to send cargo and astronauts to low Earth orbit. The first uncrewed flight of the shuttle-shaped spaceplane will be to the International Space Station. Dream Chaser is scheduled to deliver over 7,800 pounds of cargo for this demonstration mission, but is capable of carrying upwards of 11,500 pounds. It can also ferry experiment samples, trash and other cargo from the orbiting lab back to Earth. If all goes well, Dream Chaser will be a key part of NASA's commercial resupply services program.

5. Polaris Dawn

The Polaris Dawn mission — a private human spaceflight mission operated by SpaceX on behalf of Jared Isaacman, the founder of payment provider Shift4 — is scheduled to launch no earlier than April 2024. Isaacman and three others will spend several days in low Earth orbit on a Crew Dragon spacecraft.

Polaris Dawn is the first of three planned missions in the Polaris program, which aims to conduct scientific experiments, raise money for St. Jude's Children's Research Hospital in Memphis, Tennessee, and to perform the first commercial spacewalk using SpaceX-designed spacesuits. Commanded by Isaacman, the Polaris Dawn crew includes one veteran astronaut and businessperson, two SpaceX personnel experienced in crewed and uncrewed launches and mission operations, and a former combat pilot.

6. Starship IFT-3

Starship's engines ignite as the megarocket lifts off for IFT-2, Nov. 18, 2023. (SpaceX's Starship rocket is gearing up for its third flight, IFT-3, within the first quarter of 2024. The IFT-3 of Ship 28 and Booster 10 aims to validate critical technologies essential for future lunar and interplanetary missions. This mission follows the company's second flight test (IFT-2) on November 18, 2023, which demonstrated successful hot staging but experienced telemetry loss after eight minutes of flight. Each flight test provides valuable data, from which the company can learn and adapt future attempts. That said, a critical test planned for IFT-3 is the propellant transfer utilizing two different tanks within Starship.

7. Ariane 6

The European Space Agency (ESA) aims to launch its Ariane 6 rocket in the middle of 2024. Recent tests were completed on Dec. 7 and Dec. 15, which entailed launch operation preparedness for the rocket's inaugural flight. While the Dec. 7 test of the rocket's upper stage was aborted shortly after what seemed to be a normal liftoff, the Dec. 15 test of the rocket's core and upper stages went smoothly.

The practice countdown ran as planned, concluding with a four-second firing of the core stage's Vulcain 2.1 engine. The cause of the abort during the Dec. 7 test is still under investigation, with an update expected to arrive mid-January. However, ESA does not expect this will impact the Ariane 6 schedule, with additional tests of the rocket's launch system slated for early 2024.

8. New Glenn's ESCAPAGE Launch

The first launch of Blue Origin's New Glenn rocket appears promising for 2024 after a long history of delays since 2020. The two-stage heavy-lift rocket stands more than 320 feet (98 meters) tall, with the capability to haul nearly 100,000 pounds (45 metric tons) of payload into low-Earth orbit. New Glenn is designed to be a reusable launch vehicle for up to 25 missions. Slated for its inaugural flight is NASA's Escape and Plasma Acceleration and Dynamics Explorers (ESCAPE) mission to study Mars' magnetosphere.

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Spaceflight Missions ...*continued*

This ESCAPEDE mission consists of two identical small spacecraft that will collect two-point observations simultaneously to better understand how energy and plasma enter and leave the magnetosphere, and how they interact with solar wind. It will take roughly 11 months for the ESCAPEDE probes to arrive at Mars post-launch.

9. Europa Clipper

NASA plans to send a spacecraft to explore Jupiter's moon Europa in 2024. Aptly named the Europa Clipper, the spacecraft will study the icy Jovian moon to determine whether its underground ocean is habitable. It is scheduled to launch on Oct. 6, 2024, atop a SpaceX Falcon Heavy rocket and arrive at Jupiter on April 11, 2030.

The spacecraft will orbit Jupiter, instead of Europa, due to radiation concerns. Europa (the second large moon out from Jupiter) lies deep inside the planet's magnetosphere, where charged particles generated by the gas giant's powerful magnetic field could harm the spacecraft's electronics. Once it reaches Jupiter, the spacecraft will make nearly 50 flybys of Europa — one of the most promising places in the solar system to search for life beyond Earth — with its closest approach of only 16 miles (25 kilometers) above the moon's surface, allowing for a tantalizing close-up view of the moon's subsurface oceans.

10. Boeing Starliner

The first crewed test flight of Boeing's Starliner spacecraft is tentatively scheduled for mid-April. The eight-day mission includes test pilots Butch Wilmore and Suni William, who will travel to the International Space Station on the reusable capsule. Manufactured by Boeing, Starliner consists of a reusable crew capsule and an expendable service module. The spacecraft is designed to transport crew to low-Earth orbit and will be used for NASA's Commercial Crew Program. For its first test flight, Starliner will launch on a ULA Atlas V rocket.

Boeing has struggled with delays to launch its first crewed test flight for years. The company announced the vehicle will be ready by March; however, NASA ultimately determines the timing of the launch, and due to traffic at the space station, the opportunity for Starliner to liftoff to the orbiting lab will be no earlier than April 2024.

Space.com By Samantha Mathewson, published 12/28/2023



Artist's rendering of the Europa Clipper spacecraft above the surface of Europa.
(Image credit: NASA/JPL-Caltech)



Hamatuer Antix



Gil W1CJD

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

January 8th General Meeting

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

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

The Technical Session will be presented by Jane K8JGR about Personal Weather Stations. She will explain the types, benefits, factors to consider when buying, installation, maintenance, and console/app/internet data viewing. Jane has a Davis Instrument Weather Station.



Dits and Dahs

- **Monthly Meeting**

Our **January 8th General Meeting** will be held at **7:00pm**, at the **Medina County Career Center (JVS), Room 246**. The Medina County Career Center (JVS), is located at: 1101 W Liberty Street, Medina, Ohio 44256

- **Condolences**

We offer our sincerest sympathy to the family of Fred and Gail Helwig on the December 11th death of Fred's brother, Jerry Helwig. May he rest in everlasting peace.

- **2024 Dues**

Diane KD8SSX, reminds us that dues for 2024 can be paid to her at a meeting or mailed to Diane Snider, 8311 Norwalk Road, Litchfield, Ohio 44253. Fill in Membership/Renewal form at <https://w8eoc.org/membership>. Make checks payable to the Medina Two Meter Group Inc. Dues are \$15.00 for regular membership, \$22.50 for family membership which allows one vote, and for \geq age 60: \$150.00 for life membership. Get a start on 2023 by paying your dues! d.snider19@yahoo.com

- **Status of CQ Magazine**

Reported by Bill WT0TX 12/20/2023

Quoting Rich Moseson, W2VU, editor of CQ Magazine: "Unfortunately, CQ has temporarily suspended publishing at this time. We are working very hard to secure the necessary funding to continue operations but until we can make those arrangements, everything is on hold."

Reported by ARRL 12/22/2023

CQ Editor Rich Moseson, W2VU, acknowledged the delays in delivering CQ magazine. He indicated that the November and December issues are delayed but plans are to get them out to the readership as soon as circumstances permit.

- **Parma Radio Club**

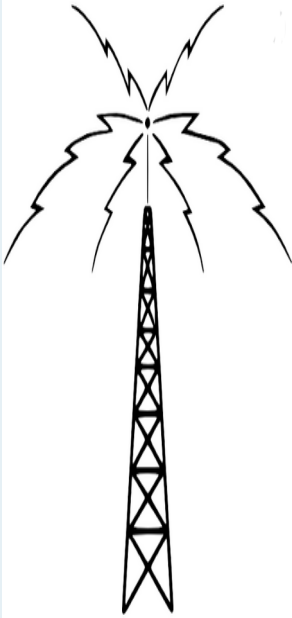
We are happy that the PRC continues its 75+ year legacy. They report that, "The PRC emerged from the recent meeting victorious. Two new members, both very qualified, stepped up to nominate themselves for the roles of President and Vice President! There were no other contenders for the roles so the slate of Officers for 2024 was accepted by acclamation. President: Dale Woods KE8WZQ, Vice President: Jeb Steel E8YPP, Secretary: Hal Rogers K8CMD and Treasurer: Tom Pechnik AC8EH

- **For Sale**

Dave NK0K has a lightly used desk and credenza available for \$50 (buyer needs to pick up). Clean environment: no pets and no smoking. It would be suitable for radio shack use. Contact Dave... hibbardd@zoominternet.net



MCARC Repeaters—UPDATE 11/13/2023



Call	Location	Function	Repeater Input	Repeater Output	CTCSS (PL)	Band
W8EOC RX ONLY	Brunswick (North Tower)	RX	147.63	147.03	131.8 two beeps	2 Meter
W8EOC MAIN SITE	Lafayette (South Tower)	TX & RX	147.63	147.03	88.5 one beep	2 Meter
W8EOC	Lafayette (South Tower)	RX	51.16		N/A	6 Meter
	Brunswick Hills (Pearl Rd)	TX & RX		51.66		
W8HN	Medina (MCCC)	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	Lafayette (South Tower)	Repeater TX & RX	223.26	224.86	Open & 77.0	1.25 Meter
W8EOC	Lafayette (South Tower)	Repeater TX & RX	449.925	444.925	131.8	70 CM

Note: You can get into our 2-meter repeater from either the Brunswick input (PL 131.8) or the South input (PL 88.5). The previously MOST USED PL tone of 141.3 NO LONGER WORKS.

NOTE REPEATER UPDATE: Please set your radios as indicated above to enjoy our 7:30pm MCARC weekly Monday Net (except for 2nd Monday of month).

2-Meter Net

MCARC 2-METER REPEATER

Remember to join our 2-Meter nets on 147.030 Monday evenings at 7:30pm, except for the 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

02-Jan-2023	K8NVR	09-Jan-2023	Meeting
16-Jan-2023	KD8SST	23-Jan-2023	WT8O
30-Jan-2023	K8TV	06-Feb-2023	K8NVR

Contact Baji K8IIT, 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., 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 d.snider19@yahoo.com or at <https://w8eoc.org/membership/>

Please consider volunteering. We really would enjoy seeing fresh faces and hearing new ideas to keep the MCARC relevant and viable in 2023. 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: Jane Reed K8JGR
jane@K8JGR.radio

VP: Ed Eyerdom K8NVR
eeyerdome@gmail.com

Secretary/Treasurer:
Dave Swancer KE8APO

W8EOC Repeaters:
Ed Eyerdom K8NVR
Ken Koyan K8TV

Sunshine:
Diane Snider KD8SSX

Trustees:
Doug McClure KD8SST
Dave Oravec N8JNX
Diane Snider KD8SSX
Amy Panchumarti K2KSU
Steven Stein KE8BJD

Newsletter:
Jane Reed K8JGR

Field Day:
Fred Helwig K8FH

Membership:
Diane Snider KD8SSX

Program:
Open

Website:
Jane Reed K8JGR

Net Scheduling:
Baji Panchumarti K8IIT

Social Events:
Gail Helwig KD8GGM

Skywarn:
Tracey Liston W8TWL

ARES:
Bob Mueller K8MD

RACES:
Dave Rickon NF80



MCARC on the World Wide Web

www.W8EOC.org

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. Our roots go back to 1932 in Medina County.

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 the Medina County Career (JVS) Center, upstairs Room 246.



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: