August2025
Vol IX Issue 8

News Beacon

Medina County Amateur Radio Club

Celebrating 50 Years of Service 1975-2025

Inside this issue

Prez's Preface

"Learning without thought is labor lost; thought without learning is perilous."
- Confucius

So, I wrote this last week from my hospital bed, a brand-new experience for me. The breathing problems I have been experiencing for more than a month have FINALLY been diagnosed as pneumonia, some other stuff, and ensuing acute respiratory failure.

Seems like all of the knowledge and technology at our fingertips is as only as good as the intellect summoning it. ChatGPT, web browsers, and medical repositories offer a plethora of information, but not all who access it possesses the ability to narrow the topic, select pertinent material, synthesize the results, and draw conclusions that not only satisfice but optimize a course of action leading to a successful conclusion. It appears thinking and problem solving seem to be in short supply these days, even in medicine. After consulting my past pulmonologist, family doctor and a visit to Parma Hospital ER, I was brushed off. But last week's visit to the Brunswick SW General ER facility and subsequent ambulance ride to SW Gen Hospital yielded me a team of doctors who understood their mission. They obviously learned critical analysis in college, and I am not only able to breathe, I am recovering fast, and feel great!

Exercise your critical thinking skills in all that Amateur Radio has to offer. It may save your life.

God Bless and 73,
Jane@K8JGR.radio

Hmmmmmmm...

"How do you greet a ham radio operator? ?" ...

"... With a short wave! "

July General Meeting Minutes

The monthly General Meeting of the Medina County Amateur Radio Club was held July 14, 2025 in-person, at the Medina County Career Center (JVS). The meeting was called to order by VP Ed Eyerdom K8NVR. The Pledge of Allegiance was recited at 7:02pm. The following Thirteen (13) paid members attended, so quorum (9) was reached.

Fred K8FH	Ed K8NVR	Dave KE8APO	Tamara WA8KGV	John K8JEK
Amy K2KSU	Dave NK0K	Diane KD8SSX	James KD8FHY	John Jr KF8CTA
Gail KD8GGM	Doug KD8SST	Dudley WA1X		

Minutes: Motion to suspend reading and to approve June General Meeting Minutes as published in the July newsletter: Dave NK0K, Second: Amy K2KSU. Approved.

Treasurer's Report: December Treasurer's Report for the Month of July was read by: Dave KE8APO. Motion to approve: Diane KD8SSX, Second: Dave NK0K. Approved.

Vice President's Report: The Twin Sizzler was held July 4th. Thanks go out to a lot of our club members for helping out and making this a safer race.

We would like to award $20.00 to one of our members for having the best attendance. Congratulations Dave Hibbard NK0K.

Elections: Elections will be held at the November meeting. We need nominations for President and Secretary! Ed Eyerdom K8NVR is nominated again for Vice President. Dave Swancer KE8APO is nominated again as Treasurer. We need Trustees as well. This is important, without everyone pitching in we won't have a Club.

Membership: Diane KD8SSX reported that membership is currently at 58.

Repeaters: Ed K8NVR reported that all is good with the repeaters.

Newsletter: Jane@K8JGR.radio is always looking for articles to be sent in for the newsletter. We are also going to need someone to take over the newsletter next year.

Field Day: We had a great Field Day! Weather was good, we had 23 members attend and 12 guest. There were 12 radio operators. The contacts were CW – 701, Side Band – 146 and FT8 – 584 for a Total of 1431. Discussion ensued on what we could do different with the antennas in future.

Annual Picnic: Invitations are out for Sept 7th 2PM. Food, Music, Raffles, and lots of fun conversation.

Adjournment: Motion to adjourn: Diane KD8SSX, Second: Amy K2KSU. A pproved. Meeting was adjourned at 7:43pm.

Technical presentation: Following the meeting was a talk by Ed K8NVR on Portable Generators.

Respectfully submitted by Gail KD8GGM

Nominations Open for MCARC Trustees/Officers

Please, please, step up and volunteer for a leadership position in the Medina County Amateur Radio Club. We need nominations for President and Secretary, as well as Trustees, Webmaster and Newsletter Editor.

The Trustees have waived the one-year membership and the six meeting attendance requirements in the hopes that we can bring on-board new members for a fresh perspective on our Club's direction.

While many other Clubs are struggling, we have robust attendance at our events.

Consider a one-or two year commitment as a small gesture of appreciation for all that the Club does for its members.

MCARC NOMINATION OF 2025 OFFICERS AND TRUSTEES

Note: your address, phone number and email will NOT be published in the MCARC News Beacon newsletter
Form must be submitted to Diane KD8SSX d.snider19@yahoo.com or another Officer by September 25th

Person Being Nominated Self? Yes No	
Name	**Call Sign**
Address	
Email	**Phone**
Position (circle one): • **President (one year term)** • **Vice President (one year term)** • **Secretary (one year term)** • **Treasurer (one year term)** • **Trustee (two year term)**	**Nominee is a paid-up member of M2M for one full year prior to November 2025: Yes No** Waived **Nominee attended at least 6 meetings since November 2024? Yes No** Waived by Trustees **Nominee holds a valid Amateur Radio license: Yes No** **Nominee is over the age of 18: Yes No** **Nominee is a convicted felon: Yes No**
Please list nominee's qualifications and any other information you would like to be presented to the membership to use in considering your nomination:	

Person submitting Form (If not nominating self):	
Name	**Call Sign**
Address	
Email	**Phone**
Nominee Permission Granted? Yes No	
SIGNATURE OF NOMINEE:	
Date:	

Club Meetings

Monthly, MCARC General Meetings are held at 7:00pm on the second Monday of each month 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

Member Birthdays

08/06	Heinz Wimmer KC8F
08/07	Julio Esis KE8JIE
08/17	Stephen Kinford N8WB
08/31	Anthony Crespo KC8PTQ

MCARC Calendar

August 4	7:30pm	Monday Night 2M Net
August 11	7:00pm	IN-PERSON GENERAL MEETING (See page 8)
August 18	7:30pm	Monday Night 2M Net
August 25	7:30pm	Monday Night 2M Net

ARRL Ohio Hamfests

08/02/2025 - Columbus Hamfest
Location: Grove City, OH
Sponsor: Aladdin Shrine Audio Unit
Website: http://columbushamfest.com

08/09/2025 - Cincinnati Hamfest℠

Location: Owensville, OH
Sponsor: Milford Amateur Radio Club
Website: https://CincinnatiHamfest.org

08/16/2025 - Portsmouth Radio Club 2025 Hamfest
Location: New Boston
Sponsor: ARRL, Jett Fire Equipment, Shawnee Computer and More
Website: http://www.portsmouthradioclub.com

08/17/2025 - Warren Hamfest
Location: Cortland, OH
Sponsor: Warren Amateur Radio Association
Website: http://w8vtd.com/hamfest

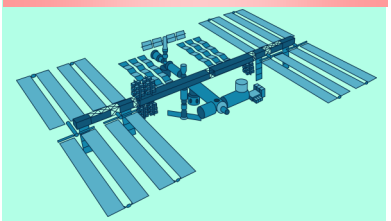
08/30/2025 - Athens Trunkfest
Location: Athens, OH
Sponsor: Athens County Amateur Radio Association
Website: https://www.ac-ara.org/

ARRL Radiosport Contests

August 02-03	222 MHz and Up Distance Contest
August 16-18	10 GHz & Up – Round 1
August 16-17	EME - 2.3 GHz & Up
August 17	Rookie Roundup– RTTY

Hams for Lunch (Formerly Called Old Timers' Lunch)

Attendance at the monthly "lunch and natter" has been fairly consistent. It is held on the **third Tuesday at 12:00 noon**, at the Royal Buffet, 3835 Pearl Rd, Medina, OH 44256, located at the SE corner of SR-42 & Fenn Road. You do not have to be a MCARC member or old to enjoy the camaraderie.



NASA Astronaut Snaps Rare Sprite Flash From Space and It's Blowing Minds

A sudden burst of red light flickered above a thunderstorm, and for a brief moment, Earth's upper atmosphere revealed one of its most elusive secrets.

From 250 miles above the surface, aboard the International Space Station, astronaut Nichole "Vapor" Ayers looked out her window in the early hours of July 3 and saw it: a sprite. Luckily for us landlubbers, she captured it.

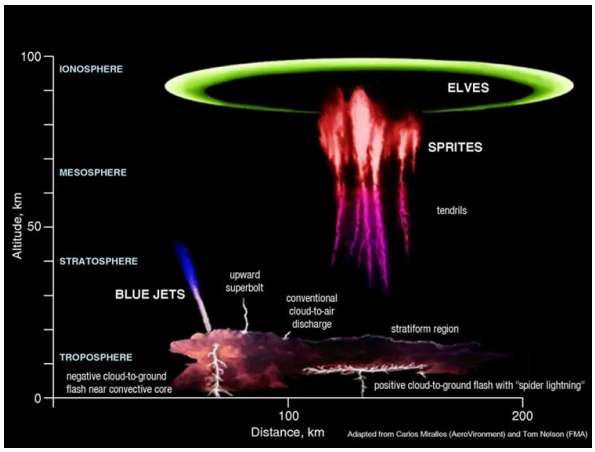
"Just. Wow," Ayers posted on social media, attaching a photo of the glowing tendrils reaching down from the mesosphere like ghostly fireworks.

Sprites, formally known as transient luminous events (or TLEs for short), are among the most mysterious phenomena in Earth's skies. Long suspected, frequently reported by pilots and mountaineers, but rarely verified until recent decades, they appear only after a powerful lightning strike and typically last just milliseconds. They glow in red and pink hues and often resemble jellyfish or carrot-shaped bolts.

Sprites generally form well above where typical weather unfolds, up to 50 miles in the sky. That makes them invisible to most observers on the ground. But from the vantage point of low Earth orbit, they are in plain view.

"We have a great view above the clouds, so scientists can use these types of pictures to better understand the formation, characteristics, and relationship of TLEs to thunderstorms," Ayers wrote in her post.

Despite how otherworldly they appear, sprites are very much part of Earth's weather system. Thunderstorms produce more than just lightning. Under the right conditions, they can also charge the upper atmosphere with enough energy to trigger a luminous discharge above the storm cloud. NASA explains it this way:



From Fringe to Frontier Science

Until 1989, sprites lived mostly in folklore and flight logs. That year, scientists at the University of Minnesota accidentally captured one while testing a low-light camera for flight on a rocket experiment, confirming decades of anecdotal reports.

continued next page...

Rare Sprite Flash ...*cont'd*

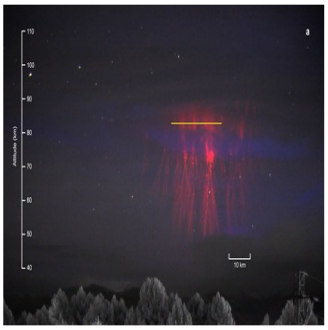
In October 1989, Otha "Skeet" Vaughan of NASA's Marshall Space Flight Center and scientists working on the Mesoscale Lightning Observation Experiment were able to verify the existence of these electrical discharges with their instrument on space shuttle flight STS-34. Through the 1990s, observers on the shuttle, in airplanes, and even on the ground captured many more images with low-light cameras.

Ever since then, sprites have gone from aviation mystery to a growing field of atmospheric science.

Researchers now understand that sprites are plasma discharges — brief, high-altitude jolts caused by imbalances in electric fields. But the full picture is still murky. Why do some storms create them, while others don't? Why do they appear in different shapes and patterns? And how are they linked to other upper-atmosphere flashes like blue jets or elves?

NASA and other agencies have been working to answer these questions, but data is hard to come by. Each sprite lasts less than a blink. And unless you're lucky enough to be flying above a thunderstorm or living aboard the ISS, your odds of spotting one are slim. Still, not impossible.

A New Role for Citizen Scientists



Since 2022, NASA has invited amateur sky-watchers to join the hunt through its Spritacular project. Using long-exposure cameras and detailed reporting, volunteers across the globe have added to what was once an astronomer's fantasy.

So far, the project has gathered 360 confirmed sprite observations in 21 countries, gathered by 871 contributors. That's more than the ISS crew has managed in years.

Every sprite recorded helps scientists piece together how energy travels through the atmosphere. It helps researchers understand lightning's hidden impacts.

For Ayers, the sprite was a surprise. For scientists, it's a data point. But for the rest of us, it's a reminder that even in the space age, Earth still holds secrets worth chasing.

What are sprites, exactly?
Sprites are brief, high-altitude bursts of red light caused by large electrical discharges above thunderstorms. They typically appear after strong lightning strikes and may look like branching tendrils, columns, or jellyfish.

Can you see one from the ground?
Yes, though it's rare. With the right equipment and a good view of a distant thunderstorm (preferably in a dark-sky area), some citizen scientists have captured sprites using long-exposure cameras.

Why do scientists care about them?
Sprites help scientists understand how storms interact with the upper atmosphere. These interactions can influence everything from weather modeling to radio communications and even climate patterns.

What's next for sprite research?
More observations, especially from orbit and citizen scientists, will help build better models of how sprites form and behave. NASA's Spritacular project is still ongoing and accepting contributions.

zmescience.com by: Tibi Puiu *July 9, 2025*

Scientists make game-changing breakthrough that could slash costs of solar panels: 'Has the potential to contribute to the energy transition'

Solar energy experts in Germany are putting sun-catching cells under the magnifying glass with astounding results, according to multiple reports. The Fraunhofer Institute for Solar Energy Systems team is perfecting the use of lenses to concentrate sunlight onto solar panels, reducing size and costs while increasing performance, Interesting Engineering and PV Magazine reported.

The "technology has the potential to contribute to the energy transition, facilitating the shift toward more sustainable and renewable energy sources by combining minimal carbon footprint and energy demand with low levelized cost of electricity," the researchers wrote in a study published by the IEEE Journal of Photovoltaics.

The sun-catcher is called a micro-concentrating photovoltaic, or CPV, cell. The lens makes it different from standard solar panels that convert sunlight to energy with average efficiency rates around 20%, per MarketWatch. Fraunhofer's improved CPV cell has an astounding 36% rate in ideal conditions and is made with lower-cost parts. It cuts semiconductor materials "by a factor of 1,300 and reduces module areas by 30% compared to current state-of-the-art CPV systems," per IE.

It's just over a square foot in size, using a compact design that unlocks production efficiencies and better pricing — all while shining on performance. A two-axis tilt with the ability to track the sun helps to capitalize on solar opportunity, IE continued.

A 60 cell-lens prototype was studied for a year. In "real-world" conditions, CPVs achieved up to 33.6% efficiency. The 36% mark was posted at 167 degrees Fahrenheit. The prototype showed no signs of degradation, according to IE. The improvement in CPV tech is among numerous breakthroughs in the sector. Long-lasting perovskite cells being developed at Rice University could help to unlock the tech for widespread use. California's GAF Energy created amazing solar shingles that can be nailed, another example for home use.

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Adding solar can reduce or eliminate your utility bill. EnergySage can help you to unlock available tax incentives on the federal and state levels as well as get the right pro installer. The guidance can save around $10,000 on upfront costs. The expense can vary based on size, but EnergySage said a system can go for nearly $30,000 before incentives. That's why having a trusted advocate to help you navigate the process is important.

Community solar is a leasing option that can save you around $150 a year by renting panels on nearby solar farms. No tech is required at home.

All the options capitalize on free, abundant sun energy, which produces no air pollution. Cutting production of heat-trapping fumes is crucial, as the World Health Organization reported that 99% of Earth's population breathes air that's below its standards. It is causing increased lung, heart, and other health risks. Dirty air is even being linked to dementia cases.

At Fraunhofer, the CPV project is four years in the making. Next up is the creation of a startup to bring the tech to market. There are also plans to produce an improved version with a 37% efficiency rate, all per IE.

Yahoo News, July 19, 2025 By: Rick Kazmer

Hamatuer Antix

MCARC will be holding Technical Sessions during most of our in-person General Meetings on the 2nd Monday of each month. IF THE DOORS ARE LOCKED PLEASE CALL JANE K8JGR AT 216-570-8500 AND WE WILL SEND SOMEONE DOWN TO LET YOU IN.

August 11th, 2025 General Meeting

Our next monthly **In-Person General Meeting is August 11th,** and 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.

Call Jane K8JGR 216-570-8500 if doors are locked and we will send someone down to let you in. State whether you are at the front or back of the building.

The **Technical Session:** Doug KD8SSTwill give a presentation on RT Systems.

Dits and Dahs

- **Our Monthly Meeting**

Will be held on **August 11th,** 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. IF THE DOORS ARE LOCKED PLEASE CALL JANE K8JGR AT 216-570-8500 AND WE WILL SEND SOMEONE DOWN TO LET YOU IN.

- **MCARC 2M Net**

Check in with your friends to the **MCARC 2M Net**, held on every Monday evening at 7:30pm, with the exception of the second Monday of the month when we have our in-person meeting. See page 10 for info.

- **Consider Volunteering as Trustee for MCARC**

As was mentioned, after nine years, Jane K8JGR is planning on stepping back a bit from MCARC Presidential duties in 2026. Please consider stepping up and compiling our News Beacon, honing your webmaster skills, exercising your leadership skills as Trustee, or plan to take meeting notes as Club Secretary since Gail KD8GGM is also stepping down. We are all willing to help with the transition. MCARC has many talented members who would provide a fresh perspective on what direction the Medina County Amateur Radio Club should take in the next decade. Please contact jane@K8JGR.radio if you would like more information, or to nominate yourself or another member. .

- **Bike Race Volunteers Wanted**

A note from Jeff Garvas N8YNR:

The 2025 Pedal To The Point Bike Tour from Berea to Sandusky is August 9/10. I am looking for ham radio operators to help staff stationary rest stops at various locations in roughly the Lorain / Huron / Erie and maybe Ashland county areas. If you volunteer for both days I can find you hotel accommodation in Sandusky (and will likely need you on the road early Sunday AM).

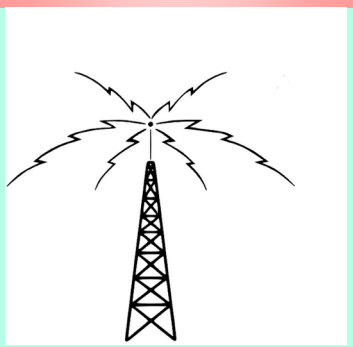
If you don't like to be stationary and have a vehicle that can transport bikes (either a mini van, truck bed or a bike rack) and riders, and you'd pass a criminal background check, have a valid driver's license, insurance, and a CLEAN vehicle interior we also need SAG volunteers to be dispatched to riders who need a ride either to on-route mechanics or a rest stop. This is a very fun event where ham radio plays a vital role in the day-of operations of a 150 mile bike tour (over two days). Some volunteers may be handed a MARCS radio depending upon your assignment.

Come play radio with us by signing up at the link below or calling/texting me as we're just a little over a week away and I need more help. The event is primarily on VHF. UHF is helpful if you have it. Mobile radios in working condition are preferred due to the sheer distance we cover with a single repeater. APRS is optional, but helpful if you're a SAG.

Sign up here:
https://forms.gle/4aNUKMSHaQF5rH4h8

- **Lost & Found**

Left behind at Field Day held at Mill Stream Park in Valley City: one pair of WZQH leather work gloves. Will bring to August 22th Member Meeting or contact Jane@K8JGR.radio.



MCARC Repeaters

Call	Location	Function	Repeater Input	Repeater Output	CTCSS (PL)	Band
W8EOC	Medina (Central Tower)	RX	147.63	147.03	141.3 three beeps	2 Meter
W8EOC	Brunswick (North Tower)	RX	147.63	147.03	131.8 two beeps	2 Meter
W8EOC	Lafayette (South Tower)	TX & RX	147.63	147.03	88.5 one beep	2 Meter
W8EOC	Lafayette (South Tower) Brunswick Hills (Pearl Rd)	RX TX	51.16	51.66	107.2	6 Meter
W8EOC	Lafayette (South Tower)	Repeater TX & RX	223.26	224.86	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 W8EOC 2-meter repeaters from the Brunswick input **(PL 131.8),** the South (Lafayette) input (PL 88.5), or the North (Medina) at 141.3.

NOTE: 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

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

04-Aug-2025	KD8SST	11-Aug-2025	*Meeting*
18-Aug-2025		25-Aug-2025	KE8APO
01-Sep-2025	KD8SST	08-Sep-2025	*Meeting*

Contact Baji K8IIT, k8iitm@gmail.com,
if you would like to serve as NCO.
NCO openings can be found at:
*https://rebrand.ly/2025-net-**control***

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, or contact Diane KD8SSX at d.snider19@yahoo.com

Then, mail your dues to Diane Snider, 8311 Norwalk Rd, Litchfield, OH 44253, or bring them to the next meeting.

Please consider volunteering. We really would enjoy seeing fresh faces and hearing new ideas to keep the MCARC relevant and viable in 2025. Do you like designing or maintaining web-sites, organizing speakers for technical sessions, writing for the newsletter or teaching members new skills? Please let Jane@K8JGR.radio know. Thank you.

Who's Who

President: Jane Reed K8JGR
jane@K8JGR.radio

VP: Ed Eyerdom K8NVR

Secretary:
Gail Helwig KD8GGM

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:
Ed Eyerdom K8NVR

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: