

News Beacon

Medina County Amateur Radio Club *Celebrating 50 Years of Service 1975-2025*

Prez's Preface

"We don't stop playing because we grow old; we grow old because we stop playing."

...attributed to George Bernard Shaw

Well, if you like to have fun, March offers some opportunities with Mardi Gras/Fat Tuesday on March 3rd, and St Patrick's Day on March 17th. Then there are always sports (think Cavaliers winning streak), theater, and music venues galore.

Of course, there are always the maple sugar festivals, pancake breakfasts, and walks in the park.

March 1st & 2nd is the International DX- Phone Contest for you competitive types.

Upgrade to a General Class license by attending the MCARC classes at the career Center starting March 5th. See page 6.

March 9th is the NOARS Winter Hamfest (see page 4), always a good place to run into local Ham friends. But don't forget to set your clocks AHEAD 1 hour for the Daylight Saving Time change on March 9th.

And MCARC members, please RSVP to Gail KD8GGM for your invitation to the March 15th Annual Dinner.

March 16 through 22 is Tornado Safety Week, a good time to refresh your safety plan for family.

With thoughts about the perfect Amateur Radio station, March brings us a few more temperate days in which we can tweak outdoor coax and antenna installations. Thumbing through the latest DX Engineering catalog, or browsing the radio equipment sites online, eases us through the rainy days.

So, enjoy the Spring season, with all of its offerings.

73,

Jane@K8JGR.radio



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Hmmmmmm...

"Today I saw an ad that said 'Radio for sale, \$1, volume stuck on full.'"

..."I thought, I can't turn that down."

Submitted by Kirk VanBlarcum WN8KDN



February General Meeting Minutes

The monthly General Meeting, was held February 10, 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 7:00pm. The following eleven (11) paid members attended, so quorum (9) was reached.

Dave KE8APO	Ed K8NVR	Rick KE8CSW	Dave NKOK	John Kollar Jr KF8CTA
Brian KA8NCI	Lou N8LEM	Diane KD8SSX	Steve KE8BJD	Doug KD8SST
John K8JEK				

Minutes: Minutes of previous January meeting were not reviewed this time.

Treasurer's Report: December Treasurer's Report was read by: Dave KE8APO. Motion to approve: Diane KD8SSX , Second: Dave NKOK . Approved.

Vice President's Report: Ed K8NVR relayed information from Jane K8JGR. Jane K8JGR is organizing a General License class starting March 5th and is looking for instructors. She is also always in need of articles for our newsletter.

Repeaters: Per Ed K8NVR, no change. All are working. Ed purchased \$81 in spare parts for the PA and will be submitting a request to the trustees for a \$300 purchase of a Discone antenna to allow VHF and UHF operation from our classroom. He plans to host radio operator classes starting in late April. He is looking for ideas for technical presentations. A session on "go boxes" will be planned and a session on POTA (parks on the air) may be done as well.

Membership: Diane KD8SSX reported that we have 44 currently paid members.

Club Dinner: : Invitations will be going out soon for our Annual Dinner on March 15th. There will be a 50/50 raffle as well as prizes.

Comments: Dave NKOK will have some items to donate to the Club including a couple power supplies as well as a MFJ analyzer and miscellaneous connectors and adapters. See Ed if interested in any of these.

Adjournment: Meeting was adjourned at 7:29pm.

Technical presentation: Ed K8NVR covered the "Russian Woodpecker" and an explanation of single side band.

Respectfully submitted by Dave KE8APO

ElectroMagnetic Member

Tracey Liston W8TWL, a 45 year Senior member of the of the Society of Broadcast Engineers (CLE chapter) was awarded Broadcast Engineer of the year during a late summer picnic meeting in 2024. Liston was one of seven Certified Broadcast Engineers recognized nationally for their service to the Industry and the Society.

Liston started his Broadcast Engineering activities in 1989 at Lorain County's WOBL-AM and had built his client list to include seven AM, FM and TV broadcast facilities in NE Ohio while working full time at the CWRU School of Medicine managing media/ lab facilities. In 2005, Liston left CWRU after 20 years of service to an offer he couldn't refuse to travel the US as a Satellite Uplink Engineer for events such as Super Bowls, Olympics, baseball spring training broadcasts and Presidential campaign stops.

In 2020, sports broadcasts mostly went into hiatus so he joined DHS/FEMA, and became qualified as a Telecommunications Specialist. His first deployment was to the Logistics/Comm team that designed and operated of one of the nation's first Community Vaccination Centers in Buffalo, NY. Subsequent deployments were FEMA type 1 Disaster assignments over the next 2.5 years in TN, NJ & KY.

Upon his full time return to Ohio in 2023, Liston continued his ongoing broadcast Engineering duties, and involvement in Coast Guard Aux contingency communications.

[Ed.] Tracey has been a member of the Medina County Amateur Radio Club since 2012.



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

Tom Kenski WA8ICH	03/01
David Rickon NF8O	03/04
Doug Daniels KE8BBI	03/13
Dave Hibbard NK0K	03/14
Rick Hartranf KE8VRM	03/14
Kevin Reed	03/18
Lou Mesavage N8LEM	03/19
Steve Fisher KB8SCI	03/21
Jim Reinhart WD8EKH	03/21
Steven Stein KE8BJD	03/26
Bob Bordeaux K2BBX	03/28

MCARC Calendar

March 03	7:30pm Monday Night 2M Net
March 10	7:00pm IN-PERSON GENERAL MEETING (See page 8)
March 17	7:30pm Monday Night 2M Net
March 24	7:30pm Monday Night 2M Net
March 31	7:30pm Monday Night 2M Net

ARRL Ohio Hamfests

03/09/2025	Northern Ohio Amateur Radio Society Winter Hamfest Location: Elyria, OH Sponsor: Northern Ohio Amateur Radio Society https://www.noars.net/hamfests/winter-hamfest/
03/16/2025	Toledo Mobile Radio Association Hamfest and Computer Fair Location: Perrysburg, OH Sponsor: Toledo Mobile Radio Association http://www.w8hhf.org

ARRL Radiosport Contests

March 1-2 International DX—Phone

Old Timers' Lunch

Ray Pick W8MFU said that attendance at the "Old Timers'" (and not so old) 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 and Fenn Road. You do not have to be a MCARC member to enjoy the camaraderie.



Test your Funny Bone

Submitted by Club Jester, Dave Swancer KE8APO

BASIC ELECTRICAL EXAM

1. What color is the green grounding screw? _____
2. When hooking up a 200v heater, you must use 220v wire?
___ TRUE ___ FALSE
3. Electricity will leak out of pipes if they are not connected with rain tight fittings? ___ TRUE ___ FALSE
4. To trip a breaker, you must stick out your foot as it walks by. ___ TRUE ___ FALSE
5. When dealing with conduit the O.D. must be larger than the I.D. or the hole will be on the outside. ___ TRUE ___ FALSE
6. A keyless fixture cannot be unlocked ___ TRUE ___ FALSE
7. A breaker reads "20" on the handle. This means that it can only be tripped 20 times before it wears out. ___ TRUE ___ FALSE
8. If you plug a 110v appliance into a 120v line, 10 extra volts will leak out and make a mess. ___ TRUE ___ FALSE
9. The gauge # of a wire tells you how many outlets you can plug into it. ___ TRUE ___ FALSE
10. When pulling 4/0 wire thru a 1/2" PVC conduit, the "PVC" stands for "Pipe Very Crowded" ___ TRUE ___ FALSE
11. An OHM is a Hindu measurement of voltage ___ TRUE ___ FALSE
12. A Flush Mounted device may only be hooked up to a toilet.
___ TRUE ___ FALSE
13. High voltage wire is only used in the upper stories of a building and low voltage wires is only used in the lower floors and basement. ___ TRUE ___ FALSE
14. If you have a molded case breaker, the mold can be removed with soap and warm water. ___ TRUE ___ FALSE
15. Electrical Inspectors are also known as _____



www.W8EOC.org

Why General Class?

- **More frequencies**
- **Greater communication options**
- **New technical opportunities**
- **More fun**
- **One step closer to Extra Class license**

No cost for classes

ARRL *General Class License Manual*
Tenth Edition
book required

**READ CHAPTERS 1-3
BEFORE FIRST CLASS**

Amateur Radio Upgrade

General Class License Amateur Radio Class Instruction

PREREQUISITE: Technician License

No Morse code required * Will prepare you for the FCC Element 3

General Class License exam:

35 multiple choice questions

Last class will be FCC exam night

**March 5, 2025
begins *nine*
Wednesday
classes,
7:00-9:00 pm**

Location:
Medina County Career
Center (JVS),
Room 246,
1101 West Liberty St,
Medina, Ohio 44256

For more information about classes:

see www.W8EOC.org

Or

K8JGR Jane 216-570-8500

jane@K8JGR.radio

Please pass this information along to your Technician friends.

Thank you!

Contact with Alien Intelligence (AI)

By Dudley Chapman WA1X

It all started with a project to revive a broken LDG 200-watt autotuner that I picked up at a hamfest from someone selling it for parts. My plan is to replace the PIC processor chip with an Arduino-compatible processor and write custom code. The goal is to have the tuner control a network of antenna relays out in the woods, and do the tuning for various horizontal and vertical antennas.

One thing I've always wondered is why these autotuners don't include circuitry to measure the impedance they're trying to match. You'd think that if they could measure both the real and imaginary components of the load impedance, they could calculate the conjugate match, set the values, and be done. Yet, if you've ever watched an SWR meter during autotuning, you've seen how it cycles through various inductance and capacitance values, searching for a good match.

Recently, I came across an ad from Analog Devices for a chip that measures both the ratio of forward and reflected power and their phase difference. I found a small breakout board on Amazon featuring that chip, and the possibilities began to take shape.

Arduino-compatible processors are programmed in C or C++. I used these languages extensively in my early career, automating scientific instruments. However, that was over 40 years ago. Since then, I've worked with more modern, expressive, and productive languages. Suffice it to say, I wasn't particularly thrilled about diving back into writing a lot of C code.

This is where the "alien intelligence" comes in. In my professional software development work, I've been using an AI called ChatGPT to assist with various coding tasks. The more I've learned how to communicate effectively with it, the more complex work it can handle. So, I decided to see if ChatGPT could help me design the circuit and write the C code for this project. Specifically, I needed it to interface with the Analog Devices chip, perform the necessary calculations, and control the antenna relays.

To the left is the schematic for the SWR bridge and phase detector circuit. I used an online tool called EasyEDA for schematic capture.

(On the left side of the schematic is a classic Stockton SWR Bridge circuit. It measures the RF current and voltage of the transmitted signal going to the antenna. The rectangular component labeled AD8302 represents a small breakout board containing the 8302 chip, along with supporting surface-mount resistors and capacitors. The vendor's schematic for this board is shown at the bottom left. The connector on the upper right allows data transfer from the phase/magnitude detector to the Arduino-compatible controller board.)

Two key design decisions involved selecting the turns ratio for the toroidal transformers and choosing appropriate values for resistors R3 and R5. These needed to be optimized to keep input voltages within the chip's allowable range, even under high SWR conditions. Fortunately, the AD8302 chip features logarithmic amplifiers, enabling it to handle a wide range of input levels. I had the AI perform the necessary calculations for these components.

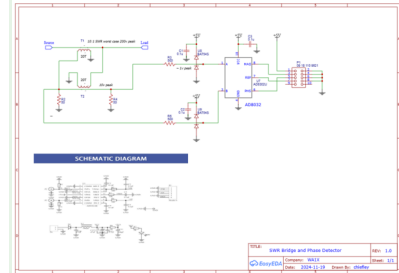
In a previous conversation about the 8302, the AI suggests protecting the inputs to the 8302 chip with Schottky diodes. This was totally unprompted, but I imagine it probably came across this as it searched the web for information. By the way, the particular part it chose is an excellent choice. Schottky diodes respond really fast. The part it chose has the two diodes in it and it is cheap and readily available.

In my conversation with ChatGPT, I specified that the processor would be a particular version of the ESP32. Remarkably, the AI was able to provide detailed recommendations for pin assignments based on the specific ESP32 board I described. (I haven't included the schematic for the controller part of the project in this article.) Working with AI systems like ChatGPT is similar to collaborating with a knowledgeable colleague. You provide clear instructions, background information, and your goals. The AI then returns a well-organized response, which may require further refinement based on your feedback.

At the end of this article, I'll provide a link to the full conversation I had with ChatGPT. While you don't need to read through all the technical details, you may find the flow of the conversation and the AI's comprehensive responses quite interesting. My side of the dialogue is displayed in right-aligned comment bubbles, while the AI's responses appear as the main text.

It's worth noting that I've been using ChatGPT for about six months. Over time, it has developed a profile based on our work together and from a résumé I provided early on. This allows it to tailor responses to my level of expertise and provide just the right amount of detail.

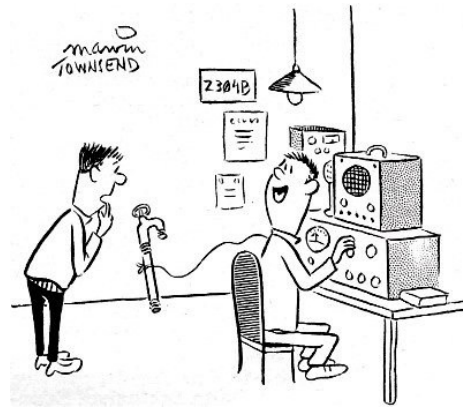
One final note: I asked ChatGPT to edit this article for grammar and readability. I hope you found it engaging and informative! "Open pod bay doors, Hal!" "I'm afraid I can't do that, Dave."



Written by Dudley Chapman WA1X, Feb. 10, 2025



Hamatuer Antix



"The book says you can get a good ground by connecting your equipment to a water pipe."

August 1965 Popular Electronics Comic (p101)

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.

March 10, 2025 General Meeting

Our next monthly **In-Person General Meeting is March 10th**, 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** speaker to be announced.

Dits and Dahs

- **Our Monthly Meeting**

Will be held on **March 10th**, 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. (See page 8). **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.

- **MCARC Net Control Operators**

Please consider volunteering as a MCARC 2m **Net Control Operator** for our weekly nets. [Click here](#). If you are a NCO, please turn in your **net log** to Jane@K8JGR.radio.

- **Speakers Wanted**

We are always looking for **speakers for our Monthly Technical Sessions**. If you would like to present an interesting topic—radio, hobby related, or other tech info— or know someone who would, please contact Jane@K8JGR.radio.

- **Annual Dinner**

Gail KD8GGM, Social Event Coordinator, asks members to RSVP for the invitation to the Saturday, March 15th, MCARC Annual Dinner.

- **Upgrade to a General Class License**

General Class License Training Sessions will be held at the Medina County Career Center starting March 5th. See page 6 for info.

- **Apply for a YLRL Scholarship by April 30, 2025**

The Young Ladies' Radio League provides two scholarships of \$2500.00 and one scholarship of \$1500.00 each year. The scholarships are granted to “worthy Young Ladies for continuing their education, with preference given to those in academic study of communications and electronics or related arts and sciences” as according to the YLRL by-laws. **A Ham license is currently mandatory for all scholarships.**

Applicant must be female. Applicant must have an amateur radio license. Preference will be given to students studying communications, radio, electronics, or Amateur Radio related arts and sciences. Preference will be given to members of the YLRL. There are no residency restrictions. Non-US amateurs are eligible. The Ethel Smith, K4LMB and Mary Lou Brown, NM7N scholarships are intended for full-time students. For these scholarships, applicants must intend to seek a Bachelor's or Graduate degree from an accredited college or university.

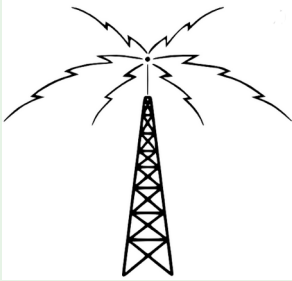
The Martha “Marte” Wessel, KOEPE scholarship is intended for a part-time student of an accredited educational institution* who is working full-time. Full time work includes a stay-at-home parent or caregiver. High School students are exempt from the full-time work requirement.

*What qualifies as an educational institution? Qualifying educational institutions/programs include: Any accredited technical or vocational school. A two or four year college or university.

Reprint from YLRL website
[Application Link](#)



MCARC Repeaters—current April 2024



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)	RX	51.16			
	Brunswick Hills (Pearl Rd)	TX		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: FINAL REPEATER UPDATE for awhile: 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

03-Mar-2025	K8NVR	10-Mar-2025	Meeting
17-Mar-2025	KE8APO	24-Mar-2025	KD8SSX
31-Mar-2025	K8TV	07-Apr-2025	KD8SST

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 websites, 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: