



Madison County Amateur Radio Club

QSO

www.w9vcf.org



MAY 2025

The May meeting will be held May 7, 2025



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From the President

The month of May is an exciting time for hams because it's that time of the year when amateur radio operators from around the globe converge on Xenia, Ohio for the annual Dayton Hamvention. There you find vendors from most of the major companies in the exhibition buildings, probably the world's largest ham radio outdoor flea market, and some of the best forums offered at various locations on the fairgrounds. We are fortunate to only be a couple of hours away from the Hamvention. If you have never attended, I would strongly encourage you to make plans to go on May 16, 17 & 18. You can find more details on their website www.hamvention.org. We also have some upcoming outreach opportunities during the summer months. Hopefully, you will be available to assist us in working our booths at these various events. Summer Field Day is June 28th and will give you more details at our next monthly meeting about how you can participate.

73

Tim

KD9PSR

Vice-President Message

Well April saw a POTA activation from the reports I heard a lot of fun was had. We had storms come through at the beginning of the month and the Hams in this county knocked it out. Was talking with some is there any type of training that would be beneficial to the club. We have outreach coming up which is a time we can do what hams do; talk. Hope to see everyone at the Monday night meeting.

Dale

N9OLC



Madison County Amateur Radio Club

200 North Delaware Street, Anderson IN Madison County EMA EOC

Monthly Meeting – April 7, 2025

Meeting Minutes

- Call to order 7:00 pm - President Tim Bailey
- Pledge of Allegiance to the flag
- Introductions
- Secretary's report read - no questions Gary Sherman (W9GNR) - Second by Jeff Stewart (AK9JS)

Passed

Treasurer report

- Beginning Balance - \$ 3020.02
- Deposit - \$ 146.00
- Insurance - \$ 200.00
- Equip Reimburse - \$ 28.00
- POTA Park Fee - \$ 30.00
- **Ending Balance \$ 2908.02**
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- REPEATER FUND
- Beginning Balance - \$ 1232.61
- Deposit (Donut Fund) \$ 40.00
- Ending Balance - \$ 1272.61

- Motion to accept - Mark Mace (W9MWM) second Gary Sherman (W9GNR)

Passed

- Attendance 34 - Including 4 guests

Gary Sherman	W9GNR		Mike Cook	KC9DJU
Jean Sherman	EMA		Dennis Owen	W9DO
Charlie Dixon	KD9RZG		Ike Jones	N9IKE
Paula Dixon	KD9SZJ		Tony Poitras	KD9PZR
Don Billey	W9BLY		Ferrin Nice	N9VZL
Tim Bailey	KD9PSR		Jeff Dyer	K9DYR
Aiden Paul	KE9APA		Andrew Paul	KE9CBI
Craig Wilson	KE9CRB		Harry Burkart	WA9RCY
Jeff Stewart	AK9JS		Lynn Edens	K9RLE
Greg Hunt	K9ALC		Walter Hestand	KD9VVK
Kenny Olvey	WA9QEK		Rick Wisely	W9CGA

Mark Mace	W9MWM		Doug Rose	N9DR
Jeff Friend	KD9TXH		Dave Sargeant	KE9XF
Frank Dick	WA9JWL		Tom Ecker	KA9SYP
Dewey Rushin	N9DEW		Chris Mannon	KD9USK

- Visitors: 4: Brian Hamaker (KD9VFA - Marion); Justin Coleman (N9LST - Marion); Steve Kirk (KD9RZF - Marion); Jean Sherman (EMA 697)

New Member - Craig Wildon - KE9CRB Passed Unanimously

VP Report - No Report

Report on POTA Activity... Shelter house... worked out nicely. 48 Contact
Appreciate Mike Cook bringing out his Wolf River Antenna...

ARRL Podcast... Weekly - lasts 8-10 minutes... news and activities ARRL has scheduled... a lot crammed in.
A lot of clubs rebroadcast on their repeater... would like to rebroadcast on the .39 at 20:30

Club committed to HF Radio but not limited to HF. There are a lot of different digital modes available... Greg Hunt has educated us quite a bit on new technologies. It is not the MADCO HF Club, it is the Amateur Radio Club.

ECC Simplex Antenna has been changed... simplex should be a lot stronger.

If you participate in Storm Spotting... HTs are only effective in the immediate vicinity of Anderson. Outside of the town you really need a mobile with a good antenna. To prepare for the next one, be sure your equipment is tuned

Signal Stick antenna... 19" very pliable and flexible. SignalStuff.com... about \$22 brings some gain. SMA, M/F specify connection when you order.

Donut Meetings - Not written in stone... round table rag chew but there are times when it cannot be held at the EOC... will try to let people know as far ahead as possible. If there is other activity in the room we will either need to relocate or cancel. Will email information.

Tonight... Ask a HAM panel...

Jeff Stewart, Greg Hunt, Dennis Owen

White River Run is the 14th of June

Indy Mini-Marathon - May 3 - Looking for communicators

Invited to be communicators for an event on the 7th of June... at mini-marathon - Hancock County

Brian - Grant County... Hamfest at Campground... activities, forums, ARRL, clubs, agencies. April 26 in Peru at the Fairgrounds. Fox Hunt... SkyWarn Training... NWS is coming... only allowing 50 participants... North is still doing in person seminars. A few groups demonstrating... go-kits, ham clock, FT-8, etc. Food, coffee, water.

If you want to help with outreach - see Aiden Paul KE9APA, Dale Bloomer N9OLC, or Don Billey W9BLY

Motion to Adjourn... Mark Mace (W9MWM) - Second by Gary Sherman (W9GNR)

Respectfully Submitted,

Don Billey
W9BLY

Tech Committee Report: May 2025

****Antenna Phasing Insights – Unlocking Optimal Signal Performance****

The fundamental concept of ****antenna phasing****—a critical factor in achieving superior signal coverage, directivity, and system efficiency.

➤ **What is Antenna Phasing?**

Antenna phasing involves adjusting the relative timing or phase of signals fed to multiple antenna elements within an array. By controlling the phase difference between elements, engineers can shape the overall radiation pattern, enhancing desired signals while suppressing unwanted ones.

Why Is Phasing Important?

- ****Beamforming:**** Phasing allows the construction of highly directional beams, focusing energy in specific directions to improve signal strength and reduce interference.
- ****Coverage Optimization:**** Proper phasing can steer the main lobe of the antenna pattern without physically moving the antenna, enabling dynamic coverage adjustments.
- ****Interference Management:**** By nullifying signals in certain directions, phasing helps mitigate interference sources, improving communication quality.

➤ **How Does Phasing Work?**

Imagine an array of antenna elements arranged in a specific pattern. When signals are fed with precise phase differences:

- The waves constructively interfere in the desired direction, creating a strong main lobe.
- Conversely, they destructively interfere in other directions, reducing unwanted radiation.

The phase difference ($\Delta\phi$) between elements is typically calculated based on the desired beam direction, element spacing, and frequency.

****Basic formula:****

$$\Delta \phi = \frac{2\pi d}{\lambda} \sin \theta$$

Where:

- d = spacing between elements
- λ = wavelength
- θ = desired beam angle

Practical Applications

- *Home antennas- for contesting and receiving
- *Repeaters - better transceiving (weather spotting)
- *Satellite system acquisition - uplink/downlink

➤ Challenges in Antenna Phasing

- **Precise Control:** Achieving accurate phase shifts requires sophisticated hardware.
- **Frequency Dependency:** Phasing effects vary with frequency, necessitating adaptable systems.
- **Mutual Coupling:** Interactions between elements can affect the intended phase relationships.

➤ Future Trends

Advancements in digital signal processing and adaptive algorithms are making antenna phasing more flexible and efficient. Emerging technologies like reconfigurable intelligent surfaces and metasurfaces are opening new horizons for dynamic antenna systems.

➤ Conclusion

Antenna phasing can be a cornerstone in modern radio communication and satellite systems. Mastering this technique enables Ham operators to optimize coverage, enhance signal quality, and innovate in antenna design.

Until next month, 73

Greg K9ALC

-FOR SALE-

Dale Bloomer has radio equipment for sale:

Baofeng radio with

Tactical Antenna

Ear piece

Bluetooth programming for phone

Desk charge

\$55.00 obo

Yeadu FT-25 2meter with desk charger

\$45.00

Yeadu FT-817 hf radio with Tuner and Power Supply

\$450.00

HAVE AN HAM RELATED ITEM FOR SALE? ADVERTISE HERE!! E-MAIL
w9vcf.mcarc@gmail.com with your Item, asking price and preferred contact info!!

EVENTS

Every Wednesday	MCARC 2M Net 8:00 PM - 145.390 pl 151.4 Followed by an informal ragchew on 28.465
Every Thursday	Donut Meeting 09:00 AM at the EOC
Every Saturday	Breakfast at Anderson Grill 09:00 AM at 2038 S Scatterfield Rd, Anderson
May 7th	MC ARC Meeting at the EOC, 7pm
May 20th	VE Testing at the EOC 7pm

SPECIAL EVENTS

May 8 th – May 18 th	80 th Anniversary Victory in Europe 1300z – 2359z 7.245 14.245 21.345 28.445
May 10 th	Jamestown 1400z – 2000z 7.265 14.265
May 10 th	Golden Spike 1500z – 2300z 7.040 7.235 14.040 14.235
May 10 th	Armed Forces 1600z – 2300z 7.250 14.320 14.070
May 10 th – May 17 th	National Police Appreciation 0000z – 0000z 14.325
May 19 th – May 25 th	National EMS Week 0000z – 0000z 14.325

Have something to contribute to the newsletter?

- Participated in any recent contest?
- Have an interesting QSO?
- Try an experimental antenna?
- Get a new piece of equipment you'd like to offer a review about?

We'd love to hear about it. You are more than welcome to write a piece about something above or something else you feel worthy of sharing. If you would like to write a piece for the newsletter, please submit your article, along with any pictures that you'd like included to the club email, w9vcf.mcarc@gmail.com.

Also, if you have anything for sale that you would like to advertise in the club newsletter, please send it to the above email.

Thank you, Gary - W9GNR

Madison County Amateur Radio Club

P.O. Box 3044

Anderson, Indiana 46018

Officer Contact Information

President	Tim Bailey	KD9PSR	kd9psr@gmail.com
Vice President	Dale Bloomer	N9OLC	dbloo42927@aol.net
Secretary	Don Billey	W9BLY	don.billey@gmail.com
Treasurer	Gerald Hollon	K9GDH	gdhollon@comcast.net
Activities	Greg Hunt	K9ALC	RWilco.85@gmail.com
Trustee	Doug Rose	N9DR	n9dr@arrl.net
Technical Committee Chair	Dennis Owen	W9DO	w9do@arrl.com
Newsletter Editor	Gary Sherman	W9GNR	w9gnr@arrl.com

Meetings are at the Madison County EOC
200 N Delaware Street
Anderson, IN 46016

HAMFESTS



NO HAMFESTS?