



Madison County Amateur Radio Club

QSO

www.w9vcf.org

OCTOBER 2024

The OCTOBER meeting will be held October 7, 2024



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From the President

Since our last meeting we have participated in a POTA activation at Mounds Park. It was a bit on the cool side, but a sunny and pleasant day. Several from our club made dozens of contacts, and it was a great learning experience for some of our new hams. Each event or activation gives up an opportunity to sharpen our amateur radio skills and to promote camaraderie within our club. We had several individuals who were in the park and noticed our temporary station and inquired about ham radio. I am grateful for those who assisted in setting up our station, those who spent the afternoon working the bands, and those who helped take down and pack everything away when we were finished. Overall, it was a great day.

I look forward to seeing everyone at our next meeting Monday October 7th at 7:00 PM.

Let's make amateur radio great again!

73

Tim

KD9PSR

From the Secretary

I don't know about you, but not having a September meeting TOTALLY threw me off! When Gary was getting this month's newsletter ready, I got into a slight panic because I couldn't find the September minutes... and then realized, "Duh... it was LABOR DAY and we didn't meet!" Have you ever had one of those senior moments where you knew something wasn't quite right but you just couldn't figure out what or why? I literally searched for hours trying to figure out which folder, hard drive, or computer I must have used to store those minutes!

It's been a challenging three months since my knee replacement and the physical therapy has caused me to miss three months worth of donut meetings as well! I'm finally getting back into the swing of things, although I'm not at 100% yet, I have completed PT so life is getting back to normal. I'm anxious to get back to the weekly meetings and to dig more deeply into the HF world. During this downtime I have been able to set up my HF antenna and make some HF contacts - all but one within the USA. Regardless, it has been exciting for me as I listen, twist the dial, and learn about the different groups, frequencies, and bands that have been opened up through my General license. Now, of course, my sights are set on the Extra class, and I've already begun studying. My goal is to have it by springtime and to continue to dig more deeply into the HAM world.

A huge "THANK YOU" to so many who have been patient and invested time with me, answering questions and pointing me toward resources as I continue my quest!

73s to all.

Don Billey, Secretary

W9BLY

MCARC

Meeting Minutes

Date July 1, 2024

Opening:

The monthly meeting of the Madison County Amateurs' Radio Club was called to order at 7:00 PM by Tim on July 2, 2024 at the EOC with the Pledge of Allegiance.

Present: 23. We had three applications Gary Brown, Jr. KE9AMG, Chris Mannon KD9USK, and Aiden Paul KE9APA.

Secretary Report: Minutes was approved as email by 1st motion Mark W9MWM and seconded by Jeff K9DYR.

Treasurer Report: Gerald K9GDH gave a balance as of June of \$2,077.72 after \$75.00 pay out for Field Day food and the repeater balance of \$1,146.11. Motion to accept report was by Mark W9MWM and seconded by Charlie KD9RZG.

Trustee Report –Doug N9DR had nothing new to report.

Activity Report – Please check the calendar for upcoming events that was available at the meeting. Field Day went good.

Points Report – Jeff Stewart AK9JS reported, Mike KC9DJU is in first place, Kenny WA9QEK is in second place, and Mark W9MWM is in third place.

New Business-

There was a survey passed out to determine the interest of the club in different areas of ham radio. So that we can schedule training session.

We need to change the Constitution to prorate membership after March 31. If you paid your dues after March 31st and are a new member and would like to get a refund please see Gerald K9DGH or let him know to apply it to your next year's due.

Seventy-five years old will be paying due and an unanimous vote by club member were voiced.

Secretary position will be appointed by the executive board.

It was discussed that instead of a jacket for first place something else should be considered due to the cost.

The vote to merge both club was voted down. Vote count was 10 yes and 8 no, we have to have 2/3 of the vote to pass this.

Show and Tell- Charlie, KD9RZG discussed his contact with the USS Cod during Museum Ship Week.

Next Month's Meeting will be Monday, August 5, 2024 at 7pm.

Motion to Adjourn Meeting: Majority of the club.

UPCOMING EVENTS TO BE AWARE OF:

2024 Public Outreach Festival Dates

Madison County 4-H Fair Sunday July 21, Monday July 22, Tuesday July 23, Wednesday July 24, Thursday July 25, Friday July 26, Saturday July 27

Elwood Glass Festival Friday August 16, Saturday August 17, Sunday August 18

Frankton Heritage Days (Public Safety Party) Friday September 20, Saturday September 21, Sunday September 22

Pendleton Public Safety Day Sunday August 25 from 1pm to 4pm

73,

KD9SZJ

Tech Committee Report: September 2024

Nothing new to report. The Tech Committee continues to work on existing projects and will report when significant advances are made.

Submitted 23September2024

Dennis Owen, W9DO

Tech Committee Chair

EMA COMM DIV.

	<u>Y-T-D</u>	<u>August</u>	<u>September</u>
MCU	20	0	0
Active Storm Net	123	0	0
Project:LifeSaver	2	0	0
Outreach	355	50	0
Comm Div	70	17	0
Nets	590	58	50
Training	1,199	98	135
EMA Activation	188	0	0
Total	2,537	223	185

THE EC SHACK

Gary-W9GNR

Amateur Radio Medical Support

Sweeping changes in healthcare delivery practices and regulations are impacting amateur radio in our emergency communications and public service roles. The first change was the 1996 Health Insurance Portability and Accountability Act (HIPAA). This law requires detailed healthcare information be kept private.

A second trend, around 2010, saw regulations and incentives published, driving the healthcare system in the US toward the use of electronic medical records vs. historical paper charts. These are subject to HIPAA privacy rules.

A third trend, seen starting in 2020, was the appearance of shortages of medical services, such as available hospital beds, emergency room capacity and emergency medical services such as ambulances and medical volunteers.

Background and History

The days of hams grabbing a handheld radio and self-deploying to the hospital in the event of an emergency are long over. Hospital-based voice radio nets or radio clubs/rooms are less common. However, considering the shortages of all types of medical services, the door is far from closed for volunteer medical support.

Organizations like the Mayo Clinic have been working on guidelines for managing mass casualty incidents. These are situations in which the number of medical cases exceeds treatment and response resources. One published framework for this is called SALT -- Sort, Assess, Lifesaving Interventions, and Treatment/Transport. Patients are triaged into these categories: Green (minimal); Yellow (delayed); Red (immediate); Grey (expected to die); and Black (dead). Hams and volunteer medical resources are generally involved in Green cases. We may be asked to assist with Yellow cases (often transport coordination). Generally, only professionals manage Red, Grey and Black cases, often via 911.

Several use cases for hams supporting health care delivery particularly at volunteer led events have been observed:

Small Race/Parade Model

In this model, a community group will organize a 5K/10K race/walk or parade. They pull permits and organize a committee. There is usually a start/finish area that might have a medical tent or table. A volunteer medical person or team is organized. A larger race might have aid stations out on the course. These might have medical staff at aid stations or water stops. There may be a dedicated ambulance for cases more serious than Green.

Hams would set up a net control at or near the medical table. A repeater might be borrowed. Hams would check in from aid stations or mile markers with "reportable" conditions such as injuries. Serious injuries (suspected heart problems, bad falls) are usually first called into 911. All situations are logged (on the ICS 214 form) in very basic summary form (to avoid HIPAA violations) and shared with medical and event leadership. This tends to provide a clear, real time operating picture. This can also "deconflict" incidents such as multiple ambulance dispatches to the same scene for the same person.

Larger Scale Community Events

A more formal NIMS/ICS structure may or may not be seen or recognized as a basis for these events. One important point: the medical resources caring for event participants may be organizationally in the Operations section, not under Logistics. And the communications resources may be embedded in the medical team and not caring for event internal logistics needs, but relaying “runner down” status to EMS.

If this was a government forest fire response, the medical section is caring for injured firefighters. At a marathon, 300 injured runners might seek care, and with just one staff member. One model seen at marathons: most hams are embedded in the runner-facing medical units, a few might be loaned out as internal “net controls” on rented radios for logistics or water stops or to manage Supplies Athletes and Gear (SAG) buses.

Very Large Incidents/Events

The [2019 CERT Manual](#) and the [Boston Marathon Bombing After Action Report](#) show clear roles for volunteers. The idea is that trained volunteers are the front end of the system. So in the case of CERT at an earthquake, volunteers care initially for themselves and their families. They may also check on their neighbors. The objective is to triage and manage Green cases, and reduce the strain on 911 resources to conserve them for Yellow and Red cases. As directed, they may be deployed to other areas.

HIPAA and Ham Radio

[Two features of HIPAA](#) are widely used by hams to support emergency communications and public service. One is the Red Cross exemption: The Red Cross and other volunteer groups are not recognized as healthcare providers, so there may be limited information sharing. This is a complex topic, however. The other provision allows a facility directory to share the location (only) of a person being treated. This is used as an example: Allowing the location (only) of an individual (often identified just by race bib number) at a marathon needing care to be relayed to health providers.

At a given scene or event, the healthcare providers might decide to use a secure Electronic Medical Records (EMR) type of system. Ham volunteers may or may not be invited to directly participate in that. At some events, hams have expressed concerns about the security required and have decided to disengage in the handling of secure data.

Review

Mass casualty incidents are a topic of concern for medical leaders, emergency management staff and event planners. There is a large and proven role for volunteers in this work. It is best to focus on simpler, less urgent cases (Green) and look to our served agencies for guidance. Events are often in need of volunteer support and can be used as excellent avenues for real world training and practice. – *Erik Westgard, NY9D, Assistant Section Emergency Coordinator, Minnesota ARES*

YL - KD9SZJ - Paula

What Are Ham Radio Repeaters? Ham radio repeaters are two-way radio communication devices. They have a transmitter and receiver working simultaneously to receive weaker signals, strengthen them, and transmit them over a wider area, ensuring that the signals get better coverage without degradation. These efficient devices have different receiving and transmitting frequencies and greatly supplement ham radio communications. Without them, you may not be able to communicate to and from far-off areas on your regular VHF/UHF frequencies. If you have a technician class license, you can put up your own ham radio repeater, expand your radio reach and help other Hams in your community connect with a wider audience.

How Far Can Ham Radio Repeaters Reach? The reach of a ham radio repeater depends on several technical and non-technical factors. The technical factors include the device's power and the height and quality of the [antenna](#) being used. Ham radio repeaters can operate on 50 watts, 100 watts, and even 500 watts. But regardless of how high the power is, if the antenna isn't high enough, the repeater may not be able to broadcast over an appreciably broad range. Therefore, the antenna should rise above all obstructions to receive and transmit signals effectively. Apart from these technical aspects, there are certain geographic and topographic elements as well that can influence the range of the repeater. If the repeater is located on an elevated building and you live in a relatively flat geographic region, you can expect your repeater to pick up signals from 15-30 miles away and transmit them over 50-100 miles. Of course, these ranges are just approximations based on several factors. Having said that, they may vary from repeater to repeater.

Where Are Ham Radio Repeaters Located? Ideally, Ham radio repeaters should be placed where they could communicate directly with other stations. This is important because these systems work on radio waves, which in turn depend on line-of-sight propagation, and any obstruction in their path may lead to the destruction of the wave and severed communication. This is why Ham radio repeaters are mostly installed on high elevations. Common places where you may find these repeaters include mountain tops, communication towers, and atop high-rise buildings. In essence, the higher the elevation of the repeater antenna, the better the footprint or coverage of the repeater.

How Do Ham Radio Repeaters Work? You know what Ham radio repeaters do. And knowing that, you might be wondering how they do what they do. So, in this section, I'll explain the complex working of Ham radio repeaters in simple terms. A Ham radio repeater typically comprises an antenna that transmits and receives signals, a transmitter and a receiver, a duplexer, a feedline, and a controller. The antenna transfers the signals it receives to the receiver, turning it into an audio signal. The audio signal goes to the transmitter, where an exciter modulates it to the transmit frequency. A power amplifier boosts this frequency to a higher level so the signal can travel farther without degradation. Now, to ensure that the transmitter and receiver don't interfere with each other's signals, Ham radio repeaters use a duplexer. The duplexer isolates the signals, so the transmitter and receiver signals don't intermix. From the duplexer, the signal then travels through the feedline back to the antenna and is broadcasted in all directions. This entire process is monitored and controlled by the controller, which serves as the "brain" of the repeater.

Ham Radio Repeater Frequencies and Offset

We know by now the Ham radio repeaters work on two different frequencies. They receive signals at one frequency, called the input frequency, and transmit at another frequency, which we call the output frequency.

The difference between the input and output frequencies is called the offset and is a critical element when communicating via Ham radio repeaters. The offset can be either positive or negative. For the most commonly used 2m band, the [offset](#) is +/- 600 kHz. or +/- 0.6 MHz, while for the 70 cm band, the offset is +/- 5 MHz.

Confusing? I know. Let me explain with an example. Suppose the transmit or output frequency of the repeater you are trying to access is 145.110 MHz, and it has a negative offset of 0.6 MHz. In this case, its receiving frequency will be $145.110 - 0.6 = 144.510$ MHz. That means, when you want to monitor this repeater, you will tune into 145.110 MHz. and when you want to transmit through it, you will tune in to 144.510 MHz.

Most modern Ham radios are programmed to automatically adjust the transmitting and receiving frequencies based on the offset. This means that if you are tuned into receiving the signals from the repeater at 145.110, and you want to transmit through this repeater, your radio may automatically tune you into the repeater receiving frequency (144.510) as soon as you press the mic button.

How Can I Access A Ham Radio Repeater?

Accessing a ham radio repeater is more than just keying in the right frequency, pressing the mic button, and broadcasting. You need to know some critical information and program your radio accordingly to be able to use the repeater. The first thing you must know is the repeater's input frequency. Since all directories list repeaters' output or transmit frequencies, you must know its offset to find the repeater's receiving frequency.

That makes offset the second thing you must know before accessing the repeater. Finally, most repeaters these days are closed. So, you must "unlock" them first to access them and broadcast over a wider range.

Your transmitting signal should carry a low-level frequency, or a sub-audible tone called a [CTCSS tone](#) to access the repeater. The repeater receiver is programmed to listen to this tone and pick up only those signals that carry this tone. So, you must program the repeater's transmit frequency along with the offset in your radio and then feed in the tone value to access the repeater.

Where Can I Find Local Ham Radio Repeaters? Finding local ham radio repeaters is super easy. Numerous online directories, like www.repeaterbook.com, have a comprehensive list of repeater frequencies. These directories also include each repeater offset and sub-audible tone in the list.

So, you can log on to any one of these directories and get all the values you need to program your Ham radio for any repeater you like accurately.

How to Use a Ham Radio Repeater? You already know how to access a Ham radio repeater from the section above. But knowing the technical details and values is not enough for you to start using a radio repeater.

There are certain etiquettes of using a Ham radio repeater that you must know and follow unless you want to come off as an uncouth Ham. These etiquettes, call them rules if you want, include: First, listen to ensure that no one else is speaking and then transmit. Never transmit without a license unless it is a life-or-death emergency and there are no other means of communication available. Announce the station's call sign you are trying to reach, followed by your own call sign. Then wait for the station to respond. If you are using the repeater for the first time, announce your call sign along with the repeater you are using. Use plain language when using ham radio repeater for [emergency communication](#). Be as concise as you can while using the repeater to make sure the repeater remains free for other people who may be in distress. When using a repeater, always leave a few seconds gap between each subsequent transmission so anyone with an emergency can key in.

Final Word Ham radio repeaters expand the coverage of smaller, weaker ham radios and greatly supplement Ham radio communications. You can find your local Ham radio repeaters through online directories. But before you can start using any repeater, you have to program the frequency, offset, and tone of each repeater you wish to use in your radio. Additionally, there are certain etiquettes of using a repeater. Make sure to abide by them so you can become a respected member of the Hams' community. Finally, you must know that these repeaters are powered by electricity. And if your local repeaters source electricity from the grid, they may go out of power when there is an electric breakdown. Some repeaters are also powered by solar panels and generators. But those can fail too. So, prioritize connecting with your local Hams to whom you can reach out to without repeaters.

-FOR SALE-

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
October 7th	MC ARC Meeting at the EOC, 7pm
October 10th	MC UHF Net 8pm - 443.350MHz, PL tone 110.9Hz WA9CWE
October 15th	VE Testing at the EOC 7pm
October 24th	MC UHF Net 8pm - 443.350MHz, PL tone 110.9Hz WA9CWE

SPECIAL EVENTS

October 12th	BIG [Believe in Girls] Event 1400z-1930z 14.290 14230 18.125 DMR TG 907
October 12th	Navy Birthday 1600z-2300z 7.250 14.230 14.070 PSK31 D-STAR
October 12-14th	Columbus Day 0000z-2359z 7.185 14.250 18.140 21.350
October 12-20th	Earth ScienceWeek 0000z-2359z 7.044 7.184 14.044 14.240
October 31st	Halloween Special Event 1400z 2000z 7.250 14.250 7.056 FT8

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

2024 Parks on the Air



HAMFEST

Shelbyville Tailgate

HAMFEST/CONVENTION

10/05/2024

Start Date: 10/05/2024

End Date: 10/05/2024

Location: Shelbyville County Fairgrounds

500 Frank St. Shelbyville, IN 46176

Shelbyville, IN 46176

Website: <http://www.brvars.com>

Sponsor: Blue River Amateur Radio Society

Type: ARRL Hamfest

Talk-In: 145.48 MHz 88.5 Hz PL Tone

Public Contact: John Walker , 317-402-5000

302 W. Hendricks St. Shelbyville, IN 46176

Phone: 317-402-5000

Email: inprinter@comcast.net

Talk-in Frequency: 145.48 MHz 88.5Hz PL

Several SK Estate Radio Equipment Sales will be offered at the Tailgate