

Zero Beat

September, 2026



President's QRM

Well, Summer is almost over. So what did you do over the summer? Did you set up a portable station and do POTA? I saw a video on YouTube about a ham operator that proposed a new contest, MOTA, McDonald's On The Air. Set up your station in a McDonald's parking lot, out of the way of traffic, and work as many contacts as you can lol!

What rare, unusual or unique contacts did you make during the summer?

Maybe we could share our summer experiences at one of the club meetings.

This brings up a question, Is the Hazel Park Amateur Radio Club a social club or repeater club? When I joined the club, we had all sorts of activities centered around ham radio operations. From Field Day to setting up a special event station at the Detroit Science Center to setting up a special event station at the Detroit Zoo. Even our Sunday night net was on SIMPLEX, 147.51 MHZ. It seems like the club is becoming more of a repeater club and not a social club. Maybe we could plan more social activities.

As of this writing, We made headway on the repeater project. We now have permission to do the inside work on the repeater!

73 DE Mike W8VPC

General Meetings are held the second Wednesday of the month, 7:30 pm at the Hazel Park Library and on Zoom With Socializing At 7:00 pm.

See you there!

Club Officers:

President: Mike, W8VPC

1st VP Leonard, AD8FK

2nd VP Al, K8ALH

Treasurer Bob, N8REL

Secretary Reuven, KB3EHW

Parliamentarian Hugh, KE8BED

Director Andrew, AJ0WX

Zero Beat Editor: Mike N8VDZ



Want to get involved in Emergency Management?

Oakland Wayne and Macomb Counties have multiple groups that would love to have you on their teams.

Each County has its own **Amateur Radio Public Service Corps** (ARPSC)

Dearborn Heights CERT

Taylor CERT

Novi CERT

Southfield CERT

Waterford CERT

Sterling Heights CERT

Warren CERT

Harrison Township CERT

Some of the CERT teams use Amateur radios, All of the ARPSC team rely on amateur radio.

Some of these teams are not very active, train and be ready for a large scale emergency while other teams activate multiple times a week.

All of these require training but none of it is difficult and much of it is done from your home on your computer.

A simple google search for any of these will get you on the path. Go ahead, get involved!

Need to get Caught up on the Repeater Upgrade?
The Repeater Grant Team is working hard to get the repeater replaced. Please check out the News feeds at HPARC.org



Dawn of Instant Communication:

Legacy of May 24, 1844

24 May 2026 | by Tomas NW7US

On this day in 1844, a quiet revolution in human communication took place. Samuel Morse, the American inventor, sat in the Supreme Court chamber in Washington, D.C., and tapped out a short, profound message on his experimental telegraph system. The message — “**What hath God wrought?**” — was sent across nearly 40 miles of wire to the B&O Railroad depot in Baltimore, Maryland, where it was received instantly by his partner, Alfred Vail.

A Historic Landmark in Maryland:

“The First Telegram, What Hath God Wrought?” Location 39° 6.157' N, 76° 50.526' W. Marker is near Laurel, Maryland, in Prince George’s County.

The morning of May 24, 1844, stands as one of the most pivotal turning points in the history of human civilization. Before this day, information could only travel as fast as a human could ride a horse or a vessel could sail across an ocean. The physical limitations of distance dictated the speed of politics, commerce, and war. When Samuel Finley Breese Morse tapped out the message “**What hath God wrought?**” from the U.S. Capitol building to Baltimore, he did not just demonstrate a new machine; he permanently dismantled the tyranny of distance.

The Struggle for Recognition

Samuel Morse was not a professional scientist; he was an accomplished, world-renowned portrait painter. However, his life took a tragic turn in 1825 when, while painting a portrait of the Marquis de Lafayette in Washington, D.C., he received a letter via horseback messenger informing him that his wife was ill. By the time he returned to his home in New Haven, Connecticut, she had already died and been buried. The delayed news haunted him, sparking an obsession with finding a way to transmit information instantaneously across great distances.

For years, Morse labored in near-poverty, facing skepticism from the scientific community



Join us for breakfast, every Saturday, 8 am at the Cozy Cabin Restaurant, 12 Mile just east of Dequindre.

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and indifference from Congress. He was forced to sell his paintings to fund his experiments and relied on the technical brilliance of Alfred Vail, a young machinist whose family provided the financial backing and the workshop space (the *Speedwell Iron Works*) necessary to refine the electromagnetic telegraph system.

The Message and Its Meaning

The phrase chosen for the demonstration, “**What hath God wrought?**” (Numbers 23:23), was far from arbitrary. It was proposed by Annie Ellsworth, the young daughter of Henry Ellsworth, the U.S. Commissioner of Patents, who had been a staunch supporter of Morse’s application for funding. The biblical quote was an expression of wonder, a recognition that the telegraph was a divine-like power in the hands of mortal men—a tool that could bridge vast physical divides with the speed of electricity.

At 8:45 a.m., Morse sat before the apparatus in the Supreme Court chamber. When the signal reached the B&O Railroad station in Baltimore, Alfred Vail confirmed receipt immediately. The feat was so startling that even at the time, many observers found it difficult to grasp that the words were not being physically transported, but rather transformed into electrical pulses and reconstructed on the other end.

A New Era of Global Connectivity

The success of the 1844 demonstration was the catalyst for the rapid expansion of the telegraph network across the United States and eventually, the world. Within two decades, the telegraph had become the backbone of the American Civil War, allowing for the rapid coordination of troops and the dissemination of news. It also revolutionized journalism—giving birth to the “news wire” services—and changed the financial sector forever by allowing stock prices and market conditions to be synchronized across cities.

By replacing physical couriers with electrical signals, the telegraph created the first global “nervous system.” It set the stage for the invention of the telephone, the radio, and eventually the fiber-optic networks of the modern internet. When we send an instant message today, we are utilizing the same fundamental principle that Morse proved: that information can be decoupled from physical travel.

Reflection

The telegraph was the precursor to our modern digital age, proving that humanity’s greatest potential lies in our ability to connect, communicate, and share knowledge at speed. As we look back on that day in 1844, we are reminded that every monumental shift in technology starts with an attempt to solve a simple, deeply human problem—in Morse’s case, the

The Future of Amateur Radio is Also Digital

Joe WB8ADX

For most of the history of Amateur Radio, the heart of our hobby centered around RF technology — transmitters, receivers, antennas, feedlines, propagation, and the skill of communicating over the airwaves. Those principles remain critically important today and continue to form the foundation of what we do as radio amateurs.

However, over the last few decades, Amateur Radio technology has evolved far beyond simply RF transmissions. Today, successful Amateur Radio systems increasingly depend upon sophisticated computer networking, IP-based communications, wireless data transport, and digital infrastructure. In many ways, modern Amateur Radio now relies just as heavily upon data networking design and implementation as it does upon traditional radio engineering.

This shift presents both an opportunity and a challenge for the Hazel Park Amateur Radio Club.

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Local Area Nets

HPARC Friendship Net:146.640 PL 100—Sunday 9:00 pm

Warren CERT: 443.550 PL 107.2 2nd & 4th Mondays 8:30 pm

Macomb ARPSC: 142.700 PL 100 Thursday 7:00 pm

Oakland ARPSC: 146.900- PL 100.0 Thursdays at 8pm

Wayne ARPSC: 145.33+ PL 100 Wednesday 9:00 pm

Double Nickel: 443.550 PL 107.2 Mondays 6:30 pm

GMARC Information Net: 145.210 PL 100.0 Mondays 8:00 pm

Wayne Co. Repeater Crawl: 145.330 PL 100 Fridays 7:00 pm

Southeastern Michigan Traffic Net:146.760 PL 100.0 Daily 10:15 pm

From the Treasurer, Bob N8REL

Hazel Park Amateur Radio Club

Income Statement: Actual v Budget

FYE 06-30-2027 as of August 31, 2026

period as indicated

*** does not include Repeater Grant activity....see separate statement ****

	Current Month - August			Year to date		
	month	ACTUAL	month BUDGET	Variance	Actual YTD	Budget YTD
				fav/ (unfav)		Variance YTD
Summary				fav/ (unfav)		fav/ (unfav)
TOTAL INCOME		140.00	90.00	50.00	140.00	90.00
TOTAL EXPENSE		362.43	387.00	24.57	438.49	474.00
Net		(222.43)	(297.00)	74.57	(298.49)	(384.00)

ARDC Grant progress by month			
	at July 31, 2026	at Aug 31, 2026	
Avail at Beginning of Month	8,273.78	8,273.78	
used	0.00	0.00	
Remaining Grant fund NOT including Club contrib	8,273.78	8,273.78	

IT'S MY HOBBY, WHAT CAN I DO?

NEW HAM OR OLD, WHAT MIGHT I DO AS AN AMATEUR RADIO OPERATOR

POTA

Parks On The Air

Parks on the Air (POTA) is a popular amateur radio activity that combines portable operating, outdoor adventure, and friendly competition. While some people compare POTA to contesting, there are important differences. Most radio contests have a specific time period and produce winners based on scores. POTA, on the other hand, is an ongoing activity where participants set personal goals and measure their success against their own achievements.

Getting started is simple. The first step is to create an account at pota.app. Once registered, you can begin participating as either a Hunter, an Activator, or both.

Hunters - A Hunter is an amateur radio operator who contacts Activators operating from parks. Hunters are often operating from home, listening for stations calling "CQ POTA" and making contacts with them.

Every contact helps an Activator achieve a successful activation. If you are registered with POTA, you will receive credit for each park you successfully hunt when the Activator uploads their log. Hunting is an excellent way to learn how POTA works, gain experience, and begin earning awards before assembling a portable station of your own.

Hunters play a critical role in the program. Since an activation requires at least 10 contacts, Activators depend on Hunters to help make each activation successful.

Activators - For many participants, operating as an Activator is where the real excitement begins. Activators travel to eligible parks, set up portable radio equipment, and make contacts from within the park boundaries.

At a minimum, a POTA station requires:

- A transceiver
- An antenna
- A power source

A laptop computer can be helpful for logging contacts but is not required.

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Because much of our membership consists of individuals who are retirement age, many members possess decades of valuable experience and understanding regarding RF technology, repeater operation, antennas, propagation, and communications procedures. That knowledge is invaluable and remains essential to the future of our club. At the same time, relatively few members have had the opportunity to work extensively with modern wireless networking technologies, IP routing, digital microwave links, remote site networking, or computer-based communications systems which are now becoming equally important in Amateur Radio.

This issue is particularly important for the future of the DART repeater system.

Today's DART system is not simply a single repeater located at one site. The remote receiver locations require reliable RF digital networking between sites in order to transport audio, voting data, and control signals. Likewise, technologies such as AREDN and Hamnet — both of which are becoming increasingly important for emergency communications — depend heavily upon high-speed wireless data networking principles rather than traditional voice-only radio transmissions.

In many respects, Amateur Radio emergency communications has undergone a major transformation.

Gone are the days when emergency communications consisted solely of a control operator sitting at a radio passing SSB or CW traffic messages. Modern emergency communications increasingly involve interconnected digital systems capable of transporting voice, video, files, mapping data, internet-independent messaging, and networked situational awareness between agencies and operators.

As a result, the future success of HPARC will depend upon our willingness to adapt and expand our collective skill set.

One of the most important priorities for HPARC moving forward should be making a concerted effort to both attract and retain younger amateur radio operators who are already familiar with many of these digital networking technologies. Younger hams often bring valuable experience with computers, wireless networking, software systems, and digital communications platforms that can greatly strengthen the club's technical capabilities.

At the same time, we must also continue helping train and educate the current generation of operators regarding modern digital communications and wireless networking technologies so that all members can participate in the future direction of Amateur Radio.

Interestingly, this need was clearly reflected in the club member interest survey conducted last year. The top three areas of member interest were:

1. Digital Modes
2. Using Computers
3. Emergency Training

These survey results demonstrate that our membership recognizes the growing importance of digital communications and wants to learn more.

The future of Amateur Radio will not replace RF technology — it will build upon it. The most successful clubs in the years ahead will likely be those that successfully combine traditional radio knowledge with modern RF digital networking expertise.

At HPARC, we have the opportunity to do exactly that.

TELL US ABOUT IT!

Member News

Did you :

Participate in a contest?

Build an antenna?

Travel and make contacts?

Bounce a signal off the moon?

Upgrade your license?

What are you doing in the world of amateur radio that you'd like to share with the club.

Send it to Mike N8VDZ



My portable station includes a Yaesu FT-450D, power supply, voltmeter, POTA Performer antenna, 25 Ah LiFePO4 battery, laptop computer, and cables that allow operation from household power, a vehicle power outlet, batteries, or solar power. The entire setup fits in two portable cases, making it easy to transport and deploy wherever needed.

Activating a Park

POTA activations can take place in eligible state and federal parks and other qualifying public lands listed in the POTA database.

The requirements are straightforward:

1. Travel to an eligible park.
2. Set up your station.
3. Make at least 10 contacts.

Once 10 contacts are completed, the park is officially activated.

Many Activators continue well beyond the minimum requirement, while others activate multiple parks in a single day. If you are camping at a park for several days, you may activate the same park on each day of your stay and receive credit for separate activations.

Getting Started

If POTA sounds like an activity you would enjoy, several HPARC members regularly participate and would be happy to share their experiences, equipment recommendations, and operating tips. Feel free to ask questions. The POTA community is known for being welcoming and supportive of new participants.

For additional information, consider reading *Successful POTA: Illustrated Guide to Parks on the Air* by WV1W, Second Edition (Updated for 2026), which provides practical guidance for both Hunters and Activators.

Whether you prefer operating from home or taking your station into the field, Parks on the Air offers an enjoyable way to combine amateur radio with the exploration of parks and public lands.

Mike N8VDZ

HPARC License Classes!

Alas, there **will not** be a **Technician License Class** this fall. As I write this, we are one week out from when the class was scheduled to start and we have ZERO sign-up for the class. We did have a couple inquiries but no sign-ups. It happens sometimes.

Have you considered sharing your knowledge and enthusiasm for HAM RADIO? Now is your time.

We have an immediate need for another instructor for our **GENERAL LICENSE class** which we would like to start up in January. Don't worry, you will not be alone. The General Class duties are shared between three instructors. This means that you would be the lead instructor for probably only three chapters out of the nine chapters in the General Class license manual.

Please give this some consideration and help some Technicians upgrade to the General class license.

Please contact our new **Education Chairman, Joe Raznik, WB8ADX**, and become one of our club leaders. This is a personally rewarding experience which will enhance your own knowledge and understanding.

Bob N8REL

Online NEC Modeling for Portable Antenna Design—Submitted by Wes AC8JF

Many amateur radio operators use formulas, handbooks, or online calculators to size simple wire antennas for portable use. These tools can produce workable antennas, but they reveal little about radiation patterns, takeoff angles, or feed-point impedance.

The website www.portable-antennas.com lets radio amateurs model these characteristics in a web browser. It uses the Numerical Electromagnetics Code (NEC) for its calculations and displays the results in numbers and graphics. No software installation is needed.

The site offers dedicated design pages for antennas commonly used in portable or home stations. Supported designs include linked dipoles, off-center-fed dipoles, end-fed half-wave antennas, verticals, delta loops, half-square antennas, Moxons, and several specialized configurations.

Users enter the operating frequency, antenna height, wire diameter and insulation, and settings for the chosen antenna. The software calculates element dimensions and predicts performance with NEC modeling. Results can include azimuth and elevation patterns, interactive 3D radiation plots, polarization patterns, VSWR curves, current distribution diagrams, and Smith charts. Users can change settings and quickly see how the antenna's behavior changes.

The site also includes coaxial-cable data, feed-line loss and VSWR charts, calculators, and reference tables for antenna construction and feed-line matching.

The project aims to make antenna modeling easier for radio amateurs who want to understand antenna performance without installing complex software.

Edited.

Original Article by Rob Baniel, DM1CM in QST June 2026