

Zero Beat

March, 2026

President's QRM

Being Radio Ready

Two decades ago, the Northeast Blackout of 2003 caused a massive power outage that swept across large portions of the eastern United States and Canada, reminding HPARC Members and users of the DART how dependent we are on the electric grid.

In the afternoon hours of August 14, 2003, a failure in the transmission system triggered a cascading series of shutdowns that quickly spread through interconnected power networks. About 50 million people across the U.S. and Canada were affected and the Lower Peninsula was one of the hardest-hit states.



The outage ultimately traced back to a grid management failure and transmission line faults in Ohio, which cascaded through the interconnected power network. For most residents in Oakland, Macomb, Wayne and Washtenaw counties, the power was out roughly one day.

The 2003 blackout showed how quickly cellular networks, internet services, and public communications systems can become overloaded or lose power. Amateur radio systems such as W8HP and W8JXU the DART repeaters can remain operational, providing alternative communication when commercial systems fail.

Continued on page 3



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: Joe WB8ADX

1st. VP: Len AD8FK

2nd. VP: Andrew AJ0WX

Secretary: Reuven KB3EHW

Treasurer: Bob N8REL

Parliamentarian: Hugh KE8BED

Director: Dave W8HOO

Zero Beat Editor: Mike N8VDZ



*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*

Hamvention 2026

Dayton, Ohio

The ARROW Communications Association and the Toledo Mobile Radio Association (TMRA) are proud to sponsor a motor coach trip to the Hamvention 2026 in Dayton, Ohio. This one-day trip leaves early in the morning on May 16, 2026, and returns the same day after Hamvention closes for the day at 5:00 p.m. The bus has two pickup spots, in Ann Arbor and in Toledo (Rossford). Please join us!

Tickets are \$95 per person January 1st 2026 – April 17th 2026 or \$110 per person April 18th 2026 – May 15th 2026.

Please note that this does not include the Hamvention ticket, which you need to purchase separately.

To Register and see full Details visit:

<https://w8rp.org/daytonbus2026/>

There are two pickup/drop off locations on May 16th, 2026

Ann Arbor – 601 W Stadium Blvd, Ann Arbor, MI – Departing 4:30 am

Toledo – 727 Lime City Rd. Rossford, OH – Departing 5:30 am

On board, you can stretch out, relax, take a nap, chat with other hams, and enjoy a light breakfast with coffee as the coach takes you directly to the country's largest amateur radio event!

Meshtastic

In the ever-evolving world of amateur radio, a new digital mode is gaining significant traction—not on the traditional HF bands, but on the 900 MHz (33cm) ISM band. Meshtastic is an open-source, community-driven project that uses inexpensive LoRa (Long Range) radios to create a decentralized messaging network. It does this by repeating transmitted packets to other nodes in the mesh. Each packet can be re-transmitted a set number of times. While it might look like "texting over radio," its implications for emergency preparedness and local infrastructure are profound.

One of the most appealing aspects of Meshtastic is its accessibility. Because the hardware operates within the FCC Part 15 regulations for the ISM band, no amateur radio license is required for standard use. This makes it an ideal tool for coordinating with non-licensed family members during a power outage or for community groups like CERT. These devices typically operate at low power (around 100mW to 1W) and utilize AES-256 encryption by default to keep your conversations private.

For licensed operators, Meshtastic offers a "Ham Mode." By enabling this setting and providing your callsign, the firmware adjusts to comply with Part 97 rules. The primary benefit is the ability to use higher power (up to

10W in the US) and high-gain antennas to act as a "backbone" for the mesh. However, there is a trade-off: Amateur radio regulations strictly prohibit encryption. When in Ham Mode, the device disables encryption, sends messages in plain text, and does not forward encrypted messages. This creates a hybrid environment where hams can provide high-power infrastructure for the community while maintaining their regulatory responsibilities.

Meshtastic is far more than a chat app. It supports a variety of modules that expand its utility. Similar to APRS, nodes can share their real-time location, making this perfect for tracking hikers or assets in areas without cellular coverage. You can also connect sensors to report temperature, humidity, or any other sensor value from a remote transmitter. Whether you are looking for a secondary emergency comms method or a new weekend project, Meshtastic offers a modern, low-cost way to experiment with mesh networking.

Andrew AJ0WX



Would you prefer I go install a tower for my ham radio station?

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

President's QRM Continued

During large-scale incidents, authorities often lack real-time information from affected communities. Amateur radio operators can report conditions such as road closures, power outages, medical needs, or infrastructure damage, helping emergency managers build a clearer operational picture.

Clubs like HPARC can assist agencies such as local emergency management offices, hospitals, shelters, and community organizations by providing backup communications when normal systems are unavailable or unreliable. But in order to pitch in during a time of need, every HPARC member needs to be RADIO-READY.

Being Radio Ready means:

1. Maintain Reliable Radio Equipment

HPARC Members should keep at least one fully functional VHF/UHF transceiver programmed with local repeaters, especially the DART frequencies and offsets. Radios should be tested ASAP to ensure they transmit clearly and receive properly.

2. Prepare Backup Power

During emergencies such as the Northeast Blackout of 2003, commercial power failed so Operators should maintain:

Charged HT batteries

12-volt battery packs

Power supplies or solar charging options

This ensures stations can remain on the air for extended periods.

3. Pre-Program Emergency Frequencies

HPARC members should have radios programmed with:

The DART repeater

Nearby repeaters across Southeast Michigan

National simplex calling frequencies (such as 146.520 MHz)

Local emergency or ARES coordination channels

Having these programmed in advance saves valuable time during a crisis.

4. Develop Portable Operating Capability. Operators should be able to operate from locations other than their home shack. A "go-kit" might include:

A handheld radio

Spare batteries

A roll-up antenna or magnetic-mount antenna

Coax cables and adapters

Notebook and pen for logging traffic

5. Practice Emergency Net Procedures

Members should regularly participate in club nets or practice drills, so they are comfortable with:

Directed net operations

Passing formal traffic

Maintaining clear, concise radio communication

Practice ensures that when a real emergency occurs, operators already know the procedures.

6. Maintain Situational Awareness

Operators should monitor local news, weather alerts, and emergency bulletins so they can quickly recognize when communications support might be needed.

7. Coordinate With Local Emergency Organizations

HPARC members can strengthen readiness by maintaining relationships with local emergency management agencies, shelters, hospitals, and community organizations that may request amateur radio support during emergencies.

In Simple Terms:

Being "Radio Ready" means equipment is working, power is available, frequencies are programmed, and operators are trained to communicate effectively when normal systems fail.

Events like the 2003 blackout demonstrated that resilient, independent communication systems are critical during major disruptions. The DART repeater and HPARC members represent an important local capability that can help maintain communication, coordination, and situational awareness when conventional systems are compromised. 📡 ⚡

Regards & 73,

Joe WB8ADX

From the Treasurer, Bob N8REL

Hazel Park Amateur Radio Club
 Income Statement: Actual v Budget
 FYE 06-30-2026 as of February 28, 2026
 period as indicated

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

	Current Month - February			Year to date		
	month ACTUAL	month BUDGET	Variance fav/ (unfav)	Actual YTD	Budget YTD	Variance YTD fav/ (unfav)
Summary						
TOTAL INCOME	60.00	340.00	(280.00)	939.00	1,820.00	(881.00)
TOTAL EXPENSE	76.06	161.00	84.94	1,625.62	4,061.00	2,435.38
Net	(16.06)	179.00	(195.06)	(686.62)	(2,241.00)	1,554.38

ARDC Grant progress by month									
	at June 30, 2025	at July 31, 2025	at Aug 31, 2025	at Sept 30, 2025	at Oct 31, 2025	at Nov 30, 2025	at Dec 31, 2025	at Jan 31, 2026	at Feb 28, 2026
Avail at Beginning of Month	26,743.00	26,263.20	26,263.20	16,895.20	16,007.20	16,007.20	7,590.33	7,590.33	7,590.33
used	479.80	0.00	9,368.00	888.00	0.00	8,416.87	0.00	0.00	0.00
Remaining Grant fund NOT including Club contrib	26,263.20	26,263.20	16,895.20	16,007.20	16,007.20	7,590.33	7,590.33	7,590.33	7,590.33

IT'S MY HOBBY, WHAT CAN I DO?

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

CONTESTING

AKA Radiosport

Contesting, a radiosport, is a competitive activity pursued by amateur radio operators. In a contest, a station—run by an individual or a team—aims to contact as many other stations as possible during a set time and exchange information. Each competition's rules specify the permitted radio bands, communication modes, and required exchanges. Contacts count toward a score that determines station ranking. Sponsors publish results in magazines and on websites.

Contesting emerged from other amateur radio activities in the 1920s and 1930s. As intercontinental amateur radio communication became more widespread, competitions arose, challenging stations to make the most contacts with stations in other countries.[1] Contests also offered amateur radio operators opportunities to hone message-handling skills essential for routine or emergency long-distance communications.

Over time, both the number and variety of radio contests have expanded, and many amateur radio operators now engage in contesting as their main activity.

There is no international authority or governing body for this sport, so each competition is independently sponsored and operates with its own rules. While contest rules do not always oblige entrants to follow voluntary international band plans, participants must comply with the amateur radio regulations of their home country. Since radio contests use amateur radio, competitors are generally barred by national regulations from financial compensation. High levels of contest activity and noncompliance with international band plans can create friction between contesters and other amateur radio users on the same spectrum.

Continued on page 5

Contesting Continued...

Contesting basics

Radio contests are primarily sponsored by amateur radio societies, radio clubs, or radio enthusiast magazines. These organizations issue event rules, gather operating logs from all participating stations, verify the logs to calculate each station's score, and publish results in a magazine, journal, or online. Since competitions are conducted between stations licensed in the Amateur Radio Service (except for some contests that offer awards to shortwave listeners), which prohibits using radio frequencies for financial gain, there are no professional radio contests or professional contesters. Sponsor awards are usually limited to paper certificates, plaques, or trophies.

A multioperator contest effort involves a team of operators at a single station working together to maximize their score and efficiency during the contest period.

During a radio contest, each station attempts to make two-way contact with other licensed amateur radio stations to exchange contest-specific information. This information may include an R-S-T system signal report, operator's name, national region (such as province or US state), geographic zone, Maidenhead grid locator, operator's age, or a serial number. For each contact, operators must accurately receive the other station's call sign and exchange details, logging this data with the contact's time and the frequency or band used.

A contest score is calculated using a contest-specific formula. Typically, a formula awards points for each contact and a "multiplier" for certain exchanged information. Rules for VHF amateur radio contests often grant a multiplier for each unique Maidenhead grid locator logged, rewarding competitors contacting stations in more locations. Many HF contests award a new multiplier for contacts in each country, often referencing the "entities" on the DXCC country list from the American Radio Relay League ("ARRL"). Depending on the contest, each multiplier may count per radio band or only once during the contest, regardless of band. Points per contact can be fixed or vary by geographic factors, such as whether the communication crosses a continental or political boundary. Some contests, like the Stew Perry Top Band Distance Challenge, scale points based on the distance between stations. Most VHF and microwave contests in Europe award 1 point per kilometre separating stations for each contact.

After receipt by the contest sponsor, logs are audited for accuracy. If errors occur in a contact's log data, points may be deducted, or credit and multipliers may be forfeited. The scoring formula determines whether scores for a given contest range from a handful to millions. Most contests feature various entry categories and announce winners for each, while some also recognize regional winners for subdivisions such as continents, countries, U.S. states, or Canadian provinces.

The most common entry category is the single-operator category, where one individual operates a radio station throughout the contest. Subdivisions are often based on power output, such as QRP for single operators using five watts or less, or High Power for those using up to their license limit. Multi-operator categories allow teams to operate from a single station and may use either a single or multiple transmitters on different amateur radio bands. Many contests also offer team or club competitions that combine scores from multiple radio stations and rank them.

Check with members like Reuven KB3EHW to find upcoming contests

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