

# The Hertzian Herald



May 2022 • Volume 46, Issue 5 • Monroe, Michigan, U.S.A.

## D Fritz Bitz:

35 days, 12 hours, 23 minutes, and 19 seconds until the Monroe Hamfest. We don't actually have a countdown clock on our website like Dayton does but that is as close as I can get. I will have sign up sheets for the Hamfest at the meeting and will also be sending out emails over the weekend for volunteers. Last year was very successful because we had a lot of people helping out and things went very smooth.



A week after that is Field Day. I don't have a countdown clock for that. It took me 5 minutes to do the math for the other one and I don't have the time. Again we will be asking for help for that too. Set up takes a few hours but take down only takes about an hour or so and the operation is a lot of fun. I hope everyone plans on stopping out for a while at least. It really is a lot of fun.

The Technician License class has been getting a lot of response and it looks like we may even fill the next class very soon. The new question pool came out the other day and I have to do a little re-writing of the study guide but it doesn't look to bad.

The first Foxhunt of the year is coming up Saturday (as of this writing), and I am sure they will have a great time. Mike (N8KUF) always puts together a great event and I hear many good stories. I hope more people get involved in the Foxhunts.

But first is the Hamfest. 35 days, 12 hours, 8 minutes, 47 seconds. The countdown continues.

So, until next month, 73.

Don Fritz, N8BZN

<http://mcrca.org/>

[www.facebook.com/  
groups/  
1643856795878368/](http://www.facebook.com/groups/1643856795878368/)

### Club Officers

#### PRESIDENT

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## MCRCA Meeting Minutes for April 21, 2022

Meeting called to order at 7:30 pm, by Don N8BZN.

Pledge of Allegiance

Introductions: 3 new members, no upgrade or guests.

MINUTES: Motion by Mike N8KUF, supported by Tom KG8P, to approve as written in the Herald. Approved.

TREASURER REPORT: Motion by Paul W8PI, supported by Wes KC8SKP, to approve the treasurer's report as passed out to the membership. Approved.

DX REPORT: Tom KG8P, not many groups out at this time, will pick up as conditions improve. There are some groups out there, TX5N – Austral Islands, VK9NT – Norfolk Island, 3A6M – Monaco. 6m activity opened up a little. Sun spots and solar flux up sporadically. There are 340 entities available for contacts worldwide.

CONTESTING: Paul W8PI, April 16 was the Michigan QSO Party, our club sponsored a plaque. Paul was #7 and worked a guy from Texas with 100mw. MCRCA club scores N8DXR-75,020, W8PI-49,720, N8BZN-12,600, KG8P-4,180. Total score 141,520, Last Year's score 53,055. April 30, FL. – May 7, 7 call area QSOP, IN, DE, and New England QSOPs. May 21, AR QSOP and Dayton Hamfest.

FOX HUNT: Mike N8KUF, announced our first fox hunt of this year will be Saturday May 14, 2022, starting at 9 am at the EMD parking lot on Raisinville Rd. Be there early to register and get your envelope.

TESTING: Next session - Sat. June 18, 2022. **Appointments Preferred - FRN and email req'd**

CLASSES: Next session – Sat. June 11, 2022. Contact Don N8BZN. Don reports the class went very well. Rick Wykle KE8UNH passed the Tech and went on to pass the General portion the following week at our regular testing day.

FUTURE PROGRAMS: Fox Hunts, Digital, DMR, Kits, and Antenna builds.

ARPSC: Rodney KD8ZNZ, last Saturday we had 3 crews out testing 16 County Sirens not including Bedford. Last night was a Skywarn drill lasting 2 hours with lots of practice. Meetings are held first Thursdays at 7:30 pm at the EMD on Raisinville Rd. all are invited.

ARRL: Dale WA8EFK, ARRL installed new operating software that maintains membership, but it didn't go very well, must create a new password with new criteria. A high school in Ohio made a scheduled ARISS contact and Dale went to watch the event. Says it is a very big job to set up in a school.

RRRA: Mike N8KUF, the annual meeting will be the first Saturday in May 7<sup>th</sup>, 2022. We will meet at 10 am at the Red Cross on N. Dixie Hwy. all are invited. The Echolink is in service on the 72 repeater, and the IRLP is in service on the 440 Ida repeater.

OLD BUSINESS: None

NEW BUSINESS: Terry N8NYP, announced that Field Day is only two months away, and there are 23 cities and villages in Monroe county that we should contact about emergency communications. *My memory is failing me but I have this in my notes:* Paul W8PI 95-foot fire truck at Field Day.

### Committees

#### Club Station

Wes Busdiecker KC8SKP

#### DX Net

Soon

#### Field Day

Jeff Breitner KA8NCX

#### Finance

Paul Trouten W8PI (chair)

Fred VanDaele K8EBI

Dale Williams WA8EFK

#### HamFest

Fred VanDaele K8EBI

#### Hertzian Herald

Fred VanDaele K8EBI

#### Historian

Paul Trouten W8PI

#### Public Relations

Terry Kolton N8NYP

Tom Imlach KE8KNZ

#### Scholarship

Fred VanDaele K8EBI

#### Program Chairman

Ron Duvall KE8OSX

#### Membership

Terry Kolton N8NYP

n8nyp@arri.net

#### Property Custodian

Paul Trouten W8PI

DOOR PRIZE DRAWING: Aaron Liske KE8PUN

50/50: John Turner WA8YZP donated his winnings to the scholarship.

ANNOUNCEMENTS: Toledo Trunk Swap at Raceway Park, May 1<sup>st</sup>

PROGRAM: Video: Fox hunting equipment

ADJOURNED: 8:21 pm

ATTENDANCE: 20

KE8PUN Aaron  
K8EBI Fred  
KE8OTG Larry  
KD8ZNZ Rodney

WA8EFK Dale  
WD8NWF James  
N8KUF Mike  
N8NYP Terry

N8BZN Don  
K8OLV Jeff  
KA8PQH Neil  
KG8P Tom

AC8WE Donald  
WA8YZB John  
W8PI Paul  
KC8SKP Wes

K8FGT Ed  
KJ8H Keith  
KC8AZZ Peter  
KE8UNH Rick

## MCRCA Foxhunt #1 May 14, 2022

Fred K8EBI and Brenda KB8KQC fulfilled the Fox Duties

The FOX was located At the Detroit Edison Monroe Activities Center (Fix & Mental Roads)

Shortest possible route per Google Maps = 9.3 Miles

### Hunters

#### Team 1 – Tied for First Place

Paul W8PI and Vickie

Fox found at Approx. 11:15

Miles = Not Reported (see narrative below)

#### Team 2 – Tied for First Place

Mike N8KUF and Rick KE8UNH

Fox found at approx. 11:00

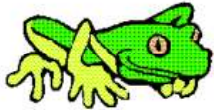
Miles = Not Reported (see narrative below)



Thanks to all who were able to participate. The hunt was troubled from the beginning when no one at the start location was able to hear the fox when he started transmitting at 0900. Hunters tried many methods, and the fox took several compensatory actions to try to make the fox 'hearable' at the start location. Since there were only 2 teams, it was agreed that the best option was to solicit a 'hint' from the fox that both teams heard. After setting off in the 'hinted' direction (east/northeast) hoping that we would soon be able to hear the fox .... The teams ended up stopping at several locations along the way to collaborate after still not being able to hear the fox. (See narrative below). After eventually getting MUCH closer and being now able to hear the fox, the teams split up and went their own ways ... each eventually finding the fox at the hiding location. It is believed there was a technical issue with the fox box (e.g., bad adapter fitting) with that theory still to be proven.

Following some discussion, the Hunt Chair decided that based on the difficulties encountered and the collaborative nature of the hunt along with the number of mileage resets performed prevented a true accounting of mileage. The Hunt Chair further decided that the collaborative efforts turned out to be an excellent educational experience for the first time hunter – and therefore declared BOTH teams to be worthy of first place. Fox duties for the next hunt will be decided by flip of the Chairs Kennedy Half Dollar.

Respectfully submitted – Mike N8KUF – 2022 Foxhunt Chair



## **River Raisin Repeater Association, Inc.**

May 14, 2022

The RRRRA thanks all members very much for your participation in the River Raisin Repeater Association. **We need and appreciate your continued support!!!**

As many already know, the RRRRA is an association of ham operators that initially gathered in 1971 and formed an association for the expressed purpose of promoting FM and repeater operation, offering a technical base on the subject, providing a useful communications facility for emergencies, and to develop friendships through a common goal. The same mission statement applies to this day as the association strives to accomplish the above stated goals.

At the 5/7/22 Annual Meeting RRRRA officers were established as follows: Rodney Haddix KD8ZNZ (Pres), Don Fritz Jr N8BZN (VP), Mike Karmol N8KUF (Sec/Treas), Paul Trouten W8PI (Director), Dale Williams WA8EFK (Director/ Trustee). Summary of Association business was reported, and updates were given regarding efforts completed as well as development projects currently underway.

During this past year, efforts were focused on resolving a few technical issues and implementation of some performance upgrades. The site SCADA system has performed well in reporting building temperature and power excursions. A 'Generator Running' sensor was added to the SCADA to facilitate fuel usage/ remaining run time calculations. The Echo/IRLP subsystem was separated into 2 distinctly different pieces to allow better utilization of EchoLink.

Thanks for your continuing support and encouragement. Additional information can be found on <http://www.mcrca.org/RRRA/Index>

**Mike Karmol** - N8KUF  
RRRA Secretary / Treasurer  
email: n8kuf@arrl.net

## **Monroe County ARPSC Report**

We will be looking for help Saturday June 4<sup>th</sup> 8am-12pm to assist with the Erie 5k Run/walk in Erie, we will need at least 10 operators for this event, but the more people that participate the better. Most locations will be able to be driven to and be able to operate from/near your vehicle. Further information will be available shortly.

We will also be looking for operators to help out at the Dundee Independence day parade July 4<sup>th</sup>. We need a minimum of 8 operators there also, but due to construction in downtown Dundee, the parade route may have to be changed and we may need many more volunteers.

You do NOT have to be an ARPSC member or have any club affiliation to participate in either event, so if you know a licensed friend that would be willing to help out, have them contact me.

If you are interested in honing your skills or building new ones, please feel free to stop in to any of our meetings or training sessions, or participate on our nets. We are here to help every operator learn and perform better. It doesn't matter if your call sign was just posted on the FCC database or you have had your ticket for decades, we are always looking for additional operators.

ARPSC meetings are the first Thursday of every month at 7:30pm at the EMD on Raisinville Rd. Next meeting is Thursday June 2nd.

As always Thanks to the club and the club webmaster for linking our FB and webpage, and to Fred for his time getting this newsletter out.

73, Lance Charter - KE8BYC  
Emergency Coordinator  
Monroe County Amateur Radio Public Service Corps



## Why Do Radio Signals Travel Further at Night?

The ionosphere shifts

The air is colder

Stations boost the power at night

FCC regulations are relaxed after 9PM

### Answer: The ionosphere shifts

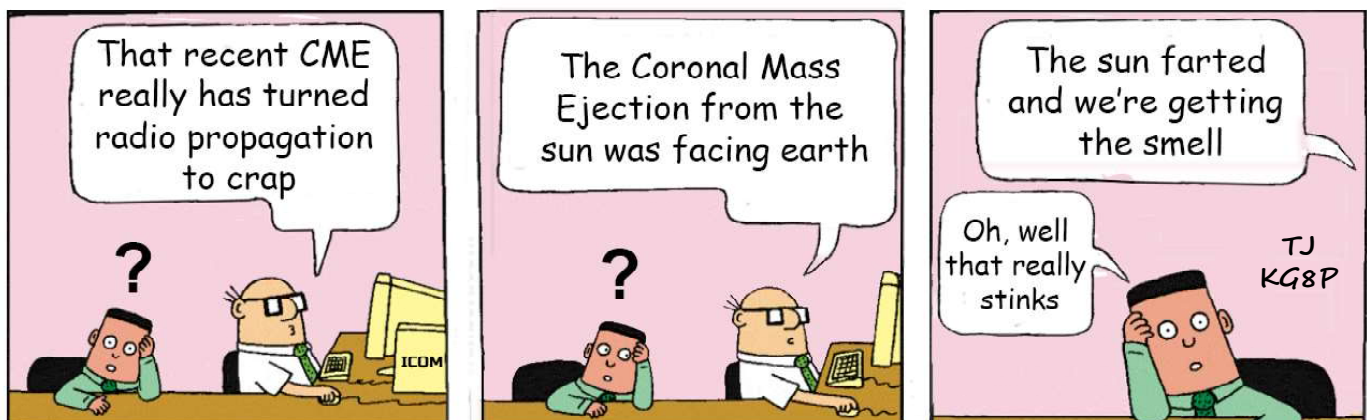
While the phenomenon of better night-time radio reception might be foreign to a generation brought up on podcasts and streaming media, anyone who grew up tuning into far off radio channels late at night (or continuing to do so) can attest to the startling clarity a midnight stroll around the radio dial can provide.

Why exactly are distant AM and shortwave radio stations so much clearer at night? While it would be tempting to imagine it has something to do with the cool night air or the silence that typically permeates the evening, the secret lies miles and miles above the surface of the Earth in the ionosphere.

During the day, the ionosphere is bombarded by sunlight which ionizes the molecules in it. At night when the sun is blocked by the Earth, the lower levels lose their ionization while the upper and less dense levels remain fairly well ionized and full of energy. During this period of time, radio waves pass into the upper reaches of the ionosphere where they collide with the highly energized electrons of the ionized molecules. When the radio wave frequency and the electrons fall into alignment, the electrons give the signal a boost and shoot it back down to Earth. Depending on the conditions, this can happen several times in a row and, in the process, propagate the radio signal well beyond its daytime range.

In fact, the propagation can be so significant that AM radio stations can easily broadcast in a thousand-mile radius and shortwave signals can often bounce around the curvature of the Earth and be heard across oceans. As a result of this, many AM stations either lower their broadcast power at night or kill their signal completely lest they spill over into other radio station's broadcast territory. There are, after all, only around 100 AM radio channel frequencies in use but thousands upon thousands of AM radio stations. If all stations stayed at full broadcasting power at night, the radio would become unusable across entire continents.

This phenomenon doesn't affect FM broadcasts as FM radio frequencies are propagated almost entirely by a phenomenon known as groundwave propagation. The shifting of the ionosphere and the increased transmission length produced by extended skywave propagation has little to no impact on FM radio.



## Granville Woods

Railway Telegraphy  
US Patent No. 373,383

Inducted in 2006

Born April 23, 1856 - Died January 30, 1910



A prolific inventor, Granville Woods developed the railroad telegraph, a device that transmitted messages, through static electricity, between moving trains.

Born in Columbus, Ohio, Woods was formally educated until the age of ten when he took a job in a machine shop. In 1885 Woods began working on what he called "telegraphony," a device that allowed users to switch between two forms of communication, voice or Morse code, to transmit messages.

Based on "telegraphony," Woods invented the induction telegraph in 1887. Prior to its creation, moving trains were unable to communicate with each other or with rail stations, resulting in dangerous situations. The induction telegraph used static electricity from the existing telegraph lines running parallel to the train tracks, making messaging possible between moving trains and rail stations.



Woods' later inventions dealt with more efficient use of electricity. He created an overhead conducting system for rail and trolley cars to run on electric current instead of steam power. In addition, he devised a third rail that is still often used on many rail lines; the third rail carries electricity via electromagnetic switches and pulls trains along. He also improved the automatic air brake used by railroad cars. His patents were eventually bought and used by General Electric and the Westinghouse Air Brake Company

## Satellite snoopers pick up surprising TV broadcast

While Internet based streaming services appear to be the future of television, there are still plenty of places where it comes into the home via a cable, satellite, or antenna connection. For most satellite transmissions this now means a digital multiplex carrying a host of channels from a geostationary satellite, for which a set-top box or other decoder is required. Imagine the surprise of satellite-watchers then when the Russian polar communications satellite Meridian 9 which has a highly elliptical orbit was seen transmitting old-style terrestrial analogue TV (ThreadReader Link). What on earth was happening?

How a Russian polar comms satellite picked up a TV station.

The TV signal in question comes from Turkmenistan, so were some homesick Turkmenistanis in an Antarctic base being treated to a taste of their country? The truth is far more interesting than that, because the signal in question comes from a terrestrial transmitter serving domestic TV viewers in Turkmenistan. We've all heard of the idea that somehow every TV show ever transmitted is somewhere out there still traveling as radio waves across space, and while perhaps we can't fly far enough out to check for 1960s Doctor Who episodes it's true that the horizontal transmissions from a TV tower pass out into space as the earth curves away from them.

Thus Meridian 9 passed through the beam from the Turkmenistan transmitter which happened to be on a UHF frequency that matched one of its transponders, and the result was an unexpected bit of satellite TV. We're indebted to the work of [dereksgc] and [Scott Tilley] for bringing us this fascinating observation. We've featured [Scott]'s work before, most notably when he relocated a lost NASA craft.

<https://hackaday.com/2022/03/22/satellite-snoopers-pick-up-surprising-tv-broadcast/>



The American Radio Relay League's round-up of the forthcoming week's DX activity on the amateur radio bands

This week's bulletin was made possible with information provided by The Daily DX, the OPDX Bulletin, 425 DX News, DXNL, Contest Corral from QST and the ARRL Contest Calendar and WA7BNM web sites. Thanks to all.

**RODRIGUES ISLAND, 3B9.** Robert, 3B9FR has been active using CW on 17 meters around 1500z. QSL via M0OXO.

**MONTENEGRO, 4O.** Special event call 4O2IPA is QRV from Podgorica during all of May to commemorate the Second IPA Games 2022. QSL via operators' instructions.

**UGANDA, 5X.** Anders, SM0HPL is QRV as 5X7W from Kampala. Activity is in his spare time on 20 to 10 meters using CW, JT65, FT8, and FT4. QSL to home call.

**OMAN, A4.** Mohammad, A41NN is QRV using SSB and FT8 from Grid Square LL93fl. QSL direct to A61BK.

**BAHRAIN, A9.** Members of the Bahrain Amateur Radio Society are QRV as A91WTIS until May 17 as part of World Telecom Day. QSL via operators' instructions.

**MOZAMBIQUE, C9.** Kiyo, JA7NQQ is QRV as C83YT from Macuti. Activity of late has been on 17 to 10 meters using FT8. QSL to home call.

**CUBA, CO.** Several members of the Federacion de Radioaficionados de Cuba's La Habana branch will be QRV as T42ITU from May 14 to 17. Their activity is to commemorate the 157th anniversary of the signing of the first International Telegraph Convention and the creation of the International Telecommunication Union. Activity is on all bands and modes. QSL via LoTW.

**CAPE VERDE, D4.** Freddy, F5IRO is QRV as D44RO from Praia, Santiago Island, IOTA AF-005, until May 19. Activity is in his spare time and his evenings on 40, 30, and 20 meters using CW, FT8, and FT4 with QRP power. QSL to home call.

**PHILIPPINES, DU.** Irek, SP3SUX will be QRV as DV8/KH7EA from Mindanao Island, IOTA OC-130, from May 14 to 27. Activity will be during his daytime hours on 80 to 6 meters using CW and SSB. QSL to home call.

**IRAN, EP.** Members of the Alborz DX Club will be QRV as EP2C on May 17 to celebrate World Telecommunication Day. Activity will be on various HF bands using CW, SSB and various digital modes. QSL via EA5GL.

**HAITI, HH.** Members of the Radio Club D'Haiti will be QRV with special call sign HH18MAI from Port-au-Prince from May 18 to 23. Their activity is to commemorate Haiti's Flag Day, and Catherine Flon, who was a Haitian seamstress, patriot, and national heroine who sewed Haiti's first flag of the independence as a republic. QSL via W3HNK.

**THAILAND, HS.** Werner, DH7OT is QRV as HS0ZMO from Phuket Island. Activity is on 40 to 10 meters. QSL to home call.

**SAUDI ARABIA, HZ.** Special event station HZ1WTIS is QRV until May 17 to commemorate World Telecommunications and Information Society Day.

**ITALY, I.** Members of the 4U1GSC group from the UN Global Service Center in Brindisi are QRV with special call 4U9MAY and 4U1GSC until May 31 to commemorate International Day of UN Peacekeepers. Activity is on 160 to 10 meters. QSL via 9A2AA.

**JAPAN, JA.** Members of the Voice of Toyoake Amateur Radio Club are QRV with special callsign 8N2TY from Toyoake City, Aichi, Honshu Island, IOTA AS-007, until November 30 to commemorate the 50th anniversary of the Toyoake City. Activity is on 160 meters to 1.2 GHz using various modes. QSL via LoTW.

**MONGOLIA, JT.** Andrey, R9YU and Gennady, R5QA are QRV as JV0YU from the Bayan-Olgii Province until June 10. Activity is on 160 to 2 meters, and on 70 centimeters, using CW, SSB, and FT8 in DX-pedition mode. QSL via RW6HS.

**PALAU, T8.** Yoshi, JR3QFB is QRV as T88JH from Koror Island, IOTA OC-009, until May 17. QSL to home call.

**ST. KITTS AND NEVIS, V4.** Dick, K2KA is QRV as V4/K2KA from Calypso Bay on St. Kitts, IOTA NA-104, until May 18. Activity is holiday style on the HF bands. QSL via LoTW.

**ANDAMAN AND NICOBAR ISLANDS, VU4.** Yuris, YL2GM is QRV as VU4W from Andaman Island, IOTA AS-001, until May 16. Activity is on 160 to 10 meters using CW, SSB, RTTY, and FT8 in DX-pedition mode. QSL to home call.

**THIS WEEKEND ON THE RADIO.** The NCCC RTTY Sprint, NCCC CW Sprint, K1USN Slow Speed CW Test, Portuguese Navy Day Contest, VOLTA World Wide RTTY Contest, CQ-M International DX Contest, Canadian Prairies QSO Party, 50 MHz Spring Sprint and the Run for the Bacon QRP CW Contest are all scheduled for this upcoming weekend.

The ICWC Medium Speed CW Test, OK1WC Memorial, ICWC Medium Speed CW Test, Worldwide Sideband Activity Contest, RTTYOPS Weeksprint, Phone Weekly Test, A1Club AWT, CWops Test, VHF-UHF FT8 Activity Contest, Mini-Test CW 40, Mini-Test CW 80 and the RSGB 80-Meter Club Data Championship are all on tap from May 16 to 18.

Please see May QST, page 71, and the ARRL and WA7BNM Contest web sites for details.

## Amateur Radio Examinations Monroe, MI

Monroe County Radio Communications Association Amateur Radio examinations are held the 3<sup>rd</sup> Saturday of every even numbered month at:

American Red Cross Chapter Bldg.  
1645 North Dixie Highway  
Monroe, MI 48161

**Registrations preferred**  
**Call for information.**  
**email address and FRN required**

### 2022 Schedule:

February 19	April 16
June 18	August 20
October 15	December 17

### TESTING BEGINS PROMPTLY AT 9:00 AM

Applicants are expected to have all forms filled out and be ready to take tests at that time. Coffee and doughnuts are available at 8:30 AM. For more information or to make reservations, call Paul Trouten - W8PI at 734-854-2224

### Join us at the next meeting

May 19th at 7:30 pm  
American Red Cross Chapter Bldg.  
1645 North Dixie Highway  
Monroe, MI 48162

### Local Net

**ARPSC Net** - Every Monday evening on '72-Monroe (146.72 Mhz) starting at 8:00pm.

**ARPSC Meeting** first Thursday of every month at the EMD office on Raisinville Rd.. 7:00 PM

## One Day Bi-Monthly Technician classes

### Next class will be June 11, 2022

The Monroe County Radio Communications Association (MCRCA) is offering a one-day Amateur Radio course for the entry level Technician class license. The class will run from 8:30 AM to 4:00 PM on the **second Saturday of every even numbered month**. The cost is \$10 and includes lunch, snacks and beverages. The test will be conducted immediately following the class and has a separate fee of \$14. These classes will be held at the Red Cross building, 1645 N Dixie Hwy, Monroe, MI 48162.

There is a maximum class size of 10 people on a first come first served basis and you should sign up no later than 1 week before the class. All study material and testing paperwork will be provided at the time you sign up and you should plan on doing some pre-class studying to make things easier in the class.

If you are interested in becoming a Ham Radio Operator, please call or email me to get signed up for the next class.

N8BZN Don Fritz / (419) 345-4495 after 6PM / [Donfritz56@gmail.com](mailto:Donfritz56@gmail.com)

## New MCRCA Members

Please welcome recent new members to the club.

Greg Almes, W3DTW — James Toomey, WD8NWF — Jeff Giles, K8OLV — Mike Isbell, KE8TYC