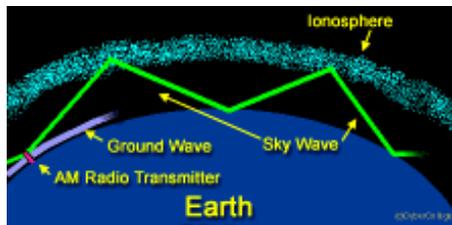


# The Hertzian Herald



## N8DXR's Ground Waves



Our next meeting will find us in the middle of August and only two weeks from the Labor Day weekend. It seems we wait without much patience for the grey days of winter to pass while looking forward to spring and the warm days of summer; then in a blink of an eye the dog days of summer are over and summer has passed. Then fall is upon us and we are beginning the slide back into another winter season. To some this might seem a little depressing but to those of us in Amateur Radio we know the changing seasons bring a change in band conditions and new operating opportunities. One might say that another benefit of Ham Radio is that it makes it easier to look forward to the changing seasons.

Those who were at last month's meeting found some changes at the Red Cross building. The chairs and tables were gone and the building was empty with the exception of the clubs radio room. It seems that the building is being re-tasked and is undergoing a major remodel. Consequently we are temporarily going to be having our meetings at an alternative sight for a while. This August meeting will be held at the Monroe County Emergency Management building located behind the county fairgrounds at 987 S Raisinville Rd. The meeting will start at its usual time of 7:30. Any changes to our meetings location will be posted in future newsletters.

The first annual GLHamCon is only 55 days away and tickets are now available. As a benefactor of the event the MCRCRA will be participating in making the event a success. Members of the MCRCRA who volunteer to help out with the event will receive a ticket to the event. If you plan on volunteering please let us know at future meetings where we will also be presenting more information as it develops. More information about the GLHamCon can be found at <http://glhamcon.org/>

On August the 19<sup>th</sup> the annual Energy Run is being held at Fermi. The briefing is at 8:30 and the race begins at 9am and takes about 2 hours. Any members wishing to participate can get further information at this month's meeting.

That is about it for this month. I hope everyone is enjoying the summer and will have a safe and great Labor Day holiday.

Hope to see you at our meetings and on the air.

73, John - N8DXR

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## MCRCA Minutes:

Due to the last-minute discovery of the Red Cross being under construction and remodeled, the July meeting was held as a simple get together and no business was conducted.

I received the below text from Armando Falcon, DMC, disaster program manager for the Red Cross in southeast Michigan.

"We cleared our space out as we have construction and interior remodeling going on for the next few months. The building will continue to house our disaster services and health & safety departments, but also now become a Blood Services Hub. The radio room space will remain as is. However, the current classrooms will now become FDA regulated/secured blood storage lab and rooms. The west offices will have walls knocked down and be transformed into our new chapter classroom."

## ATTENTION ALL MEMBERS:

**Our August 17, 2017, club meeting will be held at the, Monroe County Emergency Management Center, 987 S. Raisinville Rd, Monroe, MI 48161.**

**Also, the testing session scheduled for Saturday, August 19, 2017 at the Red Cross will be canceled. Please make a note of these changes. Future meeting locations and testing, will be announced as we receive more details on the construction at the Red Cross.**

### When everything else fails, amateur radio will still be there—and thriving

Ham is now a full-fat fabric that can provide Internet access. Why aren't you using it?

RUPERT GOODWINS (UK) - 6/19/2016, 9:00 AM

It's a good time to be technical. Maker communities are thriving around the world, tools and materials to create and adapt are cheaper and more powerful now than ever, and open source hardware, software, and information mean that if you can think it, you can learn how to do it and then make it happen.

For one group of technological explorers, this is more than just a golden age of opportunity: it's providing the means to save one of the oldest traditions in electronic invention and self-education, one that helped shape the modern world: amateur radio.

Radio amateurs get a sweet deal, with effectively free access to many gigahertz of the same radio spectrum that companies pay billions for. They've earned it. Throughout the history of electronics, they've been at the borders of the possible, trying out ideas that commerce or government deem impossible or pointless—and making them work. Here's one example of hundreds: Allied military comms in World War II needed a way to reliably control the radios used by front-line forces, replacing tuning knobs with channel switches. Hams had the answer ready and

## Committees

### Classes

### Club Station

Wes Busdiecker KC8SKP

### DX Net

### Field Day

Jeff Breitner KA8NCR

### Finance

Paul Trouten W8PI (chair)

Fred VanDaele KA8EBI

Dale Williams WA8EFK

### HamFest

Fred VanDaele KA8EBI

### Hertzian Herald

Fred VanDaele KA8EBI

### Historian

Paul W8PI

### Public Relations

Jeff Breitner KA8NCR

### Scholarship

Fred VanDaele KA8EBI

### School Liaison

open

### Programs

open

### Membership

open

### Planning

open

### Property Custodian

open

waiting—quartz crystal oscillators. (Those are part of computing history, too. You're probably using about 10 of them right now.)

The trouble with making a success of frontier territory is that it doesn't stay frontier for long. As radio hams colonised new frequencies and new methods, government and commercial interests wanted in (and they got in). What was useless yesterday can be very desirable today, and a lot of the ham bands in the once-fallow UHF and microwave spectrum now look very tempting for wireless data, satellite downlinks, and the constant chatter of the Internet of Things. Some attacks on amateur spectrum have been repelled, others have succeeded. More are on the way.

It has looked a losing battle at times, as the relevance of amateur radio seemingly faded with the advent of the Internet and cheap digital technology to play with. Radio hams looked like yesterday's people, as relevant as steam engine enthusiasts in the age of spaceflight. Who cares if they lose their spectrum if the rest of us can stream more HD cat videos as a result?

There's enough truth in that to make it dangerous. A large cohort of hams just want to play with radios and talk to their pals, but that attitude masks four things that amateur radio still does that can't be easily replaced.

Start with STEM. In the days of valve radios, it was a standard rite of passage for 10 year olds to take them apart and find out how they worked. The likes of Richard Feynman, Claude Shannon, and Robert Noyce all started that way. Good luck taking the back off an iPhone, kids—but the whole path from simple radio receivers to megabit interplanetary communication is still there. Amateur radio will take you every step, bypassing barriers and making connections. There's a reason ham radio is aboard the International Space Station.

Then, there's backup. Take the European HAMNET, for example. That's a four-thousand-node high speed data network covering a large part of continental Europe and providing full IP connectivity at megabit speeds. It connects to the Internet—ham radio owns 16 million IPV4 addresses, believe it or not—but is independent of it, doing its own robust and flexible routing. If the Internet was to go away, HAMNET would still be running. The same's true of nearly all ham radio infrastructure. When everything else fails (power, comms, roads), ham radio is still there. These days it can even be a full-fat digital medium.

This independence gives ham radio a further edge. It is vigorously non-commercial and non-governmental, and by law the format has to be open—encryption is almost completely forbidden. It's open to all nations (and nearly all allow it). It has survived war, dictatorships, disaster, and CB radio. If you want to use the airwaves, then provided you can pass a simple technical test and pay a nominal admin fee, you don't need any further permission. Increasingly, that means unique creations that can't happen any other way, like global free-to-access digital voice radio networks and international automated satellite tracking and data systems.

This resurgence has helped amateur radio keep its place at the negotiating table with regulators and lawmakers. It's kept the world full of active expertise in wireless, one of the major drivers of modern IT and also one of the guarantors that things like commercial cellular networks are constantly checked for abuse. Those radio hackers at the Def Con and Blackhat conferences who gleefully expose the flaws and backdoors in your mobile phone will usually be active ham radio geeks.

It's also a lot of fun. Nobody has to be a radio amateur, but if you want to use radio inventively, understand how it works, or need to create a communications link that doesn't conform to other people's limits or require their permission, it's there for you. Be there for it.

Rupert Goodwins started out as an engineer working for Clive Sinclair, Alan Sugar, and some other 1980s startups. He is now a technology journalist who's written and broadcast about the digital world for more than thirty years. You can follow him on Twitter at @rupertg.

This post originated on Ars Technica UK

<https://arstechnica.com/gadgets/2016/06/when-everything-else-fails-amateur-radio-will-still-be-there-and-thriving/>

## Philosophy of Ambiguity

Suggested by Ted / NW8W

1. Don't sweat the petty things and don't pet the sweaty things.
2. One tequila, two tequila, three tequila, floor....
3. Atheism is a non-prophet organization.
4. If man evolved from monkeys and apes, why do we still have monkeys and apes?
5. The main reason Santa is so jolly is because he knows where all the bad girls live.
6. I went to a bookstore and asked the saleswoman, "Where's the self-help section?" She said if she told me, it would defeat the purpose.
7. What if there were no hypothetical questions?
8. If a deaf person swears, does his mother wash his hands with soap?
9. If someone with multiple personalities threatens to kill himself, is it considered a hostage situation?
10. Is there another word for synonym?
11. Where do forest rangers go to "get away from it all?"
12. What do you do when you see an endangered animal eating an endangered plant?
13. If a parsley farmer is sued, can they garnish his wages?
14. Would a fly without wings be called a walk?
15. Why do they lock gas station bathrooms? Are they afraid someone will clean them?
16. If a turtle doesn't have a shell, is he homeless or naked?
17. Can vegetarians eat animal crackers?
18. If the police arrest a mime, do they tell him he has the right to remain silent?
19. Why do they put Braille on the drive through bank machines?
20. How do they get deer to cross the road only at those yellow road signs?
21. What was the best thing before sliced bread?
22. One nice thing about egotists: They don't talk about other people.
23. Does the Little Mermaid wear an algebra?
24. Do infants enjoy infancy as much as adults enjoy adultery?
25. How is it possible to have a civil war?
26. If one synchronized swimmer drowns, do the rest drown too?
27. If you ate both pasta and antipasto, would you still be hungry?
28. If you try to fail, and succeed, which have you done?
29. Whose cruel idea was it for the word "Lisp" to have "S" in it?
30. Why are hemorrhoids called "hemorrhoids" instead of "assteroids"?
31. Why is it called tourist season if we can't shoot at them?
32. Why is there an expiration date on sour cream?
33. If you spin an oriental man in a circle three times does he become disoriented?
34. Can an atheist get insurance against acts of God?

## Ham researcher to investigate effects of solar eclipse

By Dan Romanchik, KB6NU

August 21 is a once-in-a-lifetime opportunity for many in the U.S. to see a total eclipse. It's also an opportunity for a team of Virginia Tech researchers to study the effects of the eclipse on changes in the upper atmosphere that have an impact on HF propagation and the global positioning system (GPS). Backed by research funding from NASA and the National Science Foundation, the team is headed by Dr. Greg Earle, W4GDE.

The Virginia Tech team plans to gather data from a variety of sources, including radar systems, transceivers, satellites, ham radio, and GPS receivers, in order to analyze the effects of the solar eclipse on the conductive region of the atmosphere.

"Whether military radar, or consumer GPS signals, the eclipse is going to have effects on the medium that we would like to understand better, so that we can either mitigate them or use them to our advantage," said Earle.

Here are a couple of links to news stories on the research team and the experiments:

- [Virginia Tech team prepares for special project during total solar eclipse](#)
- [Virginia Tech expert to study August solar eclipse effects on radar, ham radio, GPS](#)

### Let's party!

In conjunction with the eclipse, the HamSCI and the ARRL are sponsoring the [Solar Eclipse QSO Party](#). (SEQP). According to an article in the August 2017 issue of QST, the goal of the SEQP is to "flood the airwaves with contacts, all measured by the automated receiver networks of the Reverse Beacon Network, PSKReporter, and WSPRNet." Once all the logs are in, researchers will analyze the data to see what effect the eclipse had on radio propagation.

A YouTube video of a presentation at Dayton on the SEQP can be found at <https://youtu.be/3EviY2Cuxpo?list=PLihPo8xWmo8-xDYAtP9BWX9QnhUoT7k4>

The SEQP will run from 1400Z - 2200Z on Monday, August 21. This is well before the eclipse is due to begin on the West Coast. The reason it starts before the eclipse is to establish a baseline for radio propagation conditions.

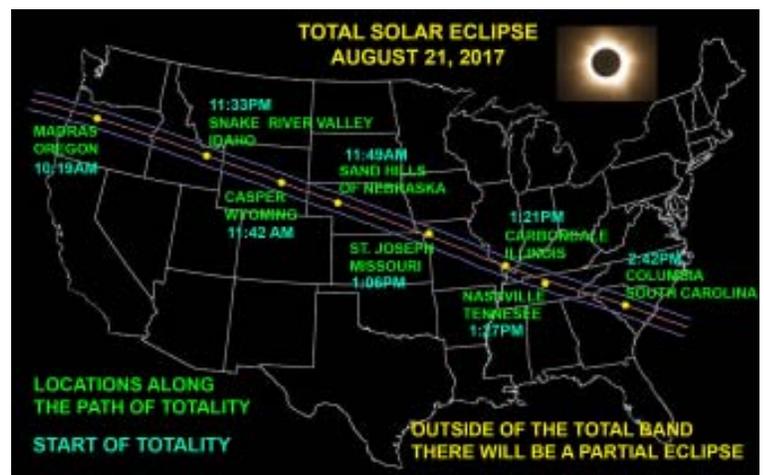
SEQP organizers urge you to make as many contacts as you can on as many bands as you can operate. Like nearly every contest, contacts are not allowed on 60m, 30m, 17m, and 12m. CW, RTTY, and PSK31 are the preferred modes because automated receivers can record those contacts, but phone and other digital modes count, too.

An interesting twist to this contest is that, like Field Day, you can earn a number of bonus points, including:

- Operating outdoors (100 points)
- Operating in a public place (100 points)
- Operating a wide-band automated receiver at your station (100 points)

Hams have had a long history of supporting scientific research. They provided communications for some of the early polar explorations and listened for Sputnik as it flew overhead. The Solar Eclipse QSO Party continues this tradition, and it's going to be a lot of fun as well. Visit the [HamSCI website](#) for more information.

Dan Romanchik, KB6NU, blogs about amateur radio at KB6NU.Com, and is the author of the "No Nonsense" amateur radio license study guides and the CW Geek's Guide to Having Fun With Morse Code." You can reach him by emailing [cwgeek@kb6nu.com](mailto:cwgeek@kb6nu.com).



## 20WPM Koch Amateur ham radio Morse code CW trainer app.

This app will train you to copy Morse code at 20 WPM using an approach very similar to the Koch method. In this app you learn first the vowels, starting with "a", then alphabetically the letters and ordinally the numbers. As you gain more experience copying Morse code, you will begin to recognize short strings of characters such as "CQ", "73", "Tu", "Tnx", "HiHi", "599", "Wx", and the numerous Q-codes. This app may be of interest to amateur ham radio operators and CW or telegraph enthusiasts. Also available here on Google Play are 10, 15, 25, and 30 WPM versions of this app.

For learning the sounds of the characters, you are presented with a game-like interface using a QWERTY keypad or the Default keypad, depending upon your choice. A character is played in Morse code, and you must tap the matching character on the keypad. Note that only the characters you have learned will be enabled. The game is very easy at first as you only have the letter "a" available to tap, but it quickly gets interesting as you progress and learn more characters. Once you gain 90% proficiency within a character set, a new character is introduced. Press and hold any alphanumeric key to hear that character in Morse code without registering a hit or miss. Tap the large Check or X just above the keypad to show/hide the current character. Tap and hold to see your stats.

A similar interface is provided for Numbers, Prosigns, and CW abbreviations, both RX and TX. Once in one of these 3 modes you may toggle between them without returning to the main menu. Note that when you change modes your current hits and misses for that mode will be reset to 0, but overall stats are not affected. Remember that Prosigns are sent run-on without regard to character spacing, while Abbreviations adhere to proper CW spacing.

The Copy Pad is for copying strings of characters by drawing with your finger on the white canvas. You are presented with a group of random characters composed of only the characters already learned, and you can then write down the characters as you recognize them. After 3 seconds, the group of characters is displayed, the Copy Pad is cleared, and a new character set is presented. You have the option to choose the word size from 1 to 10 characters. The Copy Pad works best with shorter strings. For longer strings, pen and paper are more practical. Please note: The Copy Pad DOES NOT attempt to recognize your handwriting.

This app also includes a straight key transmit feature. A character is played in Morse code, and you must tap out that character with the code key. You need not send at 20 WPM and should use a speed that is comfortable. For sending fast code, an iambic key is helpful. You can choose to see the code you are tapping out or the characters you have learned. You may also turn the sound of the characters off. Additionally, you may replace the straight key image with the International Morse code chart. Tap and hold the large Check or X just above the straight key to see your stats.

[https://play.google.com/store/apps/details?id=appinventor.ai\\_izzybella419.MorseCodeTrainer20WPM](https://play.google.com/store/apps/details?id=appinventor.ai_izzybella419.MorseCodeTrainer20WPM)

## Why Navy sees Morse Code as the future of communication

Engineering reports that for centuries, mariners around the globe have used lamps and shutters to beam messages via Morse code from ship to ship. But today, Morse code isn't being learned by every sailor, even though lamp light communication is still being used

So, how we reconcile these two facts? Well, if you're the U.S. Navy you update your lamp light communication systems to encode the modern form of Morse code: texting.

In a recent test carried out aboard the USS Stout, the U.S. Navy used a new mechanism it calls the Flashing Light to Text Converter (FLTC) system. During the test, sailors aboard the Stout fired off text messages and the FLTC converted them to their Morse code lamp light signals which were interpreted by the USS Monterey, moored at a dock in Norfolk, Virginia.

"The best part of this flashing light converter is how easy it is for sailors to use," said Scott Lowery, a Naval Surface Warfare Center engineer. "It's very intuitive because it mirrors the messaging systems used on iPhones. You just type your message and send it with the push of a button."

Read the full Engineering story at <http://www.engineering.com/DesignerEdge/DesignerEdgeArticles/ArticleID/15283/Why-the-Navy-Sees-Morse-Code-as-the-Future-of-Communication.aspx>



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 QRZ DX, the OPDX Bulletin, 425 DX News, The Daily DX, DXNL, Contest Corral from QST and the ARRL Contest Calendar and WA7BNM web sites. Thanks to all.

**MARKET REEF, OJ0.** Martti, OH2BH and Henri, OH3JR signing OJOBH and OJOJR, respectively, will be QRV from August 12 to 19, using the new FT8 digital mode. They will also be active in the Worked All Europe DX Contest as well as make appearances on the traditional modes during any audible propagation.

**ISRAEL, 4X.** Udi, 4X6ZM and friends plan to activate the Baram National Park (Synagogue section Sn-02, Church section Ch-05, Holyland M-03-ZF, 4XFF-0005, WW Loc. KM37rb) for the HOCOTA programme on August 11. They will be QRV as 4X0B on HF using SSB and CW. QSL via 4X6ZM direct via the bureau or LoTW.

**ALGERIA, 7X.** Bodo, DF8DX is currently QRV as 7Y0A until August 26 from Bechar using SSB and CW. QSL via ClubLog OQRS.

**ENGLAND, G.** Special event station GB4RFR operates around the Flight Refueling Hamfest on August 13.

**UNITED STATES OF AMERICA, K.** K7I is the call of a special event station commemorating the birth of the first IBM-PC. They are QRV until August 14. This is one in a series of activities for marking historic milestones in air and spacecraft technology. For QSL information see qrz.com.

**RUSSIA, UE.** UE80AR draws attention to the founding of the Archangelsk Oblast 80 years ago and is QRV until the end of September. An award is available as well. QSL via RN1ON.

**INDIA, VU.** Madhukar, VU2MUD plans to use the call AT5M in the WAE contest from Bengaluru. QSL via VU2MUD, ClubLog.

**MALTA, 9H.** Oliver, DF6MS will be operating holiday-style from Gozo as 9H3BW until August 19 on 40 to 15 meters, using CW only, running a QRP rig. QSL via DF6MS.

**SVALBARD, JW.** Look for Volkmar, DL4AOJ signing JW/DL4AOJ on the HF bands, using SSB and CW, until August 14. QSL via home call.

**MAYOTTE, FH.** Heye, DJ9RR is QRV as FH/DJ9RR until August 14. Look for him using CW and RTTY on 80 to 10 meters. QSL direct or via the DARC QSL Bureau and LoTW.

**FEDERAL STATES OF MICRONESIA, V6.** Chusuke, JR1FKR will be operating as V63FKR while on vacation from September 27 to October 2, using SSB and RTTY on 40, 20, 17, 15, 10 and 6 meters. QSL direct only to JR1FKR.

**VANUATU, YJ.** Adam, K7ST will be QRV as YJ0ST from several different islands until mid October, before sailing on to Australia. QSL via EA5GL.

**LIECHTENSTEIN, HBO.** Tina, DL5YL and Fred, DL5YM will be QRV as HBO/home calls from September 21 to October 7. Look for them on 160 to 30 meters. Tina will be emphasizing low band activity towards JA, VK and ZL on the long path.

**MAURITIUS, 3B8.** Hans, PA3HGT will be QRV as 3B8/PA3HGT from September 5 to 22. Activity will be holiday style on 40, 20 and 10 meters using mainly SSB and sometimes the digital modes. QSL via his home call sign, via the Bureau, direct or LoTW.

**GUINEA, 3YX.** Operators Alain, F5OZC and Sebastien, F8DQZ will be active as 3XY3D from November 1 to 30. Activity will be on 40 to 10 meters using mainly CW. QSL via F5OZC, by the REF Bureau or direct.

**SOUTH COOK ISLANDS, E5.** Alex, F4GHS will be active as E51GHS from two of the South Cook Islands during August. He will be QRV from Aitutaki Island (OC-083) until August 16 and from Rarotonga Island (OC-013) from August 16 to 25. Activity will be holiday style on various HF bands. QSL via his home call.

**LIGHTHOUSE OPERATIONS.** GB0BLH will operate from Berwick Lighthouse (ILLW UK0077) from August 14 to 21, including the ILL weekend on August 19 and 20. QSL only via bureau and eQSL. Operators Moses, CM2YV, Bob, CO2KL, Amed, CO2AME and possibly others will be active as T45FM from the Faro Puta Maya Lighthouse (ILLW CU-005) during the ILL weekend. They plan to have six stations active on all bands using CW, SSB and digital modes. QSL via RW6HS, direct only.

**MELLISH REEF, VK9M.** Operators Dietmar, DL3DXX, Morten, LB8DC, Robert, N7QT, Brian, N9ADG, Eric, SM1ALH, Hawk, SM5AQD, Lasse, SM5GLC and David, W5XU will be active as VK9MA from November 3 to 16. They will be QRV on 160 to 10 meters using CW, SSB and RTTY. They plan to have five stations on the air. QSL via N7QT, direct, via the Bureau, ClubLog's OQRS, LoTW or eQSL.

**THIS WEEKEND ON THE RADIO.** The WAE DX Contest, CW, SKCC Weekend Sprintathon and Maryland-DC QSO Party are on tap for this weekend. The MMonVHF/DUBUS 144 MHz Meteorscatter Sprint is on August 11. Please see August QST page 86 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

Walk-ins are always welcome.

### 2017 Schedule:

February 18	April 15
June 17	August 19
October 21	December 16

### 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

August 17th 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