

The Hamgram

May 2020



ARRL FIELD DAY 2020



Digital dippin' for FD

Hams made more than 1 million contacts during last year's Field Day with more than 138,000 of those digital contacts such as FT8. Since then use of FT8 has grown explosively to the point where most Ham Radio contacts are now digital. MOST!

Digital will have a place along side phone and CW at the Winona Amateur Radio Club's Field Day, June 27-28. One of our in-house "experts," Mike Cizek, W0VTT, will do a quick dog and pony show demonstrating FT8 and MSK144 (meteor scatter) for the club meeting. Cizek worked digital modes for last October's VP6R DXpedition to Pitcairn and is very familiar with it. "I won't need to explain all the details of how and why it works or how to set it up, just how to operate for FD," promises Cizek. He says that if there is interest, those interested can get together for a more in depth look at it.

Zoom The Winona Amateur Radio Club will meet via Zoom at 7 p.m., Thursday, May 21. The correct "location" should be <https://minnstate.zoom.us/j/3120290434>

A link to the Zoom meeting will also be sent via the club e-mail reflector prior to the session.



JIM JARVIS, KB0THN, (LEFT) AND MIKE CIZEK, W0VTT, SURVEY A FIELD DAY SITE FOR THE WINONA AMATEUR RADIO CLUB.

Club meeting on Zoom May 21

Winona Amateur Radio Club Field Day arrangements should be finalized and announced at the May 21 club meeting. Preliminary surveys have been very promising for a good, fun, safe event.

Power line RFI kills Ham's radio for nearly two years

By Greg Miller, K9LEC

(Editor note:) Electric power utilities promised they would be "Delivering reliable electricity" when the CapX2020 transmission line was charged in September of 2016. The 345 kV transmission line extending from near the Twin Cities to Holmen, Wis., went right by Greg Miller's, K9LEC, Holmen home (near Drugan's restaurant) and he sure knew it when the power went on: his HF radios were rendered useless. Here's his story:

December 2018, 345 KV of raging electrical energy came steaming down the power lines like a 4-6-4 Pacific Railroad steam locomotive, leaving in its wake Radio Frequency Interference so ravaging that it took out the HF bands at the shack of K9LEC.

HHHHHHUUUUUUMMMMMM. BBBBBSUUUUUUZZZZZZ.

It took 15 1/2 months of not being able to fire up an on-air chat with anyone by HF anywhere. Engineers flew in from Idaho to tackle the problem only to find the RF source eluded them. The local power company made three visits changing out various poles in the area trying to solve the issue. XCel Energy brought two large bucket trucks to go over the suspected tower in hopes of stopping the problem. All to no avail.

Finally, an expert on the subject flew in from Maryland and forced the culprit rear-up its ugly head and get caught in the act.

The short of the story is that the RFI problem has been solved and K9LEC is back on the air. And I will say that 15 1/2 months without ham radio really takes its toll on the hobby's interest. But now it seems like I have new hobby and interest is coming back.

I need to thank Brian Beskee of American Transmission Company for taking the lead on this issue and never letting it drop. He was very persistent in getting to the bottom of it. His persistence finally located and hired Mike Martin from RFI Services to identify the problem.

Martin was very knowledgeable and sure educated me. I can't thank him enough for sharing some of that knowledge and locating the source of the RFI fast and getting it corrected.

Here's the issue and the cure: The new 345 KV power line, traveling north along Hwy 53, created magnetic energy that encompassed the street light that was located at the corner of Hwy 53 and Cty T. (See the picture at right.)



This induced a voltage in both the pole holding the light as well as the ground wire. Because of the size difference between these two items a different voltage was induced. The ground wire was very close if not touching the pole so the desire to equalize the voltage between them was causing a wide band arcing. This RFI was traveling through the service lines that travelled down to my QTH. This arcing was taking place so long that when the power company came up to correct it the ground wire broke off. That was the end of my RFI problem.

And with that I will end my saga of the RFI that invaded my QTH for better than a year.

I would recommend that you check out RFI Services web page, RFIservices.com and watch the following YouTube video to learn more about RFI problems. <https://www.youtube.com/watch?v=-jTY6Zlp6x4>

Stick to whole numbers for contacts

Watch where you tune if you'd like to work as many operators as possible. For example, for CW, you might want to pick 14035 kHz - not 14035.5 kHz. The skill of tuning a radio is just that - a skill. Some people may have their knob tuning rate set to a larger increment than you might expect, and you might be between frequency jumps as they tune.

WARC Executive Board (unofficial minutes)

Wednesday, May 6, 2020, via Zoom



Attendees: Paul Schumacher, KØZYV, Dan Goltz, WKØW; Harro Hohenner, KG6RLM; Erik Brom, WBØNIU; Bob Seaquist, W9LSE Mike Foerster, WØIH. Guests: Les Hittner, KØBAD, Mike Cizek, WØVTT, Marv Rodvold, AC9TO; Sam Resto; Terry Peterson, WØEUU.

Called to order 7:01 p.m.

Minutes: (Bob Seaquist, W9LSE) Approved

Treasurer: Harro Hohenner, KG6RLM) Approved

Balance on 5/1/2020 \$3,842.52

Deposits:

Dues and donations \$230.00

Dues \$90.00

Add'l Repeater Donations \$155.00

Payments:

Club Insurance \$200.00

Balance reported by Bank \$3872.52

Paid members (2020) 39

- ▶ **MOTION (Dan/Mike): Move budgeted WIRES X money back into the general fund. (Approve)**
- ▶ **MOTION (Dan/Bob): Move budgeting up to \$700 for internet project at three repeater sites. Cost is for Ubiquiti Bullets, 1,000' CAT6 and some small supplies.**

Committee Reports

Public Service (Dan Goltz, WKØW) Walt Kelly, KEØXI, and I continue to attend weekly online emergency management meetings with all of the county public service groups, elected, and administrative officials. The monthly and quarterly meetings have been merged into weekly county COVID-19 updates. At the last meeting it was announced that a Winona State University dormitory will be converted into an overflow hospital for the eastern part of the S.E. MN EM district if the need should occur. Faribault and Rochester are also designated as overflow sites. This would concern us if there was a major communications failure at that site.

Also at the last meeting Emergency Manager Ben Klinger discussed plans for county SKYWARN call outs. Rural fire departments and first responders will not be paged out for Skywarn response, but if they

wish to and feel they can maintain their safe distancing they can respond. Amateur radio will have the primary responsibility for Skywarn reporting until further notice. Our net control will be from a residence and not the county emergency operations center. We still have access to emergency management, dispatch, and the National Weather Service.

Klinger will be happy to meet with us regarding equipment needs and projected plans when the stay at home order is lifted.

Witoka (Mike Foerster, WØIH) WØIH set up and installed the new Yaesu DR-2X repeater at the Rooster Ridge site as the 146.835. The old repeater hardware was removed to clean up the site.

The lightning arrestors donated by Jim Jarvis, KBØTHN, arrived and are installed on the repeater antenna connection and on the B-CH input used for control of the repeater.

At the Witoka repeater site four L-COM lightning arrestors were installed for the antenna for the 442.150 repeater, the APRS receivers and the HF Remote antenna.

Some equipment was moved to the Witoka site for storage: Box and manuals, USB cable and parts from the Rooster Ridge DR-2X repeater; ICOM IC-718 HF transceiver, ICOM Power Supply and the LDG Z11-Pro2 antenna tuner; Hamtronics transmitter/receiver and controller that was removed from Rooster Ridge.

Tower climber Alan Romeis indicated that he may do tower work at Witoka in the next two to three weeks.

Remote testing: there was a discussion of holding remote license testing; Paul believes there is not enough call for it and it is not easy to set up.

Field Day: There was a discussion of where and how to hold Field Day. A committee consisting of Marv Rodvold, Mike Foerster, Mike Cizek, and Bob Seaquist appointed to come up with something. Harro Hohenner and Mike Cizek volunteered their yards.

Adjourn 8:17 p.m.

Have radio will travel

By Jim Brown, NØWE

What is one to do in this world of social distancing? You can only spend so much time in the shack. With the weather warming consider portable operating. It gets you outside and tests your skills as an operator and it's also a heck of a lot of fun.

My interest in portable operation started with UHF/VHF contesting. Matt Burt, KFØQ, peaked my interest in being a rover. As challenging as HF can be, portable UHF/VHF has its own unique challenges. It's a lot of work converting your vehicle into a UHF/VHF contesting station, especially in mid-January. But there's also a lot of satisfaction when it all comes together. My UHF/VHF rover days are over but the itch to go portable is still there.

My interest now is Parks on The Air (POTA). You can be a hunter or an activator. Their website, <https://parksontheair.com/> tells you about the program. It also has a spotting page that lets you know who is on the air. Spot yourself to get some action started. POTA is just one of the portable opportunities. There's also Summits on the Air (SOTA), Islands on the Air (IOTA) and Light Houses on the Air (LOTA) and I am sure many others. You don't have to be involved in a formal group you can just call CQ and see who answers.

For equipment you can do fine with the basics. If it's a POTA activation you don't really need to worry about the weight or size of the gear. You will just be hauling the gear from your car to a picnic table, although once you start doing it you usually come to the conclusion lighter

is better. I can get my whole set-up in a plastic tool box. For a radio I have a Yaesu 891 (I like the ability to go QRO) and for power I use a 20ah Bioenno LiFePO4 battery. At 90 watts I can operate over four hours. It's about the size of a 7ah gel cell but lighter. I have three antennas: My main antenna is a vertical, multi-band antenna, the Wolf River Coil TIA, good for 10M through 80M. You adjust the antenna by moving a ring on the coil. I also have a 20M Par EndFedz wire antenna. Most people throw one end up in a tree. I use a 30' fiberglass mast if I plan on using that antenna. My last antenna is a EARCHI multi-band wire antenna. It uses a 9:1 unun but I usually don't use this one because it requires taking a tuner.

Many prefer to operate QRP, especially if you are doing SOTA and plan on doing a lot of hiking. Rigs like the Elecraft KX3, KX2, Yaesu 818, Xiegu 5105 and soon-to-be Icom 705 with their built in batteries and light weight work well. Throw in a wire antenna you are all set.

As much as I enjoy portable operating it's always fun sharing the experience with others. I would like to create a website or a facebook page that can be a resource for people in the area interested in portable operating. It would include activations, web resources, activation stories (successes and failures) and a place to share ideas. If this sounds like something you would like to do contact me at n0we@yahoo.com with your comments and ideas.

Winona Amateur Radio Club, Inc. P.O. Box 1451, Winona, MN 55987

WØNE Repeaters

146.640 PL 100.0 Hz *

146.835 PL 131.8 Hz ** **NEW!** FM Voice C4FM Digital

444.225 PL 100.0Hz FM Voice C4FM Digital

442.150 PL 100.0 Hz. FM Voice C4FM Digital

* SkyWarn Net when activated.

** Sunday Night Net—8:30 p.m.

Winona Amateur Radio club meetings are 7 p.m., third Thursday of the month on Zoom video conferencing. The monthly program is open to the public.

President: Paul Schumacher, KØZYV, pschumacher@winona.edu
 Vice President: Lance Tagliapietra, ADØUT, lancetag@hbci.com
 Treasurer: Harro Hohenner, KG6RLM, Harro@hohenner.com
 Secretary: Bob Seaquist, W9LSE, seaquist.robe@eagle.uwlax.edu
 Custodian: Erik Brom, WBØNIU, ewbrom@hbci.com
 At Large: Dan Goltz, WKØW; Mike Foerster, WØIH
 Dues: \$30 per calendar year per license holder. \$35 per calendar year for all licensed members of the same family within the same household. Send dues to: Treasurer, P.O. Box 1451, Winona, MN 55987



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