

The Hamgram

October 2021



A Walk In The Park

By Jim Brown, NØWE

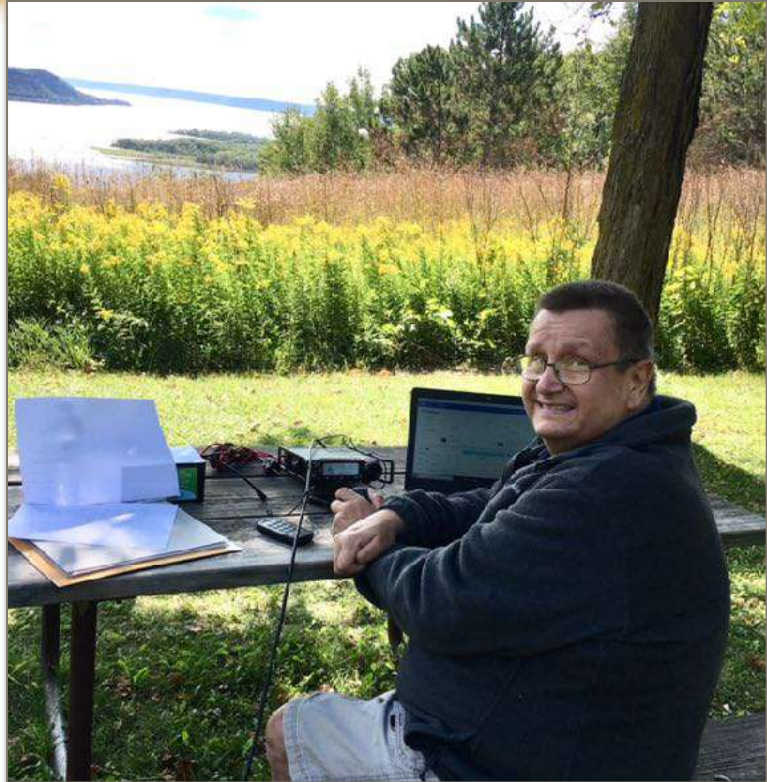
As fall approaches and the weather cools down one of my favorite activities is to activate parks in the POTA (Parks On The Air) program. Recently I was at Frontenac State Park, about 50 miles north of Winona. It's a beautiful park with great views of the Mississippi River.

Seeing it was a week day there weren't a lot of people at the park so we had the area to ourselves. My wife Sue, KEØS, and I found a picnic table with a view of the river. In less than 10 minutes we had my 33' fiberglass mast up and a 40 meter Par End Fed antenna hooked up. I spotted myself on the POTA website and within a few minutes I had a pileup. It takes 10 contacts to officially activate a park. I was able to do that in less than 10 minutes! All-in-all we got 39 contacts in an hour. Three of these contacts were park to park. In other words, I contacted others that were also activating parks.

Park-to-park contacts can be a little more challenging seeing everyone in the parks are using somewhat compromised antennas and many run low power. It was a great day to play radio and admire the view.

My equipment was a Par 40 Meter End Fed, a 33' telescoping fiberglass mast, my Yaesu FT-891 and my Bioenno 20 Ah battery.

If you enjoy working portable, the Parks On The Air is a great program. If you are not into portable



JIM BROWN, NØWE, OPERATING FROM FRONTENAC STATE PARK.

operating you can operate from home and contact people in the parks. People who operate from home are called Hunters. They are very important to the program so us activators have someone to contact. Looking forward to getting a few more activations in before winter sets in.





“Scenic” can be beautiful for your Sunday drive but “scenic” for bicyclists means hills, horrible hills, and “scenic” for Amateur Radio operators providing communication for a bicycle ride means dead spots and poor RF. “Scenic” describes the Winona Rotary Club’s Ride The Ridges bicycle tour, Sept. 18, and it describes the challenges for the Winona Amateur Radio Club.

“The help of all the Radio Club members was instrumental in making the ride a huge success,” noted ride coordinator Mike Bernatz.

Communication coverage required 20 Amateur Radio operators, some of whom rode 200-300 miles in SAG vehicles providing service. In addition to SAG units, there were two net control operators (NCS),



LES HITTNER, KØBAD, WAS ONE OF THE SAG COMMUNICATORS FOR RIDE THE RIDGES.

Hams stationed at rest stops, a Ham at the Winona Middle School, a couple Hams that served as floaters and one Ham helping the ride coordinator. Ride The Ridges is a fund raiser for the Winona Rotary with money supporting many of that organization’s charities. The bicycle tour is sought by riders for its scenic beauty, Autumn colors, great

organization and great support. There are four different routes ranging 26 to 106 miles contained in a triangle between Winona, La Crescent and Rushford. Bicycles started and finished at the Winona Middle School and are challenged by hills and rewarded by swooping, twisty downhills.

Communications required planning because the short, steep valleys make an RF coverage map look like Swiss cheese. Cell phones become useless and even Minnesota’s public service ARMER system has dead zones. Amateur Radio systems are better because they use two very good Winona repeaters, the 146.835, near Bluff Siding, WI, and the 442.150 near Witoka, MN as well as the 146.97 Riverland repeater high above La Crescent. At the far western edge of the route at Rushford a cross-band radio repeated the Witoka signal. Ride The Ridges is a challenge for radio operators but carefully planned by Erik Brom, WBØNIU.

Dan Goltz, WKØW, reminded operators that they are communicators so Amateur Radio was supplemented by cell phones and a number of Winona County ARMER public service radios connecting the ride with the Law Enforcement Center, the SOAR Team (Search Operations Assistance and Rescue), first responder units and the National Weather Service.

Lance Tagliapietra, ADØUT, located at the ride’s start and finish point, answered an emergency phone number distressed riders could call if they required assistance and got the appropriate response going.

APRS was in all moving units such as rider support vehicles, the ride director’s truck and the sweep at the end. Net control (NCS) tracked all moving pieces on APRS assisting dispatch. Yaesu radios told the NCS which of the three repeaters to use to call a unit because they report which voice frequency is used on each mobile unit.

Participants included: Erik Brom, WBØNIU; Syed Faruque, ACØVA; Dan Goltz, WKØW; Nancy Goltz, NØNAN; Shawn Hicks, KD9KGQ; Les Hittner, KØBAD; Harro Hohenner, KG6RLM; Clare Jarvis, KØNY; Rick Kolter, KD9GVS; John Kowalik, K2OPT; Ben Kuhn, KUØHN; Keith Laken, KEØIJI; Russ Marsolek, NØQK; Justin McElmury, KFØBSI; John Roche, KBØELR; Lee Schultz, AEØML; Paul Schumacher, KØZYV; Bob Seaquist, W9LSE; Lance Tagliapietra, ADØUT; Steve White, KDØBOD.





Waumandee communication support success

It's hard to miss the smell of the Waumandee Time Trials: gasoline, E-85 and burnt rubber. It is perfume for car lovers but just smelly to others. Members of the Winona Amateur Radio Club take it all in as they provide critical communication for the event.

Radio operators climb ladders to hillside perches then wait for a car to hit a hay bale, go off the road or worse. Though the principal activity for operators is sorting through the grocery sack of treats.

The Waumandee Time Trials is an annual competitive driving event limited to vintage cars, trucks, and motorcycles that takes place on a wooded, twisty, and hilly closed public road in the Driftless Area of west central Wisconsin, near the Village of Waumandee. Drivers navigate twisty, hilly, wooded country roads that link valleys with windswept ridges 450 feet higher. This is challenging because drivers are operating vehicles at least 30 years old. Carbureted engines scream, drum brakes lock up and power steering is a fantasy.

The radio club staffs each of the eight chicanes, the start, the end, a radar vehicle and even the entrance to

the parking lot. The radar vehicle is hidden somewhere off the course watching for drivers wanting to return to the start too quickly. Radio operators at the chicanes report if drivers hit the hay bales or cones while the operator at the top feeds the "three-two-one-start" to the timer.

Workers are treated to a mountain of treats (cookies, fruit, drinks, candy and cheese) and the course, a filling lunch and, later, a lavish dinner at the Danziger Vineyard.

Participants included: Erik Brom, WBØNIU; Bill Chavez, KEØIJG; Dan Goltz, WKØW; Nancy Goltz, NØNAN; Harro Hohenner, KG6RLM; Clare Jarvis, KØNY; John Kowalik, K2OPT; Ben Kuhn, KUØHN; Justin McElmury, KFØBSI; John Roche, KBØELR; Marv Rodvold, AC9TO; Lee Schultz, AEØML; Bob Seaquist, W9LSE; Lance Tagliapietra, ADØUT. Also assisting with communication were Tom Hazen, KEØSQB; David Graupmann, KD9HMA; and Dennis McGinn, KCØWMM.

October 21 club meeting Go Boxes for emergencies and sub zero Minnesota

In January, located in very remote, deep woods, Ham radio operators have to be extra prepared. They need an excellent, complete Go-Box. Having a well-prepared Go Box also is essential for Hams providing emergency communications.

We'll hear about Go-Boxes at the Winona Amateur Radio Club October meeting from Russ Marsolek NØQK. He has been a volunteer for the John Beargrease Sled Dog Marathon on Minnesota's north shore miles from nowhere providing safety communications for the mushers and dogs competing in this historic event.

NØQK's presentation will be 7 p.m., Thursday, Oct. 21, on Zoom.

The monthly program is open to the public. (<https://minnstate.zoom.us/j/3120290434> Password: WarcBoard)



WARC Executive Board (unofficial minutes)

Wednesday, Oct. 6, 2021, via Zoom

Paul Schumacher, KØZYV; Dan Goltz, WKØW; Harro Hohenner, KG6RLM; Bob Seaquist, W9LSE; Lance Tagliapietra, ADØUT; Clare Jarvis, KØNY; Mike Foerster, WØIH; Tim Jacobson, N9CD; Tom Wilmot, WØMK; Keith Laken, KEØIJ; Marv Rodvold, AC9TO.

Called to order: 7:02 p.m. by Paul Schumacher, KØZYV

Minutes: Bob Seaquist, W9LSE.

Treasurer: Harro Hohenner, KG6RLM

Balance on 9/30/2021 \$4,434.10

Balance reported by bank \$4,434.10

MOTION: Approve as amended to a balance of \$4418.13 because of an outstanding check. (KØNY/WKØW)

Harro wants to know who has been filling out the Minnesota Revenue form and find out how it's done.

Tower: Keith Laken, KEØIJ. He has relatives formerly in the tower business who would climb the Witoka tower, replace the lights and fix our antennas for \$4,000. The job would be completed in one day. They have no insurance.

The tower belongs to Winona County and it is responsible for maintenance and county emergency manager Ben Klinger is seeking a professional climber. In addition, the FAA has granted a waiver for the lights. There are memories that the last time was about \$3,000.

MOTION: (WKØW/ W9LSE) APPROVED. We respectfully decline the offer for these persons to

do the work due to cost and their lack of insurance.

Witoka: Mike Foerster, WØIH. Working on winter antenna for 160.

Public Service: Dan Goltz, WKØW. We completed two major events since the last report, Ride the Ridges and the Waumandee Time Trials. Both events were highly successful and the organizers of both events have invited us to participate again next year.

We participated in one Skywarn event since the last report. Tornado activity was reported in neighboring counties, and severe thunderstorm warnings were issued for our county. There was a good turnout and good quality reporting.

There has been some remodeling and rearranging at the Emergency Management office. The resultant changes have made it difficult to find some of the county-owned amateur radio equipment. I am planning to get a couple people together and go there to inventory and arrange storage of that equipment to be sure it is readily available the next time it is needed.

October general meeting presentation: Lance Tagliapietra, ADØUT. Meet with program committee to determine program. In Lance's absence W9LSE will facilitate.

Adjourn: 7:37 pm

Small and low is big for QRP

By Rich Berger, KC3MIO

New, improved, little radios plus an interest in outdoors activity has made QRP (usually 5 watts or less) a hot item, yet many Hams wonder why you'd want to use less and not more power.

Why would you artificially limit the resources at your disposal? I didn't give it a thought until I heard two hams chatting and found out that one of them was running five watts and I could copy him perfectly. I sent my call and joined the conversation. That five watts was all that was needed for a QSO intrigued me.

I experimented with lower power and found that I could talk to stations in LA and TX with five watts or less, but I made no systematic attempt to pursue QRP operation.

There is a magic to QRP. Each contact is special, whether it's local, halfway across the country or halfway around the world. You become more aware of band conditions and focus on antenna types. There is a special kick to a QRPx2 contact as you connect with a fellow aficionado. Even QRO stations are sometimes surprised at the strength and clarity of your low power signal.

QRP gear can be lightweight and compact, run on batteries or solar power and is

ideally suited for taking outdoors, whether along the roadside or at the end of a hiking trail. Parks on the Air (POTA), Summits on the Air (SOTA) and other outdoor programs are ideal for QRP. You learn to deploy effective portable antennas under varying conditions. And you get to understand what it is like to be a DX station, as your CQs draw a pileup.

Finally, there is the astonishing fact that your little pulse of electromagnetic energy, shooting out of a wire, can be detected thousands of miles away.

Frustration is part of QRP but the rewards of a successful contact with your low power gear makes it worthwhile.



Who you are...every 10 minutes

By Dennis Rybiecki, K9LGU

What's required for identification in nets? The FCC is clear about identification of amateur stations. Part 97.119 states "**Each amateur station. . . must transmit its assigned call sign on its transmitting channel at the end of each communication, and at least every 10 minutes during a communication, for the purpose of clearly making the source of the transmissions from the station known to those receiving the transmissions. No station may transmit unidentified communications or signals, or transmit as the station call sign, any call sign not authorized to the station.**"

It's simple. End with your call. That's all. So what does that mean for traffic handling and net operation? It means during a net a check-in needs to identify when first calling in, and at the end of a comment, relay, or "second-go" if any. Luckily, it doesn't mean each listening station must also identify every ten minutes during the net. If an operator establishes communication with another station off frequency to pass traffic, the required part is the same – every ten minutes and at the end of the communication.

How about the net control? Same deal. The net control station only needs to identify every 10 minutes and at the end of a series of transmissions with the net. True, it may help to identify the net and net control much more frequently during the net operation, but it's only "required" every 10 minutes and at the "end of the communication" with the net.

During ARES nets and for public service operations, sometimes tactical calls are implemented. They help,

but they don't substitute for the FCC requirement – identification with an FCC-assigned call every ten minutes of continuous communication and at the end.

A call sign is like an operator's name. Although we may occasionally misspeak, a call should be said correctly, remembered, and respected. Giving only a call sign is how to get recognized by a net control.

At times, we suffer from over-identification. It may be nice to start with

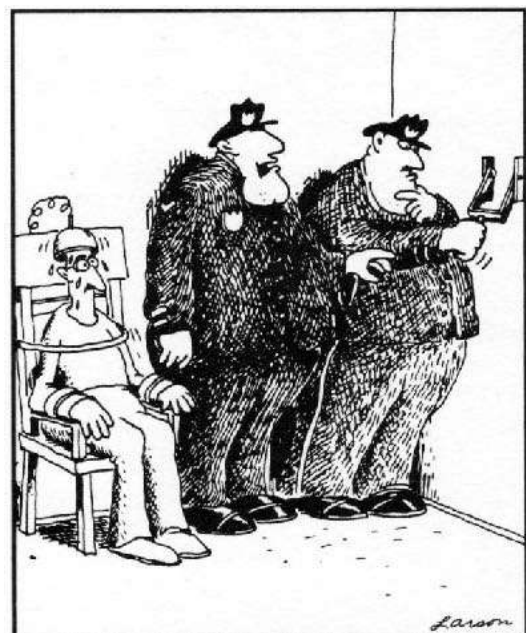
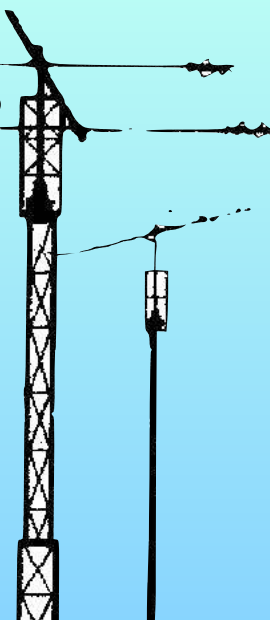
your call but it's not necessary. Technically, we don't need to say the call of the other station at all – just identify ours. However net controls do ask for their call to be said by check-ins to help avoid doubling. If we spend too much time repeating call signs, we limit time for other content. We don't need the Department of Redundancy Department with calls. So comments from net participants are fine – if they are solicited by the net control, accompanied with a call sign, and if they're followed by identification in 10 minutes or at the end of the operator's last transmission.

Finally, we certainly don't have to accompany our call with the phrase "for I.D." Why else would we identify?

We certainly don't have to accompany our call with the phrase "for I.D." Why else would we identify?

Wire works

When a tower and beam aren't possible for one reason or another, try a wire antenna to get on the air. A dipole can get you on at least one band, and some amateurs use wire antennas exclusively. Variations on the dipole theme to get multi-band coverage include the fan dipole, the off-center-fed dipole, the popular G5RV antenna, and many others. Some of the multi-band antennas will require an antenna tuner of some sort.



"The contact points must be dirty. ... Just click it up and down a few times."



Pocket FT8

Probably the most interesting facets of amateur radio in 2021 lie in the realm of digital modes. Using the limitless possibilities of software defined radios has freed digital radio communication from the limits of what could be done with analog electronics alone, and as a result this is a rare field in which radio amateurs can still be ahead of the technological curve. One of these newer digital modes is FT8 created by Joe Taylor K1JT.

And it's for this mode that Charles Hill has created an easy-to-build transceiver. Its brains are a Teensy 3.6, while the receive side is a Si4735 receiver chip and the transmitter is a Si5351 programmable clock chip driving a Mini-Circuits GVA84 power amplifier with an appropriate filter. The interface is via a touchscreen display. It relies on existing work that applies a patch on-the-fly to the Si4735 receiver chip for SSB reception, and another project for the FT8 software.

The charm of this transceiver is that it can be assembled almost in its entirety from modules. Some radio amateurs might complain that homebrew radios should only use the most basic of components assembled from first principles, but the obvious answer to that should be that anything which makes radio construction easier is to be welcomed. If the 100 mW output power seems a bit low it's worth remembering that FT8 is a weak signal mode, and given the right propagation conditions the world should be able to hear it despite the meager output.

For more information refer to <https://github.com/chillmf/Pocket-FT8>



Look like a pro

By Dennis Rybiecki
K9LGU

Professional appearance is important. Before you respond to an assigned location know the dress code such as shirts, badges, or vests and dress accordingly

Look professional and act like a professional. Remember we are serving an agency and should respect their standards and procedures.

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 ** 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.

** Sundav Nialt Net—8:30 p.m.

President: Paul Schumacher, KØZYV, pschumacher@winona.edu

Vice President: Lance Tagliapietra, ADØUT, lancetag@hbc.com

Treasurer: Harro Hohenner, KG6RLM, Harro@hohenner.com

Secretary: Bob Seaquist, W9LSE, seaquist.robe@eagle.uwlax.edu

Custodian: Erik Brom, WBØNIU, ewbrom@hbc.com

At Large: Dan Goltz, WKØW; Clare Jarvis, KØNY

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

The Hamgram is published monthly by The Winona Amateur Radio Club, Inc. Distribution is via e-mail and the *WØNE.org* Web site. Distribution to individual members by USPS is available upon request. Editor: Bob Seaquist, W9LSE. Address comments and Hamgram correspondence to: Bob Seaquist, W5735 Woodhollow Rd., Holmen, WI 54636 or seaquist.robe@eagle.uwlax.edu Monthly club programs are held on the third Thursday. The submission deadline for the Hamgram is Wednesday of the week prior to that of the club programs.

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. (<https://minnstate.zoom.us/j/3120290434>)
Password: WarcBoard)

