The Hamgram



April 2020



ZOO to the WARC meeting

The Winona Amateur Radio Club's 7 p.m., Thursday, April 16, meeting will be via Zoom. It's an easy-to-use on-line app that allows you to see the presentation and other club members and to even join-in the conversation.

To join the meeting you need the URL of the meeting and a computer or smart phone. If you plan on using your computer go to https://zoom.us/ and sign-up (it's free). You then can download the Zoom software.

If you are using a smart phone. you have to install the Zoom app that is available in the app store for your type of cellphone.

At about 7 p.m. on our meeting night go to: https://minnstate.zoom.us/j/3120290434
By the time of the meeting we may have to add a password. If so, we will post that on the club e-mail reflector.

To join the meeting, open your browser and put in the URL and simply follow the directions.

Meeting on-line with

Logbook of The World is April meeting

Logbooks used to be a fussy, necessary requirement for Hams, but they also were very important paperwork that reminded operators who they contacted, and some of those were legendary contacts, and where the other operators were located. Logging is no longer required but it is definitely recommended for many reasons. The internet age has added a new, exciting aspect of logging including electronic logbooks and, the online service, Logbook of the World (LoTW).

LoTW is an online service that lets you electronically submit contacts (QSOs) for confirmation, view your submitted QSOs and resulting confirmations online, view your DXCC, VUCC, WAS, WAZ and WPX award progress online and electronically submit confirmations for credit toward DXCC, VUCC, WAS, WAZ and WPX awards. The months-long wait for snail mail QSO cards is over!

Getting LoTW to work can be a challenge and then there's some learning to access all its features. To simplify your encounters with LoTW our April club presentation is from an expert, our own Mike Cizek, WØVTT.

Our 7 p.m., Thursday, April 16, meeting will be online via the Zoom app. (see sidebar)



The nasal drone of old four-cylinder English roadsters as well as the roar of fairly recent Pony cars will again echo in the hills near Waumandee, Wis. this October. It's the "Waumandee Time Trials" in which cars are timed to run from the bottom to the top of a hill. The event is open to vintage vehicles manufactured 1990 and earlier.

Members of the Winona Amateur Radio Club provided crucial communication for the event two years ago and has again been invited to help. (See what it looks like at: https://www.youtube.com/watch? v=HT3Siga1-Qg)

This year's event is scheduled for Saturday, Oct.10.

At the last event, radio volunteers were treated to a large bag of treats at their station, a great lunch and, afterward, a fine dinner at the Waumandee Inn. Of course they also had a full day of radio operating!

Massive score

WARC big in MNQP

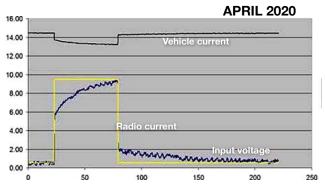


SOME OF THE WINNING WINONA AMATEUR RADIO CLUB OPERATORS IN THE MNQP INCLUDED (L-R): PETER EBERTOWSKI, KDØYOB; JAMES BICKERSTAFF, KEØYMA; AUGUSTINE RICKERT, KEØMDV; LUKE RICKERT, KEØMDW; ILIANA RICKERT, KEØZFU (PEEKING OVER); AND MARV RODVOLD, AC9TO.

The 2020 Minnesota QSO Party resulted in a number of exclamation marks starting with the undeniably huge score tallied by the Winona Amateur Radio Club! The WARC took a massive first place in "Multi Operator" with **126,380** points! That's the biggest win Winona has had! That's from 215 CW contacts, 495 Phone contacts and 89 mults.

The MNQP saw a dramatic increase in the number of logs submitted, very likely due to the announcement of the "State QSO PartyChallenge." MNQP just happened to be one of the initial kick-off events for this challenge. (See: http://stateqsoparty.com/ for details). This year there was a 34 percent increase from the MNQP's record activity level of 2018. There were 421 logs submitted. Of these, there were 111 Minnesota logs, and 310 non-MN logs. Almost all of this increase was due to the increase in non-Minnesota activity.

This is the first time ever in MNQP that the number of Phone QSO's surpassed the number of CW QSO's. Typically there has been about 10 percent more CW QSO's, but it appears a large number of casual non-MN participants resulted in a swing toward more SSB activity. Usually every effort is made to insure all 87 Minnesota counties are activated each year, but due to some unforeseen circumstances, the best you could do would be to get 84 counties.



Brombat, SAGs & you

By Erik Brom, WBØNIU

I've been saying that the charging diode in the "Brombat" battery cover will "soften" the load on a vehicle, reducing the chance of blowing a fuse. This is important in a temporary installation in a SAG wagon, for example, where we don't know much about the vehicle's capability. I had a chance to take some data recently and here's what I found:

Setup: The diode charging input of the battery is fed by the vehicle, and the radio, an FTM-400, is connected to the load side. For this test the vehicle was idling, and the radio was set to high power transmit. The vehicle's voltage was about 14.4V. The radio draws about 500mA on receive, and 9.5A on transmit.

I built a shunt to read the current. This consisted of about a foot of #20 wire. I used a bench top multimeter to calibrate it. I found that it was about 11mOhms. Or, a scale factor of 89.5. That is, the voltage across the shunt times 89.5 gives the current. It introduces about 100mv drop on transmit.

I had an IOtech Personal Daq/55 on hand. This has five high resolution differential analog inputs. Data was gathered at 5 samples per second.

Operation: In the graph, I keyed the radio for about 60 seconds. The voltage shown is the battery voltage going to the radio. The radio current is shown in yellow, and the current draw from the vehicle is shown in blue. At the start of the transmission the battery and the vehicle share the load. As the battery discharges, more current is drawn from the vehicle. After a minute, the battery and the voltage coming from the diode equalize at about 13.2V, and nearly 100 percent of the current is coming from the vehicle. When the PTT is released, you see the battery slowly recharge. It takes about 2-1/2 minutes to fully recharge. This is only a very slight discharge of the battery.

Although the current draw from the vehicle eventually reaches the full current of the transmitter, the waveform is "softened", hopefully reducing the chance of blowing a fuse in the vehicle. The diode characteristics, vehicle voltage, and transmitter load will all affect the curve.

WARC Executive Board (unofficial minutes)

Thursday, April 4, 2020, via Zoom



Attendees: Paul Schumacher, KØZYV, Dan Goltz, WKØW; Harro Hohenner, KG6RLM; Erik Brom, WBØNIU; Bob Seaquist, W9LSE. Guests: Les Hittner, KØBAD, Mike Cizek, WØ0VTT, Marv Rodvold, AC9TO.

Called to order 7:02 p.m.

Minutes: Bob Seaquist, W9LSE.

Treasurer: Harro Hohenner, KG6RLM.

Balance on 3/31/2020 \$4,657.52

Deposits:

Dues \$85.00

Payments:

Yaesu Repeater \$900.00

Balance reported by bank \$3,842.52

Paid members (2020) 34

Committee Reports

Public Service, Dan Goltz, WKØW

Skywarn alerting system: Text messaging and e-mail alerts are not working well with delays of up to two hours. Messages are also truncated. Many messages are returned.

We will continue using the text messaging but will supplement it by making announcements on the club repeaters when storm spotting may be needed.

Changes to Skywarn: activities will be directed from home-based net control. Russ Marsolek, NØQK, will be initial net control. We will minimize the number of mobile stations dispatched. I will communicate with the weather service, public service groups and emergency management and dispatch from my home as well as the Skywarn net. The Covid-19 emergency, and emergency management's responsibility will also increase. I anticipate amateur radio will be asked to take a more active role in handling Skywarn activities. We have handled Skywarn without an emergency manager several times, and we can do it again. Skywarn training is still available on-line from both the National Weather Service in La Crosse, and Norman Oklahoma.

Emergency Management meetings: I have been in contact with Ben Klinger and participated in two online meetings. Walt Kelly, KEØXI, and I, participate in weekly meetings with emergency management, health officials, ambulance companies, first responders, fire departments and law enforcement agencies. Emergency response criteria has not changed, but response may initially include fewer personnel, and those responding will require personal protective equipment, which is in short supply.

Ride the Ridges active promotion is suspended: Even though September seems a long way off, the planning meetings required for this event have to begin now. A final determination on cancellation will come as conditions change.

Trinona has been cancelled.

Dan will not request the Sheriff's trailer or tower trailer from Ben Klinger due to the uncertainty of the Covid-19 virus.

The climber planned for Witoka will be here later in April. Only essential persons should be on-hand when he's here.

Witoka: Mike Foerster, WØIH (written report) HF Antenna:

Recently, a member using the remote said it it wasn't working. The USB Video camera was messed up as well. I rebooted both the RCForb application as well as the camera app and they both came back. It doesn't happen often enough to warrant any work on it

ZS6BKW antennas. Added a capacitor and some 450 ohm line length to try to move the SWR for 20M back into the band on the Double Length ZS6BKW. I'd like to play with it more next fall when we re-install the double length antenna to add 160M back in. I moved the 750pf capacitor to the standard ZS6BKW and installed it between the guy wires, so we are ready for the growing season.

I also installed another Windows 10 update to the PC while I was there.

442.150 Repeater:

The 442.150 repeater seem to not be working too well. The power was down to 5w, so I changed it to 25w. The SWR on the output of the transmitter into the duplexers is about 2:1 and the SWR is 1.4:1 at the output of the duplexers into the antenna. I think that that stub is still giving grief!

Club's IC-718:

I got a Kenwood TS-430S for James Bickerstaff, KEØYMA, who has been using the club's ICOM IC-718, tuner and power supply. He is still using the power supply for the short term. The matching power supply for his radio will be ready soon. The radio and tuner will return to the Witoka tower.

Field Day

Following the ARRL recommendation to "punt" regarding Field Day, Mike Cizek, WØVTT, volunteered his gear if it would be possible to remote them like the club remote at Witoka.

Program:

The April program will be on Logbook of the World by Mike Cizek, WØVTT and done via Zoom. Paul will use the reflector to notify members of the virtual meeting and Bob will send a notice to the Hamgram list as well as make a note of it in the Hamgram.

Adjourn: 7:44 p.m.



Plans are afoot to make the Winona Amateur Radio Club's four Yaesu Fusion repeaters more valuable. Members including: Marv Rodvold, AC9TO, Ben Kuhn, KUØHN, Walt Kelly, KEØXI, Erik Brom, WBØNIU, and Les Hittner, KØBAD, plan to link repeaters via a MESH link. The club repeaters are in three places, at the KAGE site, Witoka, and on the ridge east of Bluff Siding.

The Internet-linked Multi-site Repeater System (IMRS) allows linking multiple repeaters for a local area network (LAN) direct communication between repeaters providing high quality digital and analog communications even when "all else fails."

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.
- ** Sunday Night Net-8:30 p.m.

Winona Amateur Radio club meetings will be via Zoom on-line meetings. See page 1 for details. 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

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, 202 Zephyr Circle, La Crosse, Wis. 54601 or <u>seaquist.robe@eagle.uwlax.edu</u> 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.

