

Hamgram

October 2018

Winona Amateur Radio Club
Winona, Minnesota

Waumandee Hillclimb operation “success”

Communications for the Waumandee Hill Climb Sept. 22 resulted in a near-perfect operation for Winona Amateur Radio Club members. Minnesota Austin-Healey Club race director Tom Hazen, as well as multiple other volunteers and participants, were very happy with how clear the communications were, and how smoothly everything went.

Minor challenges included having to invoke a backup radio at the starting line and minor issues with handhelds.

The race itself went smoothly with no reports of speeding on the return loop, and only action stopping when a car ran out of gas half way up the hill.

Participants included: Erik Brom, WBØNIU; Bill Chavez, KEØIJG; Paul Degallier, ADØUU; Dan Goltz, WKØW; Nancy Goltz, KAØPJM; Tom Hazen, KEØSQB; John Kowalik, K2OPT; Ben Kuhn, KUØHN; Dennis McGinn, KCØWMM; Marv Rodvold, AC9TO; Bob Seaquist, W9LSE; Cathie Steinhoff, KC9ZEZ; Lance Tagliapietra, ADØUT; Zhetta Thomas, KEØPKB; Jeridiah Wøti, ACØKO. In addition, Syed Faruque, ACØVA, Harro Hohenner, KG6RLM and Terry Peterson, WØEUU, couldn't assist that day but loaned equipment.

Next year, Ride the Ridges is the third Saturday of September, and Waumandee is the fourth Saturday.



Net control operator Erik Brom, WBØNIU, left, and radar patrol Paul Degallier, ADØUU, check out the NCS table.

Power Amp presentation Oct. 18

A 1,000 watt amp built by WØIH will be presented at the Oct. 18 meeting of the Winona Amateur Radio Club. Mike Foerster's amplifier is solid state, 50 volt power supply and Arduino controller.

The amplifier requires about 2 watts of drive to put out more than 1,000 watts.

The real magic is in the Arduino controller. As the rig changes bands, it also

changes the band on the Amplifier and sets the power output of the rig to a preset value.

In addition, there will be a recap and review of Waumandee Hillclimb operations.

The meeting is 7 p.m., Thurs. Oct. 18, at the Winona County Office Building, 202 West Third St., Winona.



Sundown for surplus

By Randy Cook, K6CRC

I have always enjoyed tinkering. I have hobbies that involve building and fixing things -- audio, Ham radio and an old car. Those hobbies mean gathering bits and pieces for projects, and usually hitting the junkyard or electronic surplus stores. And, cleaning the dust off after the trip. Always a lot of dust.

Fixing something or starting a new project meant a Saturday morning outing for parts. No doubt the place had what you needed, but finding it was an adventure. Sometimes the owner or clerk knew exactly what I was looking for, but not quite sure where it was. I spent an hour crawling through attic storage in a junkyard locating that rare Zenith carb. And, the owner was right, he did have one, and just one. When I restored a Harman Kardon tube amp, the high value power resistors needed were found on the back of a shelf at a surplus store, on top of the stack of Tektronix scope plugins.

However, surplus sales is a tough business, as so much will never have value, except as scrap. Modern electronics is now high volume SMT components and programmable parts, not through-hole and standard logic that gave us tinkerers a chance to easily create. Most old test equipment has been scrap metal for some time now. How many times have you seen it rain at an outdoor swap, and the vendors rushing to get stuff covered? But, they just left out the old HP test gear and Tek Scope tube plugins in the weather.

Starting 20+ years ago, the signs of change came. eBay set the "prices" for good stuff. Hagglng at swaps became "according to last eBay auctions."

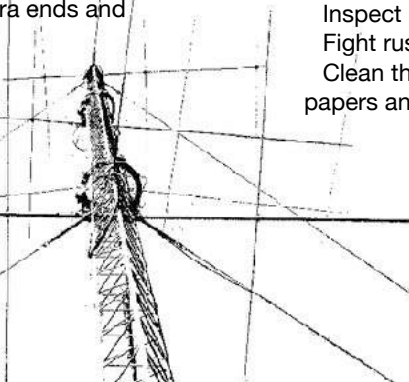
At the same time, electronic/Ham swaps hit the downward slope of the curve. No more Dynaco amps or boat-anchor ham gear. Just old PC motherboards and boxes of software obsoleted when Windows 95 was introduced.

Soon after, the death of electronic surplus stores started. My favorite Euro car junkyard just closed, the land will be part of a condo complex. Someone will turn the lights off on the whole "surplus" industry soon.

The "Maker" movement is a possible rebirth of the tinkering that made Ham radio such a big hobby. Exciting new tools and smart young people are rushing products into many old-line hobbies, such as Ham radio. Likely 3D Printing and Arduinos will be among the tools. At some point, I may be able to "print" that Zenith carb or Collins knob if needed for a restoration. So, one era ends and another begins.

Emotional levels of pile-up cracking

Indifference- "I don't need that country"
Curiosity- "Might be fun though"
Excitement- "I love a challenge"
Determination- "I'm on a mission"
Compulsion- "Lord, get me through"
Obsession- "I refuse to give up"
YESSSSSS!!!!!!- "The after-glow"



Testing opportunities

Winona

Thurs. Nov. 1, Watkins Hall, Winona State University.

Rochester

Thurs., Nov. 1, 6:30 p.m., American Red Cross Building, 310 14th Street SE, Rochester. Pre register with Bob Dubke, 507 398-5964 or email K0SIR@arrl.net. (Location may change if Red Cross sells the building)

La Crosse

Sat. Nov. 10, 9 a.m., American Red Cross, 2927 Losey Blvd S, La Crosse. Register five days in advance with Roger Reader, KA9BKK, 608-783-0723 or readers@centurtytel.net.

Ride The Ridges correction

Harro Hohenner, KG6RLM, was inadvertently not listed as a participant in the Sept. 15 Ride-The-Ridges communication effort though he clearly provided communications from the two Witoka locations.



Prepare for Winter

It won't be long before the beautiful, sunny, dry days of Autumn turn into bitter cold Winter and thus, easy repair and outside construction season becomes contest and contact season. That is if you took the time to make repairs and additions to your outside system.

Keep a station notebook so you're better prepared next September. Note whenever you add a piece of equipment, wire a gadget, note a problem, or fix a problem.

Check cables, power supplies, wires, ropes, masts, and everything else between the operator and the ionosphere.

Check RF cables, connectors, switches, and grounds.

Inspect antennas and outside feed lines. Use a pair of binoculars to check the antenna. Look for loose connections; unraveling tape, ties, or twists; damage to cable jackets.

Inspect ropes and guy wires.

Inspect masts, towers, and antenna mounts.

Fight rust with cold galvanizing spray paint.

Clean the operating table and equipment; clear away loose papers and magazines.

WARC Executive Board

Wednesday, Oct. 3, 2018, Watkins Hall, Winona State University
(Unofficial minutes)

Present: Paul Schumacher, KØZYV; Erik Brom, WBØNIU; Dan Goltz, WKØW; Mike Foerster, WØIH; Marv Rodvold, AC9TO; Lance Tagliapietra, ADØUT; Clare Jarvis, KØNY; Harro Hohenner, KG9RLM. Guests: Bob Seaquist, W9LSE; Tom Wilmot, WØMK.

Minutes: approved

Treasurer's Report for September (Harro KG6RLM)

Balance on 8/31/2018	\$2,193.04
Deposits:	none
Payments:	
Repeater Site Rental – Draskowski	
- \$100.00	
Outstanding checks	+ \$100.00
Balance reported by bank	\$2,193.04

President's comments: (KØZYV) Someone is needed to organize and teach the tech course this fall. Will look for volunteers.

Has a Ubiquity setup that can be brought to club meetings as a way to provide internet access.

The club website is still "down." He has a student willing to help Lance get the new one going.

Public Service (WKØW)

The committee has not formally met in a while, everyone on the committee has been active in planning, working or promoting our public service events.

There have been four major events we have actively participated in this year. Early in the spring there was a walk across the interstate bridge, the Trinona triathlon in June, and in September, the Ride the Ridges bike tour, and the Waumandee Hill climb. All these events were highly successful from the WARC point of view, both technically and in participation, and appreciated by the sponsoring organizations.

There have been several SKYWARN callouts, including one confirmed tornado. Emergency management and the National Weather Service in La Crosse have been happy with our responses this year. Our call out text/phone/email alerting system still needs to be fixed.

We have also been participating in the monthly County Emergency Preparedness meetings.

We have been asked to participate in the upcoming table top exercise with the railroad and all county emergency response agencies in November.

Ben Klinger, County Emergency Management director, believes there will be money in the EM budget to purchase a Yaesu FTM-400XDR to replace an aging dual band radio at the LEC and will allow us to utilize the full capabilities of the Fusion repeater and Wires-X box at the Witoka tower.

Our next project is to present to Emergency Management and County Dispatch a demonstration of our amateur radio capabilities. No time frame has been set.

Klinger plans to present a program on the state ARMER radio system at our Nov. 15 club meeting.

Buffalo County is updating its disaster plan and seeks a Ham organization to participate. Marv will coordinate with the county.

Repeaters (WBØNIU)

A group should visit the '835 site and give it a checkup. Planning an expedition Oct. 13.

The KAGE Fusion repeater is not working. Paul Degallier is checking it. If it does not work the board may consider trading it in for a new one with a built-in LAN. Cost would be more than \$500.

Witoka (WØIH)

The Witoka Tower 160m dipole antenna will need work this fall. The rope has deteriorated. Harro (KG6RLM) and I hope to get up there to replace rope and add newer stuff to the ends to support the antenna.

I have been working on a six position antenna switch, similar to the two position switch tried last year. The Arduino is mounted and the circuit built to drive the relays, using 6 2N2907 transistors. Surface mount capacitors are on the board for better RF isolation. There is a seven volt pre-regulator to keep all of the voltage drop from overheating the regulator on the Arduino. It's close to being done. We can use the code for the Arduino that Harro and I developed for the last one. The Arduino NANO is mounted on a socket so it can be easily swapped out. By simple modifications the code, we can use up to six different antennas, all through the current antenna tuner: 160-80 meters through 160m dipole & 9:1 balun (balun built by WØIH, works for the 160/80m bands). 40, 20 and 10 through the existing ZS6BKW antenna (similar to the G5RV antenna). Future installation of the club's HF beam for 20/15/10. Future 6 meter antenna.

The club HF tri-band beam has been rebuilt and currently is at the tower, sitting on the ground. I disassembled the traps and cleaned them. One trap had to be rewound. Two standoffs were stripped out and had to be replaced. I have a receipt from Mosely Electronics for \$25.45 for the parts that I had to order for the beam.

Mike, WØVTT, and I talked about mounting the HF antenna on the tower with a rotor, **not** initially installing a rotor box in the shack. The antenna would be pointed at Europe. Installing the rotor would allow us to add remote control later when we have the funds without having to go back up the tower to install the rotor. Mike thought that the ideal height for the antenna installation might be at about the 70' level.

I still need to make another trip up to the tower to backup the hard disk drive to the correct model of the drive. I have it backed up to an IDE drive, but it should be backed up to a SATA drive. This PC runs unattended and with the USB camera running, that the drive may go bad on us; it would be great to have a backup drive that we can quickly install.

While up at the tower Oct. 1 to investigate the internet being down, I noticed that somewhere there is a small fan that is making a laboring noise. We should investigate this some more.

WARC Executive Board

Tuesday, Sept. 4, 2018, Goodview Haven, 3655 W. 6th St. Winona

Minutes from August not read.

Treasurer's Report approved for August 2018

Balance \$2183.14

Deposits:

Dues \$50.00

Payments:

Picnic expenses – Dan Goltz \$27.36

Picnic expenses – Paul Schumacher \$12.74

Balance reported by bank \$2,205.78

Public Service (WKØW)

Preparation continues for the Ride the Ridges and Waumandee Hill Climb events, Sept. 15 and 22 respectively. A special meeting is planned for Sept. 5 to test equipment and make final assignments.

I met with Ben Klinger, Winona County Emergency Manager Aug. 22. He discussed county fair communications challenges and how we could help. He also volunteered to do a program for the club on the state ARMER 800Mhz radio system and how, while a very good system, it has some shortcomings. I told him I would help set up the time for him to do the program.

He mentioned the Nov. 5 table top exercise with the railroad and several agencies in Minnesota and Wisconsin that we will be invited to participate in. While only 5-6 people from each agency will be able to take part in this exercise, it is a

precursor to a full scale exercise that will be scheduled at a later date, and all interested persons from all agencies will be able to participate.

We have his permission to use any of the communications equipment his office can supply for our exercises or events. If we need 800MHz radios, we will be required to sign them out.

We are continuing to plan a demonstration of amateur radio for his office and the lead dispatcher. Bob, W9LSE has been active in this activity, and has already prepared a brief Power Point presentation and talking points to open the demonstration.

A meeting with Chris Cichosz, WSU head of security, is on hold while Paul KØZYV recuperates.

The October meeting will feature County Emergency Manager Ben Klinger discussing the ARMER system.

Bob, W9LSE, will prepare a PowerPoint on the ham radio capabilities of the club.

Repeater (WBØNIU)

'64 is tailing CP. Committee is working on it.

444.225 does not behave perfectly and the committee will investigate.

'835 APRS telemetry is inoperative

Education Committee (KØZYV)

Melanie, KDØNTM is working on a class for fall.

Website move was discussed and is still not complete.

WØNE Repeaters

146.640 PL 100.0 Hz *

146.835 PL 131.8 Hz **

444.225 PL 100.0Hz FM Voice C4FM Digital

442.150, 100 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 at the Winona County Office Building, 202 West Third St., Winona. The monthly program is open to the public.

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

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

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

Secretary: Clare Jarvis, KØNY, cjarvis@hbc.com

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

At Large: Dan Goltz, WKØW; Mike Foerster, WØIH

Dues: \$25 per calendar year per license holder. \$30 per calendar year for all licensed members of the same family within the same

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correspondence to: Bob Seaquist, 202 Zephyr Circle, La Crosse, Wis. 54601 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

