

Official Publication of the West Allis Radio Amateur Club

Hamtrix

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Volume 74, Issue 2 February, 2025

FEBRUARY CLUB HAPPENINGS



NUT NET 3.985mhz Monday-Saturday 8:15am CT

WARAC 4th Tuesday Breakfast At the Forum Layton & Hyw 100 at 8:30am

The Milwaukee-Florida Net time is:

7:15 – 8:00AM Central 8:15 – 9:00AM Eastern Mon through Sat Meeting
Tuesday February 11, 2025 7:00 pm
Community Center
14750 W. Cleveland Ave.
New Berlin, WI
Between Moorland and Sunnyslope
Presentations pg 9 more info

Tom Macon, K9BTQ - 2025 Wisconsin QSO Party

Brayden Irwin, KD9YVG - Foxhunt with the CAP Comp Squad

Premeeting dinner New Berlin Ale House 5:15pm 16000 W. Cleveland Ave West of Moorland Rd.



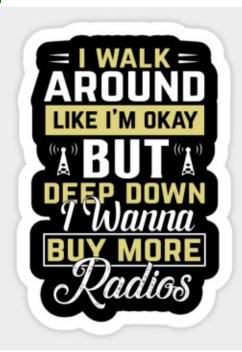
Wisconsin QSO Party March 9, 2025 1:00pm CDT to 8:00pm CDT

Sendik's Grill fundraiser May 17, 2025 September 6, 2025 11:00 to 4:00 pm At the New Berlin store

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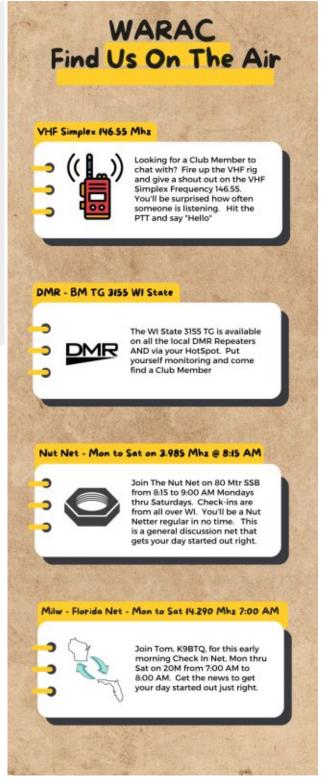


WARAC 4th Tuesday Breakfast

NOTE NEW LOCATION

Several years ago there was talk among Nut Net members that we should get to meet each other. A breakfast get together idea was started. It was open to all hams, XYL/partners and anyone who wanted to learn about amateur radio. Even visiting OM/XYL couples joined us.

So, on the fourth Tuesday each month at 8:30 am we meet at **The Forum Restaurant, corner of HWY 100 and Layton, Greenfield, WI**. Looking forward to seeing you, mark your calendar.





Mid Winter Blues

So January 29th delivers 50 Deg's and sunny skies. I found myself in a park at 1:00 PM like it the middle of summer. Did any one else take advantage of the awesome January thaw? Too good to say no to. For frosting on the cake, the bands were hot and fast. On the side. ľm counter planning on heading up to the UP in mid February for the Sled Dog races. Still have to scratch my itch for winter. The UP ought to do it. The last report was they were getting a bit of winter weather so there we go.

Last month's dinner

meeting at Pizzaman was a really nice event. Hope everyone had as much fun as I did. We do have a talent for scheduling those dinners on the coldest nights. The restaurant handled the group well and frankly the atrium space heating system was the star of the night.

In the big news department, WARAC was the recipient of a very generous \$1000 scholarship donation from the Miller Valley ARC. Sadly, they are closing the doors on there club after so many years. There donation was given in the spirit of furthering ham radio via education, outreach and camaraderie. Thanks to Dean Berglund, KC9REN, for thinking of WARAC for the donation.

In the sad new category, long time club member Ron Gorski, N9AU, passed away on Jan 16th. For our older members, Ron was a legend for decades. He made a couple of meetings last year, but his activities were very limited. Ron's technical knowledge and DX skills were top notch. Several members still have the Gorski Dipole antenna in use. I think the club still has one in storage. Keep Ron in your prayers. For the February meeting this month we have a couple of presentations. In anticipation of the March Wisconsin QSO Party, Tom, K9BTQ, will be bringing us up to speed on all the what, when, where and howto's for this ritual of spring sponsored by WARAC. The second presentation will be on the Civil Air Patrol Fox Hunt program by Brayden, KD9YVG. Looking forward to both presentations.

So hope you can make the club meeting. Plenty of room. Don't forget the pre-meeting dinner at New Berlin Ale House.

WARAC Social – January 14, 2025

Pizza Man 6:30 - 9pm 11500 W Burleigh St Milwaukee, WI 53222

Attendance: 26

Everyone enjoyed visiting and the good food.

Respectfully Submitted Bill Dargis KD9BJZ Secretary WARAC, January 14, 2025

WARAC Board Meeting Minutes – January 28, 2025

Board meeting called to order by Mike Johnson WO9B @ 7:00PM.

Present: Mike Johnson WO9B, Pierre Porter KD9SSY, Bill Reed N9KPH, Bill Dargis KD9BJZ, Tom Macon K9BTQ, Jeff Pahl W9JSP.

Mike reported. WARAC received a \$1,000 check for our scholarship fund from the closing "Miller Valley club". We are one of four clubs who received a check.

Treasurers report: Bill Reed

- 1. Financial status report. Approved.
- 2. Investment Account options where discussed. The club approched Carla Zevnik-Seufzer for information and ideas. She suggested talking with Charls Schwab to setup 3 Balanced Investment Funds that are pretty conservative. We are looking for higher yield returns, with minimum risk. The Board agreed we need to research this further.

Sendik's: The 2 dates haven't been set.

Field Day: Dave is still looking at possible site's for this year.

WIQP – Tom M: The new computer that was purchased crashed and was sent back. We are still waiting for its replacement. The old computer is still working. There should be no major problem with this years contest. **Scholarship**: \$1k check was sent to the ARRL to keep this years scholarship at \$3k.

Web Site – Mike is having problems getting it going. (Not a web master.) Will sit down with Feroz, to try and figure out the software(Wordpress).

Directory - Bill D.: Should be ready early February. e in Hamtrix on release.

Meeting place status: No update.

FTP site replacement – Pierre: The FTP site passes passwords and data in the open.(unencrypted.) Very poor security. Recommended to use Google Drive. Has more control and security. Better access control, file versions, can encrypt. Don't use an individuals personal account, create a club account.

Strategic Plan Development - Long Term

I. Improve Membership engagement.

Events, activities

- II. Re-image Scholarship Program.
 Increase the scholarship amount for 2026. Find donations. Do more fund raising. Look for sponsors.
- III. Form strategic Alliances.

 New Berlin What does New Berlin city or county need that we could possible provide with our club members. Mike plans to talk with the mayor in the near future.

February Program: WIQP, CAP Program.

Meeting Adjourned at 9PM. Respectfully Submitted Bill Dargis KD9BJZ WARAC Secretary, January 28, 2025

Contest Corner and DX Report Michael Falk, AA9RK

Welcome to February! What's on the air?

Last month I mentioned the CQ WW RTTY WPX Contest, February 7th through 9th. There is a lot of activity, stateside and DX, for that contest, and everyone can contact everyone else. Those of us with modest stations really like those rules. RTTY is a ton of fun, but it's not something to set up on the fly. Take the time before the event to try it out, and that gives you a better chance of success during the event.

For the full week after that, February 10th through 14th, the ARRL School Club Roundup will be on the air. It's a good chance to contact college and high school stations (mostly), all bands, all modes. The ARRL is just getting warmed up that week, because the following weekend (6PM Friday to 6PM Sunday) is the ARRL International DX Contest (CW edition). Lots of loud DX stations with big antennas will be on the air, so if you have a little station like mine, this is a great chance to fill your log with DX entries. There's also a Valentine's Day PSK contest (sponsored by PODXS 070) on the 14th. As long as you got your computer working on RTTY the weekend before, it's not a huge jump to switch modes to PSK31.

On the weekend of the 22nd and 23rd, you have a lot of options for more niche contests. The South Carolina QSO Party (Saturday) and North Carolina QSO Party (Sunday) are on the air from mid-morning until evening. If your top band antennas are in top condition, give the 2025 CQ World Wide 160-Meter contest (SSB edition) a try; it runs for 48 hours from Friday evening to Saturday evening here. Last month I wrote about the North American QSO Party's CW edition, and this month the RTTY edition runs on Saturday afternoon and evening.

For something completely different (and completely local), the Milwaukee Radio Amateurs' Club sponsors their FM Simplex Contest on Sunday afternoon from 1:00-4:00 PM. Our club has taken 2nd or 3rd place every year for the past four years, and one of our club members has been the high scorer among base stations for the past four years, so let's continue WARAC's strong showing in this great local event.

March 1 and 2, the marquee event is the ARRL International DX Contest (SSB edition), and it kind of dwarfs everything else on the bands that weekend. There is a Nova Scotia Amateur Radio Association contest, kind of like a QSO Party, on 80 meters, all modes. Nova Scotia's 18 counties are the multipliers.

And finally, March 9 is the date of this year's Wisconsin QSO Party. Once again, I will be a part of the WO9B team which will be mobile, activating many counties in southern, eastern, and central Wisconsin, and I hope to hear many of you on the air that day!

Here are your February Dxpeditions:

Africa:

9X2AW in Rwanda is a holiday-style DXpedition until February 15 on satellites and HF, 160-10 meters, all modes.

J52EC is putting Guinea-Bissau on the air for the entire month of February. Specifically they recommend 10 meter SSB for QSOs.

5H3DX is a holiday-style DXpedition from February 20-March 6th, and initial indications are that QSOs will be primarily on FT8.

TY5C Benin should be active the whole month, holiday style, with verticals and wires.

Indian/Pacific:

VK9AB, VK9QD, and VK9YB are activating Norfolk Island from February 22 until March 1, operating HF and also longwave (2200m and 630m, attempting world distance records). As you may be able to tell from the call signs, Norfolk is a territory of Australia, only 14 square miles and with a couple thousand residents, and nearer to New Zealand than to Australia

VK9XU, with German and Australia ops, will operate from Christmas Island from February 18 and March 4 (and then from Cocos [Keeling] the next week), all modes, 160-6m, with verticals, Hexbeams, and kilowatt amplifiers. Christmas Island is on the other side of Australia, in the Indian Ocean, just south of Indonesia, and with even fewer permanent residents than Norfolk.

See you next month,

-Michael AA9RK

Hamfest 2025

Buy/Sell Amateur Radio Equipment, Electronics and Computer Gear



Sunday March 16, 2025

Free Parking!

ADVANCE SALES: Admission: \$8 8' Table Space - \$15/ea AT THE DOOR: Admission: \$10 8' Table Space - \$25/ea

Amateur Volunteer Exams will NOT be offered this year Check in at the TCARC table for other local testing options



Presented by: TRI-COUNTY AMATEUR RADIO CLUB - W9MQB Talk-in on the 145.49- Repeater (CTCSS 123.0)

JEFFERSON COUNTY FAIR PARK ACTIVITY CENTER 503 NORTH JACKSON AVE JEFFERSON, WI 53549

- Vendors will be admitted at 6:30 AM
- · Vendors-only unloading zone on West side
- · Food and beverages available
- · General Admission and Sales begin at 8:00AM



Take 194 to Exit 267 (Johnson Creek), Head South on 26 to the Hwy 18 Exit. Exit East on Hwy 18 and turn left onto Jackson Ave. Look for the Fair Park sign.

Next year's date: March 15, 2026



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Register online at https://www.W9MQB.org/SwapFest

Mail-In Reservations require that we receive your payment BY MARCH 1" with a self-addressed, stamped envelope at:

TCARC Hamfest 2025, P.O. Box 321, Fort Atkinson, WI 53538

Questions? Call Michael Zore (A E9 MZ) at 414-455-549 3 or Email: ha mfest @w9mq b.org



WSJT-X Improved

Ham radio's favorite mode is driving me crazy. That is not completely fair, it is actually working very well, Though I am not a big user, I load it up fairly often in my quest to work DX. The Fox and Hounds mode is popular with DXpeditions, so therefore it is popular with me too.

The developers have fallen into a new feature release procedure which is kind of bugging me. They release new features via Release Candidate and follow up with final versions at a later date. While that is pretty normal, they seem to have forgotten to release the final versions for a very long time. So long that the DXpeditions are using the Release Candidate versions. In fact, the latest version of F & H's only works on the latest Release Candidate. :My irritation is that I prefer to not update all the time and usually only have the final versions loaded up. I've never had a problem with the Release Candidates, but they have this nag screen that pops up and new release candidates seem to show up every 6 weeks or so. Eh...

For reasons unknown, I have never wandered off the WSJT-X versions. Never tried the competitions versions. Just turned a blind eye and kept using the original only. I happened to catch a YouTube of someone praising one of the alternatives, WSJT-X Improved. It caught me at a weak moment and I gave it a try. Oh my. What a treat it is. No nag screen. Loads of clever useful features. No issue with the download or setup. A total treat. I suspect that users of other derivative versions (JTDX comes to mind) have been enjoying the same experience for quite some time.

The various user conveniences are too many to name. You really need to the explore <u>additional features</u> yourself to see what will be useful in your shack. Here are a couple that I found to be immediately worth my while:

<u>Band Buttons:</u> I am using these all the time. It's not a big deal, just a total convenience for changing bands.



<u>Wait Features:</u> Two operational features, Wait & Reply and Wait & Call. The first basically automatically replies to a station calling you. The second automates your calling of a station that is engaged with another station at the moment. I've found both of these features very helpful.

Many additional features as well. Take a look the software and info and give it a try.



---WIQP is just a month away on Sunday, Mar 9th. Tom will be bringing us up to speed on the latest info and changes for this year's WIQP Party!!



Brayden Irwin, KD9YVG Foxhunt with the CAP Comp
Squad
---In addition to his amateur
radio interests, Brayden is
also an active member of the
Civil Air Patrol. As a CAP
member, they participate in
FOXHUNT training events as
part of their SAR mission.
Brayden is going to tell us all
about it.

Editorial

The story of my new boot. It all came together when a shoe lace, steps and a fall happened

on 28jan25 I took a fall that didn't seem too bad. Iced it and raised the leg after a week seemed to have major swelling of the calf/foot.

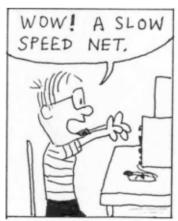
Judy thought we should go have it checked in an emergency room. With a little arm twisting we went and I got x-rayed, checked for clots, other damage. Did have a break in my small leg bone on the left leg. Then sent me home with no cast or anything. Did get a appointment with Ortho They found same but gave me the boot. HI HI another appointment next Wednesday. . . to be continuaed That's my report this month HI HI 73

Frank editor



ELMER

by Rich Regent, K9GDF









2024 Challenge for our membership. Have someone you meet, Ham or Ham wannabe come to a meeting this year!

RFI from Mars... Watch Out!

Tom Langer KD9FPC

In 1932, experts revealed astronomical objects emit radio waves. A system has been established that makes it possible to produce pictures from radio waves. Thus, astronomers are using radio telescopes to study radio waves emitted not only from planets, but also from specks of dust, gas clouds, stars, comets, and other galaxies. Who knows...you may have radio waves from Mars floating through your head right now! Live365

It is true, the demon RFI is universal. There's the "simple" kind we are always on the search for, and RFI that may be impacting us and we don't know it. In this next chapter on our space conquest we'll look at RFI (Radio Frequency Interference) and all of the impacts.

In fact, all objects produce RFI. That includes objects in space of which there are many. Consider...

• There are over 200 sextillion stars known to exist. Each radiating radio energy. Among them are pulsars, quasars and magnetars which each radiate a strong radio signal. We'll be looking at those in our next trip into space.

• Within our galaxy there are an estimated 100 billion planets. Each is generating radio frequencies. Our 8 all do... though I still say there's 9 because I include Pluto.

Guess you know I am plenty old!

• There are 130 million pieces of "space junk". Of those 40,500 objects measure at least 4". There are 1.1 million that measure from .4" to 4". All told, the scientists estimate there are 5,500 tons of garbage orbiting or floating in our space.

• There are 9,115 active satellites, most of which are from the U.S. They range everything from the Starlink satellites that operate like a train by staying in a single orbit trailing each other to government, weather, and communication satellites. Every one of them transmitting to earth. Talk about RFI!

There is a lot of RFI in the universe that is even known. We'll stay away from Quantum physics and the String and M theories here!

That's right. There is a star sending RF to the earth every 22 minutes that last about 5 minutes each time. And that has been the case for thirty years. Radio telescopes and scientists have been studying this situation for the entire three decades.

Now is a good time to study the frequencies where space can be "heard". First there is VHF, best known for the uplink and downlink from the International Space Station (ISS). Here are some more: Ultra-High Frequency (UHF) 100 - 10 cm Again, there are satellite radio frequencies here. And, it wouldn't be unknown that you may run into some space junk, especially at the higher numbers. The "magic line" that radio astronomy uses for hydrogen is 1420 MHz in the area of 21 cm. In other words, at 1,420 MHz you can bounce radio frequency off of the concentrated hydrogen line.

Super High Frequency (SHF) 10 - 1 cm, 3 - 30GHz. Getting out further yet, and may realize some planet noise here. This is the range typically used for radar, microwave both outward, and within our microwave ovens.

Extra High Frequency (EHF) 30GHz – 300GHz. Where you may find much radio telescope activity and "space noise". You will also find data transmission from earth to space and back.

Terahertz (THz) 300 -3,000 GHz or -1cm to 1mm. This is set aside for experimentation for things like spectrometry, experimental medical imaging, condensed matter physics and other science issues.

For example, there are bands specifically set aside for Very Large Array (VLA) antennas. The bands within the tuning range of the VLA which are specifically protected for radio astronomy are: 73.0-74.6 MHz, 322.0-328.6 MHz, 1400–1427 MHz, 1660.6–1670.0 MHz, 2690–2700 MHz, 4990–5000 MHz, 10.68–10.7 GHz, 15.35–15.4 GHz, 22.21–22.5 GHz, 23.6–24.0 GHz, 31.3–31.8 GHz, and 42.5–43.5 GHz. No external interference should occur within these bands. Source: National Radio Astronomy Observatory (NRAO/National Science Foundation)

By now I assume more than a few are asking yourselves "this is interesting, but what difference does it make to me?" The answer is plenty. On a few fronts. First, all of that noise you hear on your radio, especially the higher frequency areas does include "space noise". While we have a couple of more jaunts out to space left, we will eventually come back to earth and sort this out a bit.

Secondly, the frequencies listed above are protected VLA site restrictions. There are 28 radio telescopes in the U.S. None are located around us. The biggest is in New Mexico and is our VLA. Around the other sites there may be frequency restrictions for the narrow bands they operate on. While you won't get an FCC bad operator letter, you may be putting any of these units at risk for interference. Keep an eye open when you travel around the country and help these folks out.

Lastly, I just think it would be fun to create a "space scanner" and listen for the various radio frequencies. Or, try to operate against a known object. AMSAT has many people interested in this subject. I have had fun trying to work the various satellites. I have a goal of getting Earth-Moon-Earth (EME) one day. In fact I think I am on to an antenna design to make it happen. More on that later.

But, as you sit today reading this, I want to leave you with a thought. While we cannot see them, there are radio frequencies from our earth, planets, satellites, space junk and more swirling all around and through each of us. As stated at the beginning of this article... Who knows...you may have radio waves from Mars floating through your head right now!

Sources: NRAO, NSF, Live 365, European Space Agency, NASA, Space Magazine, MIT articles and many more and various.

DON'T KEY LIKE A PHONE MAN



CW Practice

One of the best and maybe the only way to get better at CW is practice. Having someone else who also wants to practice also helps. Just makes it more fun.

The West Allis Radio Club is going to try to help. We are running a CW practice net on Monday at 8pm The repeater is 147.045+ 127.3 the CW portion is on HF

Mike WO9B has been joining me and setting up some practice but we are open for suggestions on where to go with this. Come join us.

Officers and Board President: Mike Johnson WO9B

Vice-President
Pierre Porter KD9SSY

Treasure: Bill Reed N9KPH

Secretary: Bill Dargis KD9BJZ

Committee member(2) Jeff Pahl W9JSP Tom Macon K9BTQ

Past President: Feroz Ghouse WU9N

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