



Official Publication of the
West Allis Radio Amateur Club

Hamtrix

[click here to go to web site](#)

Volume 72, Issue 5 May , 2023

MAY CLUB HAPPENINGS



NUT NET
3.985mhz
Monday-Saturday
8:15am CT
NUT NET
Breakfast
8:30am fourth
Tuesday
of the month

Milwaukee-Florida Net
Every Day on 14.290 Mhz
7:00AM - 9:15AM ET
6:00AM - 8:00AM CT

Meeting
May 9, 2023 6pm
New Berlin Community Center
14750 W. Cleveland Ave.
New Berlin, WI
Between Moorland and Sunnyslope



MAY Board MEETING
Tues May 30

<https://meet.jit.si/WARACHamRadioClubVirtualMeeting->
Members are always welcome to come Observe board meetings.

Sendik's Grill Fundraiser
Will be on **July 15, 2023** and **September 9, 2023**
Save the dates and join us.

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WARAC

Find Us On The Air

VHF Simplex 146.55 Mhz



Looking for a Club Member to chat with? Fire up the VHF rig and give a shout out on the VHF Simplex Frequency 146.55. You'll be surprised how often someone is listening. Hit the PTT and say "Hello"

DMR - BM TG 3155 WI State



The WI State 3155 TG is available on all the local DMR Repeaters AND via your HotSpot. Put yourself monitoring and come find a Club Member

Nut Net - Mon to Sat on 3.985 Mhz @ 8:15 AM



Join The Nut Net on 80 Mtr SSB from 8:15 to 9:00 AM Mondays thru Saturdays. Check-ins are from all over WI. You'll be a Nut Netter regular in no time. This is a general discussion net that gets your day started out right.

Milw - Florida Net - Mon to Sat 14.290 Mhz 7:00 AM



Join Tom, K9BTQ, for this early morning Check In Net, Mon thru Sat on 20M from 7:00 AM to 8:00 AM. Get the news to get your day started out just right.

6 Meter Chat - Wed, Fri 50.160 Mhz @ 9:30 AM



Paul, W9PCS, hosts this informal 6m online get together on Wed and Fri starting at 9:30 AM. This is a round table discussion and everyone is welcome to drop by and join in.

WARAC General Meeting Minutes – April 11, 2023

Club Meeting called to order by Feroz WU9N @ 7:02 pm.

Attendance: 17 -- Members.

Minutes: Approved.

Treasury Report: Cash on hand ~ \$22,500. Checking, CD, Scholarship fund.

Feroz WU9N, Howard had a remote meeting with the ARRL on the current status of the scholarships Endowments investment. The bond, market had a loss. It did not provide the funds to award this years scholarship. A special Board Meeting was called to discuss the scholarship. The recommendation of the Board is – To not use club funds to award this years scholarship. This information was published in Aprils Hamtix, for the membership to discuss and vote.

Frank KA9FZR made a **Motion**: “We as a club. Do not spend an additional \$3,000 out of our funds to fund the WARAC Scholarship for the coming year. 2023” Seconded - Jerry K9HOG. Discussion: The Endowment normal \geq 4% return supports awarding a \$2k or larger scholarship. The Club has a Scholarship Fund in a CD. ~\$12k. We could use this to award a scholarship (1k,2k,3k ? Our choice). ARRL needs an answer by April 12.

Vote: 9 to 5. (Show of hands - Not to fund 2023.) Motion passed.

Howard WA9AXQ made a **Motion**: “To use the clubs scholarship fund to award a \$2k scholarship this year.” **Discussion**: Mike WO9B -The By-Laws – Section 7 states. “In order to obtain approval for extraordinary expenditures exceeding \$250, a proposal must be published in the next issue of the club paper. The expenditures may be approved by a two-thirds majority vote at the next meeting, provided a quorum is present.” - This motion can not be voted on today. Howard withdrew his motion. Howard will write a proposal to publish in Hamtix for next months meeting.

May is Trunk to Trunk. June is Field Day.

Chuck W9WLX: WIQSO Party summery.

Initial results. 501 logs submitted. 52,785 enteries.

205 in state (New Record). Band conditions – 80m decreasing, 40m going strong > 25k , 20m had 900 more then 40m, 15m was active, 10m had some, 2m - 833 which included 1 ritty, 914 on vhf compared to 100 last year, 2 on 33cm. 68 counties were active, 4 missing -Bayfield, Iron, Langlade, Rusk. All 50 States, 11 provinces. Club 9 entries, 11 participants.

Dave WB9OWN: Field Day - 10 weeks away. Field day filters worked well last year. Ugly duckling filter. A single band pass filter is ~ \$150. 8 week lead time. Duplerxers for 2 tx on 1 antenna. ~\$500. Field day set for DJ Mackie, 1 day -1pm to 8-9pm ??. Meeting are being planned.

Mike WO9B: Wednesday Park Op's. Tomorrow Lions park. 2pm for ~ 1hr. Bring a radio or just show up, have fun. Park location is posted on club Facebook page, Mike also does an email notification. See Mike if you don't do Facebook.

Feroz: Computers and the Ham shack.

How much computer do you need? Depends on what you are doing. The more you are trying to do, the more you need. Desktop/laptop – battery time? New/used. Keyboard/mouse – wired or bt. Motherboard, case size - slots, bays – expansion/upgrading, power supply rating. Multi monitors? Faster cpu I5 - I7. Video demand, multi video cards? More ram is better. Multiple hard drives/ssd. Real serial ports - irq's (some devices need - not usb). Usb2 - usb3 ports. More is better. Multi-audio cards. The need to do backups. Software demands. Get one you can add to and upgrade. Look at case air-flow - dust - cleaning. Water cooled. Shielding - qrm. Do what you can afford.

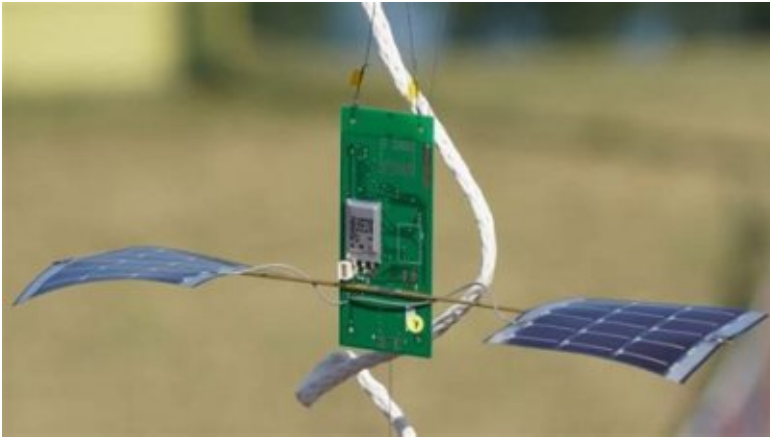
Meeting Adjourned at 9:07 pm.

Respectfully Submitted

Bill Dargis KD9BJZ

WARAC Secretary

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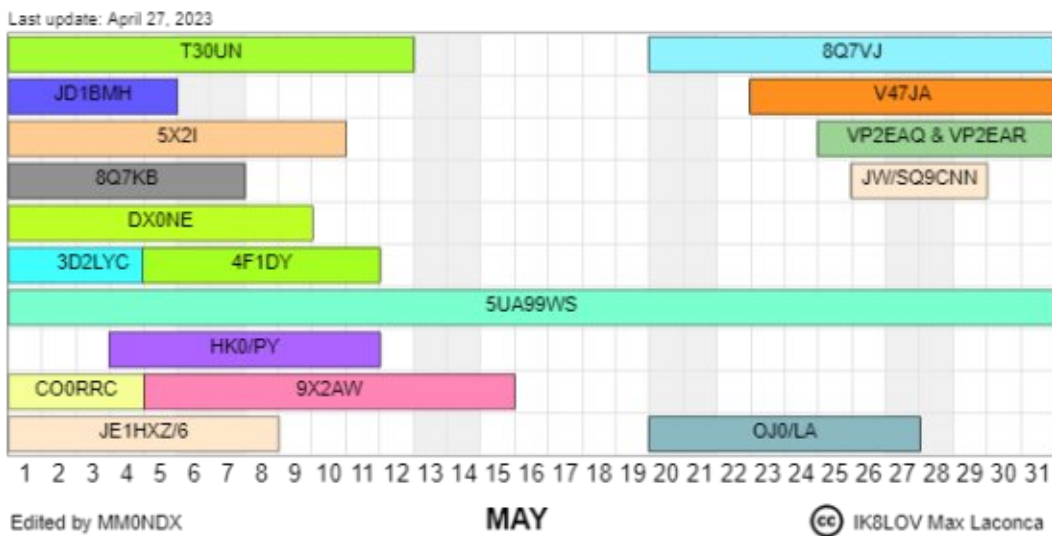




DX Update:

Spratly Is., DX0NE should be on the air now until May 9. This is a rare one. Good Luck!
T30UN, West Kiibibati, Tarawa Is, had generator problems at the end and were at 100 watts.
VU7W is now QRT
TX5S, Clipperton IS. will be on next year from January 18 to February 1.

DX WORLD.net
FEATURED DXPEDITIONS TIMELINE



CY9C, St Paul Is. will be operating next July or August with the same crew as CY0S.

Contesting:

QSO Parties this month: (There are MANY)

- 7th area QSO Party May 6-7
- May 6-7, IN, CT, ME, MA, NH, RI, VT
- May 13-14 Canadians AB, SK, MB
- May 20-21 AR

Checkout the Contest Corral on page 73 in the May, 2023 QST for **MANY MORE** contests.
There are more contests worldwide, check out: <https://www.contestcalendar.com/contestcal.html>

Special Event Stations:

For special event station listings (there are many) check out:
<https://www.425dxn.org/index.php?op=wcal>

If you have further ideas or suggestions for this page please let WA9BZW (Al) know.
wa9bzw@arrl.net



May 2023 * Hamtrix * By Michael Johnson, WO9B

Pi Star MMDVM Software Fork

Are DMR JumboSpot users considered "Appliance Operators"? Hard to say, but the venerable Pi-Star Digital Voice software package is, well, languishing of late. For those not familiar, Pi-Star (<https://www.pistar.uk/>) is the underlying software for thousands of digital voice (i.e. DMR/P25/YSF/...) hotspots in operation worldwide. It is open source and even if you didn't download it and install it yourself on your little jumbo spot, odds are good the person/organization/company you bought your's from did. They may have modified it, rebranded it, or massaged it, but most of them started with Pi Star. In the DMR world, it's been a good ride.

Alas, all good things must CHANGE. My relationship with my hotspot these days is decidedly arms length. I don't check it very often to keep it up to date with the latest firmware/software updates. It just works in the background when needed. It's typical of linux software. It just chugs along with little need for attention. So when I went to finally check it, alas what is this, no updates? It turns out Pi-Star is well, on the slow go road these days. No significant updates or version changes for better than a year. I'm not sure the reason, but Andy Taylor (MW0MWZ) has slowed development to a crawl. That's ok, he has done magnificent work with the project.

Into this vacuum walks Chip Cuccio, W0CHP, and he has got some new ideas. Oh yes. Chip is the driving force behind W0CHP-PiStar-Dash (<https://w0chp.net/w0chp-pistar-dash/>) a rewriting, reimagining, feature rich update to the venerable Pi-Star. It's big, bold and requires a generous amount of processing power to operate.

I'm itching to plug it in, but I'm short a capable Raspberry Pi at the moment. I'm waiting in line with the rest of the world for a Pi Zero 2 W unit and then I'll be off to the races. The features are crazy and fun. Check it out and just maybe jump on board.

The Ozaukee Radio Club presents its 43rd Annual Spring Indoor
Amateur Radio, Electronics & Computer



SWAPFEST



featuring TOWER ELECTRONICS!

Saturday, May 6, 2023 – 8 AM to 12 PM (setup begins at 6 AM)

Ascension Columbia St. Mary's Center (Milwaukee Curling Club)
 W67N890 Washington Ave., Cedarburg, WI 53012

Talk-in: 146.97 MHz – PL 127.3 Hz

Door Prizes! Free WIFI

Food sold by Cub Scout Pack 586, returning from 2022!

Admission: \$7.00 at the gate

Children 12 and under FREE, with a paid adult admission

6 ft. Tables: \$12.00 in advance, \$15.00 at the door, if available

Use the Order Form below, email, or call Tom Trethewey, KC9ONY at 262-421-6351

Email: swapfest@ozaukeeradioclub.org

More information: <http://www.ozaukeeradioclub.org/> or <http://www.facebook.com/orcwi>

For Advance Tickets and Tables, send check with a **SASE** (Business-Size #10 envelope) to:
 Tom Trethewey, KC9ONY- W69N905 Evergreen Ct N, #202, Cedarburg, WI 53012-1170

Name: _____ Call sign: _____

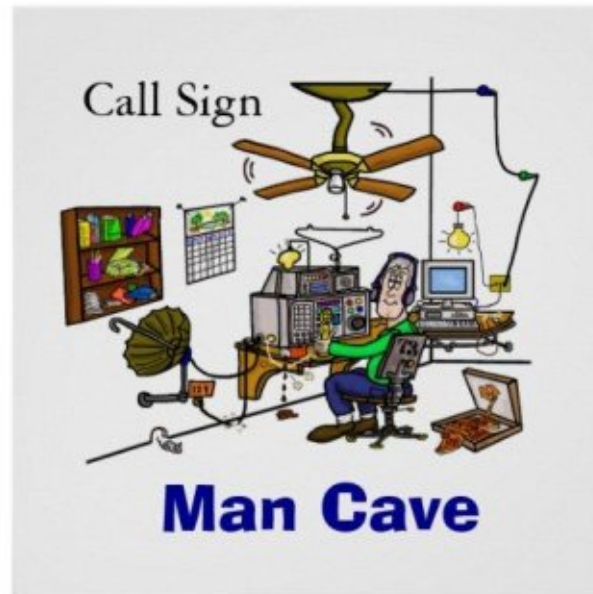
Address: _____

Phone number: _____ Email: _____

No. of Tickets: _____ X \$7 = _____ (Advance tickets are double stub)

No. of Tables: _____ X \$12 = _____ Electricity: Yes (Add \$5) _____ No _____

Total Amount: _____ **(Please make checks payable to ORC)**



2022 Challenge for our membership. Have someone you meet, Ham or Ham wannabe come to a meeting this year!



Nut Net Breakfast

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 Gensis Restaurant, corner of HWY 100 and Beloit Road, Greenfield, WI. Looking forward to seeing you, mark your calendar.

Phil, W9NAW

WARAC 2023 FD sub-committee news as of May 3, 2023

1) Gil WB9TFH and Donna WB9TFF have kindly offered to fill in as our VHF station again this year. By the way Gil is very knowledgeable on DX'ing, he has earned his chops and we are lucky to have his advice, ask away.

DXCC; Mixed, RTTY, Phone and CW

Single band DXCC; 10m, 15m, 17m, 20m, 40m.

DXCC Challenge Award, initial 1000 slots/band fills.

DXCC totals worked, 301

2) Anybody else interesting in operating another Field Day station? Think about it.

3) WARAC club has ordered and received 2 band-pass filters from VA6AM.

<https://va6am.com/2019/04/10/low-power-bpfs/>

The build and performance of the 40m and 20m filters are excellent. Pavel VA6AM is easy to deal with, immediately answers questions and communicates at every step of the purchasing process. I bought 2 band pass filter kits from him, the parts, toroids, caps and PCB boards are of excellent quality.

4) I recently acquired Rigol RSA3015N Spectrum Analyzer with tracking generator, this is a nice addition to the hamshack. I plan on bring this instrument to FD site to measure RF receive levels at each transceiver site.

73's Dave Garnier - wb9own

Ham Radios in Space

from https://science.nasa.gov/science-news/science-at-nasa/2000/ast21aug_1/

NASA's Space Amateur Radio Experiment is connecting students and ham radio operators on Earth with astronauts in Earth orbit.



August 21, 2000 -- For most amateur radio operators, it is the thrill of a lifetime to receive a "CQ", or general call, from an astronaut in space. But for some, like former astronaut Dr. Owen K. Garriott, call sign W5LFL, the thrill comes from receiving a response from "hams" down on Earth.

Garriott, who has been an amateur radio operator for over 40 years, was the first astronaut to take a ham radio into space, pioneering the way for an increasingly well developed amateur radio space program.

"It was my good fortune to take the first amateur radio into space on STS-9 in November 1983," Garriott said. "In my spare time only, I managed to hold up an antenna to the window and to talk to amateurs on Earth."

This contact was the first communication between astronauts and people on the ground outside of "official" channels, which are usually reserved for presidents and heads of state.

Above: Owen Garriott pioneered the use of ham radio from Earth orbit during his "spare time" on shuttle flight STS-9. Now, the Space Shuttle frequently carries amateur radio equipment into space where astronauts communicate with students on Earth below. [more information]

Hams, as amateur radio operators are often called, use radio transmitters and receivers to talk to other hams all over the globe, as well as to those in space. There are more than 1.5 million licensed hams worldwide, including more than 400,000 Americans.

Every radio amateur must be licensed by the Federal Communications Commission (FCC). In order to obtain a license, a ham must pass an examination, which includes questions about radio theory, rules and regulations, and International Morse Code. There are three grades of licenses, each at progressively higher levels of proficiency: Technician, General and Amateur Extra. Any licensed ham can chat with the Shuttle.

Once the examination is passed, the FCC issues the amateur operator's call letters. The first letter indicates nationality. In the United States, the first letters are A, K, N, or W.



Garriott had originally proposed the idea of taking a ham radio into space on his first space mission, Skylab 3, but was unable to due to timing and other complications. Ultimately, though, he persisted and was able to obtain permission to fly a small hand-held transmitter/receiver aboard the Space Shuttle Columbia.

Left: This is U.S. Astronaut Owen K. Garriott - W5LFL - aboard the U.S.

Space Shuttle Columbia STS-9. He is holding a Motorola two meter FM ham radio.

"When in orbit over land, I could make a CQ, which is a general call, and see who responded," Garriott said. "I used a well-designed, hand-held antenna, known as a 'cavity antenna', which could be velcroed to the window. It was about 24 inches in diameter and looked somewhat like a large aluminum cake pan. The transceiver then connected to the antenna."

In addition to the general calls, Garriott had made a few plans to send out a call to specific Earth-bound hams at prearranged times and dates.

"I had specified particular times and frequencies beforehand," Garriott said. "Among others, I was able to speak with the Amateur Radio Club in my hometown of Enid, Oklahoma, with my mom, with Senator Goldwater, and with King Hussein, who was an avid ham."

Since that first voyage into space, NASA has continued to see the usefulness of bringing ham radios into space, and astronauts have been able to speak to hams on earth on dozens of shuttle flights, as well as on the space station MIR.



"There has been substantial amateur radio activity in space since I first brought one up," Garriott said. "There is now a program called SAREX that is allowing for more and more activity."

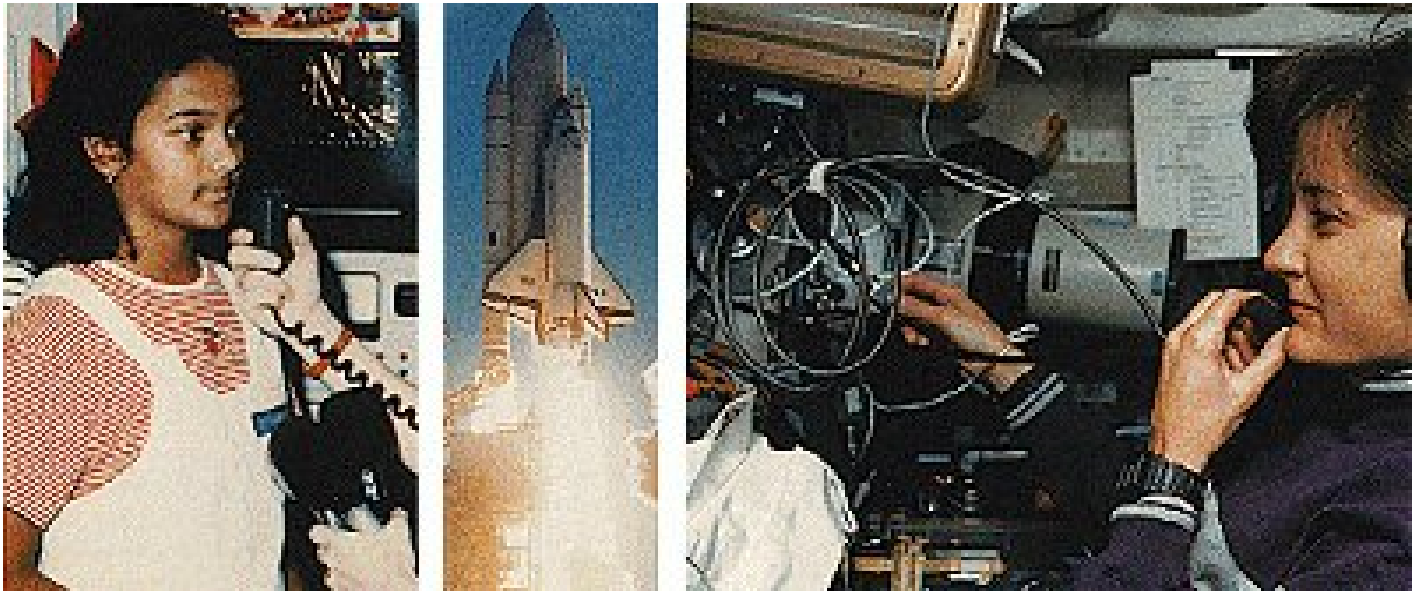
The Space Amateur Radio EXperiment (SAREX) is a long-running program to use amateur radio equipment on board the Space Shuttle to involve students in exchanging questions and answers with astronauts in orbit. Students in hundreds of different classrooms across the country are able to ask the astronauts questions about space flight and the experiments being conducted on the mission. It also allows for communication with amateur radio operators on the ground.

Above: Now that's a ham rig! ("Rig" is ham radio slang for an amateur radio operator's transceiver and antenna.) This photograph of the Space Shuttle Atlantis docked with the Russian Mir space stations was taken by Nikolai Budarin from a Russian Soyuz spacecraft on July 4, 1995. During this mission astronauts answered questions from school students over amateur radio. [more information]

SAREX is sponsored jointly by the American Radio Relay League (ARRL), the Radio Amateur Satellite Corporation (AMSAT) and NASA. Students and amateur radio operators can attempt to contact astronauts flying on a SAREX mission through voice, packet (computer) radio, or television, depending on what equipment is flying on the shuttle and on what equipment is available on the ground. According to the ARRL web site, SAREX missions are planned to begin again during the fall of 2000, and schools can apply to be contacted during the space flight.

In addition, in 1997, NASA approved plans to include amateur radio equipment as part of the payload of the International Space Station (Amateur Radio on the International Space Station or ARISS). Since astronauts will have more time in space while on the ISS, more opportunities for ham radio contacts will exist.

"Shannon Lucid used a ham radio while on MIR," said Garriott. "NASA saw how using an amateur radio would be a good thing for astronauts to do in their spare time on the space station."



Above: Onboard the Space Shuttle Endeavour, astronaut Linda M. Godwin (right) talks to students (left) via the Shuttle Amateur Radio Experiment (SAREX). The payload commander, as well as several other STS-59 crew members spent some off-duty time using the amateur radio equipment to communicate with "hams" and students on Earth.

And certainly hams on the ground are eager for contact with the astronauts. Specially designed shuttle "QSL" cards, which are postcards used by hams to confirm two-way contact or reception of a signal, are among the most prized in a ham's collection -- even to a king.

"(King) Hussein regarded his 1983 contact with Owen Garriott, W5LFL, on board Space Shuttle Columbia, as a high point in his amateur radio career," reported ARRL Executive Vice President David Sumner in a special bulletin following the death of Jordan's King Hussein, JY1. ("JY1" was King Hussein's call sign.)

Schools interested in learning more about SAREX and how it can work with their academic programs should visit the ARRL web page: <http://www.arrl.org/sarex/sarexnew.html>.

Web Links Space Amateur Radio EXperiment - SAREX is a long-running program to use amateur radio equipment on board the Space Shuttle to involve students in exchanging questions and answers with astronauts in orbit.

Amateur Radio on the International Space Station - ARISS will extend the SAREX program to the International Space Station

From the Editor

Things are happening in the club. Our popular Wednesday park activation has resumed. We had one at Greenfield Park last Wednesday, smaller than normal turn out. Still fun. I set up the rig and sent out CQ's, no takers. Better luck next time!

Trunk 2 Trunk is happening this meeting. Even with less than perfect weather last fall we had a good turn out and had fun. Join us if you can. Spring cleaning is a good excuse to lighten your basement load HI HI.

Things that keep my mind warm: The other day I was thinking how wide the possibilities for communication is in ham radio. CW can be done with nothing more than a spring loaded light switch which can still be used on many of our radios, even the expensive ones The same mode can also be done with computers that can read and send the code.

Amazingly CW is still a good way to get info through during rough conditions. There are now digital modes that can do better under poor conditions but they need at least a personal computer and a accurate time source. Those things not easily carried in ones pocket!

This is more a question then a thought. Has anyone had a contact with the Space Station? Not talking about a scheduled one which is amazing in itself. My reading suggest that during the astronauts off time they are allowed to play ham radio. Considering generally there is only a 10 minute window to talk, I wonder how that works. Do they let people know when they might be on and what frequency? Do people just monitor frequencies and hope for the best? If anyone has any experience let me know or better yet write an article!

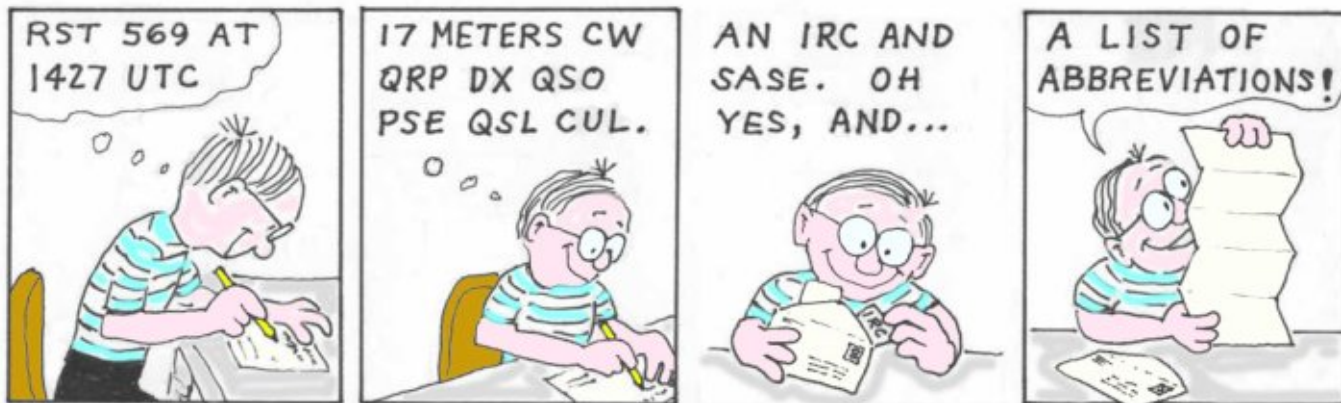
Enough for now.

73

Frank KA9FZR

ELMER

by Rich Regent, K9GDF



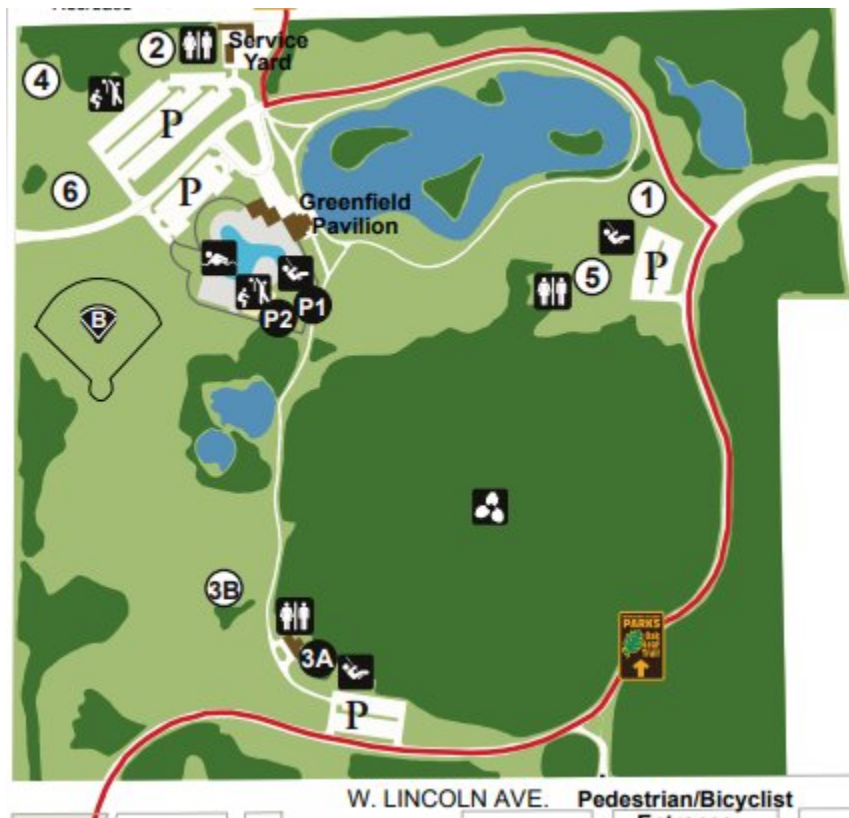


2023 May Notes

The 2023 Season has officially started. Strap on your roller skates. Charge up those batteries, Dust off your Wednesday Go to Park Gear and saddle up!!

By the time you read this we will have one Wednesday Op in the bag for 2023. It's been a long winter, cold/wet spring and by gosh I'm all set for the season to begin. As we've discussed the format will be the same as past years. Every Wednesday at 2:00 PM. Watch the West Allis Facebook page for the location. OR JOIN THE MAILING LIST. What could be easier.

As we enjoy doing, we are starting the year at Greenfield Park, Picnic Area #5. A wonderful shelter with close by parking and all the amenities necessary for an afternoon social. Not to mention a few trees to hold all those wires.



The best part is though we don't know what the weather will be like, we do know there will be an unbroken string of Wednesdays available throughout the summer. Pop in and grab your spot on the bench. We move around every week but there is always room for more folks to join in.

If you aren't on the mailing list, send your request to mike@palomonet.com and you'll get the email.

DON'T KEY LIKE A PHONE MAN



SLOW SPEED CW QSO NET

Monday's - 8:00 PM - WBOAFB Repeater 147.045 + 127.3 Tone

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.

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Vice President
MikeJohnson WO9B

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Treasurer
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