



Lakeshore Repeater Association, Inc.

KR9RK.ORG / KR9RK.COM

Newsletter

April 1, 2024

The Lakeshore Repeater Association was first organized 49 years ago.

LRA Membership stats: We are 109 members strong!

KC9REN - Dean Berglund joined our ranks in March. Welcome Dean!



From the board

Contact the board members via email at Board@KR9RK.COM

We ask for your support by attending our April activities: YMCA Kids Day, two NOAA training sessions, and of course the membership meeting on April 30.

Our MIA committee happily reports a slowdown in malicious activity during March. Be aware that even a couple of unidentified "kerchunks" activates our network of volunteers.

The MIA group has developed quite an effective tracking system over the past year.

Allstar and DMR "kerchunks" are immediately and automatically identified.

Volunteering



Call For Volunteers:

Volunteers are still NEEDED for these KR9RK Activities: Teaching session scheduler, Taste of Field Day, YMCA Kids Day, June Freefest (cosponsored with LAARC), End of Summer Picnic...

Our committees sometimes have long, very informal discussions about lots of topics, especially club activities. These are fun, on-line conversations.

If you feel left out of these conversations, it doesn't mean they're veiled in a conspiratorial cone of silence with secret handshakes... IT MEANS YOU HAVEN'T VOLUNTEERED!

Contact any board member or committee chairperson for more information. <u>Attending our quarterly meetings is necessary but it is not sufficient.</u> If you don't join in, you're missing out on a lot of fun.

Quarterly Meeting Presentation:

Our April quarterly meeting will begin with a presentation following on the great one last month from Greg, W9GTH.

If you have something to share with the group, and would like to present, please contact Dwayne or me.

Quarterly Member's Meeting April 30, 2024



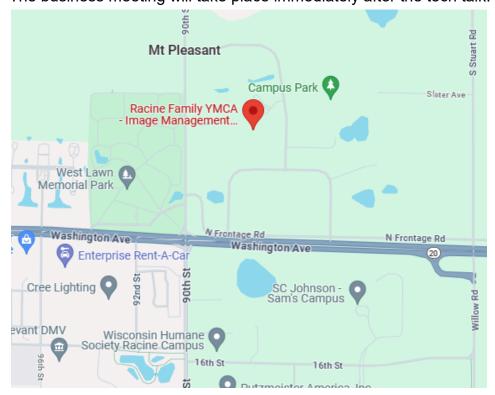
NEW HOURS! NEW LOCATION!

Our next quarterly open membership meeting will be held at a **new location** this quarter. Doors will open at 6:30pm and **the tech talk will begin at 6:45** sharp. Members physically present and in good standing for more than 30 days may vote on issues brought up at the meeting.

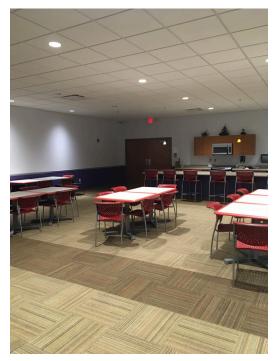
We will have a 30 minute tech talk at the start of this meeting led by one of our

members so please note the change in starting time and

IOCATION. YMCA Meeting Room at 8501 Campus Drive, Mt Pleasant, WI 53406. Enter at the main entrance and check in with the front desk. The business meeting will take place immediately after the tech talk.



Our new "LRA Clubhouse" is very well equipped with a full kitchen, etc. There is seating for about 35 of us in the standard configuration with extra folding chairs available if needed:





Upgrade your license now!

Please do not forget, the Racine ARRL VE testing team session will take place on the first Saturday in April 4/6/2024 at Faith United Methodist Church at 1013 Harmony Dr, Racine WI, 53402 between 9 and 11am.

Ham Radio Boot Camp

MRAC organizes the HAM Radio Bootcamp twice a year. First one is coming up on April 13th. Please check MRAC web site for details: https://www.w9rh.org/ham-radio-boot-camp/

NOAA Weather Spotting Training sessions (presented by NOAA):

The Link for SkyWarn Training,

https://www.meted.ucar.edu/education_training/course/23 also once completed, please email, SkyWarn@KR9RK.com so they can be marked that they have completed the training.

YMCA Healthy Kids Day



Join us at the LRA booth April 21 for the YMCA

Healthy Kids Day event. Pre-Registration is required.

YMCA Lighthouse Run Saturday, June 15, 2024



Ham Radio Operators have always provided communications for this event. Volunteers are needed again this year. 6AM to Noon.



LRA Member Activities:

Foxhunts





Check out the Fox Hunting article in **ON THE AIR** magazine

March LRA Fox Hunt Report (**Matt, AF9Q**)
March Fox Hunt took place on the second Saturday of March (3/09/2024)

This time, hunters were looking for two hidden transmitters. Matt - AF9Q and daughter Emily hid with one drive up transmitter 1 and Jeff - KC9JOB hid a walk up transmitter 2 in the park.

Transmitter 1 was a high power radio and it was found in following order: Matthew - KC9UPR and Rick KC9UJO from the "Green Eggs and HAM" team, Rick - W9ABE, Carter - W9ERR and Dean - KC9REN from "Team MRAC" arrived at transmitter 1 not long after, followed by Fred - K9SO with Mike - K9MWG from team Beer Battered Boys. Gene - WB9ZKY with Bonnie - WB9ZKX, Mary - N9ZWE and AI - N9ZWJ from Team Haney, were next followed by Wiliam - WM9V.

Finding transmitter 2 was a bit more challenging but it was found by teams in the following order:

Alex - N0MON with his wife were the first, followed by Green Eggs and HAM, Wiliam - WM9V, Team Haney, Team MRAC and Beer Battered Boys.

Thank you guys for participating, it was fun!

Next Fox Hunt will be on the second Saturday of April 4/13/2024. We are meeting for breakfast at Meadows Family Restaurant in Franksville at 8am. Fox leaves to hide at 9am. The hunt starts at 10 and ends at noon. Transmitter frequency and other details will be provided directly before the hunt.

I appreciate "early chicken's" for the hunt as this helps me better prepare and make sure everyone has fun! Please send me an email to secretary@kr9rk.com let me know that you are interested.

Matt set up a new Fox Hunt Group on Groups.IO https://groups.io/g/LRAFoxHunt/topics Contact Matt to get set up.









Bernie, N9AZA, is our SKYWARN coordinator for the LRA. The winter months are a great time to get your certifications. Bernie coordinated a great, well-attended presentation to the membership in January.

We have two training sessions scheduled for April at the new LRA "clubhouse" (YMCA). It is important that the membership supports these NOAA-sponsored events. On Monday April 08. 2024, and Monday April 15th, 2024, at 18:30 (6:30pm) YMCA Meeting Room at 8501 Campus Drive, Mt Pleasant, WI 53406.

Happy Hour, LRA Style









The "UN-NET" is hatching many more "Chickens" almost every day. **A new record** was set last week when K9SO, as moderator, logged in 61 participants blasting away at the old record of 54.

Incidentally, **Tom, N9BUN**, started this "Chicken" thing. Everyone used to jump in and say "Check-in" very fast. Tom started to say "Chicken" and it caught on.

Going on its 4th year, this is a fun, largely unstructured but moderated "Un-Net" where the moderator writes the often crazy rules. Check in **every day** after work with your call sign and share your happy thoughts. This group meets daily on both the 442 and 147 Allstar linked repeaters at 5:00pm sharp and lasts for an hour. Be prepared to share your happy thoughts for the day. It is moderated regularly by **K9SO**, **K9WBT**, **KC9UJO**, **N9PYA**, **and KD1Z**. The beautiful FAT SQUIRREL certificate, courtesy of **Dave**, **NP2I**, is awarded for 100 HH check-ins and there are 68 of them decorating hamshack walls as of today.

ARES/RACES AND LRA PUBLIC SERVICE NET.





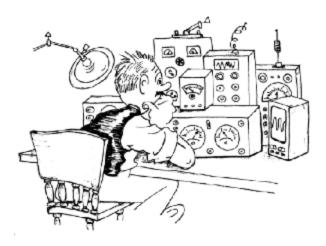
Join us every third Wednesday of the month at 7:30pm on our 2 meter repeater for an ARES/RACES net followed by public service announcements. Please visit [ARES/RACES website] for more information on how to become involved and serve the community.

Saturday Breakfast



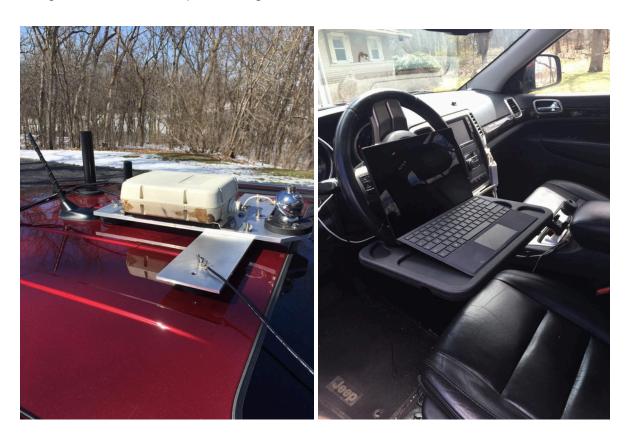
Many of our members meet for an informal breakfast every Saturday morning at 8:00am at the Meadows Restaurant in Franksville. Everyone is welcome.





Member Activities

Fred, K9SO, built a POTA station into his car including a roof mounted antenna tuner using a **KC9JOB**-built special mag mount unit:



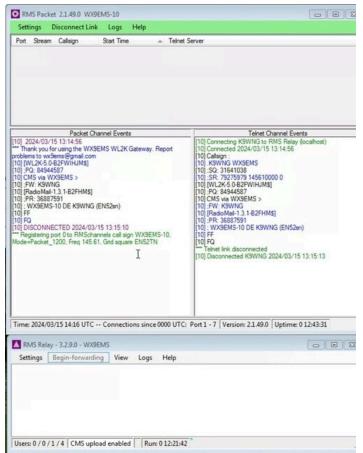
I did my first activation at Munster State Wildlife Park on 3/29.

Dan, WX9EMS got his APRS station working again with a new antenna and a picture of "the business end":





Here's the proof (exchange between K9WNG and WX9EMS):



Jack, W9LOL, mentioned the ARRL eclipse party and propagation test to be held April 8:

https://groups.io/g/HHtheUnNet/message/3139

Get On the Air April 8 for the Solar Eclipse QSO Party

Contribute to ionospheric research while having fun on HF.

McKenzie Denton, KO4GLN

An extraordinary celestial event is set to occur over North America on Monday, April 8, 2024, where the sun and moon will align in a total solar eclipsel This date marks the next Solar Eclipse QSO Party (SEQP) for hams interested in HF operating or contributing to studies of the ionosphere (or both). Sponsored by Ham Radio Science Citizen Investigation (HamSCI, https:// hamsci.org), the SEQP invites amateur radio operators to participate in an ionospheric research initiative. transforming routine radio exchanges into valuable scientific data. Operators of all experience levels, with stations small and large, are invited to make contacts on a variety of modes and bands during the SEQP. The contact data will help researchers unravel the mysteries of our planet's upper atmosphere and its interactions with the sun.

An Opportunity to Contribute to Radio Science

The 2024 SEQP is an event that no serious amateur radio enthusiast should miss because it's the last total solar eclipse visible from the contiguous United States until 2044. This event is a unique blend of scientific pursuits and radiosport. Amateur radio operators will have a chance to experience the changes to radio wave propagation when the moon's shadow temporarity reduces the amount of solar radiation reaching the ionosphere during the eclipse. This initiative is not just about radio contacts; it's also about building a vast repository of data relative to the time of the eclipse passing overhead, such as who contacted whom and when, where they were located, and on which bands their contacts occurred. Networks, such as the Reverse Beacon Network, PSKReporter, and WSPRnet, along with individual logs, will yield invaluable insights into the ionosphere's behavior to researchers. This event could be a transformative moment for amateur radio enthusiasts and scientific discoveries.



Paul Christy, N2GN, operated during the 2017 SEQP using solar power from the Rockford Lake State Recreation Area in Beatrice Nebraska. [Denise Christy, KE2MVM, photo]

Amateur radio operators will submit logs that contain details such as frequency, mode, contact times, and signal reports to the HamSCI team after the SEQP. This information will be combined into a comprehensive database for preliminary analysis, which ensures completeness and consistency and identifies any anomalies. Then physicists, engineers, and other scientists collaborate to analyze this data pool rigorously. The focus is to observe the ionosphere's reaction to the solar eclipse by identifying shifts in signal propagation. Integrating the data with other sources, such as the Reverse Beacon Network, PSKReporter, WSPRnet, and other (non-amateur) data sources, can achieve a more detailed understanding of the ionosphere. The findings will be shared at conferences, published in scientific journals, and made available to the public, thus advancing global knowledge about the ionosphere and its impact on radio communications.

HamSCI's Recognition of Hams' Contributions to Science

As the solar eclipse nears, it's essential to acknowledge the valuable contributions of amateur radio op-

I was proud of **Dwayne**, **N9PYA**, when he shared a picture of the inside of his dipole balun. QRO IS THE WAY TO GO Dwayne! I'll paraphrase the old Ham saying "If your balun doesn't burn up after a year, you haven't been running with enough power."



Soon to join the burn down a tree club?

Brad, **K9WNG**, sent us a message:

So you find yourself in Walworth County and want to check into happy hour but all you have is an HT? Here's what you do.

- 1. Find a spot where you can hear 442, this might take a little driving around.
- 2. Use the Walworth RX site (Tone 114.8 on 447MHz)
- 3. Checkin/chicken

What's that in the background? Looks like an old Bell Labs Long Lines tower....



Dan, WX9EMS, came up with a unique way of hiding his new 5 element Yagi from the XYL:



Fred, K9SO shared this story about "Fred Water":



I used to keep two bottles of "Fred Natural Spring Water" on my office desk at Motorola. I had opened one of them and added a single drop of yellow food coloring to it. Invariably, some visitor would ask me what the difference was between the clear one and the tinted one. I would pick up the yellow tinted water and say:

"This one comes from my own spring" and take a swig.

Ufer Grounding:

Jason, K9QKL and I had a brief conversation about tower grounding one March morning. One often overlooked fact is that the concrete in the base itself can be used as a ground. Concrete, by its very nature, is basic (high Ph) so there are many free ions in the solidified mixture. The idea is to connect the tower base to the rebar using a piece of rebar that sticks up out of the cement.

This is actually code for many slab houses and is defined by the NEC. While most tower bases won't meet the 20 foot specification in the NEC code, it is a simple and zero cost way to get additional tower grounding and lightning protection. It is generally not a good idea to run a copper wire inside a concrete base due to electrolysis. Use rebar or steel.

Don't forget additional ground rods at the house entry point (your single point of grounding your equipment) and it is imperative that these entry point grounds be connected to the house electrical ground through a heavy gauge wire (#6 or larger). Lightning arrestors should be at the entry point and not out at the tower.

Brief history of the Ufer Ground

Herbert G. Ufer was an engineer at Underwriters Laboratories (UL) who assisted the U.S. military with ground-resistance problems at installations in Arizona. His findings in the 1940s proved the effectiveness of concrete-encased grounding electrodes. The military required low resistance ground connections (5 ohms or less) for lightning protection systems installed at its ammunition and pyrotechnic storage sites at the Navajo Ordnance Depot in Flagstaff and Davis-Monthan Air Force Base in Tucson.

Ufer developed the initial design for a concrete-encased grounding electrode that consisted of ½-inch reinforcing bars 20 feet in length placed within and near the bottom of 2-feet-deep concrete footings for the ammunition storage buildings. Test readings over 20 years revealed steady resistance values of 2 to 5 ohms, which satisfied the specifications of the U.S. government at that time.

This work eventually resulted in what we know as the concrete-encased electrode in the NEC. More details about Ufer's research and findings are provided in his IEEE paper CP-978: "Investigation and Testing of Footing-Type Grounding Electrodes for Electrical Installations."

Concrete-encased electrodes are required to be included in the grounding electrode system for buildings or structures. It is not optional."

Ryan, N7RSK:

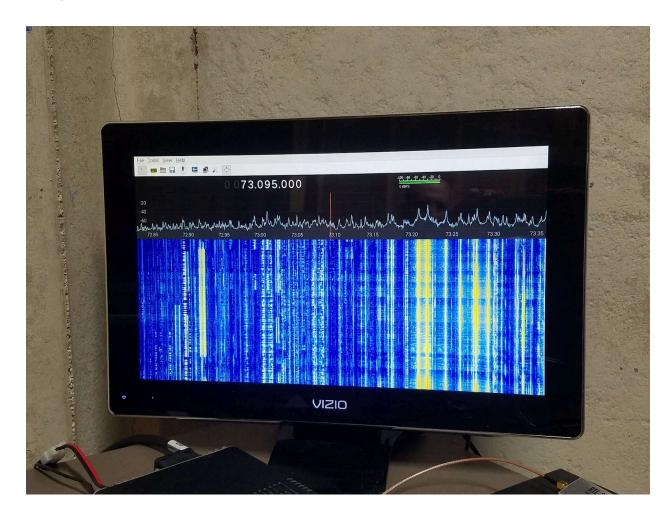
2024 WI VRC HS State Championship (click on link at left)

Proud Father, **Scott, KD9RHA** shared this big moment about son **Ryan, N7RSK** competing at the state robotics competition last month:

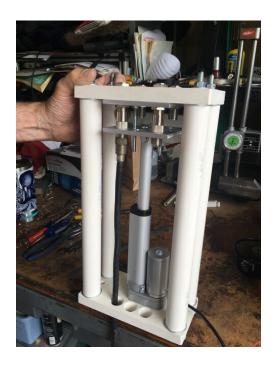
"They have already qualified for the world tournament and are starting fresh today with a brand new build. Ryan and his partner Jim were ranked as high as 56th in the world and hope they can improve on that with the new bot!"

Congratulations Ryan!

Ryan also built up a waterfall display for his TS-480 transceiver using a Raspberry Pi. He's posted more detail on his website: N7RSK website



Jeff, KC9JOB, and I posted our construction article describing the "Cable Yanker" ... an automatic antenna cable disconnect system that even disconnects the coax ground when the station is idle!



Click here to view the article:

■ Protect Your Rigs and Yourself With These Cable Yankers - Google Docs.pdf

Rick, KC9UJO, shared these pictures of his latest activities: his new mobile installation and restored/painted 25G tower sections ready for installation in April.





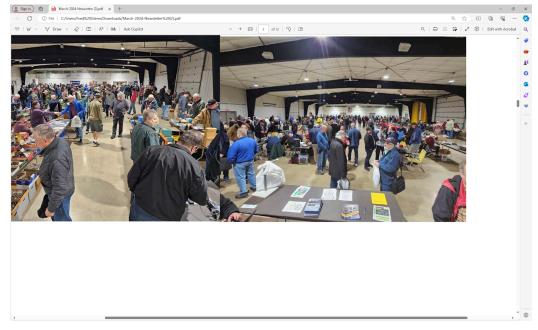
Kevin, N9OIG, recently upgraded to General class (YEAH KEVIN!) and has since been discovering the excitement of operating HF. He has a Kenwood TS-2000 that he can access from anywhere using the RemoteRig links. To do that, he built up this amazing portable access case with a pop-out control head. I have named it "The Alien"







Many of our members attended the Tri-County Hamfest in Jefferson on March 17





Bruce, K9WBT, has been leading a local Winlink Wednesday Radio Email activity. There has been growing participation. Catch Bruce on the air or anyone on the daily Happy Hour Un-Net. Bruce moderates on Thursdays. What's it all about? Check out Winlink here [Winlink].

Latest check ins:

KD1Z, sent in a position report, HF 80M

W9LOL, sent in an HICS214 Activity log, HIMT position was "sitting" LOL, callsign checks out.

K9SO, from WI, used the Winlink Check-in template, HF. Good job, Fred.

W0CBP, Chris from South Dakota joins us this week on VHF with a one line check in. Welcome aboard. **KC9HYY**, HF, one line check in.

W9ABE, Medical Incident Plan; "dropped my cocktail during Happy Hour. Unable to make QRB" K0WET, VHF, using the Winlink Check In template, VARA FM from Colorado.

KF0NWG, Tyler from Nebraska, by way of **W9AFB**, joined us this week using the Winlink Check in template. Welcome aboard.

N9PYA, with a one line check in.

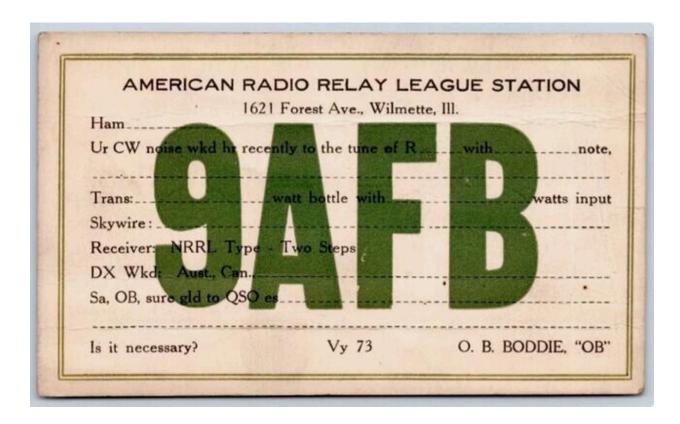
K9WNG, one line check in via VHF with his FT-4X & TNC3. Good work.

WX9EMS, telnet, online check in.

VA7YBW, returns this week checking in using a 'BC Checkin Initial" form used by the local EOC. Thank you, Pete

K9WBT, NCS, Telnet.

QSL of the Month:



Scott, W9AFB wrote this and sent in a very interesting link:

"I'm excited to share my latest QSL find, photo attached.

Before W9AFB there was 9AFB. I believe this card is from 1926 or 1927 and is from the same ham who was the first holder of W9AFB. The original (starting around 1920) 9AFB was first operating out of Cambridge, WI so I'm glad to be somewhat close to where it all started.

A surprise to some may be that there's no prefix! For more interesting lineage of amateur radio callsigns, see below.

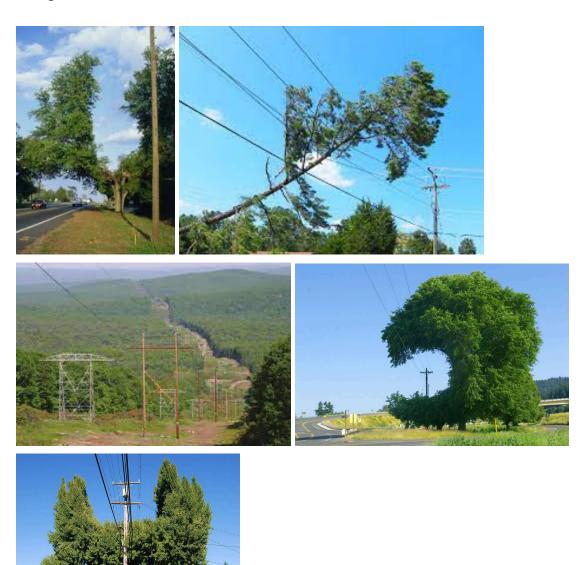
Here is a link to a great history presentation of amateur radio callsigns. https://www.w2zq.com/wp-content/uploads/2020/05/Finding-your-ham-roots.pdf

and in this link, there is an explanation of how I went back through the various callbooks to find the past holders of W9AFB.

https://www.w2zq.com/find-your-ham-roots-by-tracing-the-history-of-your-call-sign/

Beware of Electric Fields Surrounding Power Lines

We all should be aware of the dangers presented by power lines. It is a well known fact that trees and foliage do not grow well in the presence of the high electric fields surrounding power lines. One can only wonder how this affects human brain activity. I submit the following pictures as evidence that plants, particularly trees, do not grow well in such high electrical fields, often growing in strange ways just to avoid them and carving out "dead zone" electric field pathways through forests:



Be sure to wear your aluminum foil hat for protection when you are walking near power lines. Protection is then assured. Yes, this newsletter is dated April 1.

Happy Hour Email Group on Groups.IO



We have a happy hour email reflector ("the forum") on Groups.IO now. Dozens of interesting posts last month. Join in the conversation by clicking on the link below now! You won't get spammed as you can opt to receive only one summary email per day. Get an invite here: [LRA Happy Hour Net]

Amateur Extra Class License ... new question pool:

ZCZC AG04
QST de W1AW
ARRL Bulletin 4 ARLB004
From ARRL Headquarters
Newington CT February 16, 2024
To all radio amateurs

SB QST ARL ARLB004 ARLB004 Errata to the 2024 - 2028 Amateur Extra-Class Question Pool Released

The National Conference of Volunteer Examiner Coordinators (NCVEC) Question Pool Committee (QPC) has released errata for the new 2024 - 2028 Element 4 Extra Class Question Pool, which goes into effect on July 1. The errata includes minor question changes, the removal of one question, and one modified graphic.

These updates are reflected in the new downloadable files, dated January 31, 2024.

The ARRL VEC advises the community to regularly check the NCVEC website at https://www.ncvec.org/ for updates to the question pools.

Taste of Field Day, June 22, 2024

A Field Day organization committee has been formed. Three organizational on-line meetings have already been held and it is really coming together. Our members are **K9SO**, **AC9OT**, **W9GTH**, **WW9X**, **KC9JOB**, **N9OIG**, **and KC9UJO**. Let me know if you'd like to be included in the planning: VP@KR9RK.COM

You do not have to be on the committee in order to participate in the FD activities on June 22. The "Taste" is only 5 hours long (12:00 - 5:00pm) at Shelter 1, Bong.

Last Saturday, the FD committee visited the site at Richard Bong State Park, shelter #1 which has been reserved for our sole use and paid for by an anonymous benefactor. The site is nearly perfect and we were all excited about it. About half of the pavilion is enclosed. All of it is under roof. If we have high winds and rain, we can be indoors where all of our equipment will be protected. Additionally, the toilets are only 200 feet away and we have a fire pit at our disposal (due to insects, we must purchase wood on-site). We have the shelter until 11:00pm if anyone wants to stay that long.

The "Taste" will feature at least one local HF 100w transmitter station (using **KR9RK**) and lots of demonstrations stations: one FlexRadio Maestro setup operating the big station at Q-SO Qorners (**K9SOB**), another FlexRadio Maestro operating a more modest station remotely in North Carolina (**K9SO**), one RemoteRig setup running a remote Kenwood TS-2000 (N9OIG), a satellite setup where we will attempt to communicate with the International Space Station (**KR9RK**), and multiple mobile radio setups and POTA stations (individual call signs).

Jeff, KC9JOB and **Matt, AF9Q** will set up a mini fox hunt (on foot) with 2 or 3 transmitters to find during the day. Equipment will be available for those who would just like to try it out. A great activity for the kids too!

Food and soft drinks will be provided at no charge. Please bring snacks and/or deserts to share and BYOB.



K9SO's Field Day banner design (4' x 8').





It only took 2 minutes to test mount our 33 foot tall skyhook just outside the shelter (left). There are plenty of electrical outlets and operating benches indoors. The large indoor room even has flap openings in the walls for our coax!





The overall site is over an acre in size ... plenty of room for multiple POTA-like setups and a ton of picnic tables.

There is a small per-car entry fee to the state park but the cost of the picnic (food, soft drinks, etc.) is being picked up by an anonymous donor so there is no attendance fee. Registration, however, is requested for planning purposes.

So load up the entire family and join in on the picnic fun. BYOB, snacks, and desserts to share if you want.

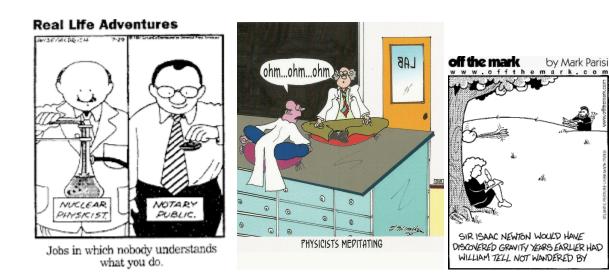


Some pictures from our last "Taste of Field Day" event hosted by K9SO in 2022.



The "Taste" is just a shortened version of the big 36 hour ARRL event with no huge commitments or overnight camping. Other clubs may sponsor full weekend events. This year, the TASTE OF FIELD DAY is an official LRA sponsored club event.





Jerry's Kids:

Jerry, **N0IMJ**, Elmers his 8th grade students at the Lutheran School in setting up a radio club. Except on school holidays, they get on the LRA repeaters **every Friday afternoon (school holidays excepted) between 2:00-3:00pm**

Contesting Corner





Lots of specialized contests and State QSO parties this month, but no majors. We just finished the WPX SSB contest this past weekend. I hope everyone had a chance to nab a few new ones.

As always, a complete contest calendar is available here: CONTEST CALENDAR

Many members participated in the Wisconsin QSO party. Results are not in yet, but I'll post when they are.

Repeater Etiquette

Joining a QSO in progress. If there is a conversation taking place which you would like to join, simply state your callsign when one user unkeys. This is the reason for having a courtesy tone: to allow other users to break into the conversation. One of the stations in QSO, usually the station that was about to begin his transmission, will invite you to join, usually before making his own transmission. Don't interrupt a focused discussion unless you have something to add to the topic at hand. (Don't break in and say "I just wanted to say HI"). Interrupting a conversion is no more polite on a repeater than it is in person.

Also, if you're accessing our repeaters via Allstar, please remember to disconnect any other links you may have set up before you connect.

ARRL Publications:

The ARRL periodical *QST* is the main amateur radio magazine and the League represents our only political voice. You may notice the long history of our losing frequencies over the years. Support our remaining allocations by joining the League HERE. I'm a Life Member myself. You get digital access to all four periodicals with

ARRL membership. Here are the new issues and a link to them <u>HERE</u> (ARRL members only)



Ham Radio News:

I am sad to report that Bob Heil, noted audio engineer and entrepreneur passed away on March 1, 2024.

Bob Heil

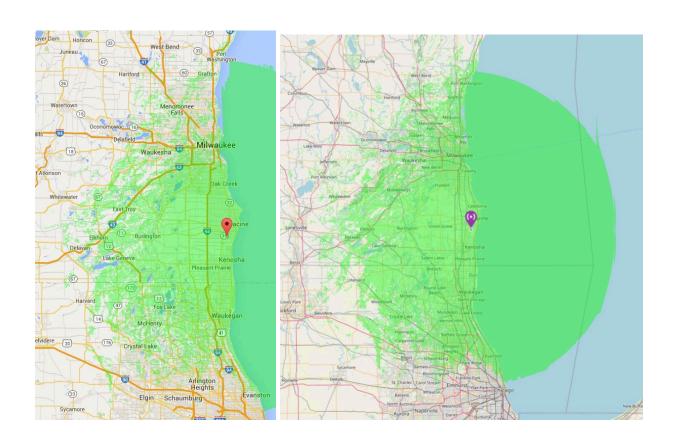
Stuff You Need (?) Department:

Michael, KM6RRS had fun building this Broadcast FM radio kit (\$17). He said it took about 6 hours and it brought back fond memories of past kit building days.



Thanks to our growing list of newsletter contributors! Make sure you post your activities on the HH forum or send them to me at VP@KR9RK.COM. Pictures say it best!

73, Fred, K9SO VP, Lakeshore Repeater Association, Inc.



APPENDIX I, upcoming hamfests: (From March ARRL Newsletter)

April 13, 2024 – Madison Hamfest Location: Stoughton, WI Sponsor: Madison Area Repeater Association Website: https://w9hsy.org

April 27, 2024 – ORC 44th Annual Spring Indoor Swapfest Location: Cedarburg, WI Sponsor: Ozaukee Radio Club, Inc. Website: https://www.ozaukeeradioclub.org

May 4, 2024 – ARAC Hamfest Location: Superior, WI Sponsor: Arrowhead Radio Amateur Club Website: https://www.thearac.org/

June 1, 2024 – Green Bay Mike and Key Club Hamfest Location: Green Bay, WI Sponsor: Green Bay Mike & Key Club Website: www.k9eam.org

June 15, 2024 – Riverland ARC Swapfest Location: Stoddard, WI Sponsor: Riverland Amateur Radio Club Website: www.rarc.qth.com

July 6, 2024 – South Milwaukee ARC Hamfest Location: South Milwaukee, WI Sponsor: South Milwaukee ARC WI9SM Website: www.wi9sm.org

August 10, 2024 – CVARC 2024 Hamfest Location: Chippewa Falls, WI Sponsor: Chippewa Valley Amateur Radio Club Website: https://w9cva.org/hamfest

August 24, 2024 – Circus City Swapfest Location: Baraboo, WI Sponsor: Yello Thunder Amateur Radio Club Website: http://yellowthunder.org

September 7, 2024 – ORC Annual Regional Fall Swapfest Location: Cedarburg, WI Sponsor: Ozaukee Radio Club Website: http://www.OzaukeeRadioClub.org September 20-21, 2024 – HRO Superfest Location: Milwaukee, WI Sponsor: Ham Radio Outlet Website: Not Provided

October 19, 2024 – Hidden Valley ARC 1st Annual Hamfest Location: Lancaster, WI Sponsor: Hidden Valley Amateur Radion Club Website: Not Provided

November 2, 2024 – ARES Conference / State Convention Location: Wisconsin

Rapids, WI Sponsor: Numerous Website: https://wi-arrl.org/events/

HAMFEST/CONVENTION

04/27/2024

Start Date: 04/27/2024 End Date: 04/27/2024

Location: Ascension Columbia St. Mary's Center (Milwaukee Curling Club)

W67N890 Washington Avenue

Cedarburg, WI 53012

Website: https://www.ozaukeeradioclub.org

Sponsor: Ozaukee Radio Club, Inc.

Type: ARRL Hamfest

Talk-In: 146.97 MHz (- offset), CTCSS 127.3 Hz Public Contact: Tom Trethewey , KC9ONY

W69N905 Evergreen Ct. N., #202 Cedarburg, WI 53012-1170

Phone: 262-421-6351

Email: swapfest@ozaukeeradioclub.org