



# THE HAMSTER

August 2024

**Official Monthly Newsletter of the Rochester Amateur Radio Club**

*Founded In 1932 - 50+ Years Of ARRL Affiliation*



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# RARC Annual Picnic

Dan Stroh (N0SPN) - Vice-President

August 13th 2024 @ 6:00 PM

# RARC Annual Picnic

## Rochester/Marion KOA Campground



- ***RARC is supplying burgers, hotdogs, cheese, buns, water, plates, utensils, condiments, napkins and we will be cooking with charcoal this year.***
- ***Brings chairs (picnic tables are at a premium) and the beverage of your choice if you don't want the water provided by RARC.***
- ***Please bring a side dish to share if you choose.***
- ***If you have a ham radio related item to sell or demonstrate - bring it along - we will have a table setup.***
- ***The picnic will move inside if inclement weather***  
***\*Your Picnic Chef's are Eric (KF0S) and Steve (W0STV)\****

***Please be aware that there has been ongoing road construction at the intersection of Hwy 52 and I-90. The DOT schedule states that the project should be complete prior to the picnic. However, if not, there may be a detour.***



# 125Live Ham Radio Club



Steve Wiebke (W0STV)

**The 125Live Ham Radio Club desperately needs RARC member support to help the people that have an interest in amateur radio obtain their technician class license.** We have limited time for extra activities but decided as a club to pursue this project. We need RARC members to attend these meetings who are a 125Live social member to answer questions and ask them. You know how you wanted to be around hams when you started in amateur radio to learn and become friends with. The 125Live topic for the August 20th meeting in the TLC room at 2 PM will be reviewing test questions that people are having trouble understanding. We want to get them licensed as soon as possible.

***Sometime in August the 125Live roof HF antenna needs to be inspected. I want to check the balun first, and then test the SWR using different ground wire configurations. Will need a few people to help when a date and time is set before the August 20th 125Live Ham Radio Club meeting.***



Watch the [RARC groups.io emails](https://groups.io) and listen to the nets for updates.

**The next meeting of the 125Live Ham Radio Club sponsored by RARC will be August 20th at 125Live in the Technology Learning Center room at 2:00 PM.**

For more information please contact (W0STV) at: [w0stv@yahoo.com](mailto:w0stv@yahoo.com)



# ARES

## Amateur Radio Emergency Service

**We will not have an August ARES meeting.** The Scheels Healthy Human Race will be our ARES event for August. We have 9 people signed up. If you are new to ARES/public service communications and want to learn about public service, we can team you up with another field person. Sign up and indicate you want a team member in the assignment section on the [RARCHAMS.ORG](http://RARCHAMS.ORG) web site or you can send me an [email](#) and I can add you to the roster. We will do our best to train you to be an effective radio communicator for Olmsted ARES. PS: The shirts have been ordered if you were signed up by July 15th. Watch for updates on this event through the [RARC groups.io email](http://RARC.groups.io), on the nets, and at RARC meetings.

**Olmsted ARES is as good as the sum of the group for effectively serving the needs of our served local and national agencies.** Some think that ARES should only be about and only use amateur radio. We do use radio extensively, but we have and will change as time and technology dictate. All amateur radio operators for Olmsted County need to know that we have two ARES email accounts. The primary is [w0mxw@yahoo.com](mailto:w0mxw@yahoo.com) and the secondary is [w0mxw@winlink.org](mailto:w0mxw@winlink.org). We used these to get the recent flooding information. We monitor the APRS network to see where our field operators are located for SkyWarn and ARES activities. We also use computer to radio interface using [FLdigi](#) digital communications to transfer ICS forms, files, photos, and text messages. Check into the Thursday nets each week at 6:30 PM on the 146.820 repeater to see and learn what this is about.

Continued on next page

**Olmsted ARES Mission Statement:  
To be so effective that you are able to help others.**



# ARES

## Amateur Radio Emergency Service

**The worst feeling to experience is thinking you are prepared and then find out you're not.** We all have experienced this. Only thing that can prevent this is to train with a thorough check over and testing of your equipment by assembling and operating. Things sometimes happen with just the passing of time. You should operate your field communications at least once every 3 months to make sure that most importantly you know how to operate it, and to see if it will work.

[The American Red Cross Rochester](#) is moving forward with proposing a trained SkyWarn/damage assessment group for Olmsted County. The Rochester Red Cross emergency director informed me if this new program is a success locally, they want to establish this with other ARES groups in surrounding counties and then Minnesota. We plan to be fully trained and operational by 2025. The new damage reporting system is now all electronic using tablets, there is no paper reporting anymore.

***I want to poll Olmsted ARES for the following information:***

- 1. What do you want to see Olmsted ARES train for in 2024.***
- 2. What do you need ARES to do to make you more radioactive.***

Send your comments to [w0stv@yahoo.com](mailto:w0stv@yahoo.com). All information will be kept confidential. I will post the results in the September newsletter.

Steve-W0STV  
Olmsted ARES-EC  
The more preparation, the less confusion.

**Olmsted ARES Mission Statement:**

**To be so effective that you are able to help others.**



# Public Service

## Amateur Radio Emergency Service

We have only one planned Public Service event remaining for 2024, the **Scheels Healthy Human Race** on August 24, 2024:

August 24th

[Scheels Healthy Human Race](#)

[Steve – WØSTV](#)

[Sign Up / View](#)

### 40th Annual Scheels Healthy Human Race

Aug. 24, 2024

This event includes a half marathon, 2-person half marathon relay, and 5K.

The race features Rochester's scenic walking and running trails on a fast, flat course, finishing in Soldier's Field Park. There is a distance for everyone and all events are walker-friendly!

The Scheels Healthy Human Race is a major fundraiser for the [Rochester Running Club](#). Thank you for your participation in the Rochester running community and for your support.

# Contest Corner

Fred (K4IU)



**Great conditions were reported for the IARU Radio Sport last month by many local contesters.** T-storms hampered some of the activity Saturday afternoon. European QSOs were reported Saturday evening on 15 meters with just 5 watts and a wire. Cycle 25 continues to reward the “deserving”! On July 19th, we had the most sunspots in a single day so far in Solar Cycle 25.

**August almost begins the contest season.** There are several activities this month that will help you tune up your skills and equipment in preparation:

- **[August 4 North American QSO Party \(NAQP\) CW](#)**, this is always a casual and friendly get together. You can do as much or as little as you want. The exchange is your name and state.
- **[August 10-11 Worked All Europe CW \(WAE\)](#)**, This is also a type of QSO party except that the objective for US stations is to work only the 50 sovereign EU countries. There is also a twist in that you can earn additional points by passing traffic called QTCs (data of previously logged QSOs), to the EU stations. You will need to brush up on the QTC rules and use a logging program which automates the exchange. I use N1MM. A detailed explanation and implementation of N1MM features for this contest is here.
- **[August 17-18 SARTG WW RTTY Contest](#)**, This is a fun RTTY contest sponsored by our Scandinavian friends. There are just a handful of international RTTY events each year. This one is a good one with support and nice award certificates.
- **[August 19 North American QSO Party](#)**, This is the SSB version of the CW NAQP. Keep in mind that this a 12-hour contest but you can only operate 10 hours max so there is still time to enjoy the weekend. Power is limited to 100 watts. I like this one because you can put a face behind some of the people you meet on the CW segments.
- **[August 24-25 WW Digi Contest](#)**: Since its debut in 2019 this Digi contest is very popular. It’s sponsored by the Slovenia Contest Club and the Worldwide Radio Foundation Club. It has some unique scoring that’s generated by the WSJT-X suite of programs. If you’re new to digi contesting check out these **[operating tips](#)**.

# Contest Corner

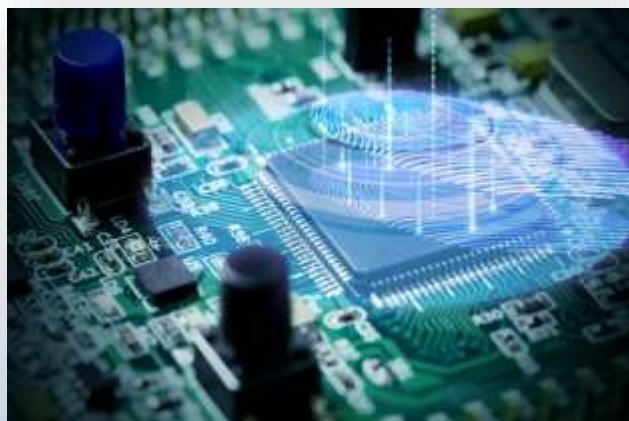
Fred (K4IU)



Look at the [WA7BNM calendar website](#) for more August contests. If you would like a handy visual view of State QSO parties print off this reference, [Periodic Table of QSO parties](#) and put it near your operating desk. Similarly, the [Periodic Table of Contests](#) is a convenient snapshot of the year's major radiosport events. Finally, here's a [link](#) to the weekly on-air contests.

Just another reminder that the **Cedar Valley Amateur Radio Club (CVARC)** is having their **hamfest on August 3rd from 8-5**. Details are [here](#).

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Many of you may be aware that WSJT-X has a new release, 2.7.0-rc6. This version includes the **SuperFox** mode, which is designed to enhance DXpeditions by enabling high-rate digital QSOs. There are some additional new features which are found [here](#). If you're really new to FT-8 check out this [operating guide](#). It's been awhile since we put this into the tips page. Definitely worth reviewing even for seasoned ops!

That's all for this month - see you in September!

73

Fred (K4IU)





# Hamster Hints

Bob (KEØEXE)

**I've been improving my AEA IsoLoop "mag-loop" antenna recently**, while **Eric (WØEJB)** has been trying it out, in his attic space. One of the first problems we encountered was that we could not tell, by visual inspection of the antenna, the position of the tuning capacitor's rotor. This drove an improvement...The tuning capacitor for this commercial (once-upon-a-time) antenna is a large, "butterfly" type, made from eight chunks of aluminum heat-sink stock, welded into three separate pieces (see photo). It is all housed inside an opaque, black, nylon shell. I decided it would be fairly simple to put a pair of "windows" in the shell, by drilling-out 2-1/2" circles with a hole-saw.

I then fashioned circular windows from clear, 1/4"-thick polycarbonate. I cut-out the rough circles with a jigsaw, clamping them together with a strong spring-clamp, and then sanding the edges on a belt sander, as I rotated the assemblage. By repeatedly reorienting the two circular pieces, with respect to each other (and flipping their "together" faces), and then sanding a little bit in each new configuration, it had the overall effect of "averaging-out" the rough spots and errors in their perimeters. Eventually, I achieved a near-perfect, smooth, circular shape. I did this enough times to hone in on just the right size for a tight fit into the holes I had already cut in the shell. Carefully adding plenty of superglue around the edges (only!) resulted in sufficiently-secure windows.

*(Superglue dissolves plastics, of course, so avoid getting it on window areas that you wish to keep clear. If you do, do not wipe it off--it will only wreck the highly polished, plastic surface, making it rough and no longer visually-operational. Just let the mistake harden. Improperly wiping it away will only spread the liquid glue and wreck even more of the surface.)*

My wife joked that the final assembly--with its new window "eyes"--looked like "that character in the Monty Python film"!



A happier Black Knight? "...'Tis but a scratch... ..Now come back here you yellow [cowards] and take what's coming to you!"--  
Monty Python, The Holy Grail.

More project photos on following pages



# Hamster Hints



Butterfly capacitor, made from welded heat-sink material.



Looking into left window with capacitor fins fully meshed.



Looking into right window with capacitor fins fully meshed.

More project photos on following page



# Hamster Hints



Full mag-loop on custom stand in my attic.



# Technical Committee

Eric (KFOS)

## Tech Committee Meeting Minutes - 7/8/24

**Attendees: Eric, George, Pat, Dave, Taylor, Steve**

*Post meeting and RARC meeting comments in italics*

### **Mayo Site:**

- We should do clean up; labelling, replace license, determine hardware needs, etc
- Work party to see what is needed, check bandwidth, power status (UPS, failover) and start cleanup
- *Scheduling with Darrel.*
- Weekday evening?

### **146.625 Fusion repeater:**

- Do we upgrade the computer? Current computer won't support Windows 11.
- Defer to work party.
- Anyone having connection issues? *Earlier issues seem to be resolved*

### **443.85 D-Star repeater:**

- Gateway Server. Hardware/software.
- Defer upgrade to work party determination. New Linux has some additional hardware requirements.

### **146.82 repeater:**

We are going to replace the backup battery. Didn't last long during a recent power outage.

### **147.255 repeater:**



# Technical Committee

Eric (KF0S)

## **Rochester EOC facility and computers:**

- Add a router to the inventory. Configured for private network. N1MM issue with creating a cross computer database.
- Need to set HF Radio back to digital mode for EmComm, WinLink.

## **County EOC facility and computers:**

- Try and delay move until after SkyWarn season.

## **Donation of W0IBM equipment:**

- Nothing new.
- IBM and new site team seem to still in a dispute. Both sides know we would like to take the antennas down once resolved.

## **Control Operators:**

- Validate that we can control repeaters.
- Work on getting together docs for all repeaters. (Nothing new)
- Collect more info from John Scott.
- John Scott has code to lock box for building access to 146.82.
- Taylor is working on this.

## **Website:**

- Preamble link.
- Steve, spreadsheet.



# Technical Committee

Eric (KF0S)

## Education:

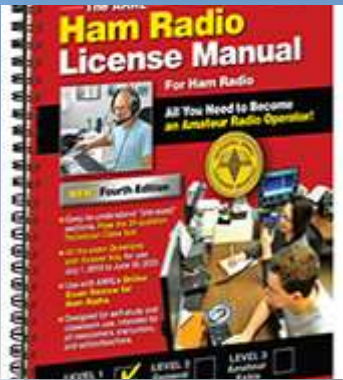
- **125 Live:**
- Mark will cover. Steve is away.

## Club Inventory:

- Discussion started to get a more current list.
  - Insurance due in October. Will we need a new list. What to insure?
  - 3 Yaesu radios in the RST EOC cabinet.
  - Military mast.
  - Discussion on sharing club documents.
  - What's left in the sandbox? Sell in newsletter. *No one available at meeting to let us in.*
- Oscilloscope

# Education

Dave (KØVH)



***One of the first steps needed to really get into Amateur Radio is to get your Amateur Radio License. This license is required in order to transmit on any of the Amateur Radio frequencies – however, listening does not. Listening is only part of the fun, so we encourage you to get your license so you can get the full experience!***

- We'd appreciate knowing any of you who are using ARRL books, the new to ARRL Gordon West training methods, or Dave Casler videos: how effective are they? Would you like some mentoring from the club? A good spot would be the 3rd Tuesday of the month at 125Live.
- We'd also like to know if you are taking any 2024 Maple Grove radio club Zoom classes or remote exams <https://k0ltc.org/training/>



## RARC buy - sell - trade



**ST-5000 Step Up Step Down Transformer** 110V 220V Step Up Voltage Converter Transformer, 5kw rating, used once / no longer need, like-new condition, **\$100 firm** (\$129.99 on Amazon). See Bob, (KE0EXE), [gettuit@charter.net](mailto:gettuit@charter.net)



**Yaesu FT-950** 160 thru 6 meter transceiver Includes MH-31 microphone  
Original box **\$500** Lynn (WB0U) (507) 358-8459



**Astron RS-35M 13.8 volt power supply** 35 amp peak, 25 amp continuous with volt and amp meters. Quiet linear supply, no RF noise, **\$150** Lynn (WB0U) (507) 358-8459

*If you have any Ham related items that you want to sell or are looking for locally, email the Hamster at [RARC Buy or Sell](#) or Trade.*





## RARC buy - sell - trade



**Monarch "Super Sensitive" "Amatuer Receiver"** (yes, "Amateur" is mis-spelled on the faceplate), 4-band BC / HF radio. Nostalgic for me, and will pay well, according to cosmetic condition. Bob (KE0EXE), 507-280-0935.



**Icom IC-735 HF transceiver** - Dan Stroh (N0SPN) you can call or text me at my cell# 507-273-0734 **\$175**



**WANTED - Icom IC-735 HF transceiver** - Parts set OK as long as main tuning works. Neil (W0VLZ) [nielwiegand0129@gmail.com](mailto:nielwiegand0129@gmail.com)

*If you have any Ham related items that you want to sell or are looking for locally, email the Hamster at [RARC Buy or Sell](#) or Trade.*



# Parks On The Air ® (POTA)

**It's *Summer* POTA Time!**

**Perhaps you've heard talk on the repeaters or on one of the Nets about [Parks On The Air \(POTA\)](#) You might be interested and think that it could be **fun to operate your rig and antenna remotely in a beautiful outdoor setting.****

In a nutshell it's all about operating in a state or national park, state trail, national monument, historical location or battlefield and making at least 10 QSOs to "activate" the entity. It's as simple as that, but there are a few [rules](#).

Take a look at the [Parks On The Air](#) website, view the [FAQ page](#), the [Help/Getting Started](#) section and perhaps view some of the getting started [videos](#) by seasoned POTA operators. If you are interested in becoming an Activator fill out the [sign-up](#) to become a member and get started.

**Do you know that there is a [POTA entity in Rochester](#)?**

Take a look at the [map of entities](#) to see the wealth of places to activate close to Rochester as well.

***POTA is a great way to enjoy Ham radio and enjoy the bonus of operating remotely or out of your vehicle!***



**Niel (W0VLZ)**



## Weekly Nets

- ◆ **Monday 8 p.m. Elmers' Net** 146.820 repeater (PL Tone 100)
- ◆ **Tuesday 7 p.m.** (except on Club Meeting Nights) **RARC 10 Meter Net** meets on 28.325 Mhz. USB. The Net is cancelled without notice if lightning in the area or SkyWarn activation.
- ◆ **Thursday 6:30 p.m.** 146.820 Repeater. The first Net of each month is a voice net, and it's the **SE MN District ARES 2 Meter Digital Net**. The other weeks, it is an informal digital net, using the digital protocol announced for the week on the Net and NBEMS.

*Most use [FLDIGI](#) and the rest of the [NBEMS](#) suite of programs, all of which are free. MT63 is a very forgiving mode. You can do MT63 on VHF without a soundcard modem - 'acoustic coupling' works fine. meaning you can hold your HT up to the mic on your computer and copy it very well and do the reverse to transmit.*

- ◆ **Thursday 8 p.m. ARES 80 Meter HF Digital Net**, 3583.5 kHz, Olivia 8/500
- ◆ **Daily M-F about 11:30 a.m.** - Repeater Of The Week - **Very Informal Morning Net** - If you show up and there is no net control, become one! The object of this net is to encourage more on-air activity.
- ◆ **Saturday 8:30 p.m. Iowa D-Star Net** on D-Star Reflector XLS632A
- ◆ **Sunday 7:30 p.m. Minnesota D-Star Net** on D-Star Reflector XLS632A
- ◆ **Sunday 8:30 p.m. Dodge County ARES Net** on the 146.820 (PL Tone 100) Repeater at 8:30 p.m.
- ◆ **Sunday 9:00 p.m. RARC/ARES Net:** 147.255 repeater (PL Tone 100) Odd numbered Sundays  
146.820 repeater (PL Tone 100) Even Numbered Sundays



- ◆ Are you a member of the [ARRL](#)?
- ◆ Are you new to Ham Radio?
- ◆ Have you been licensed for a while but not active?
  - ◆ Are you active but never explored the [ARRL](#)?

***RARC has been an ARRL affiliated club for the past 50+ years. RARC wants all members to know about the benefits of being a member of the ARRL and how the ARRL promotes amateur radio and represents and supports Hams throughout the year.***

Here are two links you can explore to see what the [ARRL](#) offers Hams. Take a look:

- ◆ [ARRL Benefits](#)
- ◆ [The Value of ARRL Membership](#)



## Contact RARC

***RARC meets the second Tuesday of each month at 6:30 PM (except the August meeting is the annual RARC club picnic) in the lower level of Rochester Fire Station #2 in the EOC at 2185 Wheelock Drive NE, Rochester, MN***

- ◆ **Online:** <http://www.rarchams.org/>
- ◆ **Mail:** RARC , P.O. Box 1, Rochester, MN 55903
- ◆ **Groups.io:** [Register](#) and a Moderator will respond shortly
- ◆ **Weekly Net:** Sundays at 9:00 PM: 147.255 repeater (PL Tone 100) Odd numbered Sundays  
146.820 repeater (PL Tone 100) Even Numbered Sundays

***If you haven't done so already, please [register](#) for the RARC groups.io email reflector so you can keep abreast of club activities, official club notices and of course the monthly Hamster emailing. Click on [register](#) and you will be taken to the RARC registration page. Once you have [registered](#) go to your account settings and choose how you would like to receive email from RARC.***

**Newsletter articles or questions: Mark (KØGMK) - Editor [gmkelm@charter.net](mailto:gmkelm@charter.net)**