



THE HAMSTER

October 2024

Official Monthly Newsletter of the Rochester Amateur Radio Club

G. Mark Kelm (KOGMK) - Editor

Founded In 1932 - 50+ Years Of ARRL Affiliation



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RARC President's Message

Pat Hagge (KE0WWG) - President

Fall is upon us and with that, some may be working to get some of their outdoor antenna apparatuses repaired out put out for the winter. Others may be planning some indoor ham projects.

I think it has been a while since people have showed off their shacks – whether stationary or portable. Wouldn't it be fun to share our stations with others to inspire ideas? Let's give that a try!

Keep an eye out on our Groups.IO reflector (<https://groups.io/g/rarchams/>) in the coming days I'll put the call out to for all to share a picture or two of our shacks. I'm certain there are some where their shack consists of an HT sitting upon a table all the way to multiple radios in a well-thought-out rack. Whatever it is, big or small, we'd like you to share it and inspire someone.

Jamboree on the Air ... This is an annual program that gets Scouts of all ages including Cub Scouts, Boy Scouts, and Venturers, using Amateur Radio. Each year it is the 3rd weekend of October – which in Minnesota we may often refer to this also as "MEA Weekend." Don Borland (KC0QGB) will be at Gamehaven Scout Reservation just outside of Rochester this year on October 19th from 10am-2pm. If you'd like to help participate, please reach out to him – his contact information and more info is on Groups.IO if you search for "Jamboree on the Air." You can also get on the air and participate in the program by making contacts with other Scout groups as well.

73

Pat Hagge, KE0WWG

pat@theewok.net

507.461.6008



RARC Training Program

Dan Stroh (N0SPN) - Vice-President

October 8th 2024 @ 6:30 PM



Tips For Learning CW

Presented By Mel Larson (KC0P/R)



October 2024 RARC ZOOM Online Login Info

OPTIONAL FOR THOSE NOT ABLE TO ATTEND IN-PERSON



Below is the ZOOM login information for the October 8, 2024, 6:30 PM CDT RARC Meeting ZOOM . The ZOOM login info is also posted via the RARC email reflector prior to the meeting.

♦ **When:** October 8, 2024 @ 06:30 PM CDT (US and Canada)

♦ **Join Zoom Meeting (click on the link below):**

<https://us06web.zoom.us/j/9876548873?pwd=T0JBWEFzSCtBYzhiazA1NTdDb2Rkdz09>

♦ **Meeting ID:** 987 654 8873

♦ **Passcode:** : #####

♦ **For audio only from a mobile phone:**

Call: (312) 626-6799 US (Chicago) **Meeting ID:** 987 654 8873 **Passcode:** 738852



125Live Ham Radio Club



Steve Wiebke (W0STV)

I would like to thank Dave Naatz (K0VH) for taking the time to mentor the 125Live radio groups meeting on September 17th. I was told the attendance was good, but I do not know what the meeting agenda was. I have mentioned this in previous newsletters that the RARC members that are also 125Live social members are requested to attend these meetings. They are always held on the following Tuesday after our RARC Tuesday meetings.

For the October 125Live we will see what the 125Live membership has for questions about any testing answers. Then the program will be on scanners what to know and how to use them for the latest weather from the NWS. How to listen to storm spotters during skywarn activation and for other radio frequencies.

If you have a topic, you think would be of interest to the 125Live radio group, let me know.

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



Dave Naatz (K0VH)

The next meeting of the 125Live Ham Radio Club sponsored by RARC will be October 15th at 125Live in the Technology Learning Center room at 2:00 PM.

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



ARES

Amateur Radio Emergency Service

Rochester EOC director Jon Turk has approved three people from Olmsted ARES to take the ARES radio trailer to Superior Wisconsin for "Operation 10-4 MN/WI Multi-State Exercise." John Dalin (KA0MYG), Colin Howe (AA0CN) and Steve Wiebke (W0STV) will be traveling north on Thursday October 3rd to attend the following Friday's dual state communications drill. This drill on the amateur radio side will use VHF/UHF for voice, WinLink using both packet and VARA programs, Echolink along with Fusion and DMR communications. On the HF side we will be using 40-meter voice along with 60-meter channel 4 USB for interstate communication with Indiana. John Dalin spent several days earlier this year at camp Ripley for a similar communications drill in Minnesota. Will give a report at the next RARC meeting on October 8th.

Locally Olmsted ARES is taking a more active approach to training our members. The drill will be over by the time the Hamster comes out, so here was the agenda for the September 28th exercises:

- Radio operators will be asked how much fuel they have in their vehicles if they are below 1/2 tank delay them.
- Record how much battery capacity they have with them before being dispatched.
- Request the use of APRS using radio, or phone app. The EOC is to record the call signs of the stations able to do this. Use Pinpoint APRS-IS programs on the RARC computers.

Continued on next page

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



ARES

Amateur Radio Emergency Service

- Split the groups from the main frequency 146.520 to 2 different simplex frequencies during the drill to simulate too much traffic for one frequency. (2 NCS)
- Using both frequencies, have both NCS stations give each team a location to locate on a map, or app and report the street names they will use to get from the EOC to that location with NCS reporting any damage to roads in between (use EOC to each of the fire stations).
- Have field groups send photos and/or videos using w0mxw@yahoo.com to the Rochester EOC. Forward some text and/or photos on HF email to the w0mxw@winlink.org.
- Request field stations complete and send a message using the ICS 213 message form. They can use voice, digital or take a picture. Have them figure it out.
- The forms will be compared later. ICS forms will be handed out before the drill.
- NCS can add more issues to the drill if time allows.

The more you know!

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

Our public service calendar is empty for 2024, so I am going to tell you what I did on **Saturday afternoon September 21st**. I drove to see how the **Winona Amateur Radio Club** was communicating during their "**Ride the Ridges**" event. Now you have to know in advance that they were operating for 10 plus hours, had 28 radio operators in three counties (Winona, Fillmore and Houston) **monitoring over 500 cyclists on multiple routes with some on the 100-mile course**.

They utilized the Winona and La Crosse repeaters and one cross band repeater set up on top of a hill above Rushford. I visited with **Jim Miller-EC (KCD0ORR)** and **Justin Johnson (KE0DKJ) Fillmore ARES** who were in charge of the set up and monitoring its cross-band operation. After they were not needed and took down their impressive tower I drove to Winona to **Russ Marsalek's (N0QK)** home where the net control stations were operating. There I was pleasantly surprised to see three radios with two ladies running their NCS operations with **N0QK** on the third radio and coordinating. I sat down, watched and talking when time allowed. Then came from one of the radios something we never want to hear. We are experiencing hail. Weather radar maps and APRS maps were being compared, and things were happening fast. That was my cue to get out of their way and let them do their best to deal with this. I did not get back to my mobile radio for a while, but when I did, things were back to operating as before. You can always learn something when you take the time to watch and listen.

Steve-W0STV

Olmsted ARES-EC

The more preparation, the less confusion.

Contest Corner

Fred (K4IU)



The contest season is upon us! October also ushers in a new Minnesota Wireless Association (MWA) Operating Incentive Program where the membership will be divided into 10 teams of 15 matched MWA contesters based on members past performance and participation. This replaces the Team North, Team South and previous Team Hennepin. The objective of this friendly internal competition is to increase the cumulative score of the MWA against our rival contest clubs worldwide. If you are not a member of the MWA consider joining! Its free and here is how to sign up. MWA'ers will participate in the same 11 contests as last year and the 12th event (wild card) will be the California QSO Party. You don't have to participate in all of them but if you do you're eligible for the "Get A life Award"!

1. California QSO Party

- **Dates:** October 5-6, 2024
- **Details:** This contest encourages participants to make as many contacts as possible with stations in California. While working the hams in 6 land is not really a challenge, working all 58 California counties is, especially some of the rural and sparsely populated ones. Visit the website and look at the prizes, rules and log deadlines.

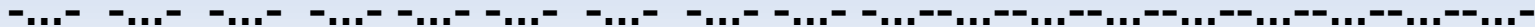
2. CQ Worldwide DX Contest, SSB

- **Dates:** October 28-29, 2023
- **Details:** This is one of the largest amateur radio contests in the world, attracting over 35,000 participants. Conditions should be superb. If you can get on even a little you won't be disappointed. If you're a technician try your hand on 10 meters.

Contest Corner



Look at the [WA7BNM calendar](#) website for more October contests. Another event calendar for local and regional [ham fests](#) can be found here.



Last month's RARC program featured Dan, NØSPN. He gave a great presentation on getting started in contesting. The discussion from those in attendance was excellent. Topics included best practices, logging programs, [Logbook of the world \(LOTW\)](#), as well as resources like [3830.scores](#) and the [ARRL contesting page](#). Check these pages out if you would like to be better informed or just review some fundamentals.

In his presentation to the RARC last month Dan discussed the advantages of using [Logbook of the world \(LOTW\)](#) whether for contesting or day-to-day logging. Here is another excellent [article](#) written by Anthony Luscre, K8ZT, describing why this might be for you.

There are also many how to videos on getting started with LOTW. Although its older (2018), Valerie, NV9L, has a couple of concise YouTube videos you can use that will walk you through the process. You can find them [here](#).

73

Fred K4IU



Hamster Hints

I just received a bag of about 150 "old diodes" from a ham friend who knows I appreciate such things. The logo on them looks like a lower-case, Greek letter Tau (τ s/t 'T'), but I have not been able to identify the manufacturer, after looking through many listings of logos. Perhaps these were made by a company that is no longer doing business. There are two other markings: "6329" and "R275"--and, for now, I'm assuming that these are, indeed, diodes (because of the packaging and the typical "cathode band" mark), and they are probably IN6329's, which looks like a low-power, 16Vrb Zener. I have not yet even found a data sheet. Here is what I plan to do to answer the questions conclusively...

Diodes can be checked and characterized using a simple circuit and a couple of DMMs (since I lack a curve-tracer, I'll need to do it the hard way). To accumulate data points (which can then be plotted to produce a V-I curve), I will connect the diode in series with a d.c. power supply and a current-limiting resistor of about 10k ohms. At 10 volts, this will allow only a maximum of less than 1 mA of current to flow through the DUT (Device Under Test) diode, which will be well within the SOA (Safe Operating Area) of the device, on its Characteristic Curve. I will need to obtain many such data points for both the forward- and reverse-biased configurations. These will be at various voltages across the diode. One DMM is used to measure this voltage drop, while another is used to measure the simultaneous current through the external, series circuit, outside of the voltage-drop measurement points. I do not have time to make these measurements right now, but you can look forward to a future Hamster Hints, where I'll report all the gory details of my new Mystery Diodes!



Bag of mystery diodes (I think)!



Bill Osler (KORGR/SK) Ham Radio Equipment Sale

There will be a sale of ham radio equipment, including HF rigs, VHF/UHF mobile rigs, HTs, antennas, and many tools. The sale is tentatively planned for 10:00 am to 2:00 pm on Saturday, October 12th. The address is 2439 Meadow Hills Drive SW, Rochester, MN. Cash or check accepted.

Some of the items include:

- Yaesu FT-DX10
- Icom IC-7410
- Yaesu FT-817ND
- Drake T-4XB
- Yaesu FTM-400XDR/DE
- Kenwood TM-D710A
- Icom UC-80AD
- HTX-10
- Heathkit HW-8
- MFJ-4035MV power supply, fused Anderson power pole strips, keyers, Baofeng HT, Tytera HT, Radioddity HT, Mirage B-34-G amp, Mirage B-1016-G, MFJ-986 3KW Tuner, Astron RS-35 power supply, multiple band antennas, Hustler coils/whips, a vertical, antenna launcher, along with many, many tools.

Photo examples on next page



Bill Osler (K0RGR/SK) Ham Radio Equipment Sale

Photos of a small amount of ham radio equipment and tools for sale





Technical Committee

Eric (KF0S)

Tech Committee Meeting Minutes - 9/9/24

Attendees: Eric, George, Dave, Taylor, Steve, Mark

(Post meeting and RARC meeting comments in italics)

Tech committee work note:

Reviewed and updated work note published in September. See below.

Rochester EOC facility and computers:

One of the audio amplifiers (primary VHF radio) has a bad port A (Operator). Moved HF amp over for now.
Steve, John, Jim, Taylor - EOC reconfiguration discussion on-going.
Need to set HF Radio back to digital mode for EmComm, WinLink. Completed?

County EOC facility and computers:

Move delayed until after SkyWarn season.

Donation of W0IBM equipment:

Have heard nothing new with on-site discussions.
What's left in the sandbox? Sell in newsletter.
Oscilloscope?
Review at October meeting.

Other equipment in the sandbox:

Greg Irvine(?)
HF Icom 746 Pro
Heil mic
Power supply
Other items. This is basically a complete station.



Technical Committee

Eric (KF0S)

Bill Osler

Steve is in contact with Faye. Take all remaining equipment and sell. Meet with her 9/23 or 9/24. Exterior antennas, HTs (including DStar), HF stations.

Steve and Eric met and looked at the equipment. There really is too much to store and try to sell at hamfests separately. Plan to have a driveway sale on October 12th. Advertise upcoming sale in Hamster.

Control Operators:

Validate that we can control repeaters.

Work on getting together docs for all repeaters.

Taylor is working on this.

Website:

Groups.io sign-up is not intuitive

Additional admins? Replace owner.

Eric, KF0S, tried setting up a new email during meeting and it was pretty painless. Note this was setting up an email for himself, not others.

Non admins need to log themselves out first to see prompt to sign-up others.

Education:

125 Live:

Needs some more volunteers to help/support. On 9/17, Steve isn't available.

Discussion on where to share club documents:

Robert had set some stuff up in our Google account. Not sure of a good way to share them. Inventory, Maintenance logs, etc..



Technical Committee

Eric (KF0S)

Club Inventory:

Discussion started to get a more current list. Insurance due in October.

Review ARRL rates as well as rates offered by replacement vendor (our old vendor no longer provides insurance).

Need vendor is sending a proposed offer in the next few days. We have received. Eric and George reviewing.

3 Yaesu radios in the RST EOC cabinet.

A new router in the RST EOC.

1 Military mast sold.

Mayo Site:

Darrel is our current access person. Mark and Taylor are working on getting access as well.

We have old expired licenses displayed at each repeater. Fusion has an old WB0SBH and DSTAR has 2015 expiration of WOMXW.

Eric has made new contact/license sheets. Need to get two of them to Darrel for Mayo.

Speed Test was slow (although I think it matches what we have seen in the past)

ISP says we should be getting 1.5 MB/s.

Router may have older firmware. Mark to investigate if there is an update and we will update the router.

Fusion repeater has a 4 digit lock code to access.

Sounds like no easy way around this at present.

Fusion repeater amplifier needs a new fan (current one doesn't work).

Fan updated.



Technical Committee

Eric (KF0S)

Current PC for Fusion, small unit, is not upgradeable to Windows 11 due to an older processor.
Only computers at Mayo are Windows 10. We would have to purchase Windows 11 or just buy a low cost computer with it on it.

Replace DSTAR PC with a small unit? Big item is the gateway PC needs two NICs (network cards). A little tougher to get.

Taylor is investigating.

New Icom Gateway software runs on AlmaLinux. Requires a x86_64_v2 chipset, but anything recent should be ok for that.

Eric has new gotten new software from Icom.

Database update may not be desired if the older data was/is not updatable.

Hope to use an analyzer to check the antennas at some point.

The old 625 repeater is still onsite as a backup.

Tech Committee work for 82 repeater site

Updated license/contact sheet.

Tech Committee work for Digipeater

Currently, we don't have access as they replaced the gate lock and added a lock to the door. We do not have a key for these locks. John Scott will work with the owner to get 2 keys. One for John and one for the Tech Committee chair. We do have a single key for the second door lock. John will work on getting us another key for the Tech Committee chair.

Have license/contact sheet to place at new site once we have access.

We need a few PL-259/N connector adapters to test a second antenna.

Update Location in the config? Further discussion later.

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!

2024/2025 Online *ZOOM* Extra Class & Technician Class Schedule From Maple Grove Radio Club (K0LTC):

- **EXTRA CLASS ZOOM Classes**: Every Wednesday starting Oct 2nd, 2024 Zoom for twelve weeks. Class time: 6:45 – 9:15 pm (\$10 due first day of class) [purchase Amateur Extra Class License Manual](#)
- ***NEW HAMS* - TECHNICIAN LICENSE ZOOM Classes**: Every Wednesday from Feb 5th, 2025 to April 9th. Class time: 6:45 – 9:15 pm (\$10 due first day of class) [purchase Technician Class License Manual](#)

To Register: registration@mnyarc.org



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), gettuit@charter.net.**



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**



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](#).



Parks On The Air® (POTA)

It's *Fall* 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