



THE HAMSTER



February 2025

Official Monthly Newsletter of the *Rochester Amateur Radio Club*





THE HAMSTER

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The Hamster is the official monthly newsletter publication of the **Rochester (MN) Amateur Radio Club (RARC)**. The Hamster is distributed monthly via the official RARC [groups.io](#) email free to members and non-members and is also available online in the club website: [www.rarchams.org](#).

Rochester (MN) Amateur Radio Club was founded in 1932 and has been an [ARRL](#) (Amateur Radio Relay League) Affiliated club for 50+ years.

All members are invited to [contact the Hamster](#) with comments and/or questions. Additionally, members are encouraged to suggest or submit story ideas or content to the Hamster via the Editor's email link below.

The Hamster has an *outstanding* staff of regular contributors and you are invited to join the team!

[G. Mark Kelm](#) (K0GMK) - Editor

This Month In The Hamster

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THE HAMSTER



The Editor Says...

[G. Mark Kelm](#) (K0GMK)

The RARC Holiday Party was held on Tuesday, January 13th, with a tremendous turnout. January marks the start of another year of RARC activities with continuing ARES education, 125Live Ham Radio Club, JM Rocket Radio Club, Field Day 2025 and many others. The essence of all of these activities is the volunteer dedication of club members.

RARC asks all members to get involved in your club and that will ensure that all of the activities are successful and fun. The goals of a hobby like amateur radio are lifelong learning, community service, involvement and teaching of youth and developing lifelong friendships.

ARRL Field Day 2025 will be held June 28th through 29th. As I stated in this column last month this is an outstanding opportunity for one or more new Hams to get involved. I assure you that you won't be left to fend for yourself as RARC has a number of Field Day veterans that will guide and assist you in all the aspects of planning and carrying out a successful Field Day. If you or a group would like to volunteer to carry out this important RARC mission please contact [Steve Wiebke](#).

The Hamster has a tremendous team of monthly contributors. If you would like to join the team please feel free to [email](#) me. It's not necessary to write a column (but I won't turn it down). Photos of antenna building, shack setup, POTA activations or any ham radio related activities are welcome. Please don't worry about being a "wordsmith" as that's my job as the editor as a former newspaperman.

Finally, if you have a ham radio related item you want to sell, trade or give away, you are invited to take advantage of the free Hamster ad page. All that's necessary for you to do is attach a photo to an [email](#) to me with a description of the item and whether you want to sell, trade or give away the item. If no photo is available, I will be happy to endeavor to find one on the web.



RARC Training

Dan Stroh (N0SPN) - Vice-President

February 11th 2025 @ 6:30 PM

RFI *In The Shack*

*And how not to go **crazy** trying to get rid of
it...*

*Presented by: **Mike (N0MGY)***



RARC Holiday Party



Photos courtesy of Fred (K4IU)





RARC Holiday Party



Photos courtesy of Steve (W0STV)





RARC Holiday Party

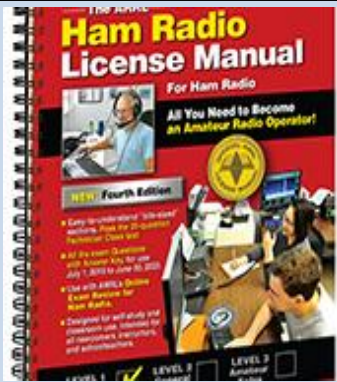


Photos courtesy of Steve (W0STV)



Education

Dave (KØVH)



Class Begins February 5th - Register Soon!

2025 *Online ZOOM* Technician Class Schedule

Presented by: [Maple Grove Radio Club \(K0LTC\)](#):

- **NEW HAMS - [TECHNICIAN LICENSE ZOOM Classes](#)**: Every Wednesday **beginning Feb 5th** to April 9th. Class time: 6:45 – 9:15 pm (\$10 due first day of class) [purchase Technician Class License Manual](#)

To Register Click The Following Link: registration@mnyarc.org

The first step 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!



125Live Ham Radio Club



Steve Wiebke (W0STV)

The 125live radio club met on Tuesday January 21 at 2:00 PM in the technology room.

The meeting ran for 1hr and 20 minutes. The training program was Echolink, how to install and use the network. We made Echolink contacts from the 125Live radio station. There was further education on last month's program APRS network and apps.

If you are a 125Live social member you are invited to our next meeting on February 18th at 2:00 PM. All are welcome to attend this unique club of people that enjoy doing fun things.

Any 125Live social member that has a current FCC amateur radio license can use the ham radios in the Technology learning center room. See **Steve Wiebke (W0STV)** for the code.

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



The next meeting of the 125Live Ham Radio Club sponsored by RARC will be February 18th at 125Live in the Technology Learning Center room at 2:00 PM.



Amateur Radio VE Testing

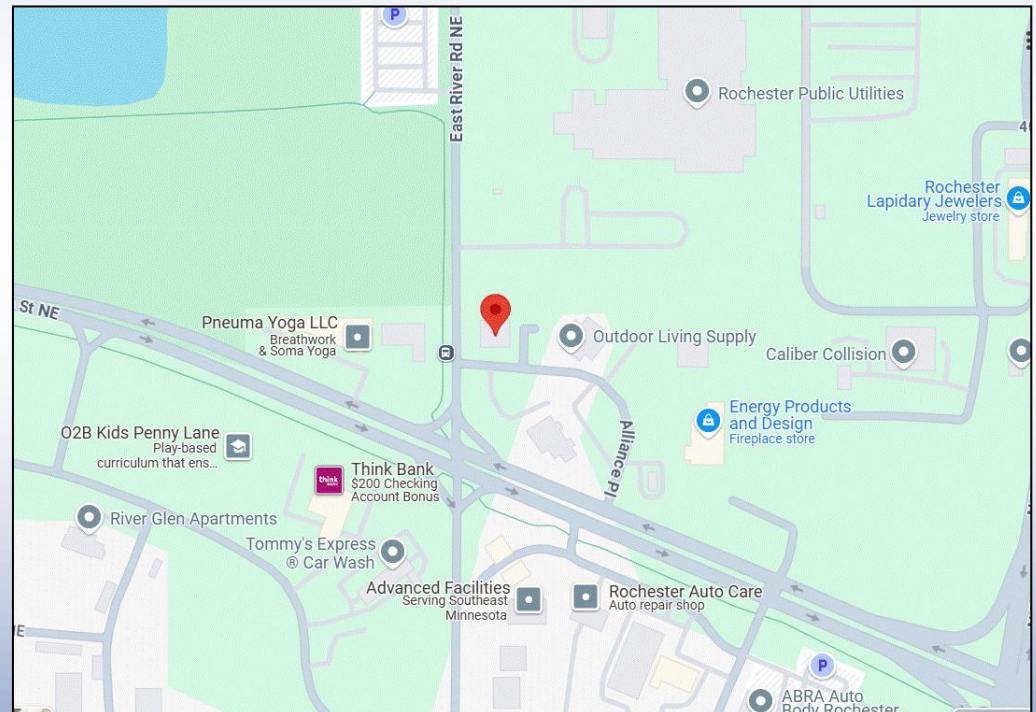
There will be a VE test session on February 13th starting at 6:30 PM at the Rochester Red Cross building at 305 Alliance Place NE, Rochester, MN.

Walk ins are welcomed, no preregistration required. You must have your FRN (federal registration number) before you can be tested.

Watch the link below about how to get your FRN:

<https://www.youtube.com/watch?v=SaHcLG9cLS0>

- A government picture ID is requested.
- If you are upgrading your license, bring your current license with you.
- Bring \$15.00 for the cost of the test.





ARES

Amateur Radio Emergency Service

ARES and the Rochester EOC were very busy. All 5 ARES AECs attended one of a 3-day Rochester EOC tornado tabletop disaster activation. We met and discussed our ICS interactions with other departments and organizations. We met people that would be in the EOC and learned about each other's rolls and capabilities for when we would work together again during a real disaster. We learned about the EOC computer information dashboard other programs that are being used and how we can get and input information on the EOC dashboard network. I walked away with this thought, there is no such thing as too much information, but it's very important to have the CORRECT up to date information.

Olmsted/Rochester ARES has added a second email to our information network. We have our primary email w0mxw@yahoo.com. We have added an alternative email w0mxw2@yahoo.com. This was to be able to either handle high volume of information being posted by location, topic, or EOC locations.

All ARES members are asked to send an email to the w0mxw@yahoo.com anytime during the week to test your information capability. They are recorded and read during the Sunday ARES nets at 9:00 PM. If you have a Winlink account, please use it to send an email to w0mxw@winlink.org. This will also be recorded and announced during the Sunday nets.

ARES has weekly nets, and monthly meetings to stay current on information and training activities. The changing protocols and operating procedures, along with updated communications information are important for ARES to operate effectively. The more you know when all else fails. Call 507-254-3993 with questions, information, or anything related to ARES. 73

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.

Contest Corner

Fred (K4IU)



February is a notable month on the calendar. Not only do we celebrate Valentines Day, Presidents Day, Groundhogs day and Super Bowl Sunday but also the **Minnesota QSO Party**. This will be held **Saturday, 1 February 2025**. Olmsted county may not be rare, but the national and international popularity of our QSO party will keep everyone busy on the bands.

- **1 February [Minnesota QSO Party MNQP](#):** 1400 UTC (8:00 AM CST) to 2400 UTC (6:00 PM CST). There are lots of resources on the webpage to include activity schedules, rover routes and a list of certificates, plaques and prizes.
- **8-9 February [CQWW WPX RTTY Contest](#):** This is a very popular RTTY event and there are several RTTY contests in February to include the [NAQP RTTY](#) on the last Saturday of the month.
- **15-16 February [ARRL International DX Contest](#):** This is the CW version. Remember that since this is an ARRL sponsored contest you can take advantage of self-spotting. This is now built into the contest logger [N1MM+](#). Use the **{SPOTME}** macro on a function or bandmap button. You must be in run mode to do so. You can only spot yourself on the same frequency every 5 minutes. The details are [here](#).



Contest Corner

Fred (K4IU)



There's much more in February including the RTTY Sprints, Straight Key night and several digital contests. You can find all the details right here on the [WA7BNM calendar](#) website!

If you're not into contesting a lot you might enjoy some of the award nets like the North American Traffic & Awards Net, [NATA](#) for short. Several of the new hams in our area have really enjoyed this community and all the camaraderie. NATA meets most evenings at 6 p.m. EST on 7.185 MHz. More information can be found [here](#).

Are you new to HF QSO parties? AND just what is a QSO party?

If you ever have wondered about being the focus of a pileup then a QSO party, like the Minnesota [MNQP](#) next month, may be for you.

QSO parties are special operating events, usually occurring during part of a weekend, where hams try to make as many QSOs as possible within a designated timeframe. They typically focus on a specific geographic area, such as a state or region. Because multipliers are usually counties of that state, you try to work as many counties as you can to improve your score in addition to working individual stations.

Participants in a QSO party exchange specific information during each contact, such as their call sign, location (state, county, or region), signal reports, and sometimes additional details depending on the rules of the specific event.

Contest Corner



You can find a list of state QSO parties, the rules, dates and details are here: <https://www.contestcalendar.com/stateparties.html> or the very detailed [State QSO Party \(SQP\) website](#).

Finally, there is a new Beta version of WSJT 2.7.0-rc8 software used in FT8/4 and several other digital modes. It can be accessed [here](#). The main new feature is a messaging system described [here](#).

73 Fred K4IU@me.com

2025 QSO Party Calendar (with links)					
Month	Start Date	Start Time	End Date	End Time	Contest Name/Link
FEB	2025-02-01	0000Z	2025-02-02	2400Z	Vermont QSO Party
	2025-02-01	1400Z	2025-02-01	2400Z	Minnesota QSO Party
	2025-02-01	1600Z	2025-02-01	0359Z	British Columbia QSO Party
	2025-02-02	1600Z	2025-02-02	2359Z	British Columbia QSO Party
	2025-02-22	1500Z	2025-02-23	0159Z	South Carolina QSO Party
	2025-02-23	1500Z	2025-02-24	0059Z	North Carolina QSO Party
MAR	2025-03-08	1500Z	2025-03-09	0200Z	Oklahoma QSO Party
	2025-03-08	1900Z	2025-03-09	1900Z	Idaho QSO Party
	2025-03-09	1500Z	2025-03-09	2100Z	Oklahoma QSO Party
	2025-03-09	1800Z	2025-03-10	0100Z	Wisconsin QSO Party
	2025-03-15	1400Z	2025-03-16	0400Z	Virginia QSO Party
	2025-03-16	1200Z	2025-03-16	2400Z	Virginia QSO Party
APR	2025-04-05	1400Z	2025-04-06	0200Z	Louisiana QSO Party
	2025-04-05	1400Z	2025-04-06	0200Z	Mississippi QSO Party
	2025-04-05	1400Z	2025-04-06	0400Z	Missouri QSO Party
	2025-04-06	1400Z	2025-04-06	2000Z	Missouri QSO Party
	2025-04-12	1400Z	2025-04-13	0200Z	New Mexico QSO Party
	2025-04-12	1800Z	2025-04-13	1800Z	North Dakota QSO Party
	2025-04-12	1800Z	2025-04-13	0359Z	Georgia QSO Party
	2025-04-13	1400Z	2025-04-13	2359Z	Georgia QSO Party
	2025-04-19	1100Z	2025-04-20	2259Z	Nebraska QSO Party
	2025-04-19	1800Z	2025-04-20	0500Z	Ontario QSO Party
	2025-04-19	1600Z	2025-04-20	0400Z	Michigan QSO Party
	2025-04-20	1200Z	2025-04-20	1800Z	Ontario QSO Party
	2025-04-20	1200Z	2025-04-20	2200Z	Quebec QSO Party
2025-04-26	1600Z	2025-04-27	0159Z	Florida QSO Party	
2025-04-27	1200Z	2025-04-27	2159Z	Florida QSO Party	
MAY	2025-05-03	1300Z	2025-05-04	0700Z	7th Call Area QSO Party
	2025-05-03	1500Z	2025-05-04	0300Z	Indiana QSO Party
	2025-05-03	2000Z	2025-05-04	0500Z	New England QSO Party
	2025-05-03	1700Z	2025-05-04	2359Z	Delaware QSO Party
	2025-05-04	1300Z	2025-05-04	2400Z	New England QSO Party
	2025-05-10	1700Z	2025-05-11	0300Z	Canadian Prairies QSO Party
	2025-05-17	1400Z	2025-05-18	0200Z	Arkansas QSO Party
JUN	2025-06-07	1300Z	2025-06-08	0100Z	Kentucky QSO Party
2025-06-14	1600Z	2025-06-15	0400Z	West Virginia QSO Party	
JUL	2025-07-26	1500Z	2025-07-27	0300Z	Alabama QSO Party
AUG	2025-08-09	1400Z	2025-08-10	0359Z	Maryland-DC QSO Party
	2025-08-23	0400Z	2025-08-25	0359Z	Hawaii QSO Party
	2025-08-23	1600Z	2025-08-24	0400Z	Ohio QSO Party
	2025-08-30	1400Z	2025-08-31	0200Z	Kansas QSO Party
	2025-08-30	1400Z	2025-08-31	2000Z	Kansas QSO Party
	2025-08-30	1300Z	2025-08-31	0400Z	Colorado QSO Party
SEP	2025-09-07	1800Z	2025-09-08	0300Z	Tennessee QSO Party
	2025-09-20	1400Z	2025-09-21	0200Z	Texas QSO Party
	2025-09-20	1400Z	2025-09-21	0200Z	Iowa QSO Party
	2025-09-20	1400Z	2025-09-21	0159Z	New Jersey QSO Party
	2025-09-20	1600Z	2025-09-21	0400Z	New Hampshire QSO Party
	2025-09-20	1600Z	2025-09-21	0700Z	Washington St Salmon Run
	2025-09-21	1400Z	2025-09-21	2000Z	Texas QSO Party
	2025-09-21	1200Z	2025-09-21	2200Z	New Hampshire QSO Party
	2025-09-21	1600Z	2025-09-21	2400Z	Washington St Salmon Run
OCT	2025-10-04	1600Z	2025-10-05	2200Z	California QSO Party
	2025-10-11	1500Z	2025-10-12	0500Z	Arizona QSO Party
	2025-10-11	1600Z	2025-10-12	0400Z	Pennsylvania QSO Party
	2025-10-11	1800Z	2025-10-12	1800Z	South Dakota QSO Party
	2025-10-11	0300Z	2025-10-12	2100Z	Nevada QSO Party
	2025-10-12	1300Z	2025-10-12	2200Z	Pennsylvania QSO Party
	2025-10-18	1400Z	2025-10-19	0200Z	New York QSO Party
2025-10-19	1700Z	2025-10-20	0100Z	Illinois QSO Party	



Hamster Hints

Bob (KE0EXE)

Back in October of 2024, I mentioned I had received a bag of perhaps 150 unidentified, semiconductor diodes from a friend (review that article, if desired). He had told me they were Germanium-based and that he had kept them for a very long time, probably since the 1970's. I promised to tell the story of testing them, when I finally found time to it. This month, here is that story...

Using a 28 VDC power supply, recently, I set up a simple series circuit of supply, 1 K-ohm resistor, DMM (set to measure current), and another DMM (set to measure voltage). Almost no current flows in this circuit, due to the high internal impedance of the voltmeter. The two probes of the voltmeter are then touched to the DUT (Device Under Test--in this case a sample diode), to obtain meter readings, with both polarities tried. The resistor keeps power dissipation in the DUT within the SOA (Safe Operating Area), so as not to destroy it. I made such measurements on 10 diodes, chosen at random from my bag of diodes. All this data went into a spreadsheet, which is shown on the next page.

Based on the printing found on each diode, I had supposed them to be Zener diodes; but, remarkably, that turned out to be wrong. My friend was actually correct in his recollection about them being standard germanium diodes, as I found that they did not exhibit a reverse-breakdown voltage where I expected (nor anywhere, at least up to my power-supply's open-circuit voltage), and their forward-voltage drops all measured right around 0.4 volts, typical for a germanium diode.

- continued on next page -



Hamster Hints

Bob (KE0EXE)

	A	B	C	D	E	F	G	H	
1	Global current-limiting:			28	mA				
2	(Used a 28 VDC power supply, with a 1 K-ohm series resistor.)								
3									
4	Reverse-voltage measurement DVM leakage current (uA):						2.8	uA	
5									
6	Diode Id. #	Measured forward voltage (V)	Measured forward current (mA)	Measured reverse voltage (V)	Measured reverse-voltage current (uA)	Corrected reverse-voltage current (uA)			
7	1	0.44	25.1	28	7.5	4.7			
8	2	0.44	25.2	28	9.6	6.8			
9	3	0.44	25.2	28.2	7.6	4.8			
10	4	0.43	25.2	28.1	6.4	3.6			
11	5	0.47	25.2	28.1	4.7	1.9			
12	6	0.43	25.2	28	10.5	7.7			
13	7	0.44	25.2	28	7.3	4.5			
14	8	0.43	25.1	28	4.9	2.1			
15	9	0.45	25.2	28	5.3	2.5			
16	10	0.47	25.1	28	4.6	1.8			

So, now, I know what I have! Next, I need to find some projects to build, using these special, historical diodes. For certain, a "crystal radio" will be in the mix, especially once any grandchildren reach an age-of-interest/appreciation for such things. I can remember doing this as a kid, having fun putting up long-wire antennas, and getting very good results with similar diodes (1N34A's, I think). (Of course, Germanium diodes are more sensitive, in this application, than silicon-based diodes, due to the lower, forward-voltage drop, or "knee" in their Characteristic Curve.) I'm sure most of you can relate to a similar experience, growing up!



Technical Committee

Eric (KFOS)

Tech Committee - 1/13/25 - Not held

Since this month's RARC meeting was the holiday party, no Tech Committee meeting was held.

It should be noted that the subgroup to purchase new devices for the Mayo Clinic site have decided on the devices to purchase.

- I just received them (1/21). We still need to purchase a copy of Windows 11 and install the OS's (the other is Alma Linux).
- The subgroup still needs to determine if we need to replace the router and with what.
- I will try and bring one to the February meeting for show and tell.

We won't have access to the Mayo site until the first part of February.



Parks On The Air® (POTA)

It's *Winter* 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?](#)



RARC buy & sell & trade



Monarch "Super Sensitive" "Amateur 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, buy or trade locally, email the Hamster at RARC [Buy or Sell](#) or Trade.



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.
- ♦ **Wednesday 7 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



RARC MEETING MINUTES

There was no January RARC Meeting in lieu of the RARC Holiday Party.

The RARC February meeting will be held on Tuesday, February 14th at the Rochester EOC in the lower level of Rochester Fire Station #2 at 2185 Wheelock Drive NE, Rochester, MN.



- 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

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 and January is the annual holiday party*) in the lower level of Rochester Fire Station #2 in the EOC at 2185 Wheelock Drive NE, Rochester, MN

- ◆ **Website:** <http://www.rarchams.org/>
- ◆ **Mail:** RARC , P.O. Box 1, Rochester, MN 55903
- ◆ **Groups.io:** [Register](#) to post and receive RARC official email, notices and the Hamster
- ◆ **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