



# THE HAMSTER

July 2022

*Official Monthly Newsletter of the Rochester Amateur Radio Club*

*Editor: G. Mark Kelm (K0GMK) [k0gmk2016@gmail.com](mailto:k0gmk2016@gmail.com)*

***We are in the midst in severe weather season and it is important that all ARES and SkyWarn personnel keep informed during potential forecasted outbreaks by the NWS by keeping your mobile or HT radios tuned to the designated EOC frequency. As of this publication the 147.255 PL tone 100 repeater is the primary SkyWarn repeater. The 146.820 PL tone 100 repeater is backup.***

## EDITOR'S NOTES

- ♦ **Field Day 2022** is over and it was a great weekend for Ham radio! Thank you to **Pat (W0BM)** for the gracious use of his family farm once again. **RARC appreciates your hospitality Pat.**
- ♦ Please check out **page 6** for **Taylor's (WB0RSJ)** wrap-up of this years **Field Day** event. RARC thanks Taylor for his tremendous leadership of this years Field Day. Well done!
- ♦ Thank you to **Drew (KC0CJP)** for preparing the delicious food for Field Day 2022!
- ♦ Be sure to check out **page 4** with news regarding our **RARC July meeting program**: Meeting the new **Rochester Emergency Management Director, Kyle Mirehouse** The presentation will be on ZOOM online as well.
- ♦ The **July 12th, 6:30 PM RARC meeting** is planned for in-person at the Rochester EOC (Fire Station #2) and also on the **optional ZOOM** broadcast. See **Page 5** for the optional **ZOOM login** and connection instructions.



# PRESIDENT'S MESSAGE

Steve (W0STV) - President [w0stv@yahoo.com](mailto:w0stv@yahoo.com)

We had fun holding the 2022 RARC two days of ham radio operating in the field. Working with seasoned hams along with new hams for the field set up, take down and radio station operations was interesting and educational. Both our 2A stations were operating during the daytime both Saturday and Sunday. The SSB station had less than a 1.5 SWR on 10/15/20 meter bands. I think we will have **Pat (W0BM)** be our assembly foreman again for 2023. **Taylor (WB0RSJ)** thank you for your organizational skills and assembling a good team.

The **Rochester Parade** held that Saturday afternoon had an interesting twist for communications. New and fewer people helped with the actual parade. The EM-50 had brake problems and could not leave the garage. The Police, Fire and ARES had to set up dispatch and net communications in the **Edison building**. More on this in the **ARES report on page 14**.



The **July RARC program** is meeting the new **Rochester Emergency Management Director, Kyle Mirehouse**. We will also bring his staff, Ryan from the Rochester Fire Department, and Travis from the Rochester Police department to our meeting. This is an opportunity for the RARC to see how the Rochester EOC currently operates and functions before and during disasters and for them to see how we operate using our communication tools. The more you know!



# PRESIDENT'S MESSAGE

Steve (W0STV) - President [w0stv@yahoo.com](mailto:w0stv@yahoo.com)

The **125 live radio station** was on pause with field day activity and some equipment that needs to be purchased and assembled. Will get things going in July. I am confident we will have it completed station this year. More latter.

This is general information, but our club's **Vice President, Melissa (KE0WNH)** is currently at **NASA** where she was accepted into an elite group to learn about **aero space for teachers**. She will continue her education with a **visit to the ARRL headquarters** for their **teacher education programs**. We look forward to hearing what she learned and did. Will need to come to a Saturday breakfast to listen and learn when she gets back, since she will not be at the July meeting.

If you have **items to sell or trade** please bring them to the July RARC meeting. You may also post them on our groups.io email reflector or [email](#) them to **RARC Buy Or Sell** for publication in the next month's Hamster. If you have a photo of the item be sure to send it along. Check out this month's items on page 16.

**Steve (W0STV)**  
RARC President



# MEETING PROGRAMS

Melissa (KE0WNH) - Vice President

## July 2022 RARC Meeting Program

RARC monthly meeting starting at 6:30 PM, Tuesday, July 12, 2022

Rochester EOC (Fire Station #2)

### **Rochester Emergency Management Director, Kyle Mirehouse**

The **July RARC program** is meeting the new **Rochester Emergency Management Director, Kyle Mirehouse**. We will also bring his staff, **Ryan** from the **Rochester Fire Department**, and **Travis** from the **Rochester Police Department** to our meeting. This is an opportunity for the RARC to see how the **Rochester EOC** currently operates and functions before and during disasters and for them to see how we operate using our communication tools. The more you know!



## July 2022 RARC Online Meeting Info

OPTIONAL FOR THOSE NOT ABLE TO ATTEND IN-PERSON



Here is the information for the July 12, 2022, 6:30 PM RARC ZOOM monthly club meeting. ZOOM info is also posted via the [RARC email reflector](#) (which is private to the subscribed 120 Rochester area Hams). The remainder of this newsletter will go on a [the RARC website front page](#) without the passcode. The passcode is available to members on [rarc.groups.io](#) or by contacting [W0STV](#) prior to the meeting.

- ♦ **When:** July 12, 2022 @ 06:30 PM Central Time (US and Canada)
- ♦ **Join Zoom Meeting (copy & paste the link below in your browser):**  
<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:** #####



# RARC FIELD DAY 2022

## WRAP-UP

Taylor (WB0RSJ) - [tbbauman@gmail.com](mailto:tbbauman@gmail.com)

***Thank You RARC!***

Thanks to all the RARC members for their contributions to another successful Field Day. Without all of you it couldn't be done. Thank you to Pat (W0BM) for again hosting the event at his family farm. See you at Field Day 2023!





# 125 LIVE RADIO PROJECT

Dave Naatz (K0VH) [dcnaatz@gmail.com](mailto:dcnaatz@gmail.com)

**Steve (W0STV)** brought his vertical antenna base up on the roof of the building. He is looking at a possible **no-radial vertical** the club owns but the condition is TBD.

We also **met with the 125 Live staff** on where to install the radios in their computer lab. We have the RARC HF and VHF transceivers ready to be installed.

The 125 Live staff is planning to **add a small upper cabinet** addition that can have vents and a lock to house the equipment.

There is not a direct drop from the roof to the computer lab, so we plan to use **two high quality RG8x (double shielded) coax cables** to pull through the roof conduit this summer. The goal of the project is to be operational by early fall this year.

**Dave Naatz** (K0VH)





# JM ROCKET RADIO CLUB

**Melissa (KE0WNH) - Mentor** [melissa.ke0wnh@gmail.com](mailto:melissa.ke0wnh@gmail.com)

**I'm happy to announce the inception of the JM Rocket Radio Club!** As the home of the JM Rockets, it seemed a fitting name. The 3 students that have been the core group through the year have accepted with great enthusiasm the opportunity to start the radio club officially. Next school year, we will be meeting after school, which opens club participation to all students at JM and potentially other high schools. They have already elected officers for this year : Roarke C. is President, Manal A. Is secretary, and Megan T. Is Vice President / All other offices needed.

We have a radio room ready for being set up, so first thing for next school year is to get the antenna hung that was planned pre-covid. For now we are using my CompacTenna R7 which works well, but not ideal for radiation. This room that they were helping me clean up again has locking doors for securing equipment from unlicensed use.

In preparation for this continued interest, I'm going to Dayton, Ohio with ARRL this summer for a teacher program the third week of July. Stay tuned!





# CONTEST CORNER

Fred (K4IU) [k4iu@me.com](mailto:k4iu@me.com)

**June was a great month** with lots of activity to include the June VHF contest. We have some very competitive rovers in the club and the results of the **January VHF contest** just published in the **July QST** confirm that. On page 79 you will see Mel, KCØP leading the pack for the Dakota division in the unlimited rover category.

We're all recovering from another successful Field Day by the RARC hams. Many thanks to Taylor for making this a success.

**Tim, K3LR from DX Engineering** gave an excellent presentation on grounding and bonding at the June RARC Club meeting. We continue to see stormy conditions in the area. You can stay aware of conditions from a variety websites. One that I like tracks lightening strikes. [Lightningmaps.org](http://Lightningmaps.org) is a good resource to bookmark.

July looks like it has lots of opportunities for HF and VHF contesters to stay busy.

**July 1 [RAC Canada Day](#) contest**, is a celebration of Canada's birthday similar to our 4<sup>th</sup> of July celebrations. There are a couple of rule changes so check out the link.

**July 9-10 [IARU HF Championship](#)**, This is mixed mode (SSB/CW) summer event. It promotes IARU member society headquarters stations, using the 160, 80, 40, 20, 15 and 10 meter bands. But basically, everyone works everyone on either SSB/CW or both during the 24-hour contest period. Make sure to submit your logs within 7 days!

**July 16-17 [CQWW VHF](#) contest**, all you famous rovers can get out there and stir up things on the 6- and 2-meter bands along with us fixed location folks.



**July 16-17 North American RTTY QSO party**, There are a few RARC hams who like this mode. Almost every modern radio has a decoder built in, so you don't need a fancy setup. Maximum power is limited to 100 watts. The exchange is your name and station location. This is a friendly, and low frenzy 12-hour event. There is a new category which permits the use of packet spotting and skimmers.

That's a sampling of next month contest highlights. You can see them all on the [DL2NBY](#) and [WA7BNM](#) calendars.

-----

Although we direct you to **Bruce Horn's, WA7BNM, contest calendar** each month it is a good resource that's more than just a list of dates. Tony Luscre, K8ZT, has a short review of some of the other features and customizations you can do with the WA7BNM calendar. You can view it [here](#). Tony is also the editor of a popular CQ magazine column entitled Ham Radio Explorer.

In May I reviewed the topic of **cluster networks** when using N1MM. As a follow up **tool**, many contesters will use **call history files** with their loggers. There are some contests where these .txt format files are useful to pre-fill the exchange during a contest to save or improve typing and display user comments or notes for specific call-signs. They are **not** useful where the exchange may be a progressive serial number or QSO specific item like an age or timestamp. There are sources for call histories which include data from your own logs. There are also a number of call history files available from the [N1MM library here](#). A **caveat** is that the call history information can change for any given contest so don't always just **trust**. Instead, **verify** by logging exactly what you copy. You may also combine files from several call history sources.





To import or change a call history in N1MM open the contest setup dialogue tab as seen in **Figure 1**.

Then click on the **associated files** tab to open the menu selections.

Looking at **Figure 2** you can see that Call history text (.txt) files may be changed by clicking the change button and selecting or assembling the call history for the contest you want to set up for. They may be located in libraries/directories on either a local PC or an Internet source.

If you click the **change** button seen in **Figure 2** the program will look up an internet web file usually from the N1MM website. You may choose to decline the web selection and choose a call history from your own user data files as seen in **Figure 3**.

**Figure 1**

**Figure 2**

**Figure 3**

Make sure you enable call history utilization by tabbing to **>Config >Enable Call History Lookup** and checking the tick box to enable **Call History Lookup**

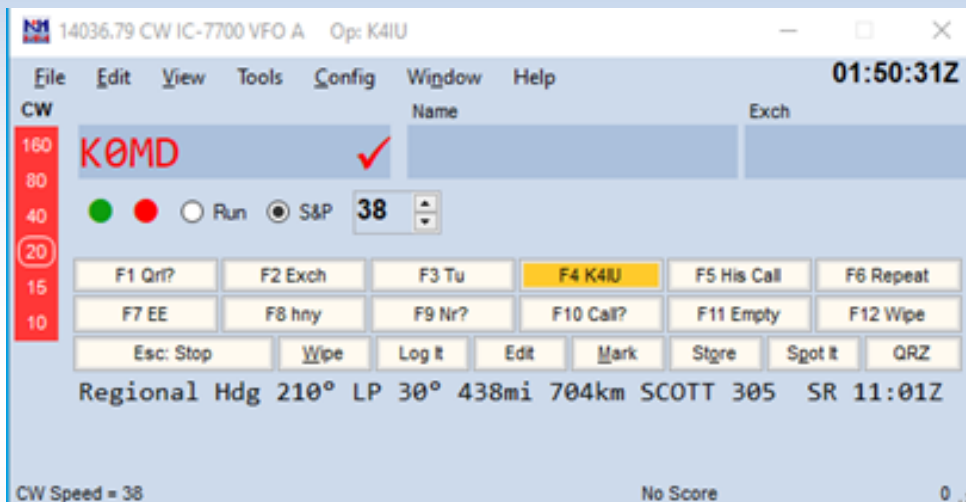


Figure 4

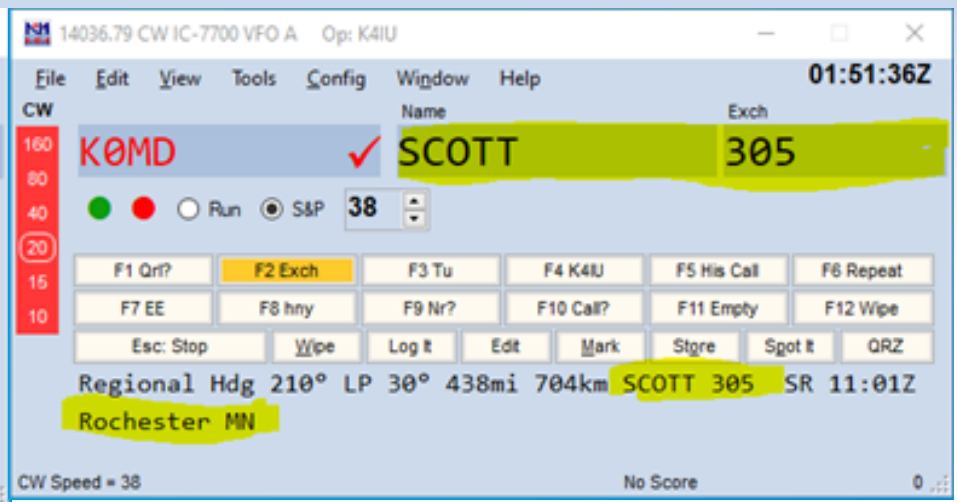


Figure 5

Once you have imported and enabled the call history file you want you just type the call into the call entry box as in **Figure 4**, i.e. KØMD. Then hit the **space bar** (or enter if ESM is enabled) to do the prefill if your QSO partner is in the call history file you imported. In this mini contest the exchange is KØMD's name and **cw ops** member number. You'll also see his QTH and beam headings.

There are additional options you may choose from and they are covered in the [N1MM documentation](#).

Although its slightly dated, **Val NV9L** has a short [YouTube video](#) illustrating another way to associate a call history with a contest.

73 for now

**Fred** (K4IU)

# ARES

## AMATEUR RADIO EMERGENCY SERVICE

Steve (WØSTV) [w0stv@yahoo.com](mailto:w0stv@yahoo.com)  
Olmsted County ARES-EC



I will start with the **next Olmsted ARES Saturday July 16th training program**. We will be learning how to set up the Minnesota portable Aluma communications tower at the **Olmsted EOC garage**. This will allow EOC's to focus on disaster operations while using our assistance for delivery, and set up. This is tentative date at this time but they are arranging for an instructor.

I got to use my **ARES go kit** for the Rochester Parade net control station. The EM-50 had brake issues and could not get out of the garage. I was contacted by the police about the situation and asked if running the parade information net from the Edison building was possible. With a battery, mobile radio, antenna w/coax, and headset, I was operational. We just had our ARES go kit information class on July 18th. Just proves the more preparation the less confusion, and wasted time. The police will have a portable go kit for their 800 MHz dispatching in the future.

The **ARES trailer had issues at field day** but no one noticed because of the built in redundancy. The trailers internal 12 volt battery system that operates the radios was dead. The generator started on the first pull after not running for years, but the batteries would not start taking a charge. Extra portable radio power supplies are in the trailer, and both worked. Will diagnose the system to determine the cause but I suspect shorted batteries. Murphy's law has no control over redundancy

The ARES trailer is see some changes soon. Masts with drive on bases. HF capability, new coax, headphones, and configured radio's to laptops. Better storage capacity, etc.

The Rochester EOC radio room is getting a Dell T3500 desktop computer donated by Gene/K0GEN. It is running new Windows 10 Pro, has 24GB RAM, with C:/ and D:/ drives. This will be a great addition to the Rochester EOC radio room operations. Thank you Gene.



# ARES

## AMATEUR RADIO EMERGENCY SERVICE

Steve (WØSTV) [w0stv@yahoo.com](mailto:w0stv@yahoo.com)  
Olmsted County ARES-EC



Check into the **Rochester/Olmsted ARES Sunday night nets starting at 9:00 PM** for the latest information and updates. The nets are on the 146.820 PI-100 repeater on Sundays that have even number dates. The nets are on the 147.255 PI-100 repeater on Sundays the have odd number dates. All hams are welcome to attend. See the **Net Schedule on page 20**.

View the **RARC Facebook site** for training and current information. The RARCHAMS.ORG web site has all the Rochester Amateur Radio operations information available.

**Interested in Amateur Radio Emergency Service?** Give me a call at 254-3993, email me at [w0stv@yahoo.com](mailto:w0stv@yahoo.com), or just come to a meeting to check us out. The more you know! 73

**Steve** (WØSTV)  
Olmsted ARES-EC  
The more preparation, the less confusion.





# HAMSTER HINTS

Bob (KEØEXE) [gettuit@charter.net](mailto:gettuit@charter.net)

**Happy Antenna Season!** Of late, I've been enjoying the outdoors, doing the yearly maintenance of wires and anchors. My favorite tool is a long, aluminum pole, used carefully. (Beware of power lines!)

The pole is made from four, telescoping sections of straight, "beam element" tubing. Each section is four feet long, and they overlap about six inches at each of the three joints. The two, outer joints are "permanently" secured, each via a stainless steel bolt and "nyloc" nut; however, the middle joint (see photo, below) uses a special bolt I made, which has a wing-nut cranked up tight to its head. On the open end of this bolt I use another wing-nut.

This allows me to break-down the roughly 15' pole into two halves, which are then easy to transport. The middle bolt's double-wing-nut (toolless) configuration allows a tight, secure joint. On the far end of the pole, I have a plastic, printed part (not shown, but it looks like an upside-down, lower-case letter 'k'), which allows a variety of manipulations of antenna wires and anchor ropes. Sometimes, the "k-half" of the pole is sufficient all by itself, too, but either way, it's always quick and easy to change the length.



# TECHNICAL COMMITTEE

Eric (KF0S) [kf0s@yahoo.com](mailto:kf0s@yahoo.com)



## Notes from the June Tech Committee meeting:

- ♦ Discussion on reprogramming the Motorola repeater we got from the Fire Department and tuning a set of cans to use as a repeater in the ARES trailer. Anticipated cost of \$150.
- ♦ 125 Live setup
- ♦ 250 feet of LMR-240 with 8 PL-259 connectors - Approximately, \$275
- ♦ Use HyGain AV-640 (need to verify that this is complete)
- ♦ Use the club Kenwood radio
- ♦ Comet 6 to replace the Comet 3 which moves to 125 Live. \$175
- ♦ 125 Live to provide a cabinet
- ♦ ARES Trailer cleanup in the fall. Thoughts are shelving, table and some drive on mast stands.
- ♦ Do we want to sell one of the military masts?



## RARC BUY OR SELL



I'm **looking for a Heathkit DX35 or 40** to go with it. Do any of you have one squirreled away some where? If so, please email me at the address below.

Niel (W0VLZ) - [nielwiegand@aggienetwork.com](mailto:nielwiegand@aggienetwork.com)

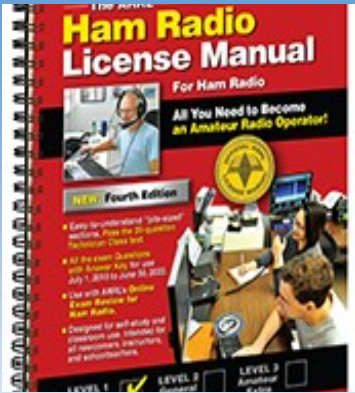


**For Sale: KB9VBR - Copper J-Pole for 2 meters.** Well made-heavy duty. Never mounted or used. Can't use it with the mount I have on the house currently. \$40 Taylor (WB0RSJ) - [tbbauman@gmail.com](mailto:tbbauman@gmail.com)



I'm still **looking for a Johnson 250-39 T/R Switch in great condition.** Bob (KE0EXE) - [gettuit@charter.net](mailto:gettuit@charter.net)

*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](#).*



# EDUCATION

**Bill (KØRGR)** [k0rgr@arrl.net](mailto:k0rgr@arrl.net)

**Dave (KØVH)** [dcnaatz@gmail.com](mailto:dcnaatz@gmail.com)

A **RARC Education Committee** has been convened and continues with regular meetings to assist in:

- ♦ Technician student class content development (online and/or in-person).
- ♦ Development of a program for 125 Live
- ♦ Development of High School radio club activities.
- ♦ Assist Melissa (KE0WNH) John Marshall HS educator with the HS program.

## **Members of the RARC Education Committee are:**

- ♦ Melissa (KE0WNH)
  - ♦ Dave (K0VH)
- ♦ Steve (W0STV)
- ♦ Bob (KE0EXE)
- ♦ Ben (KU0HN)
- ♦ Bill (K0RGR)
- ♦ Colin (AA0CN)
- ♦ Mark (K0GMK)



# PARKS ON THE AIR ® (POTA)

Mark (K0GMK) [k0gmk2016@gmail.com](mailto:k0gmk2016@gmail.com) Hamster Editor

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.

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

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

POTA is a great way to enjoy Ham radio and enjoy the bonus of being outdoors!

**You won't regret the experience.**





# RARC WEEKLY NETS

- ♦ **Monday 8 p.m.** Elmer's 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.** 147.255 Repeater. The first Net of each month is a voice net, and it's the SE MN District ARES 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 of us 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.** 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 RARC D-Star Reflector XLS632A
- ♦ **Sunday 7:30 p.m.** Minnesota D-Star Net on RARC D-Star Reflector XLS632A
- ♦ **Sunday 8:30 p.m.** Dodge County ARES Net on the 147.255 Repeater at 8:30 p.m.
- ♦ **Sunday 9:00 p.m.** RARC/ARES Net 147.255 Repeater (PL tone 100)

***147.255 Repeater is primary SkyWarn and 146.820 is backup.***



# CLUB FUNDRAISER

SMILE.AMAZON.COM

**RARC is always in need of funds to operate.** We have insurance costs, we have cost involved with running 3 repeaters and putting on a field day. Dues cover most of it but we need approximately 100 paid members to break even each year.

RARC now has another way to help bring funds to the club and it's painless.

[Smile Amazon](https://smile.amazon.com) is a simple and automatic way to [support the RARC](https://smile.amazon.com) every time you shop at [Amazon.com](https://amazon.com) at **no cost to you**. Tens of millions of products are eligible for donations.

Simply follow the [link](#) below and every time you purchase an eligible item the RARC will receive .5% of your purchase. There is no cost involved for you!

So, please click on the [picture](#) below, share it with others in your family and your friends. It will help out the RARC:





- ♦ 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](#)?

**John (NØHZN)** and **Fred (K4IU)** decided it was time to let other Hams know about the ARRL. Of course, you may think, "it's just another group that wants my money because I'm a Ham." But there is more to it than that, they truly want to grow the hobby.

So 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



- ♦ **WEB:** <http://www.rarchams.org/>
- ♦ **Mail:** RARC , P.O. Box 1, Rochester, MN 55903
- ♦ **Email:** If not a member, [register](#) and a Moderator will respond shortly
- ♦ **Weekly Net:** Sundays at 9:00 PM      147.255 repeater Odd numbered Sundays  
146.820 repeater Even Numbered Sundays
- ♦ **Facebook:** [Rochester Amateur Radio Club](#)

*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** mailing. 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 the club.*

**Newsletter articles or questions:** Mark (KØGMK) - Editor [k0gmk2016@gmail.com](mailto:k0gmk2016@gmail.com)