



# THE HAMSTER

October 2022

*Official Monthly Newsletter of the Rochester Amateur Radio Club*

*FOUNDED IN 1932 \* 50 YEAR ARRL AFFILIATION*

## EDITOR'S NOTES

**Rochester Amateur Radio Club meets the second Tuesday of each month at 6:30 PM in the EOC of Rochester Fire Station #2 (lower level) at 2185 Wheelock Drive NE, Rochester, MN**

- ♦ **Bill Lippert (AC0W) ARRL Dakota Division Director** will be at the October RARC meeting to present the 50 Year ARRL Affiliation recognition to RARC.
- ♦ **This month's meeting program features Dr. Adam Beardsley of Winona State University who will talk about Radio Astronomy** and the building of a CHART (Completely Hackable Amateur Radio Telescope) in which Melissa (KE0WNH) supervised this undergraduate program.
- ♦ **Bob (KE0EXE)** reports on Hamster Hints that you can use in your shack. Check out his excellent article beginning on **page 6**.
- ♦ **Contest season is in full swing.** Be sure to check out **Fred's (K4IU)** comprehensive October contesting report and improving your contesting tips beginning on **page 7**.
- ♦ The **RARC Education Committee** had a comprehensive meeting and planning discussion at their September ZOOM meeting. Check out **Dave's (K0VH)** report beginning on **page 10** for all the details.



# PRESIDENT'S MESSAGE

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



**This happened last July at a ARRL board meeting! The ARRL board passed a motion recognizing the Rochester Amateur Radio Club for it's affiliation with the ARRL for 50 years!**

**Bill Lippert (AC0W), director of the ARRL Dakota Division** will attend our October RARC meeting to present the club with a plaque for this accomplishment. This nomination represents the decision of the first RARC officers and following officers and members working together over the years to keep and make the RARC what it is today.

I found in the club history, it was called the **Rochester Repeater Society** (founded in 1932) before it became the **Rochester Amateur Radio Club in 1984. The first RARC officers were President Bob Dubke (K0SIR), Vice President Joe Fishburn (K0TS), Secretary Byron Giddens (N0BSG) and Treasurer Terry Van Benschoten (W0BV).** You can see the complete list of RARC officers since 1984 in the RARC web site at [RARCHAMS.ORG](http://RARCHAMS.ORG), Click on the officers and committees tab. In the drop down follow the link to RARC Officer History.

**The October club meeting will be Hybrid using ZOOM and/or meeting at Fire Station #2 EOC room.**

Some members meet for dinner at **Whistle Binkies North** prior to the club meeting around 5:15 PM.

**Anyone is welcome to attend our RARC activities and meetings to see what we are about.** Club meeting talk in on the 147.255+ PI-100 repeater. Email [w0stv@yahoo.com](mailto:w0stv@yahoo.com) for more information about the RARC, ARES or SkyWarn activities for Olmsted County.

The October RARC program is about radio astronomy.



## October 2022 RARC Online Meeting Info

**OPTIONAL FOR THOSE NOT ABLE TO ATTEND IN-PERSON**



Here is the information for the October 11, 2022, 6:30 PM RARC ZOOM monthly club meeting. The ZOOM info is also posted via the [RARC email reflector](#).

- ♦ **When:** October 11, 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:** #####



# MEETING PROGRAMS

Melissa (KE0WNH) - Vice President

## October 2022 Meeting Program

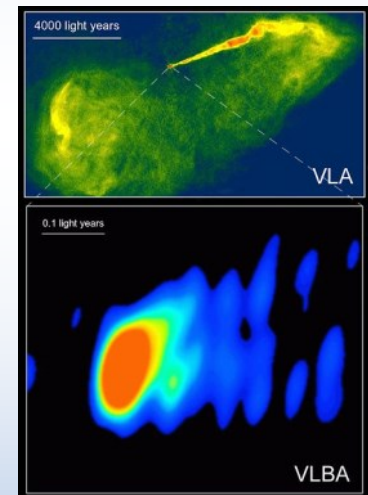
RARC monthly meeting starting at 6:30 PM, Tuesday, October 11, 2022

Rochester EOC (Fire Station #2 lower level), 2185 Wheelock Drive NE, Rochester, MN

## Radio Astronomy

With Dr. Adam Beardsley

Winona State University



Melissa (KE0WNH) worked with Dr. Beardsley at WSU this past summer building a CHART (Radio Telescope for detecting Hydrogen electron spin flips emitted from Milky Way) is coming to speak at the RARC meeting. Students from Melissa's class at John Marshall High School have also been invited to attend the presentation.

# ARES



## AMATEUR RADIO EMERGENCY SERVICE

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

If you were involved in the **ARRL National ARES simulated emergency test** on October 1st and 2nd, let us know what you did through the RARC email reflector.

**Olmsted ARES is delaying our S.E.T. until November 12th 2022.** The surrounding county ARES members are harvesting and we want these active hams to be involved.

The 2022 SET drill is designed for hams to contribute in testing Olmsted ARES communications modes, from anywhere. The Rochester EOC radio room will be activated as in a real disaster. The final details will be worked out at the ARES meeting on October 15th.



This SET will allow a person with just an HT, to a mobile/portable station, up to a home station to get involved. **ARES members that attended the September Olmsted ARES training, will have the opportunity to use what they learned.** Olmsted Hams active using radio communications are invited to join our team and use the latest communications.

Email [W0STV@YAHOO.COM](mailto:W0STV@YAHOO.COM) with questions or to join our ARES team.

Steve-W0STV

Olmsted ARES-EC

*The more preparation, the less confusion.*



# HAMSTER HINTS

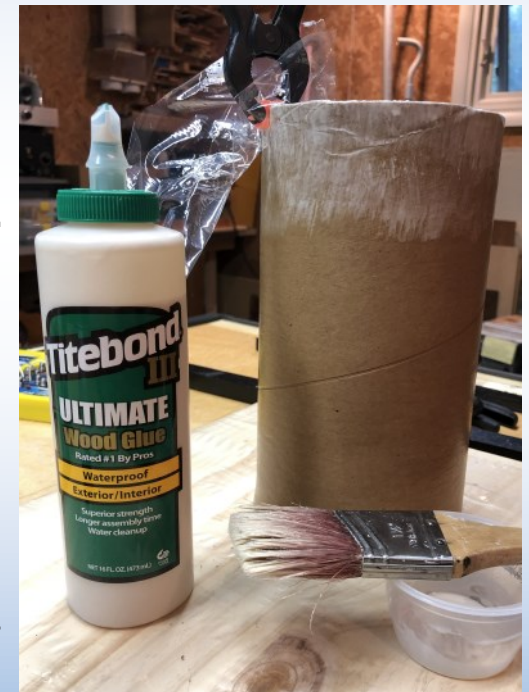
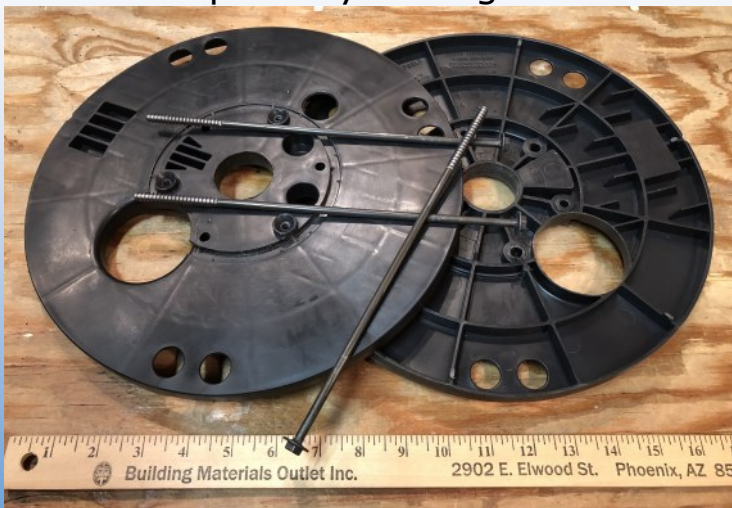


Bob (KEØEXE) [gettuit@charter.net](mailto:gettuit@charter.net)

**I remember, as a kid, going dumpster-diving in the alley behind the local "TVs & Electronics" repair-shop.** Add about 50 years, and the skill has not completely worn-away--I'm just more dignified in my basic approach. Recently, I was granted permission to take home a big, empty, plastic-and-cardboard wire-reel. It was just like old times...

Usually, such treasures require a bit of repair, or, at least, some "enhancements." The cardboard tube in the middle of this reel was crushed, on one end, due to rough-handling of the reel, probably when it was "heavy with cable." I removed the tube, straightened and glued the broken seams, and then applied a liberal coat of waterproof glue to its entire surface, inside and out, to make it more durable and weatherproof. While cheap--and soft, so it doesn't damage its payload--the cardboard tube might not hold up well out in the elements.

Incidentally, this type of glue also cleans up nicely with water, before it's set. After possibly adding an additional, thick coat of exterior spar varnish or poly, I'll reassemble it. I can also tape-on a wrap-layer of sacrificial paper, to restore the "softness." Then I'll fashion some kind of wooden stand for it that will allow it to turn freely in an orientation conducive to managing something useful (like a portable delta-loop antenna with all its hoist-lines and guys). Maybe I'll even figure out a way to add a hand-crank; that would be the cat's meow. ...It's always fun to get a freebie and then turn it into something useful.





# CONTEST CORNER

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

**October kicks off the fall and gets us closer to another Minnesota winter.** If you didn't get those antenna projects started or completed now is the time to check those support guys, ropes and replace that worn out coax. Check those other connectors and fittings while you can still get to them! In the meantime, here is what's happening in October.

**RTTY contests** this month include the [Makrothen](#) (great distance) and [JARTS](#) WW RTTY (exchange is RST and the operator age). These are on successive weekends of October 8-9 and October 15-16.

**Premier DX SSB contest,** You won't need a fancy station with lots of towers or amplifiers to enjoy the [CQWW SSB](#) on October 29-30. With current conditions we'll all be able to work DX and improve our DXCC totals. Historically, this contest brings out a world-wide array of exotic and garden variety DX. Circle those calendar dates now! You won't want to miss the last weekend in October.

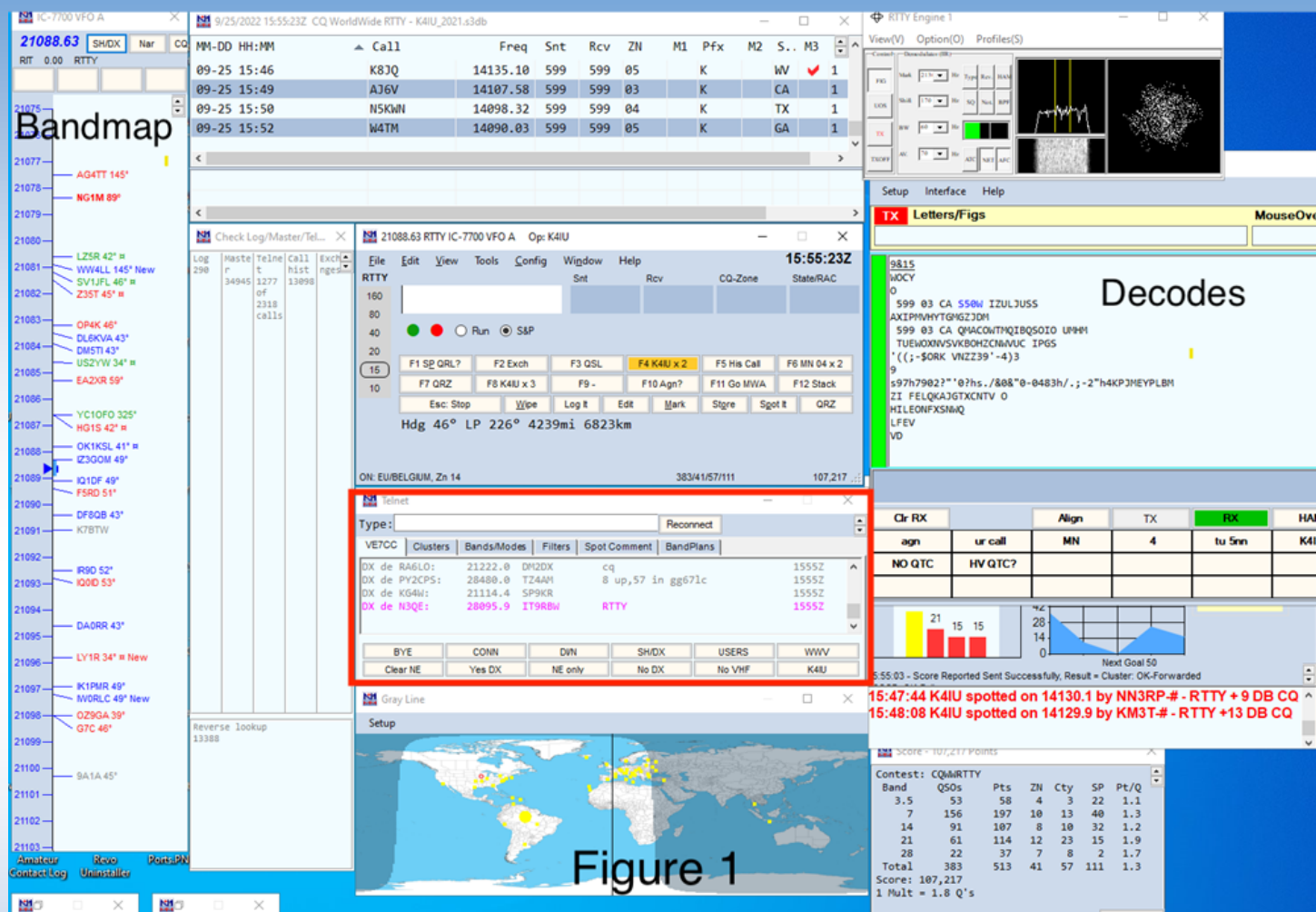
**QSO parties** including the [California QSO party](#) (CQP) on October 1-2. This is a fun one with lots of prizes and broad participation. You can do SSB, CW or both. The [Worked All Germany](#) (WAE) contest is like a QSO party except that the goal is to work all the German states (DOK).

It's a busy month with something for everyone every weekend. You can check October's events on the [DL2NBY](#) and [WA7BNM](#) calendars.

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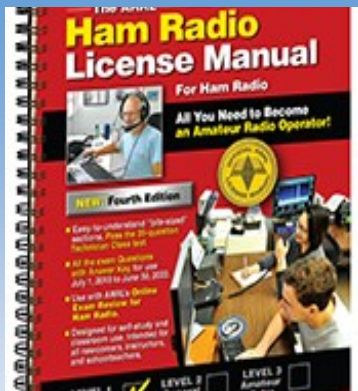
Many contesters use [clusters](#) in a special entry category known as assisted. The N1MM logger allows us to do this easily. For example, **figure 1** is a screen shot taken during my participation in last weekend's CQWW RTTY event. It's busy but look at the highlighted area in the cluster Telnet window. The call letters seen in color are spotted participants. The grayed-out calls are ones that are spotted but are on different modes. I'm logged into the VE7CC cluster via Telnet. I am on 15 meters and the calls on the **Bandmap** on the left of **figure 1** are all stations I haven't worked yet. They are colored because of different multiplier values. The grayed out calls in the band map are stations that I have already worked. If your radio can be controlled by your computer, you can simply click on each spotted station to see if you can hear them or more importantly if they can hear you!

You can choose the cluster you want to connect to but its best to choose one in your geographic area. You might not be hearing the same stations as a cluster located in Asia!









# EDUCATION

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

**We had the first ZOOM meeting since late Spring of the New Hams/Education workgroup on Sept. 21st.**

**We are going to recommend anyone interested in getting their Technician class license to take the ARRL blessed Dave Casler series on YouTube "classes" using the ARRL License Manual and <https://dcasler.com/ham-radio/training/>.** There are a LOT of videos here. We will get this link on the RARC website but are asking for volunteers to mentor/elmer those taking this class via email since we want to encourage what will be different skill levels of participants to finish, take our VE test and get on the air.

**There are other YouTube class options out there.** Here is one of them and if anyone has used this or other pay series let me know: [https://www.youtube.com/watch?v=kuVEkuu8VS0&list=PLs\\_Ab58w9LI-RyWc4QyfXeXouS4POCvw0](https://www.youtube.com/watch?v=kuVEkuu8VS0&list=PLs_Ab58w9LI-RyWc4QyfXeXouS4POCvw0) NOTE: this version is only good through the June 2022 Tech question pool. He says he's updating it, I don't see it yet.

**Melissa discussed plans for the JM after school club this year.** She had covered options for the HF/VHF stations and antennas at the Sept RARC meeting so tonight discussed how to attract 2022 students to ham radio using fox hunting, satellites and other items. We did discuss how to retain student interests and get them involved with RARC or 125Live stations.

Steve mentioned **we need volunteers soon to help assemble the 125roof antenna and pull coax in October.** This is a stair accessible safe flat roof and if you're not a 125Live member you can be escorted by others. We have the radios. Eventually we'll need to setup a "What is Ham Radio" overview meeting to the 4000+ 125Live members and beyond, but having a live station in the room is needed for that. Eventually we hope to morph that station into a remote HF but **WE NEED HELPERS SOON.** Thanks.



# 125 LIVE RADIO PROJECT

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

**We need volunteers soon to help assemble the 125 roof antenna and pull coax in October. Please contact Steve at either his [email](#) or call him at 507-254-3993 ASAP.**

**Steve (W0STV)** brought his vertical antenna base up on the roof of the building. The Comet GP-3 antenna from the ARES trailer (Replaced by a Comet GP-6) will be used at the 125 Live site.

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 (ordered)** 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)

# TECHNICAL COMMITTEE

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



## Topics from the September Tech Committee meeting to be reported on at the October RARC Meeting:

- **D-Star Repeater Replacement update**
- **147.255 Repeater Technical Issues update**
- **ARES Trailer Re-organization & clean up update**
- **EOC Computer upgrading applications and SSD**
- **New Laptop computers demo at October RARC meeting**
- **125Live project update**
- **Drone sales plan update**





## 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)



**This Space is available!** It's free! Try it, you'll like it.

*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)

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.** 146.820 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](#) 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](#)

## The logo for the Rocky Mountain Roller Coaster Riders Club (RARC) is displayed. It features a stylized blue map of Colorado with a yellow roller coaster track winding across it. The letters 'RARC' are prominently shown in a bold, red, italicized font with a black outline. A white star is located in the bottom right corner of the Colorado map.

- ♦ **Online** <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

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