



# THE HAMSTER

**July 2023**

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

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



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# PRESIDENT'S MESSAGE

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

Thanks to Taylor/WB0RSJ for mission accomplished. We never know how our RARC field days will work out. There are so many variables and changes, with some unknown until they happen. For our June Field Day 2023, we had some of the biggest changes ever. It started with moving the field day location from Pat's farm to Chester Woods Park, and then just before field day started we moved it to the Rochester EOC due to severe weather forecasts.

There were some interesting discussions, decisions, and phone calls made. The RARC's 2023 field day proved to be what the ARRL intended, an emergency radio communication operation. Making changes with your resources as the information dictates for the best operation possible. We were set up in a just a few hours once on site. This was a big change from the past field days. We did not use the beam antennas, instead we had two vertical antennas, one folded dipole, and one end fed tuned long wire. We went from a 2A to a 2F operation, running both SSB and CW stations from 1:00 PM Saturday to 11:30 PM and started again at 7:00 AM Sunday to the 1:00 PM finish time. We had over 30 people register. There were many people that worked on field day before June 24th. Drew/KC0CJP who made a fine dinner for Saturday evening. Mel/KC0P-R who set up his rover truck for VHF/UHF operation. Dave/K0VH who worked on the bonus points. Colin/AA0CN for his computer support. George/N0UM for organizing the ARRL messaging points. Mark/K0GMK for helping set up an FT8 station. Peter/W0LLN for purchasing and setting up radio equipment to operate the CW station. I especially want to thank you the club members, the people that took the time to come and help at field day. Without your involvement things would not have gone as well as they did. You made a difference, thank you!

We currently have 94 paid 2023 RARC members that have an interest is what the RARC club has to offer. The RARC wants to continue to support your interests in amateur radio. To that end, Taylor/WB0RSJ the RARC program coordinator, and Steve/W0STV the RARC president want to hear from you on what you currently like and do not like about the RARC club. We especially want to present Ham radio programs to advance your particular interests. To promote this Taylor and Wiebke request you send either of us an email explaining your ideas and information to make this your radio club. Taylor's/WB0RSJ email is [tbbauman@gmail.com](mailto:tbbauman@gmail.com). Steve's/W0STV email is [w0stv@yahoo.com](mailto:w0stv@yahoo.com). Please include your phone number so we can talk to you about your idea/information.

Do you have an interest in radio fox hunting, communicating with satellites, or operating Park's on the air or have another radio activity. Check into the Sunday night RARC nets starting at 9:00 PM local time on the 146.820 or 147.255 repeaters to discuss a Ham activity you would like to see the RARC do to stay active. The more you know.



# RARC MEETING PROGRAMS

Taylor (WB0RSJ) - Vice President

## July 2023 Meeting Program

# RARC Field Day Wrap-up

Presented by Taylor (WB0RSJ)

Another Field Day is in the books and some new challenges overcome and new possibilities discovered.

I would like to thank everyone who participated; setup and take down crew, operators and loggers and Drew Naatz (KC0CJP) for the great BBQ dinner!

At the July meeting, I should have the preliminary score tallied. Along with that, I would like to have an open discussion on the future of Field Day. What we did right, what we need to improve on and how to drive more activity from club members. Bring your thoughts and suggestions and let's start building a plan for the 2024 Field Day.

Taylor  
WB0RSJ





## July 2023 RARC ZOOM Online Login Info

OPTIONAL FOR THOSE NOT ABLE TO ATTEND IN-PERSON



Below is the ZOOM login information for the July 11, 2023, 6:30 PM CDT RARC ZOOM monthly club meeting. The ZOOM login info is also posted via the [RARC email reflector](#) prior to the meeting.

- ◆ **When:** July 11, 2023 @ 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:** #####



## 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



# RARC Field Day 2023





# RARC Field Day 2023





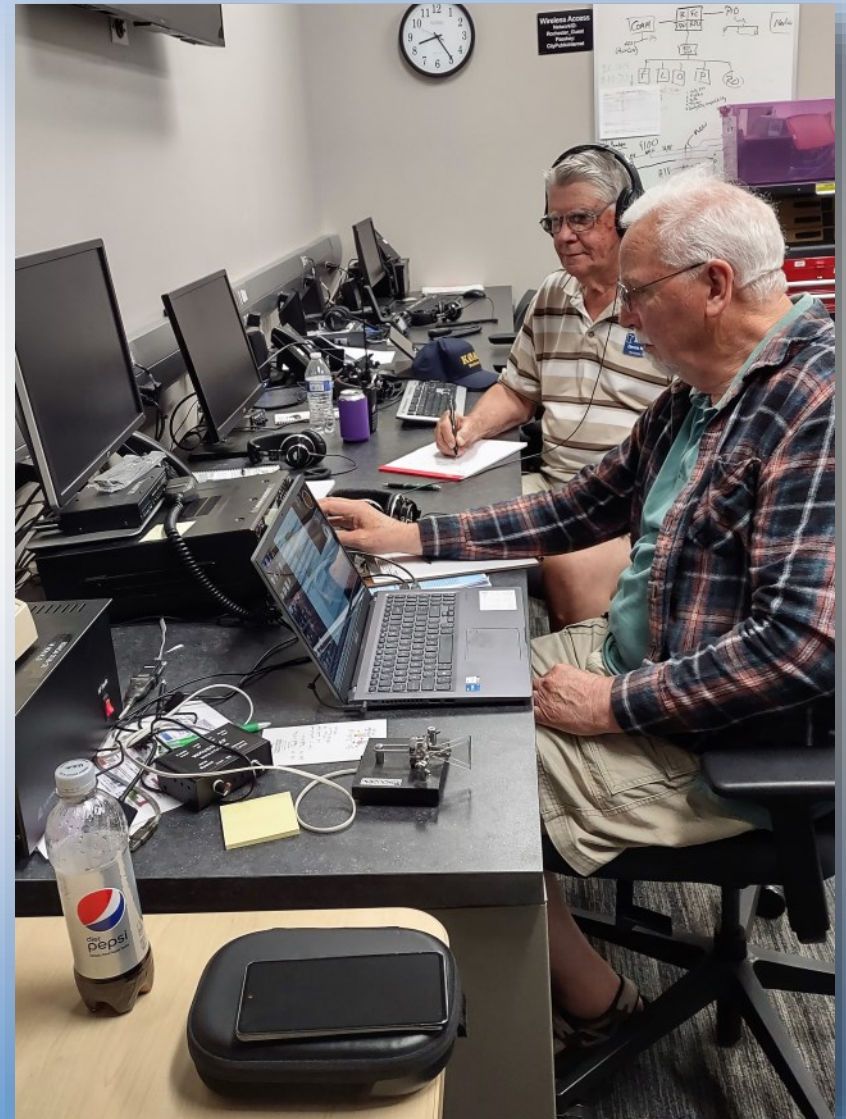
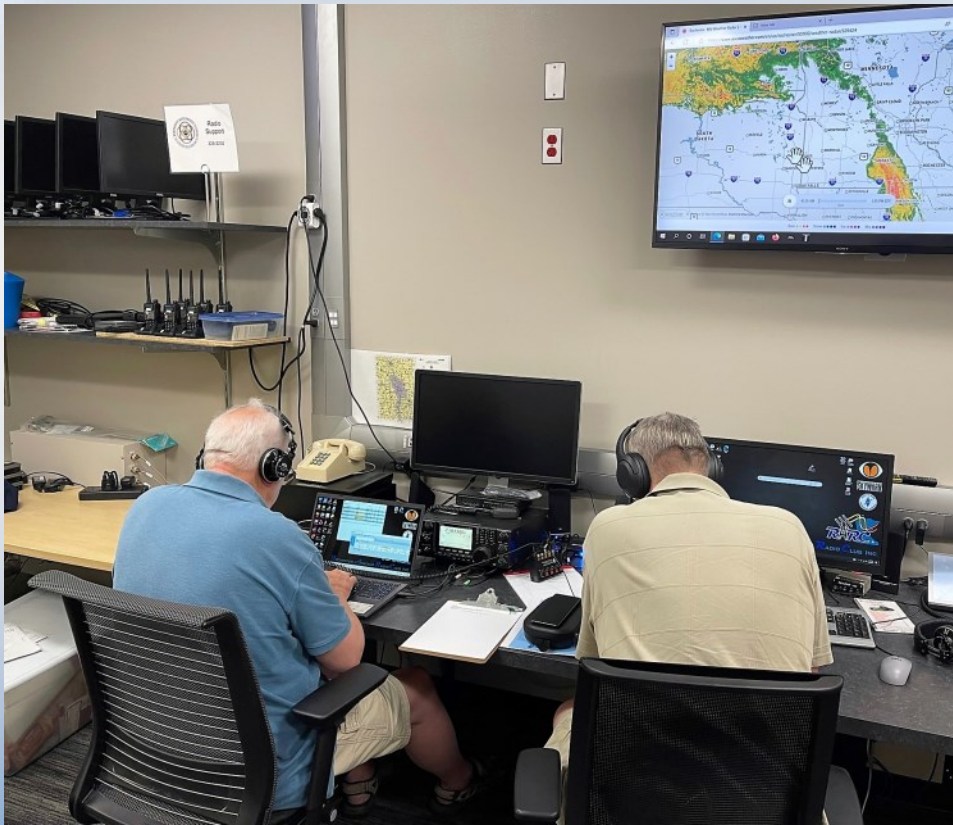
# RARC Field Day 2023







# RARC Field Day 2023





# RARC Field Day 2023



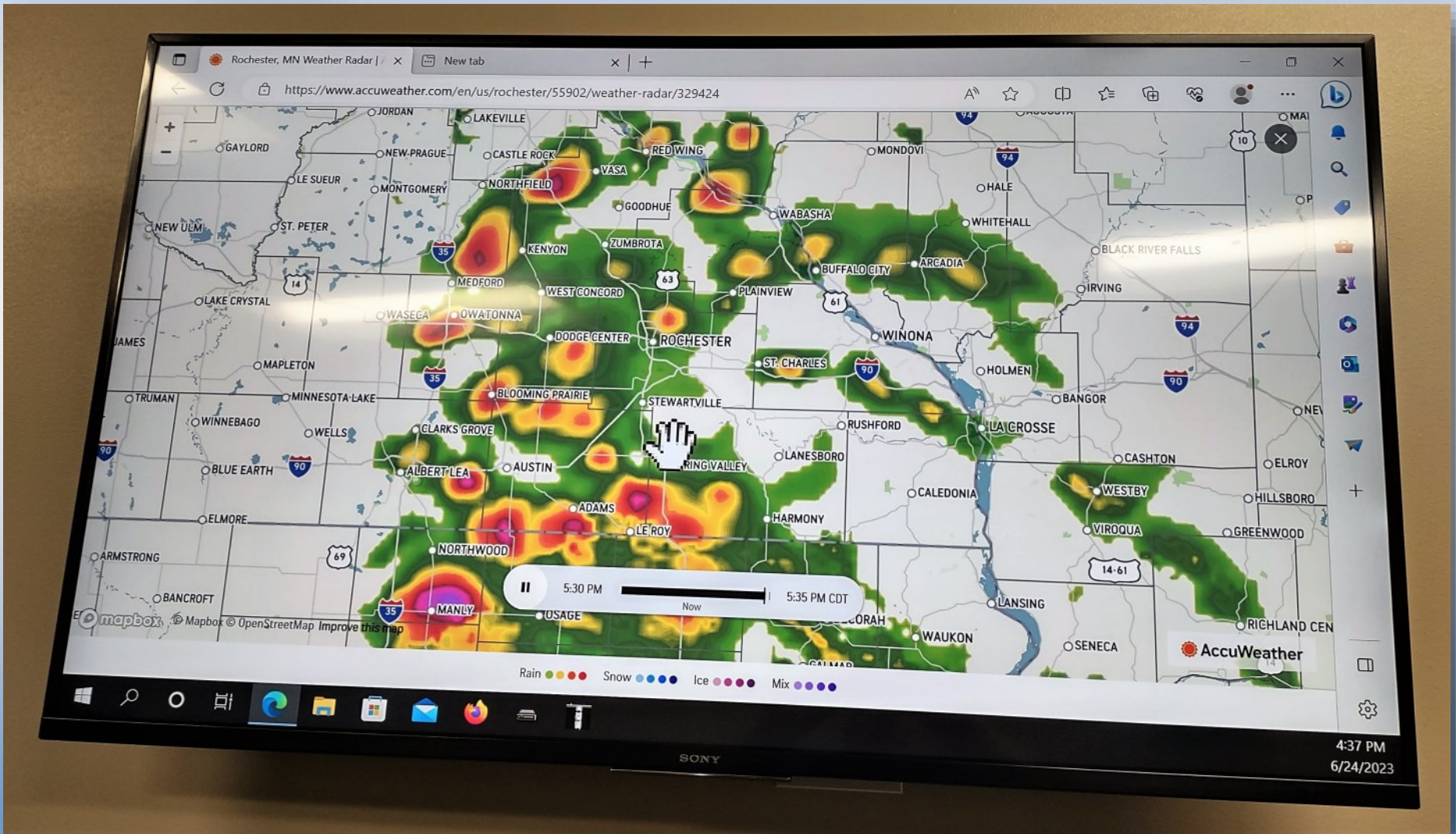


# RARC Field Day 2023





# RARC Field Day 2023





# RARC Field Day 2023



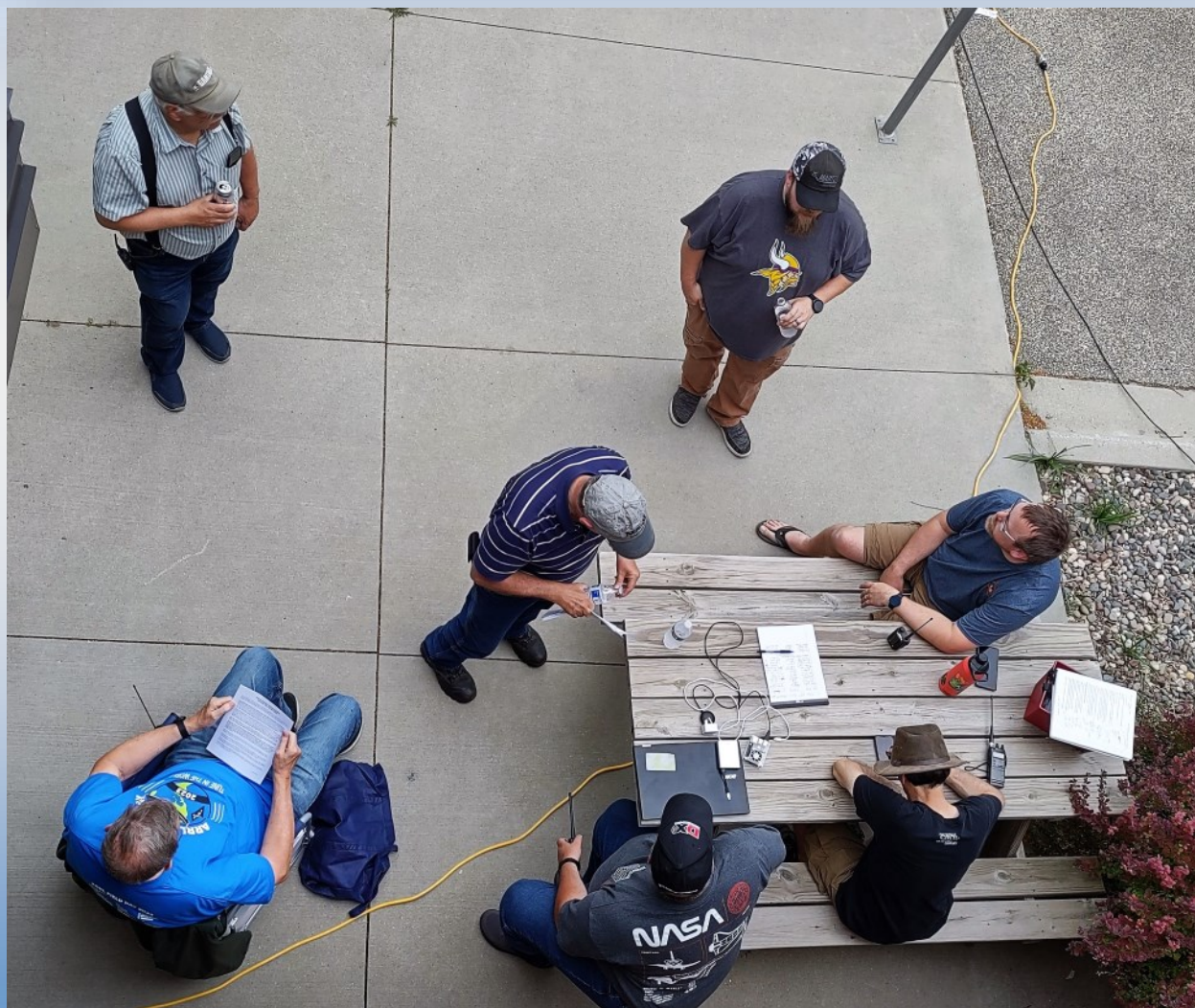


# RARC Field Day 2023





# RARC Field Day 2023





# RARC Field Day 2023







# RARC Field Day 2023





# RARC Field Day 2023



Thank you to all RARC Hams for making Field Day 2023 a success!

Kudos to the Field Day team led by **Taylor (WBORSJ)** for their quick action moving the event to the Rochester EOC in light of the potential severe weather forecast for Saturday.

Additionally, thank you to **RARC Executive Chef Drew Naatz (KC0CJP)** for an outstanding meal of his special smoked pulled pork.

**See you all at Field Day 2024**



# ARES

## AMATEUR RADIO EMERGENCY SERVICE

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

We used the June 24th and 25th Field Day for our ARES training session. We were able to move the field operating location in a short time, we were set up in less time than normal, used multiple types of antennas, and over all we were very efficient in our radio operations. I noticed not everyone, including me, knows what all the HF radio knobs are used for, and what the menus do and mean. We mainly use VHF/UHF radios, but there will be times that HF may be the radio used. We as ARES need to operate what we need to communicate. HT radios are the most versatile radios for ARES. Do you know your radios capabilities and limitations? We will have two agendas for the July 15th 9:00 AM ARES training at the Rochester EOC. At the end of the first session, we should have a better understanding how an HF radio operates after viewing training videos, asking questions, and watching hands-on operation of the EOC HF radio. The second session will be with your HT radio. How does it perform on simplex frequencies? Do the Minnesota ARES simplex frequencies in your radio's memory program work? How well will your HT radio communicate using simplex frequencies at different power outputs and distances?

Bring your HT radio with extra batteries and its owner's manual. We will have active operating sessions both in the building and outside to see how your radio is capable of operating. If you have questions, or have a training idea, email me at [w0stv@yahoo.com](mailto:w0stv@yahoo.com), please include your phone number to talk.

The more you know.

Steve/WØSTV

Olmsted ARES-EC

The more preparation, the less confusion.

**Olmsted ARES Mission Statement:**

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



# ARES COMMUNITY SERVICE

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

- **Scheels Healthy Human Race: August 26th**  
[Sign Up Page](#)

*\* Please sign up to help by clicking the link below an event above \**



# HAMSTER HINTS

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

**Years ago, I obtained an antenna "switch-in-a-can," with SO-239 connectors.** A can-opener had been used on it, perhaps from mere curiosity, or to repair the internal switch. This, of course, broke the RF seal, as well as the structural integrity. At first, I thought I would repair it by simply adding a sticky-backed EMC gasket around the perimeter, where the sheet metal can-lid had been cut out. However, in the end, I decided to "do the job right," using homemade 'L'-brackets. I chose an aluminum extrusion that I found in my scrap box, of appropriate cross-sectional shape, and went to work one morning "machining" it...

**The sequence is important.** To start, I marked and cut the six brackets, using a scribe, a vise, a hacksaw, and a file.

**I then drilled a side-hole in each bracket,** and marked the corresponding location on the outside of the can. After drilling the can holes, some brass nuts and bolts, donated by WØEJB, were used to hold the brackets onto the can's cylindrical side-wall, on the inside surface.



**Raw cut brackets.**



# HAMSTER HINTS

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

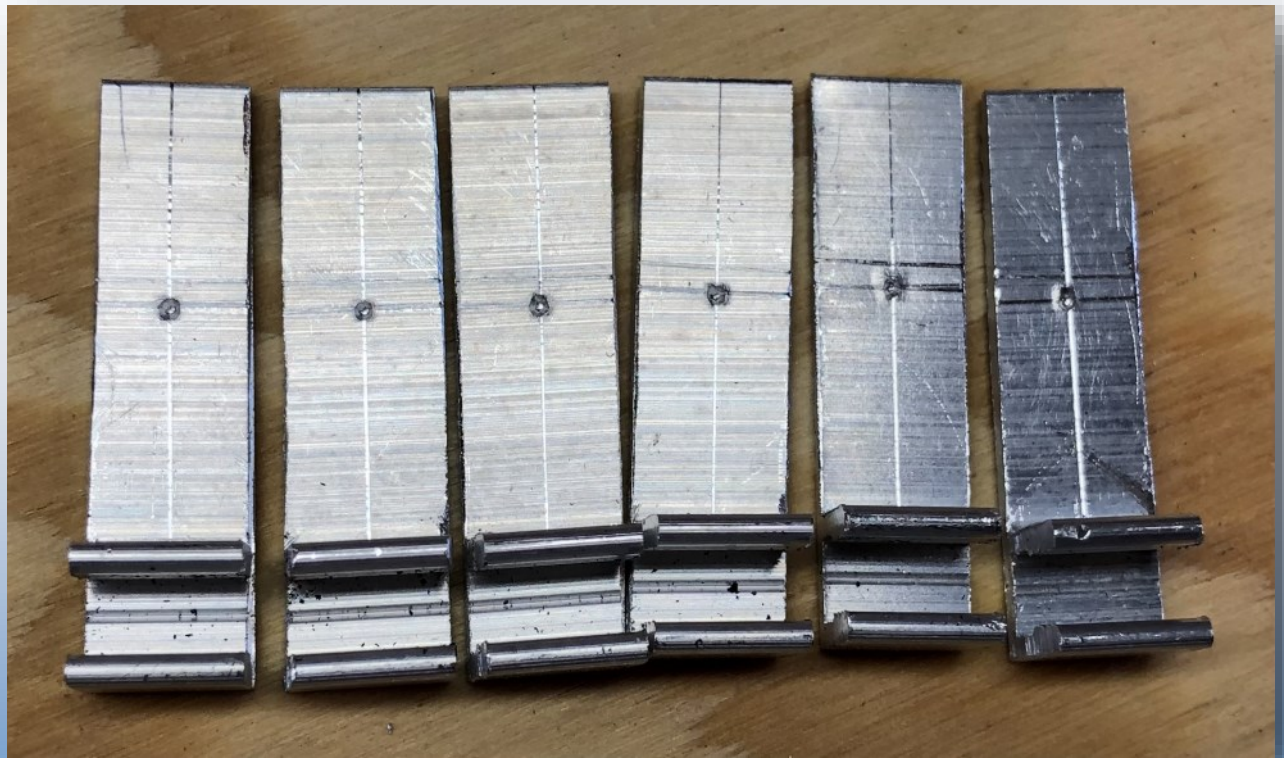
**Next, I inserted the end-plate (aka, the "lid," on which the switch is mounted),** to mark the locations of the six lid-holes.

More drilling--then tapping threads into the brackets--resulted in an assemblable set, which is very solid, mechanically. (I like tapping aluminum; it's easy. One only needs to be careful not to over-tighten the bolts.

**The two flange-approach,** used here, helped a lot to prevent any such stripping of the relatively soft, aluminum threads.) Electrically, the distance between bolts is plenty small, to provide sufficient EMC integrity at HF. The photos show the evolution of the project, and a few of the techniques used.

All tolled, it took about 3-1/2 hours to complete. Only one more thing is required, before I will integrate this into the Shack...

**To facilitate one-handed operation of the switch,** I will add an external bracket, for mounting the can onto something solid.



**Marked and punched brackets.**



# HAMSTER HINTS

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



**Drilled brackets (side holes).**



**Marking the locations of the brackets on the can.**



# HAMSTER HINTS

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



**Marking each bracket's side-hole locations, on the outside of the can**



**Hardware used.**





# HAMSTER HINTS

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



**Brackets mounted on the inside of the can.**



**The reassembled can (finished repair).**



# CONTEST CORNER

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

**You've probably have noticed that the HF bands have been pretty good lately.** DX stations can be found on 15 and 20 meters well into the evening. July has a trio of big weekend contests that everyone can look forward to and favorable propagation should make them even better.

**July 1** [RAC Canada Day](#), This is a phone and/or cw affair celebrating the Canadian equivalent of our 4<sup>th</sup> of July. The exchange is a report RS(T) and serial number or province if you're a VE station.

**July 8-9** [IARU HF World Championship](#), This is also a cw and/or phone event. This year is special because the contest includes an on-site competition of elite operators from all over the world. This COVID delayed competition is hosted by Italy and was originally scheduled in 2022. Previous WRTCs have been held in Seattle (1990), San Francisco (1996), Slovenia (2000), Finland (2002), Brazil (2006), Russia (2010), Boston (2014), and Germany (2018). The rules can be found [here](#). Two local hams Bill, ACØW and Charlie, NGØC are representing the North American Ø call district. The complete list of international competitors is [here](#).

**July 15-16** [North American QSO Party RTTY](#), If you're an RTTY operator then you can enjoy a relaxed contest exchange of name, state, providence, or country. You can operate for 10 of the 12 hours of this event.

Besides these three major contests you'll find other operating activities on the weekend or even during the week that can fill your operating time. Check out the [ARRL](#) and [WA7BNM](#) calendars for details.

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# CONTEST CORNER

**It never hurts to review contest basics** and this month I would like to look at phone (SSB/FM) etiquette that the pros recommend. The ARRL also has some [tips](#).

- As for any contest, review the contest rules and make sure you understand them.
- Check all your equipment (including software) a few days before the contest begins. Make sure everything is operating perfectly. This includes having a local ham listen to your audio and perhaps tweaking the bass/treble/compression settings.
- Understand the basics of propagation and plan your contest strategy accordingly. Try to review a propagation forecast like [VOACAP](#) or [spaceweather.com](#) for the contest weekend.
- Make plans for rest and refreshment especially if you're planning a big effort with lots of butt in the chair (BIC).
- Use a good logging program like [N3FJP](#) or [N1MM](#) to keep track of your contacts and for log submission to the contest sponsors.
- Use proper [phonetics](#) instead of confusing ones that our international friends might not copy completely or accurately.
- Use a good headset with a boom microphone.
- Free up your hands to operate by using a footswitch or VOX (voice-operated switch) to control your transmitter.
- Use a directional antenna if possible.



# CONTEST CORNER

Finally, here's a [video](#) of one of our local hams KØMD, Scott, that illustrates how to pull these best practices together. Listen to the phonetics, cadence and how a pile up sounds like from the other side (**click on photo below of Scott to watch the video**).





# CONTEST CORNER

**The video was made while on a mini DX-pedition for the 2015 CQWW on Turks and Caicos as VP5H. The team members included left to right Scott, KØMD, Fred, K4IU, Bill, ACØW and Pat, WØBM.**



**73 Fred K4IU**



# 125 LIVE RADIO PROJECT



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

The 125Live ham station is ready and waiting to become operational. We have an extra monitor to go with the laptop computer that Colin/AA0CN will be updating the OS and add digital Ham radio programs. The TLC/Technical Learning Center room that the Ham station is located in is being transformed to a high-tech AARP senior computer learning center. The room will now be locked when not in use, because 15 new laptops are now stored and used in the room. The room was never locked before now. There are two locks to access the Ham radio station. Both are touch coded. This has the benefit of being more secured, allow privacy to operate, and will be better for scheduling our radio activities. We need to plan a date and time in advance for July with 125Live maintenance to access the roof and assemble the HF antenna. This can be done any day of the week during 125live business hours. The problem is how to organize it. Will discuss this at the July RARC meeting on July 11th.





# TECHNICAL COMMITTEE

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

## Technical Committee Meeting - 6/12/2023

Attendees: Eric, Mark, Steve, Pat, John D., Taylor

*Post meeting and RARC meeting comments in italics*

### 443.85 D-Star repeater:

- Power supply fan needed to be replaced in current Dell computer.
- Bob, KE0EXE, found a used 265W (original was 300W) Dell power supply.
- Consensus was using a used Dell was better than a new no-name brand.
- Power supply replaced and machine has been running over a week with no issues.
- Now ready to reinstall Gateway Server software.
- User admin instructions after getting Gateway Server back on the air.
- A lot of clubs use national registry or via HRO-Atlanta.
- Plan is to try and get the software installed and the computer back into Mayo in July.
- *Talking with Taylor, [Rocky](#) might be a better Linux choice than CentOS.*

### 146.625 Fusion repeater:

### 146.82 repeater:

- Temperature battery replaced by John Scott.



# TECHNICAL COMMITTEE

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

## **147.255 repeater:**

- Review of reports on repeater sensitivity / power.
- Working so far. Steve has asked people to call/email if they have issues. Time, ambient conditions, distance from repeater.

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

- Batteries for ARES trailer
- 4 batteries ordered and picked up from Batteries Plus. Need to swap batteries and get cores back to Batteries Plus by end of the month.
- Slightly less than 80 A-hr.
- *Batteries have been swapped.*
- Used ARES trailer for Med-City Marathon.
- Drive on stands/mast in the trailer.
- Worked well.
- *ARES trailer also used from Field Day.*

## **125 Live:**

- Cabinet is done.
- Kenwood HF and VHF radios, with the 35-amp power supply, and the MFJ automatic antenna tuner have been delivered to 125 Live.
- Dell EOC computer for digital.





# TECHNICAL COMMITTEE

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

- Second shelf is built.
- More pictures coming.
- Antenna work was waiting on HVAC work to be completed on the roof.
- May do the assembly earlier, and leave on the sawhorses.
- Sounds like work will be completed in August.

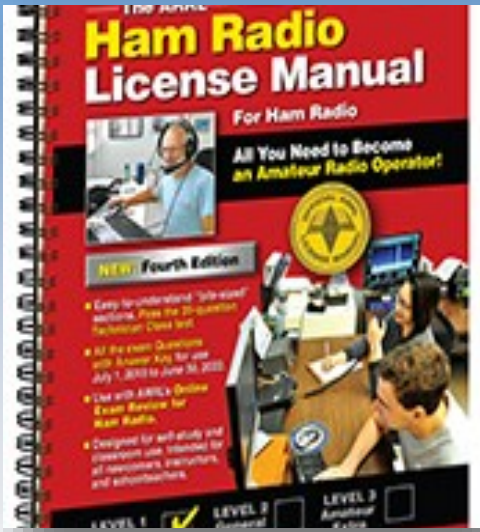
## Other Items:

### Cans:

- John will take one set of cans, Decibel DB-4048
- Proposed and accepted by club, a price of \$350, and if after tuning there is better than 75 db separation, come up to \$450.
- Cans haven't been tuned yet.
- This leaves one set of cans remaining. Decibel TDD-7200A-C.
- Check the market. List on Facebook or Craigs list. Shipping is the issue.
- Maybe think about taking to some Hamfests which would have repeater owners/operators.

# EDUCATION

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



- Check out the **YouTube videos** for **new license training** from [ARRL](#) and [Dave Casler \(KE0OG\)](#) There are a LOT of videos, but we do have something to point new hams at along with the License Manual. <https://learn.arrl.org/courses/?pathPage=%2Farrl%2Fcourses>

73 **Dave Naatz** (KØVH)



# Parks On The Air® (POTA)

Mark (K0GMK) [gmkelm@charter.net](mailto:gmkelm@charter.net) 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!





# JM **ROCKET** RADIO CLUB

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





## RARC BUY OR SELL



### Icom ic-7410 HF/60 MHz Transceiver

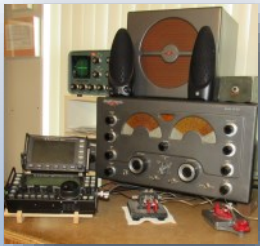
160m-6m. Full power into dummy load. Comes with mic, DC power cord and printed user manual. It does not have either optional roofing filter. Cash only.

Rob (KE0PWN) [rgolley2@hotmail.com](mailto:rgolley2@hotmail.com) Price: **\$650.00**



**FT-991A ALL-BAND, MULTIMODE PORTABLE TRANSCEIVER** The FT-991A is the next generation in all mode, all band MF/HF/VHF/UHF transceiver with C4FM (System Fusion) Digital capability. The FT-991A includes multi-mode operation on CW, AM, FM, SSB, and Digital Modes (Packet, PSK31, RTTY and C4FM), with 100 Watts of HF/50mhz Capability (50 Watts VHF/UHF). This transceiver is owned by a ham radio friend of mine. Please contact me directly. Price: **\$975.00**

Bob Dubke (K0SIR) [red@bobdubke.com](mailto:red@bobdubke.com) (507) 398-5964



**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)

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



## RARC BUY OR SELL



### RadioShack PRO-2044 Scanner

80 channels, Frequency Range: 29-54 MHz FM, 108-136 MHz AM, 137-174 MHz FM, 406-512 MHz FM. Good for listening to FM on 10 meters, 6 meters, 2 meters, and 432 MHz bands as well as NOAA weather and aeronautical communications. Complete with users manual on CD, AC adapter, original whip antenna, center loaded low band whip antenna **Price: \$20**

Lynn (WB0U) (507) 358-8459



### MFJ-4602 Window Antenna Coax Feed-Thru

Contains three coax, one balanced line, one single wire and one ground feedthrus.

Only used one weekend. Width cut down to 35.5 inches. **Price: \$20**

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.*



- ♦ **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 benefit 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](#)**

