



THE RARA RAG

Newsletter of The Rochester Amateur Radio Association, Inc.
Founded in 1931

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WHAT TO EXPECT WHEN YOU'RE EXPECTING ... SOLAR CYCLE 25

TIM BARRETT, K9VB, RARA VICE PRESIDENT

The last sunspots of Solar Cycle 24 faded away in December 2021. Cycle 25 has been ramping up ever since, with some forecasts showing very robust "Solar Max" in 2025.

It has been several years since we had an active Sun. We now anticipate not just additional sunspots but an increase of energetic events such as coronal holes, solar flares, coronal mass ejections and even proton storms.

This month's presentation will try to provide a 'heads up' as you prepare for HF communications during Cycle 25. Brian O'Connor, KA2CGB, will describe how an active Sun interacts with our ionosphere and, in turn, affects propagation. While some events may impair comms, others could enhance your opportunity to translate a CQ into a QSO.

Along the way, Brian will clarify topics such as sunspot number and sunspot groups, the planetary A and Kp indices, solar flux and solar flares, as well as terms such as f0F2, MUF, SSN, R0 and R12.

Brian, KA2CGB, was first licensed in 1978. He retired from Harris RF Communications after 30+ years of helping customers implement complex radio systems from 100 kHz to 5 GHz, and with stations from QRP to 100 kW.

Please join us on Wednesday, March 1st, 2023, 7:00PM at the Boy Scouts Headquarters at 2320 Brighton Henrietta Townline Road, Rochester, 14623 or online by registering at <https://attendee.gotowebinar.com/register/6022751292179383894>



BOARDZ BUZZ

MIKE KENNERKNECHT, N2MAK, BOARD OF DIRECTORS

For me—and I'm sure many others—trying new things, helping others, and having fun are at the heart of amateur radio. The Board has been working on some new and upcoming things that help check all those boxes. I hope you're looking forward to these just as much as I am.

We've been working on plans to purchase an updated field radio kit that will have everything you need to get out there and get on the air. This includes a modern transceiver and battery, as well as coax, antennas, and more. Not only will this help new hams be able to get on the air right away, but it will also allow others to easily do portable radio operations.

Speaking of portable operations, save the date for Saturday, April 15. We're putting together a RARA Academy for Parks on the Air (POTA) at Veterans Memorial Park in Henrietta. We'll have the Roberts Cabin, so rain or shine, it'll be an opportunity for hams of all experience levels to learn about POTA and portable operations. We'll have plenty of radios, antennas and other gear to try out. Stay tuned for more details on the time.

And for the new-ish hams, RARA will be doing another Hands-On Academy on Saturday, May 13, once again at Black Creek Park in Chili. This event is organized for those that recently received or upgraded their license, as well as those who have had their license but haven't operated in a while. There will be plenty of "stations" where attendees can learn and try out different radios, modes and antennas.

The summer will present some more opportunities as well. The RARA Hamfest will return in June and of course there will be Field Day too. Then in July, we'll have our annual Summer Picnic.

Portable operations are my passion in ham radio, so forgive me if I am a little biased towards these activities. But I'm also a "pandemic ham." During the 4 months I spent studying and taking my Tech, General and Extra exams, the VEs at the tests were the only real personal interaction I had with other hams. And it was 3 months after I got my Extra license before I actually got to see other radios, antennas and gear firsthand—which was at a RARA Hands-On Academy.

While we're no longer isolated as much as we were in the beginning of COVID-19, I understand how intimidating trying new things can be for hams at all levels. Cost and availability of radios, antennas and accessories continue to be barriers too. That's why I'm really excited about all these opportunities. Ham radio truly is a hobby of hobbies and we're fortunate to have such an active and supportive amateur radio community in the Rochester region.

So what are you waiting for? Let's get out there and play radio!

CALENDAR OF EVENTS

WEDNESDAY MARCH 1, 2023 - RARA Meeting In Person and On-Line
7:00 PM - AT THIS LINK

<https://attendee.gotowebinar.com/register/6022751292179383894>

THURSDAY MARCH 2, 2023 - RARA Board of Directors Meeting
6:30 PM - ONLINE

Email request for link to secretary@rochesterham.org

RARA MEMBERSHIP NEWS

TIM BARRETT, K9VB, RARA VICE PRESIDENT AND MEMBERSHIP SECRETARY

Our club has a very healthy membership, standing at 584 members on September 30th, the end of our membership year. Thanks to all of those who have already renewed but there are still a number of lapsed members, currently our membership stands at 506 so if you haven't done so yet, please renew your membership here.

There are many membership benefits, here are just some of them:

- Only members can attend the RARA Annual Auction
- Free admission to the RARA Hamfest
- Access to license classes and discounts for license manuals
- Annual events such as the Picnic and Winterfest
- Membership points for contributing to club events
- Supporting an Organization that hopefully you value!



Being a member is also important, as your dues and a healthy membership count contribute to many RARA activities such as Rag subscription, monthly meetings, RARA Academy sessions Elmer's Corner, groups.io mailing list, Facebook page, etc. Attracting good speakers is greatly helped when we can point to the size of our club, one of the largest ARRL affiliated clubs by the way. So, if you are not currently a member or have lapsed, please consider changing that!

I'd also like to give a warm welcome to the following people who have joined the club in the last month:

Jay Burke
Raymond Clark
Mike Ferrigno
Ted Witezynski, KD2LKD

If you see any of our new members at a RARA meeting or other event make sure to introduce yourself and welcome them to the club!

Silent Key

James DiTucci
N2IXD
February 5, 2023



EDUCATION

Karl Heinz Kremer, K5KHK, Education Coordinator

RARA LICENSE COURSES

Karl Heinz Kremer, K5KHK, License Class Coordinator

License Classes

All our license classes have started and are on track for our students to test in March. We are not planning any classes during spring and summer, and will be back in September. As always, if you are interested in any of our classes, please send an email to education@rochesterham.org.

License Manuals

The current editions of the Technician and Amateur Extra license manuals are available to our members at a discount for \$25. For this discount, we unfortunately cannot deliver, and you would have to pick up the manual. The General license manual will get renewed in the summer and we are not stocking any of those until the new edition comes in. If you are interested, please send an email to education@rochesterham.org

RARA ACADEMY

We are still looking for input in what our next Academy session should cover. To make it easy for our members to provide such input, we created an online survey. Please go to <http://tiny.cc/RaRaAcademySurvey2022> and fill out the survey.

If this short link should not work, you can also use this link: https://docs.google.com/forms/d/e/1FAIpQLSfe_RvJyAfc2BidWxePLvK1r_CjQosS1PV0Ua6m2zETiyPa-w/viewform

Operating Event for New(ish) Hams

Just like the last two years, we are again offering an operating event for new (ish) hams on May 13th at Black Creek Park in Chili. This is mainly for actually new hams, or new upgrades, but if you have not worked a certain mode, or practiced a certain skill yet, and have been a ham for a long time, we would still like to extend this invitation. Please register by sending an email to education@rochesterham.org, if you want, please add a short list of things you would like to learn. If you would like to participate as an Elmer, please also get in touch with me and let me know what you would like to present or teach.

RARA ELMERS' CORNER

Suzanne Bishopp, W2SUZ
Rich Bishopp, KD2UBJ
Elmers' Corner Coordinators

Our next Elmers' Corner will be March 4th, but if you can't make it, we do record each session which I will share upon request.

Zoom is easy and available for everyone. Grab a cup of coffee (or whatever you like to drink) and join us. We talk about everything and anything radio related. Bring your questions, your tips and tricks, or just come and join in the conversation.

The Elmers' Corner happens the 1st Saturday of every month, September – May, 10am-12pm. But if you have a question or need help before then, just let us know. Reach out to us at any time at elmerscorner@rochesterham.org, we will do our best to find the right Elmer to answer your question.

ELMERS' CORNER

1st Saturday of the month
March 4th, 10AM – 12PM

Join Zoom Meeting

<https://us02web.zoom.us/j/83484674667?pwd=MG5DZXd6SFovN3lXa0NNTzM5UnBLUT09>

Meeting ID: 834 8467 4667
Passcode: 786545

One tap mobile

+16465588656,,83484674667#,,,,*786545# US (New York)
+13126266799,,83484674667#,,,,*786545# US (Chicago)

Dial by your location

+1 646 558 8656 US (New York)
+1 312 626 6799 US (Chicago)
+1 301 715 8592 US (Washington DC)
+1 253 215 8782 US (Tacoma)
+1 346 248 7799 US (Houston)
+1 669 900 9128 US (San Jose)

Find your local number: <https://us02web.zoom.us/j/kiOoVkCMY>

MORSE CODE TRAINING

DAVE WILSON, WA2HOY, RXCWG COORDINATOR

The RXCW Group assists Hams wanting to learn Morse Code or to develop their CW skills.

BEGINNERS MORSE CODE ZOOM CLASSES

Peter Fournia, W2SKY, hosts Morse Code classes on Thursday evenings 7pm. No experience required. Join the group at any session. Register at: pfournia@gmail.com

MORSE PRACTICE FOR ALL LEVELS ON ZOOM

Tim Brown, WB2PAY, hosts code practice for all levels on Thursday evenings at 7:30pm. Register at: tjbrown@rochester.rr.com

Those wanting to start into CW QSOs and Morse Code can schedule coaching sessions on Zoom. Contact Peter Fournia, W2SKY for further details.

W1AW - <http://www.arrl.org/w1aw-operating-schedule>

W1AW On The Air CW Practice

Time	Mon	Tue	Wed	Thu	Fri
9 AM		Fast	Slow	Fast	Slow
4 PM	Fast	Slow	Fast	Slow	Fast
7 PM	Slow	Fast	Slow	Fast	Slow
10 PM	Fast	Slow	Fast	Slow	Fast

SLOW - 5, 7 1/2, 10, 13 and 15 wpm

FAST - 35, 30, 25, 20, 15, 13 and 10 wpm

FREQ(MHz) - 1.8025, 3.5815, 7.0475, 14.0475, 18.0975, 21.0675, 28.0675, 50.350, 147.555

RADIO ELMERS

Name	Call	Area	Email
Tim Brown	WB2PAY	Ogden	tjbrown@rochester.rr.com
Dave Carlson	N2OA	Batavia	kdcarlso@gmail.com
Lawrence Hill	N2AJX	Henrietta	lawrence.hill@rit.edu
Rich Hoffarth	K2AXP		rhoffarth2000@yahoo.com
Bill Kasperkoski	WB2SXY	Pittsford	wb2sxy@gmail.com
Don Kiser	AC2EV	N Greece	dkiser100@gmail.com
Karl Heinz Kremer	K5KHK	Chili	k5khk@khk.net
Tim Magee	WB2KAO	Greece	585-704-5747
Mike Moore	KC2NM		mikemoore@ieee.org
Peter Schuch	WB2UAQ	Perinton	pschuch@rochester.rr.com
Forest Shick	WA2MZG	Webster	fshick3@gmail.com
Dave Timmons	W2DST	N Greece	dstimmons@gmail.com
Steve Verzulli	KA1CNF		verzulli@yahoo.com
Dan Waterstraat	W2DEW	Henrietta	higreen@rochester.rr.com

CW ELMERS

Name	Call	Area	Email
Ned Asam	W2NED	Pittsford	w2ned@frontiernet.net
Tim Brown	WB2PAY	Ogden	tjbrown@rochester.rr.com
Pete Fournia	W2SKY	Penfield	pfournia@gmail.com
Bill Hopkins	AA2YV	Brighton	whopkin4@naz.edu
Bob Karz	K2OID	Webster	rkarz@rochester.rr.com
Joe Rowe	AG2Y	Webster	ag2y@rochester.rr.com
Harry Williams	KF2TV	Kingsland, GA	harryw7872@gmail.com

MARCH RAFFLE PRIZES

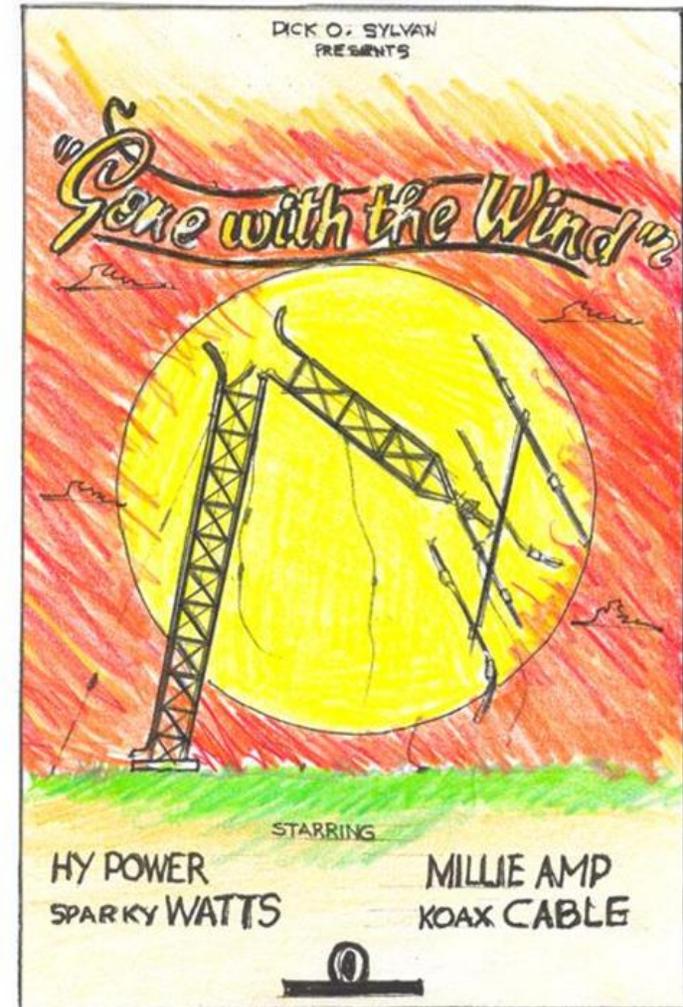
- The Radio Today Guide to the ICOM-7300
 - MFJ-171P Antenna
 - HP-1 Wired Stereo Headphones

Coming in April

- ARRL World Map



HAM QUIPS OLD MOVIE POSTERS



Dick Sylvan, W9CBT, is a very accomplished ham radio cartoonist and his work appeared previously in the K9YA Telegraph and also appears in the NAQCC Newsletters. His book "HI - HI - A Collection of Ham Radio Cartoons" is available at www.lulu.com

PUBLIC SERVICE REPORT

MIKE MOORE, KC2NM, PUBLIC SERVICE COORDINATOR

RARA participates in the leadership team for the American Diabetes Association Tour de Cure which will be held on June 10 at the Xerox Campus in Webster. The routes for this ride are being prepared and reviewed but we expect that the ride will be largely similar to years past with the exception that two of the rest stops will be dropped this year. This was done because of the low utilization of these stops and to bring our ride more in line with what rides in other areas are doing. The name for our ride is now “2023 Tour de Cure: Finger Lakes Region” and it reflects a change from last year where ours was the only upstate New York ADA ride. New for this year will be the “2023 Tour de Cure: Capital Region” to be held on June 4 at Ellms Family Farm at Ballston Spa, NY near Albany. We have contacted the Saratoga County Amateur Radio Club (SCARA) about working with the Capital Region ADA on this.

On past Tour de Cure efforts we were challenged to maintain radio contact with stations operating on the western edge of the ride course. That side is farthest from the WA2EMO 146.685 Mhz, minus 600 Hz offset, 71.9 PL tone and 444.750 Mhz, plus 5 MHz offset, 110.9 Hz PL Tone. These repeaters are operated by the Drumlins Amateur Radio Club and they are located near the Brantling Ski Slopes. This year the Digital Communications Association of Perinton has upgraded the W2DUC Repeater 146.715 Mhz, minus 600 Hz offset, 110.9 PL tone with a new Yaesu DR-2X Repeater. An Allstar node is being added to this repeater and it will be linked to WA2EMO and the Tour de Cure Communications Command Center for Tour de Cure. Hams on the western side of the course will use W2DUC and WA2EMO will be used on the eastern side of the course with the audio from both systems linked.

There will be an additional change to the real time APRS mapping for public service events. Google Maps has changed the threshold for free use of its map panels. Starting in January 2023 aprs.fi maps have been based on Open Street Maps instead of Google Maps. To quote Heikki Hannikainen from the aprs.fi discussion group “I’ll have to do this to avoid a recurrence of a Noticeably Large bill I got for Google Maps usage in December (think “one new nice HF rig every month” large, or “one VERY nice HF rig every two months”).” The technique of adding an overlay to the APRS map showing the ride course, rest stops, and other details with the position of the Sag and Sweep operators in real time does not presently work. I have been in touch with Arnold, KQ6DI for a work around to restore the real time map overlay.

Upcoming events in the public service calendar are listed in the following table. Please consider signing up for one of our public service events. Visit https://rochesterham.org/public_service.htm for more information and to volunteer.

Please mark your calendars for our upcoming RARA Public Service Events

Event	Location	Day	Date
Tour de Cure	Xerox Campus Webster	Saturday	June 10, 2023
MS Roc the Ride	Lakeside Beach State Park	Saturday	August 12, 2023
Fairport Lift Bridge Regatta	Erie Canal – Fairport, NY	TBD	TBD
JOTA / Ham Radio Demonstration - CTC	Camp Cutler, Naples, NY	Saturday	October 21, 2023
Pumpkin Patrol	Overpasses of the New York State Thruway	Monday and Tuesday	Oct. 30-31, 2023

FEBRUARY 2023 MEETING: WORKING THE DIGITAL MODES

TIM BARRETT, K9VB, RARA VICE PRESIDENT AND MEMBERSHIP SECRETARY

The February meeting attracted around 30 people who attended in person plus more than double that online so we had a good attendance similar to recent meetings.

We continued our 'new tradition' of a short technical presentation as part of the introductory session and before our main speaker. This month I attempted to answer the questions, 'What does it mean to say a cable is a 50 ohm coax?' and 'Why do we use 50 Ohms as a standard in Amateur Radio?'

Our main speaker for February was RARA member Jeremy Gaynor, K5JSG who took us through the digital radio modes and showed how to set up our computers to get on the air with them.

Unfortunately doing a live radio demonstration was not possible. One of the challenges we face is that the BSA is a steel building and it is difficult to get a line from an antenna outside into the lecture room.



Nevertheless we were able to see how to set up software to interface with the radio and it generated a good amount of interest and questions. It certainly incentivized me to restore my access to the digital modes. I had recently disconnected everything from my main rig one by one in search of some serious rf interference on transmit, only to discover in the end that an old disconnected monitor sitting on a shelf above the radio had somehow got plugged in and was generating noise. I needed some encouragement to re-connect all the computer gear so now I am back on the air digitally, thanks Jeremy! I'm hoping that at some point soon Jeremy can present the live use demo he had planned but from his own radio shack remotely, I think that would be of interest to many of us.

WINTERFEST 2023 WAS A LOT OF FUN!

TIM BARRETT, K9VB RARA VICE PRESIDENT

Our Winterfest was at our traditional location, Stewart Lodge in Mendon Ponds Park back on February 18th. It was a great success with over 40 attendees. We picked a perfect day, beautiful sunshine; it was a bit cold outside but warm and snug in the cabin. Plenty of great food was provided by club members which included five different Chilis to choose from. The prize for best crockpot went to Brian KA2CGB for his Buffalo Chicken dip with crackers and the best dessert prize went to Suzanne for her incredible radio themed cookies. Both will get well deserved membership points for their efforts. Thanks to everybody who brought food!

I think we had a record number of radios set up including, courtesy of Scott W2LW, examples of both the radios we are considering buying for the club so members could try them both and help us make an informed choice.

We did not work a lot of DX but a good number of US stations. Mike, N2MAK managed to work into Mexico and spectacularly one of our tech members, Kathy KF7TPI, got MM0TFU in Scotland on 10 meters using the ICOM 7300 at 100W with a 1/4-wave ground mounted vertical. Well done, Kathy! All in all it was a lot of fun and everybody seemed to have a good time.





Photos provided by
Tim Barrett, K9VB
and
Dave Wilson, WA2HOY



HAM RADIO DEMONSTRATION AT WINTER KLONDIKE

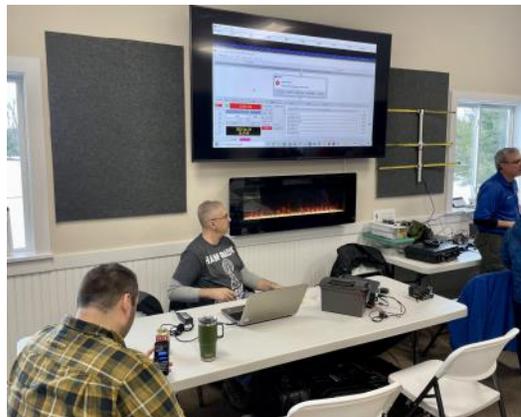
MARK PEDERSEN, KC2UES

I was honored to have been assisted by eight hams during the Klondike radio demonstration on Saturday, January 28, 2023, at Williamson Town Park for the Winter Klondike sponsored by the Waters Edge District of Seneca Waterways Council. It included youth from Scouts BSA (boys and girls in Scout Troops), Crews (Scouts of ages 14 - 21 in the Venturing program) and Cub Scouts (from Kindergarten to Fifth Grade). We had about 60 Scouts visit our station.

On Friday afternoon, Tim WB2PAY and I set up his 20/40m dipole using Tim's



too-long-to-fit-in-the-bed-of-my-son's-truck painter's pole and two trees. On Saturday, Kevin set up a random wire end-fed with 9:1 UNUN. I brought my K3; Don brought his Icom 7300, and Kevin brought an Icom 718. Sue and Rich brought a mobile HF radio in their vehicle with a great screw-driver-type antenna that proved very useful as I will explain later. Once George found an HDMI cable, Don was able to project his digital attempts on the large TV in the lodge we used for the station. We tested VHF reception to the nearest repeater but could barely get reception until Rich connected his HT to my J-Pole from Dr. Ed Fong - then it could clearly receive the repeater's signal.



The hams involved in this event were:

- Mark KC2UES
- Tim WB2PAY
- Joe AD2DB
- Jon N2JAC
- George K4GWA
- Sue W2SUZ
- Rich KD2UBJ
- Don KD2REU
- Kevin KC2PKO

Tim not only helped me set up an antenna on Friday, but he was

also a contact on 40 meters from his QTH in the morning before the band no longer supported it. After that, Sue sat in her car in the parking lot on 20 meters and did a great job getting the mic-shy Scouts to talk to her and use Q codes. Having a nearby HF station worked so well that I think it should be included as a backup plan for any radio demonstration to Scouts. Of course the ground wave signal was crystal clear, and we used very low power. However, even at 5 watts, Sue made a contact in Atlanta, Georgia, who was very surprised to learn how little power she was using.

Using Kevin's end fed random wire antenna and 25 watts on the K3, I spoke to WA4D in Charlottesville on 40 meters and he was as clear as if he were next door (he did not give me a formal signal report, but we had a rapid back-and-forth coherent conversation leading me to conclude he could hear me clearly). Towards the end of that conversation, he faded away as the band changed.

Tim and I noted S7 noise levels on Friday, and they continued Saturday on both 40m and 20m. Don tried digital (RTTY & FT8) without success but learned what he will need to do to improve his station's performance for the next time.

Kevin, Rich, Sue, Jon, and Joe each took a turn talking to the Scouts about radio and asked seven questions of each patrol. The questions were the first few in the merit badge booklet. Each patrol was graded on knowledge (answers to the questions) for a maximum of six points, graded subjectively on leadership, patrol cohesiveness, and spirit. The scores from our demonstration station, along with scores from the other activities at the Klondike resulted in a final score for the winning patrol.

Some of the Scouts and leaders who toured our station expressed a desire to have a radio merit badge session. I



spoke with a representative of Seneca Waterways Council who was at the Klondike, and she gave me two names to contact to set up a session for “Merit Badge Days,” which the Council is trying to revive post-COVID. I’ll contact them to use the Seneca Waterways spaces for such a class.

We began operations about 0900 and took down the antennas and packed up the radios about 1500, so did not stay for the sled race at 1530. We were in a heated building with indoor plumbing, had great chili and rolls for lunch, and coffee and hot chocolate were available. At times the noise level in the building was so high I had to use headphones to hear the radio, but for the most part, it was relatively quiet.

Jon and I experimented with 2 meters and his tape measure antenna. It turns out that my HT at “low” power was still too strong to use as a “fox,” until Jon and George hit on the idea of tuning to the third harmonic, then Jon could obtain a directional fix on me as I wondered about the campground, occasionally transmitting for 10-second bursts (no voice needed, just the push to talk button depressed).

Don deployed his UAV (“drone”) over the park, but the wind levels were too high to safely operate it for long.

I consider it to have been a successful event and am grateful to the hams that assisted me. They truly made it possible to run this demonstration station smoothly as dozens of Scouts came by to learn about amateur radio.



NEW WINLINK GATEWAY

JAMES SALYER, KD2EFR

Winlink global radio email is a network of amateur radio stations that provide worldwide radio email. This radio network can be used to provide communication pathways where the internet is not present.

KD2EFR-10 is a new RMS (Radio Message Server) located in the Town of Royaltown, in Niagara County.

This RMS sits near Bunker Hill on the Niagara escarpment. Bunker Hill is the highest elevation in Niagara County providing good coverage from an omnidirectional antenna.

Currently operating on a frequency of 145.030 MHz, KD2EFR-10 offers communications on two digital modes, VARA FM and Packet 1200 Baud.

Future considerations are the utilization of RMS relay. The relay program becomes active when TCP/IP links are lost. When active, it will provide temporary message storage and routing. This program will make it possible to send email traffic outside of the Western New York region if needed during a significant event.

All Amateur radio operators are encouraged to utilize the RMS. EMCOMM and RACES groups are especially encouraged to leave feedback with James Salyer: KD2EFR@gmail.com.

BULK BUY OF VARA LICENSES

PAUL CONAWAY, KD2DO

The most used Modem for use with WinLink is called Vara.. You can use Vara for free to try it out but the free version limits you to the slowest speed. A license for Vara allows you to use it on FM or on HF or even on satellite. The remarkable thing about Vara is that it automatically adjusts its speed for band conditions – ramping up to the fastest possible for the selected bandwidth and conditions. The license also allows you to use the FM version through Digipeaters.

It normally costs \$69 for a license. But there is a deal. If we send in a minimum of 10 at the same time the price drops to \$55. I am collecting names for people interested in joining in a bulk buy. Contact me at KD2DO@arrl.net if you want in on this deal

SOMETIMES – PART 2

FOREST SHICK, WA2MZG

Sometimes:

- You Share
- You Ask Where Am I (GPS)
- You need a new accessory (QSO Messenger)
- You head for a goal

Ham Radio history from the book of Forest.

Ham Radio began with everyone building, experimenting, inventing, sharing – there were no off the shelf radios to buy. Eventually manufacturers appeared but you could still make a quality radio yourself. Hams were still experimenting and building. Jumping ahead to today – it is nearly impossible to homebrew a quality radio that competes with what is commercially available.

There are still areas of our hobby for experimenting, building, inventing, sharing and homebrewing.

Sometimes You Share

Why am I making these small projects and writing the articles?

I think of these as steppingstones – a bridge between building from scratch and buying a kit. An entry into home brewing – with a kernel of the idea ready for you to build around. An idea to learn from, experiment with, to say “I Did That!”.

The projects are not perfect nor complete – if they were – what would you do?

These projects easily become more sophisticated ideas and projects. They provide a first step for experimenting and then deciding what to do next. Buy a soldering iron, learn to write code, experiment, and fabricate YOUR ideas. And finally SHARE!

Using the solderless breadboard, jumper wires and modules eliminates the immediate need to learn to solder, hand wire, handle small components, etc. Kind of a “Try It – You’ll Like It” approach.

I have provided my code for you to build from, steal from, borrow ideas from. It certainly isn’t perfect code or complete code - there is always one more thing to add.

There are many project-oriented books to learn from and borrow code from. Sometimes resources seem endless – if you can sort the good from the bad.

A few more components I have purchased:

- Adafruit
 - Ultimate GPS Breakout

- <https://www.adafruit.com/product/746>
- PJRC
 - Microphone
 - <https://www.pjrc.com/store/microphone.html>
- Amazon (similar to the following)
 - [Si5351](#)
- QRP Labs
 - Receiver Module
 - <https://qrp-labs.com/receiver.html>

Sometimes You Ask Where Am I

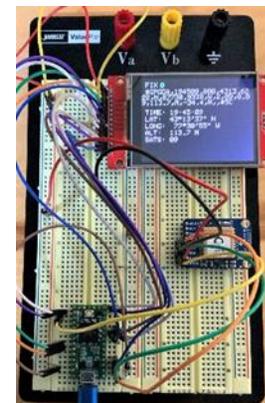
I was interested in GPS data and what I might learn from it. I know – our phones and cars all have GPS but the fun is doing it yourself.

As you can see in the picture, it was a simple 5 wire addition to the base setup from last month.



This is a look at some data.

Here is an interesting link discussing accuracy: [GPS1](#). Here is another link for [GPS2](#). The actual links are too long to include as text.

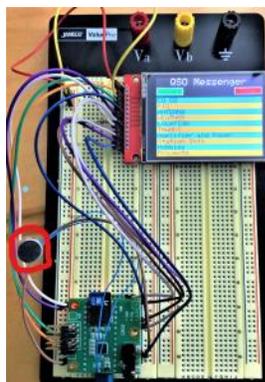


Sometimes You Need A New Accessory

The QSO Messenger is a tool to record repetitive QSO sound bites and play them back when needed. Such as calling CQ, rig, location, weather, etc. The project provides the option for 10 sound bites, but you can add more as needed.



The only new component is a microphone added to the audio adapter – circled in red on the left edge of the picture.



Since the project does not have a keyboard input, the sound bite titles must be entered into the code before you compile

and load the code – an opportunity to add your own feature – a keyboard input.

Sometimes You Head For A Goal

Before I started the February article, my intention was to make an SDR receiver.

I had a receiver board from QSO Labs, the hardware design using a TEENSY 4.0 and audio adapter. Karl Heinz, K5KHK shared some links to software as a starting point and books by Jack Purdum provided code snippets and ideas.

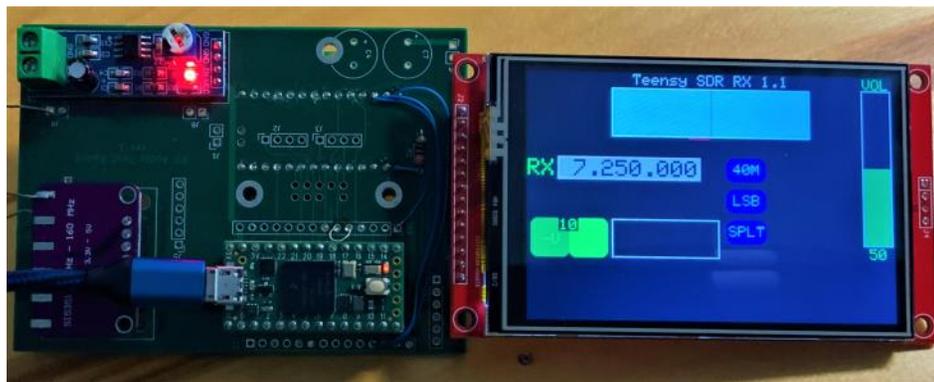
Distraction

I have been hand wiring / breadboarding projects since I was 13 – for myself and work. My hands, fingers and eyes are not what they used to be – funny thing! So I started down the road of using the solderless breadboard but even then I needed more light and magnification to be sure things were connected properly before applying power (I toasted one GPS module).

So, I started making my own circuit boards – well I draw the schematic and layout the board using KiCad and JLCPCB has made 2 boards for me.

Back On Topic

I have a PWB with the Teensy 4.0, audio adapter, touchscreen display (480x320), Si5351 DDS (VFO) and an audio amplifier. I have code to set the frequency and user interface (display) code.



The next step is adding signal processing code.

In the accompanying video, I will show you my first steps at testing my code design and hardware.

Interestingly, you can do some testing of the audio circuits using the PJRC Audio Design Tool functions and build the test equipment into the receiver code and then remove it when you have tested the intended function. Then add more code for the next function.

When I get that far – I will share the results with you.

Appeal

- You might combine the Memory Teaser and the QSO Messenger in to a game and a voice recorder for your children or grandchildren
- You might combine the AF Function Generator and the RF Signal Generator into a small desktop signal source
- The Waveplayer – for just your music
- You might combine the GPS and the QSO Messenger as a portable station accessory – add Grid Square identification to the GPS and PTT and mic connection to the QSOM – not to mention accurate UTC
- Maybe combine the 2 generators, the GPS, and the QSOM into a portable station “Swiss army knife”. And for the time when the bands are quiet include the Memory Teaser
- How about a morse code keyer / decoder?
- You might enjoy the challenge of taking the next step – making your creation into something a bit more rugged, adding a case and sharing your creation at a RARA meeting or as a Rag article
 - Learn to solder
 - Learn to draw schematics and layout circuit boards
 - Learn to make 3D printed cases
 - Of course, it all takes time
 - Ham Radio is the hobby of a thousand hobbies

Here are my Teensyduino sketches (code) at the following links, as before – no guarantees, but opportunities:

- [GPS](#)
- [QSO Messenger](#)

Here is the accompanying video.



RAGS OF THE PAST

ED GABLE, K2MP, RARA HISTORIAN

20 Years Ago, March 2003

"I will be demonstrating the ability to communicate with hams around the world, over your radio or PC, using Internet Radio Linking Project or Echolink PC Software," wrote Jim Stefano W2COP, in announcing the program for the next RARA meeting. Jim continued by informing readers the Voice over IP technology on this amateur service had 85,000 users linking their HT's or mobile rigs to PC's everywhere. Writing for the RARA Licensing classes was Ray Pickens WA2MYG (sk) where among several topics he explained why there were 23 students registered but only 21 people. Simple, two folks are taking two courses each! In that issue I wrote a full column, an obituary really, describing the life of a friend who just became a silent key, Patrick Hoke, Sr. W2DN. It's worth reading again, but I didn't have enough room to tell a story worth taking more free paper-less space we have today. I wrote about Pat's life during the Big Band era where he had some success singing with known and recognizable Band leaders. Times were difficult then and Pat became friends with another struggling singer where they went from one music hall to another, each night in NY City, just trying to sing a song or two in front of an audience for little money or perhaps just tips. The two friends went their own way, Pat to the Army Signal Corps where he taught his much loved high speed CW, but his buddy stuck with it and managed to make a decent living singing for the rest of his life. His name was Frank Sinatra! The front page of this issue had an interesting photo of an old 1938, mechanical television set (televisor back then) with the viewing magnifying glass showing the callsign GB2KZ, from England! Yes, it was real trans-Atlantic on-air television without satellites or fiber optics. The picture was a test pattern sent from the Amberley Museum in the UK, to the AWA Museum in the US, to celebrate the 75th anniversary of the original event, captured on a spinning disk and displayed in a 60 line format, the same format used by television inventor John Logie Baird. The recreation was originated at Amberley with many dignitaries eagerly awaiting the results while AWA's then Curator and craftsman of the equipment at this end, Ed Gable W2AN, tweaked the synchronizing motor speed. And finally there it was, a perfectly recognizable slide from across the Atlantic. A year later, a very surprised Ed Gable, was called to the podium at the AWA's annual convention, where Dr. Malcolm Baird, son of the UK's recognized television inventor, presented Ed with the J. P Taylor International award recognizing advancement of television history. It's on the wall right behind me. Wow, enough of that, but I will say this was a very small Rag with little to report on RARA news, so this was really important fill material – hihi. We already reported on the passing of Pat Hoke W2DN. There were no new Want Ads in this issue, but Esteban Piva N2MLG, had the same T-50H Aluma tower for sale for three months running. (hint – lower the price) There were also no new commercial advertisers but a peek at Snyder and Snyder Attorney's Ad, Sherwood Snyder (sk) W2KFU, revealed they added Medical Malpractice as one of their services.

The cover of the RARA RAG magazine features a circular logo on the left with the text "SPECIAL SEP. 7ICE CLUB". The main title "the RARA RAG" is in a large, stylized font. Below it, it says "Published by ROCHESTER AMATEUR RADIO ASSOCIATION, INC.". The issue information is "VOL. 55 MARCH 2003 NO. 7".

Ham Internet Radio Linking Project
Jim Stefano W2COP
I will be demonstrating the ability to communicate with hams around the world over your radio or PC, using the Internet Radio Linking Project or Echolink PC software. The conversations are in digital quality audio and can be one-on-one or one-to-many. Contacts can be made through your HT, Mobile Radio or PC, to gateways that are linked to Repeaters or VHF/HF base radios. There are currently over 85,000 registered users of this Voice over IP technology in addition to thousands of casual users.

Radio Amateurs Revisit TV History
Ed Gable K2MP
Curator, AWA Museum
Seventy-five years ago the recognized leader in television development, Mr. John Logie Baird, made history when he transmitted the first TV signal across the Atlantic.

To celebrate this event, the very active Narrowband Television Association (NBTV), made up mostly of Radio Amateurs in the event. *COUNTINUED PAGE THREE*

RaRa MEETING
MARCH 7, 2003
8:00 PM
HENRIETTA FIRE HALL
3129 E. HENRIETTA RD.
IRLP
PRESENTED BY
Jim Stefano W2COP

Internet Radio Linking Project

RaRa RAG 1

40 Years Ago, March 1983

The RARA program this month featured the Amateur Radio world above 1 Gigahertz (1,000 Megahertz or the land of little QRM). The featured speaker was Dan Pedke, KW2T, the Chairman of the Rochester VHF Group and one of engineers over at RF Communications. The venue for monthly RARA meetings was the Forty and Eight Club on University Avenue. On a similar note the Rochester DX Association, RDXA, announced their meeting this month would feature Mike Rice KB2SG, speaking on the ramifications of Amateur Radio Tower installation. Activity within the RARA License Classes was announced with the starting of new Advanced Class theory courses. The ever important volunteer instructors for this session were Harold Mundy KD2K and Ron Jakubowski K2RJ. Combining resources to hold a joint meeting were the Rochester VHF Group and the Rochester Radio Repeater Association where they planned a popular meeting featuring a Ham Auction. The location was the Scottsville Road Police and Fire Academy. RARA President Ed Holdsworth (sk) N2EH, announced the purchase of a new PC to handle RARA membership records and to generate mailing labels for Rag mailings and other routine administrative jobs. Taking place of Secretary El Goss' pen and quill was a new Radio Shack TRS-80 Model III, with a shiny new disk drive spinning away. Hearing from Ed Holdsworth again, this time with the title RACES/ARES Director, Ed reported on the club's efforts to increase public service awareness and participation. He reported a recent meeting brought 38 RARA members to a public service introductory gathering. Readers heard from representative of the K2SA/R (146.76) and WB2AQQ/R (145.11) repeaters, wrote to reveal a plan to link the two VHF Repeaters, along with many others, to serve their local communities in an on-air session of the Teleconference Radio Network. Frank Kryss W2QJM (sk) ex-8AKK, an early area DX'er, was announced a silent key. A new commercial advertiser was F.C. Sound, Frank Cataldo, N2DKI, Manager, offering audio services and sales of all kinds. From the Want Ads you could buy old CQ and QST magazines from Dave, N2CSB.

The RARA RAG

Published by

The Rochester Amateur Radio Association
INCORPORATED

VOL. 35

MARCH 1983

NO. 7

WORLD ABOVE 1 Gigahertz — MARCH 4th MEETING

If you don't know what a Gigahertz is, you haven't been there yet. Generating radio signals at 1000MHz and above is no mean feat. But like all electronics, it's getting easier all the time. Two way SSB communication on microwave frequencies is very practical at the amateur level — especially so when antennas with incredible gain can be readily built or bought, if you must.

To give us a glimpse of this interesting world of really short waves, Dan Pedtke, KW2T, Chairman of the Rochester VHF Group will discuss what the bands from 1296 and up are like, show some slides of equipment and antenna installations, and bring along some relatively simple homebrew devices.

Mark the date — March 4th 8:00 p.m. at the Forty and Eight Club, 933 University Avenue (across from Gleason Works).

Bill, K2KGE

LOCAL TELECONFERENCE NET ON 145.11 AND 146.79

The Rochester Radio Repeater Association, Inc., and the Genesee Repeater Association will again co-host the local portion of the Teleconference Radio Network linking-up the WB2AQQ/R and K2SA/R repeaters locally (barring any intervention by Murphy). The program will start promptly at 8:30 p.m. Both repeaters will be locked on the air with the autopatch on local control for the duration of the net. All participants are asked not to transmit unless local Net Control, K2RJ asks for questions from the local area. Each repeater will be polled in turn. Thanks to all for your cooperation.

SILENT KEY

FRANK KRYSS, W2QJM, pioneer amateur who was licensed in the early 1920's under the call 8AKK. Frank was an ardent DX'er and charter RDXA member.

ADVANCED CLASS STARTS MARCH 8th

The Advanced Class this year will start March 8th at 7:30 p.m. in the K2JD Club Station. Registration is \$3, the book used is \$2 and RaRa Membership is \$6. Instructors will be Harold Mundy, KD2K and Ron Jakubowski, K2RJ.

ANNUAL AUCTION — MARCH 11

Take it from a (sob!) 45 year Rochester-ite, there is no better way (save getting out of town) to get yourself warmed up on a cold spring night than a good old-fashion auction. In case you think that sportsmanship has declined, where else can you go to hear two or three competitors get a round of applause after hotly bidding. To a seasoned auction participant, this one is unique. All radio amateurs are welcome, as are their guests. The terms are that 10% of the sale price is paid by the seller to the treasurer, who splits it evenly between the RRRR and the Rochester VHF Group.

The doors open Friday night at 7 p.m. to allow set-up and inspection. The first gavel falls at 8 p.m. The auction is run for the sole benefit of the RRRR and the VHF Group. Bring anything you think would interest a radio amateur, but leave the "junque" out.

LOCATION — the Rochester Police and Fire Academy located on Scottsville Road, opposite the east side of the Rochester/Monroe County Airport.

GUIDELINES —

1. Clearly label or identify each item or lot (box). The auctioneer can't dream up the description you want.
2. Include your name and callsign in your identification.
3. Indicate your desired opening price.
4. Tell auctioneer if he is to take the price up (usual), or down (chinese) if no bids are made.
5. State the condition of the item.

Neither sponsor group is responsible for the condition of items, condition is solely a matter between buyer and seller. It is the buyers responsibility to inspect, and the sellers responsibility to give correct representation. These details insure the continued quality of the auction.

RARA CALENDAR

TIM BARRETT, K9VB, MEMBERSHIP SECRETARY

March 2023						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1 RaRa Monthly Mtg BSA & ONLINE 7pm ROC City Net ~3.830 MHz 7pm AWA John Rollins DX Contest A1 Club AWT CWOps Test VHF/UHF FT8 Activity Contest Mini Test 40, 80 Walk for the Bacon Contest UKEICC 80m Contest	2 RARA BoD Mtg 6:30pm ARES Net 146.610 MHz, 7pm VHF Group 9pm 50.205 USB AWA John Rollins DX Contest NRAU 10m Activity Contest NCCC Sprints SKCC Sprints Europe QRP Fox Hunt	3 K1USN Slow Speed Test	4 ROC City Net 28.405 MHz, 9pm AWA John Rollins DX Contest ARRL Inter.DX Contest SSB Novice Rig Roundup Wakeup QRP Sprint
5 AWA John Rollins DX Contest ARRL Inter.DX Contest SSB Novice Rig Roundup Wakeup QRP Sprint UBA DX Contest, CW NSARA Contest WAB 3.5MHz SARL Sim. Emer. 40M Contest	6 AWA Net 145.110 MHz, 7pm VHF Group 9pm 144.260 SSB ICWC Medium Speed Test OK1WC Memorial WW Sideband Activity Contest ARS Spartan Sprint RSGB 80M Club Contest , Data	7 QRP Foxhunt Phone Weekly Test – Fray	8 ROC City Net ~3.830 MHz 7pm A1 Club AWT CWOps Test VHF/UHF FT8 Activity Contest Mini Test 40, 80	9 ARES Net 146.610 MHz, 7pm VHF Group 9pm 50.205 USB NCCC Sprints EACW Meeting QRP Foxhunt	10 K1USN Slow Speed Test	11 ROC City Net 28.405 MHz, 9pm YB RTTY DX Contest AGCW QRP Contest RSGB Commonwealth Contest South America 10M Contest Stew Perry Topband Challenge EA PSK63 Contest OK, ID DIG QSO Parties Tesla Memorial HF Contest SKCC Weekend Sprintathon
12 RSGB Commonwealth Contest South America 10M Contest Stew Perry Topband Challenge EA PSK63 Contest WI, OK, ID DIG QSO Parties Tesla Memorial HF Contest SKCC Weekend Sprintathon NA Sprint RTTY FIRAC HF Contest	13 AWA Net 145.110 MHz, 7pm VHF Group 9pm 144.260 SSB ICWC Medium Speed Test OK1WC Memorial WW Sideband Activity Contest	14 QRP Foxhunt Phone Weekly Test – Fray	15 ROC City Net ~3.830 MHz 7pm A1 Club AWT CWOps Test VHF/UHF FT8 Activity Contest Mini Test 40, 80 Walk for the Bacon Contest RSGB 80M Club Contest , CW NAQCC CW Sprint	16 ARES Net 146.610 MHz, 7pm VHF Group 9pm 50.205 USB NCCC Sprints NTC, BCC QSO Parties QRP Foxhunt	17 K1USN Slow Speed Test	18 ROC City Net 28.405 MHz, 9pm BARTG HF RTTY Contest Russian DX Contest VA QSO Party Feld Hell Sprint F9AA Cup, SSB
19 BARTG HF RTTY Contest Russian DX Contest VA QSO Party UBA Spring Contest, CW F9AA Cup, SSB Classic Exchanve, Phone	20 AWA Net 145.110 MHz, 7pm VHF Group 9pm 144.260 SSB ICWC Medium Speed Test OK1WC Memorial WW Sideband Activity Contest Classic Exchanve, Phone Bucharest Digital Contest	21 QRP Foxhunt Phone Weekly Test – Fray Classic Exchanve, Phone	22 ROC City Net ~3.830 MHz 7pm A1 Club AWT CWOps Test Mini Test 40, 80 Classic Exchanve, Phone	23 ARES Net 146.610 MHz, 7pm VHF Group 9pm 50.205 USB NCCC Sprints CWOps Test QRP Foxhunt RSGB 80M Club Contest , SSB	24 K1USN Slow Speed Test	25 ROC City Net 28.405 MHz, 9pm FOC QSO Party CQ WW WPX Contest, SSB
26 UBA Spring Contest, 6M CQ WW WPX Contest, SSB	27 AWA Net 145.110 MHz, 7pm VHF Group 9pm 144.260 SSB ICWC Medium Speed Test OK1WC Memorial WW Sideband Activity Contest	28 QRP Foxhunt Phone Weekly Test – Fray	29 ROC City Net ~3.830 MHz 7pm A1 Club AWT CWOps Test UKEICC 80m Contest Mini Test 40, 80	30 ARES Net 146.610 MHz, 7pm VHF Group 9pm 50.205 USB NCCC Sprints CWOps Test QRP Foxhunt	31 K1USN Slow Speed Test Sasquatch Stomp	

VE TEAM

Testing takes place on the 3rd Saturday September - April

Dates for 2023: 3/18, 4/15

Testing Location

RIT
Rochester Institute of Technology
Building 16 -Schmitt Interfaith Center
43.08402626755475, -77.6734520379509

- Easiest path is from Parking Lot D it can be accessed from West Jefferson Rd via Andrews Memorial Dr or Lowenthal Rd
- From parking lot D walk south up the ramp to the Schmitt Interfaith Center.
- Once inside there is an elevator over to your left or stairs in front of you. Go to the first floor and you will find the Skalny room.

Please Note: this room cannot be accessed from the door under the bridge.

Pre-registration is required visit:

<https://hamstudy.org/sessions/14612/inperson> to find the latest session.

More information is available on the RARA website:

https://rochesterham.org/license_testing.htm

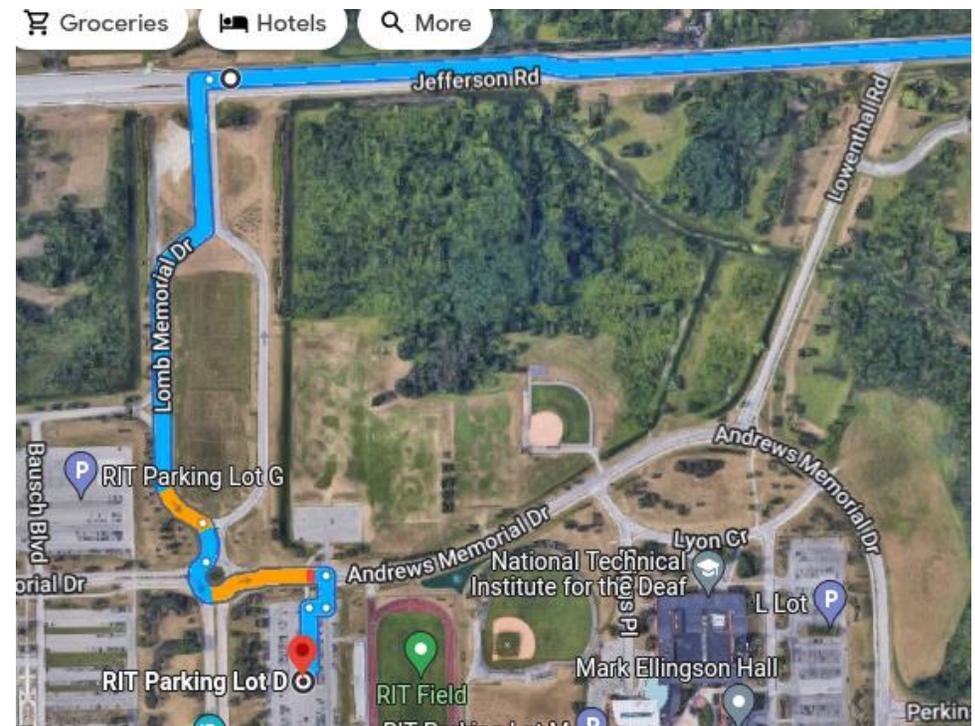
Applicants must supply their own pen, pencil, calculator

Testing begins at 10:00AM.

Also Note: The exam is free however the FCC now charges \$35 for applications. This fee is NOT paid to the VE team. It is paid directly to the FCC. You will receive an email from the FCC when your application is processed. We will also have an information sheet available

Alex Fregoe	K2OLF	G	Cecilia Lau		T
George Link		T	William Mahoney	KE2AMJ	G
Dale McConnell	KD2UWF	E			

New licensees' names are in **BOLD**



NEWS FROM AREA CLUBS

MONROE COUNTY ARES / RACES NEWS

Monroe County Amateur Radio Emergency Service (ARES)® is an amateur radio public service organization based in Monroe County, New York, and is open to all licensed amateur radio operators. Monroe County Radio Amateur Civil Emergency Service (RACES) is a program of the Monroe County Office of Emergency Management. We participate in training and emergency exercises so that we can serve other agencies during times of communication failure.



The Monroe County Amateur Radio Emergency Service, Inc. holds its meetings on the fourth Thursday of each month except in July, August, November and December. The meeting in November is on the third Thursday to avoid interfering with Thanksgiving. Anyone interested, members and non-members, are welcome to attend. The meetings are in person at the county EOC at 6:00 PM and are also available via Zoom. Please check our website for any schedule changes. Prospective members can request an invitation by email to: secretary@monroecountyemcomm.org.

Monroe County ARES/RACES meets on the air every Thursday of the month at 7:00 PM, on the W2ARM 146.61 MHz (-) 110.9 Hz PL and 444.45 MHz (+) 110.9 Hz PL repeaters. Our club callsign is WB2EOC. On nights when we hold our regular meeting, the net is at 5:30 PM.

Web: www.monroecountyemcomm.org

Facebook: Monroe County Amateur Radio Emergency Service, Inc.

Twitter @MCARESNY

ROCHESTER DX ASSOCIATION, RDXA

The next meeting will be Tuesday 21 March, 2023 at Johnny's.

Jim Porter, K2NAX, will give an in-person talk on radio communications with NASA satellites, radio astronomy and / or SETI.



The March meeting is **IN Person ONLY**.

Please check our website www.rdxa.com for up-to-date information regarding meeting locations and requirements, if any.

XRX AMATEUR RADIO CLUB

The XRX Amateur Radio Club meets the second Thursday of the month (except July and August). 7PM at the Webster Recreation Center. Zoom meeting info, when available, is sent out to our mailing list. How to subscribe and up-to-date information is always on our website at <http://xarc.us> We have a System Fusion repeater south of the city on 145.290, and another on 444.825 west of the city that is also D-Star capable. Both are also analog capable with 110.9Hz tone. All are welcome.

AMATEUR RADIO ASSOCIATION OF THE SOUTHERN TIER, ARAST

ARAST meets the third Thursday of every month at the Emergency Communications Center on Harris Hill in Big Flats, next to the National Soaring Museum. Our Chemung County ARES (CCARES) organization meets the first Tuesday of the month except February at the same location. Both organizations serve amateurs in Chemung, Steuben and Schuyler counties in New York and Bradford and Tioga counties in Pennsylvania. All are welcome to attend our meetings.

NOTE: Both CCARES and ARAST monthly meetings are now being held both in person and online. Check out the Upcoming Events at our website, www.arast.info, for the latest details.

Don't forget to check out our repeaters when you visit the area. N3AQ 147.36(+) and the W2ZJ 146.70(-) are the principal 2-meter repeaters. The latter can also be accessed via Echolink node 574415 with the call sign KD2QND-R. A full list of repeaters that can be heard in the Twin Tiers area surrounding Chemung County can be found at http://www.arast.info/arast_website/public/repeaters.php.

We also invite you to check out our new 6-meter net on Wednesday evenings at 9 p.m. local time on 50.200 MHz USB. The net usually lasts approximately one hour. Operators are encouraged to check in and participate in the round table discussions or simply stop by from time to time. We would welcome participation from RARA members.

COMMUNITY AMATEUR RADIO CLUB, CARC

If you are interested in being a part of this forward thinking and active club, visit us at a meeting or join us on one of our weekly nets. We meet at the Hoag Library (134 S. Main St. Albion, NY) on the first Saturday of each month at 7PM. Each meeting has a brief training/refresher period with upcoming topics including: net protocol, repeater set-up/maintenance, and digital signaling. The club holds a net every Sunday evening at 8pm (winter) and 9PM (summer) - 0100 UTC Monday - on 147.585 simplex, and we host the Thursday Night Social Net, Thursday at 8:30PM on 147.285+. We'd love to hear you check-in!

DRUMLINS AMATEUR RADIO CLUB

The Drumlins Amateur Radio Club meets every third Wednesday of the month at 7:30 PM at the Wayne County EMO/Sheriff's Office 7376 State Hwy 31 #1000, Lyons, NY 14489. Doors open at 7 pm, meeting starts at 7:30 pm. Announcements will be made on the 146.685 repeater. The Drumlins ARC website address is <http://drumlinsarc.us/>

DIGITAL COMMUNICATIONS ASSOCIATION OF PERINTON, DCAP

DCAP members continue to experiment with leading edge digital communication modes. We were formed in 1994 to foster the development of local and regional packet radio networks using AX25 and TCP/IP. Today we have members using the club sponsored DSTAR repeater (KB2VZS on 444.8MHz), several personal and publicly accessible DSTAR hotspots, Yaesu System Fusion systems on non-club repeaters and DMR systems through repeaters and personal hotspots. DCAP members meet for breakfast at 7AM nearly every Saturday morning at Rikki's Family Restaurant in the village of Fairport and everyone is welcome to join us. Talk in is on the KB2VZS analog repeater on 146.715MHz with a PL tone of 110.9Hz.

KEUKA LAKE AMATEUR RADIO ASSOCIATION, KLARA

We have been working on the Ground Hog Hamfest Feb 4th in Almond. Attached is the flyer for it. Hope to see you there!

Joel has been working on the Simplex Challenge! Date is set for May 6, 2023 to run from noon till 4pm. Be watching for the information on our webpage and I will be posting it on here also. This year will be 2 meter and 6 meter! So exciting so please plan to join in this event!

March meeting will be March 8, 2023 at the Civil Defense Training Center with Pot Luck at 6pm so bring something yummy to share, table service and beverage but we supply coffee.

ORLEANS COUNTY AMATEUR RADIO CLUB

The Orleans County ARC meets every 2nd Monday of the month at the Orleans County Emergency Operations Center, 14064 West County House Road, Albion, NY 14411. Doors open at 6:00PM, meeting starts at 7:30PM. Anyone with an interest in amateur radio is welcome. Program topics vary from month to month.

The club has an open two-meter net every Tuesday night at 9:00PM local time on the club repeater, WA2DQL/R (145.27 -600KHz offset, 141.3 tone). Everyone is welcome to check in.

See the club website <http://ocarc.us> or contact club Secretary Ron Craig, N5BNO for more information.

ROCHESTER VHF GROUP

You are invited to join us on-line & on-the-air! We're here to help you to use the license that you worked so hard to get.



Check out what we do by visiting our website at <http://RVHFG.org> to start.

Join our e-mail group by sending a message to RVHFG+subscribe@groups.io.

Join our weekly on-the-air nets on SSB:
2 meter band - Monday 9 PM 144.260 USB
6 meter band - Thursday 9 PM 50.205 USB

No VHF SSB radio (yet) to join the nets?
Log-in to Echolink ka2ene-L #23426

We can help to answer the question, "What radio should I buy?" Here's a list of HF+++ radios, those with the HF bands and at least three VHF bands, giving you access to all sorts of VHF fun. Research each one to see which serves you best. Ask questions on our email list. We're here to help!

Yaesu FT-100D	Yaesu FT-817	Yaesu FT-818
Yaesu FT-847	Yaesu FT-857	Yaesu FT-897
Icom IC-706MKIIG	Icom IC-7000	Icom IC-7100
Icom IC-9100	Kenwood TS-2000	

Some are older models and some are newer models, but all provide access to the 6 meter, 2 meter, and 70 centimeter bands using both traditional FM and the exciting narrow-band SSB mode that supports unexpectedly long-distance (100's of km's routinely and 1,000's of km occasionally) VHF communication. These are good all-around radios no matter what club you end up affiliating with later. We hope its us.

SKENOH ISLAND AMATEUR RADIO CLUB, SIARC

The Skenoh Island Amateur Radio Club meets every second Wednesday of the month at 7:30PM at the Ontario County Safety Training Facility, 2914 County Road 48, Town of Hopewell. We have License Exam Testing every other month which begins at 6:30PM. The next meeting will be March 08th, at 7:30PM. There will be exam testing.

SIARC is also holding a Health and Welfare NET Monday through Friday each week at 2000 hours on the SIARC 146.820 repeater (located in Canandaigua, NY), Tone 110.9. This net is to pass along general information and keep hams in touch. All hams are invited to participate.

ROCHESTER RADIO REPEATER ASSOCIATION

The Rochester Radio Repeater Association will be having its regular meeting on March 17th at the Pittsford town hall meeting room in the basement at 7:30pm. The entrance is in the back of the building.

Stay tuned to our web site, www.k2rra.org for any current information.

March is a special month because it's RRRA's Annual Auction. Set up and socialization will start at 7:00 pm. As usual, 10% of the sold value is paid to the Club by the seller. You do not need to be a member to attend but we could use your support by becoming a member. Ed Gable will be our auctioneer. Watching the auction is always entertaining. Hope to see you at our auction.

We are still looking for a club Secretary. If you wish to apply contact one of the listed club officers or show up at a regular meeting. The current club officers for March are Bob Shewell - N2HJD - President, Bob Odell - N2BZX - Vice President, and Bob Smith - NS2B-Treasurer / Membership Chairman. RRRA also accepts donations to the club. If you are not currently a member and want to support RRRA, you can join at our monthly meeting or on our web site using PayPal. www.k2rra.org

AWA SPRING MEET SATURDAY MAY 13, 2023

The annual **AWA Spring Meet, Flea Market & Auction** will be held at Veteran's Park in Bloomfield, NY. This is just across the road from the AWA Museum, 6925 State Route 5, just east of the intersection of Routes 5 & 20 and Route 444. AWA will be operating a **Museum Bargain Table** and a large **Museum Book Sale** in the former AWA Annex building located in the park.

As part of the meet, AWA will hold an **Auction** of duplicate and surplus items from the Museum's artifacts. Don't miss it! This auction will be held in the afternoon in the former **AWA Annex**. Payment must be by cash or check. We will not be able to accept credit cards. Auction items will be listed on the AWA web site as they are identified. Watch for updates to the list.

COMPLETE SCHEDULE Event

Time	Event
7 am – Noon	Open Flea Market, at Veteran's Park
8 am – Noon	AWA Bargain Table & Book Sale, in Annex
10 am – Noon	Antique Wireless Museum open for visitors
8 am – 1pm	Auction pre-view, at the former AWA Annex
1 pm – to end	AWA Auction

Admission for the Day is \$5

Flea Market Vendor Pass is an additional \$7

THE AMATEUR'S CODE

Originally written by Paul M. Segal, W9EEA (1928)

THE RADIO AMATEUR IS:

CONSIDERATE	Never knowingly operating in such a way as to lessen the pleasure of others.
LOYAL	Offering loyalty, encouragement and support to other amateurs, local club, and the American Radio Relay League, through which Amateur Radio in the United States is represented nationally and internationally.
PROGRESSIVE	With knowledge abreast of science, a well built and efficient station and operation beyond reproach.
FRIENDLY	With slow and patient operation when requested, friendly advice and counsel to the beginner, kindly assistance, co-operation and consideration for the interests of others. These are the hallmarks of the amateur spirit.
BALANCED	Radio is an avocation, never interfering with duties owed to family, job, school or community.
PATRIOTIC	With station and skill always ready for service to country and community.

RARA OFFICERS, DIRECTORS AND COORDINATORS

OFFICERS

President: Scott Theis, W2LW	(845) 774-9809	president@rochesterham.org	Treasurer: Mike Moore, KC2NM	(585) 721-0011	treasurer@rochesterham.org
Vice-President: Tim Barrett, K9VB	(646)496-5015	vicepresident@rochesterham.org	Secretary: Brian O'Connor, KA2CGB	(585) 721-2346	secretary@rochesterham.org

DIRECTORS

Richard Bishopp, KD2UBJ	(585) 766-5631	rbishopp44@gmail.com	Karl Heinz Kremer, K5KHK	(585) 210-0840	k5khk@khk.net
Tim Guyot, KB1POP	(585) 406-3163	timguyot@gmail.com	Dave Wilson, WA2HOY	(585) 200-4447	davidrw@rochester.rr.com
Mike Kennerknecht, N2MAK	(585) 754-2444	maken-nerknecht@gmail.com			

ACTIVITY COORDINATORS

Club Historian	Ed Gable, K2MP	egable@rochester.rr.com	Online Meetings	Scott Theis, W2LW	sa_theis@hotmail.com
Club Station Trustee	Dave Enright, K3WHD	denright1228@gmail.com	Public Service	Mike Moore, KC2NM	publicservice@rochesterham.org
Education Coordinator	Karl Heinz Kremer, K5KHK	education@rochesterham.org	QSL MANAGER	Dave Enright, K3WHD	denright1228@gmail.com
Elmers' Corner	Richard Bishopp, KD2UBJ Suzanne Bishopp, W2SUZ	elmerscorner@education.org	Raffle Administrators	Forest Shick, WA2MZG Jeff Sonstein, WA2RRB	wa2mzg@arrl.net
Groups.io Moderators	Tim Barrett, K9VB Karl Heinz Kremer, K5KHK	tim.k9vb@gmail.com k5khk@khk.net	RARA Academy	Kevin Denton, KD2WXS	academy@rochesterham.org
Hamfest Co-Producers	Tim Guyot, KB1POP Mike Moore, KC2NM Dave Mitchell, KD2RAF	hfproducer@rochesterham.org	RARA RAG Editors	Forest Shick, WA2MZG Mike Kennerknecht, N2MAK	editor@rochesterham.org
License Testing Coordinator	Don Kiser, AC2EV	dkiser100@gmail.com	Proof Readers	Susan Aiello, W2SBA Dave Wilson, WA2HOY Mark Pedersen, KC2UES	
Media Communications	Tim Guyot, KB1POP	timguyot@gmail.com	Refreshments	Rich Hoffarth, K2AXP	rhoffarth2000@yahoo.com
Meeting Audio	Joe DiVincenzo, AD2DB Scott Czeck, KC1GHT	joedy58@gmail.com scottczeck@gmail.com	Reward Points Administrator	Tim Barrett, K9VB	membership@rochesterham.org
Membership Secretary	Tim Barrett, K9VB	membership@rochesterham.org	Telephone Hotline	Scott Theis, W2LW	sa_theis@hotmail.com
			Webmaster	Scott Theis, W2LW	webmaster@rochesterham.org

ROCHESTER AREA RADIO CLUB CONTACTS

Amateur Radio Association of the Southern Tier (ARAST)

Reiner Dieg, N2PEZ: n2pez@arrl.net

Antique Wireless Association (AWA)

Lynn Bisha, W2BSN: lynnbisha@gmail.com

Astronomy Section Rochester Academy of Science

Mark Minarich: mminaric@rochester.rr.com

Community Amateur Radio Club (CARC)

Joe Gangi, AC2NB: ac2nb.carc@gmail.com

Digital Communications Association of Perinton (DCAP)

Gary Skuse, KA1NJL: ka1njl@arrl.net

Drumlins Amateur Radio Club Ltd. (DARC)

drumlinsarc@gmail.com

Genesee Valley Amateur Radio Assn.

Bill Boyd, N3DSP: N3DSP@lafireline.net

Keuka Lake Amateur Radio Association (KLARA)

Jim Caneen, W2JTC: jcpilot@localnet.com

Monroe County ARES / RACES

Iain Marcuson, KC2NLD: secretary@monroecountyemcomm.org

Orleans County Amateur Radio Club (OCARC)

Terry Cook, K2EYS: k2eys@ocarc.us

Rochester Amateur Radio Association (RARA)

Tim Barrett, K9VB: president@rochesterham.org

ROC City Net

Joe Merolillo, K2ZX: k2zx52@gmail.com

Rochester DX Association (RDXA)

Chris Shalvoy, K2CS: cshalvoy@att.net

Rochester Institute of Technology ARC

Jim Stefano, W2COP: wireless@mail.rit.edu

Rochester Radio Repeater Association (RRRA)

Bob Shewell, N2HJD: bshewell@frontiernet.net

Rochester VHF Group (RVHFG)

Rus Healy, K2UA: chairman@rvhfg.org

Skenoh Island Amateur Radio Club (SIARC)

Steve Benton, WB2VMR: sbenton2@rochester.rr.com

West Side Amateur Radio Club

XRX Amateur Radio Club

Brian Donovan, K2AS: k2as@outlook.com

Rochester Makerspace

David Duckles: rocmakers@gmail.com

APRIL RAG DEADLINE

MARCH 15, 2023

**RARA MEETS AT 7PM ON THE FIRST
WEDNESDAY OF EACH MONTH.**

**JOIN US IN PERSON
OR
ONLINE AT:**

<https://attendee.gotowebinar.com/register/6022751292179383894>

CONTACT WEBMASTER@ROCHESTERHAM.ORG FOR SUPPORT

Rochester Area Repeater Listing *THE RARA RAG*

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Website – <http://www.rochesterham.org>

Same Location

Contact person: Rich Hamill KC2TNJ
(315) 986-8589

Palmyra VFW Post 6778
4306 Route 31, Palmyra, NY
3 miles east of Palmyra
5 miles west of Newark

**36th ANNUAL
DRUMLINS
HAMFEST**

TALK-IN
146.745
PL 71.9



**NEW
DATE**

APRIL 22, 2023

Vendors 7am
Public 8am Till 1pm

Electronics – AMATEUR RADIO GEAR – Computers

Breakfast – GRAND PRIZE – Door Prizes
Admission \$5.00
Indoor Tables (6 ft.) \$5.00 - Tailgaters FREE

**We're looking forward to
the April Hamfest this year!
There are no Covid Restrictions
as of this printing Check for
changes on our webpage.**

WEBPAGE
Drumlinsarc.us

For Tables
Rich Hamill, KC2TNJ
(315)-986-8589
Email:
Hamfest@drumlinsarc.us

[www.drumlinsarc.us/
hamfest.htm](http://www.drumlinsarc.us/hamfest.htm)

Directions to the Drumlin's Hamfest:

Coming from the East or West on Interstate 90:
Take the NY Thruway to Exit 43 (Palmyra/Manchester).
Turn left after the toll on Route 21 North.
Follow Route 21 into Palmyra.
Turn Right on Route 31 East.
Follow Route 31 East 3.4 miles to the Palmyra VFW.

Coming from Rochester on Rt. 31:
Take Interstate 490 East to Exit 26 (Route 31).
Turn right at end of the exit ramp on Route 31 East.
Follow route 31 East through Macedon and Palmyra centers.
The Palmyra VFW is 3.4 miles from Palmyra center.

Coming from the East on Rt. 31:
Follow Rt 31 through Newark.
The Palmyra VFW is 5 miles west of Newark (before Palmyra center).

LOOK FOR THE ARMY TANK OUT FRONT

