



THE RARA RAG

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

JANUARY 2021
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ANTENNA COMPARISON USING FT8 AND PSKREPORTER ONLINE MEETING AND PRESENTATION

BRIAN O'CONNOR, KA2CGB, RARA VICE PRESIDENT

Please join us for our monthly membership meeting on Wednesday, 6 January at 7:00PM ET. We will review area Ham news and have an informative presentation.

This month's presentation is *Portable Antenna Comparison Using FT-8 and PSK-Reporter Website*, by Tom Bray, W8TBJ. Tom will discuss his experience using FT8 transmissions and signal reports provided by the PSKreporter.info website to evaluate antenna performance. PSKreporter collects FT8 reception reports over the internet from over 5000 monitor receivers operated by amateurs world-wide. Monitors are currently active on ham bands from 2200m through 23cm. PSKreporter aggregates these reports and permits a user to view an individual transmission's signal strength as received across a broad geographic area.

Tom will present his use of this method to compare the performance of three portable HF antennas: an Alpha magnetic loop, the Buddipole portable, and an LNR Precision end-fed wire.

Tom is a member of the Ford Amateur Radio League in Dearborn, Michigan. He is an engineer with over 40 years experience with hardware and software.

To register for the meeting, visit https://rochesterham.org/club_meetings.htm.

Please arrive a little early to ensure you are completely set up. See you then!



BOARDZ BUZZ

BRIAN O'CONNOR, KA2CGB, RARA VICE PRESIDENT

Let me start off by wishing everyone in the RARA community Happy Holidays and Best Wishes for the New Year.

On The Bands

The **ROC City Net** has

- (1) added a 10m net on Saturdays. This is a great opportunity for Technician class licensees to get on HF! Meet them on **28.405± MHz** (USB) at 7:30PM.
- (2) on Wednesdays, the ROC City Net has changed to 160m for the winter. Join them on **1.923± MHz** (LSB) at 7:30PM.

The **ARRL January VHF Contest** runs from 2:00PM EST on Saturday, 16 January, until 10:59PM EST Sunday. New operators are encouraged to enter as "FM-Only" on **52.525, 146.55, 223.5 and 446.0 MHz simplex**. Operators exchange call signs and Maidenhead Grid locator. If nothing else, get on the air during "activity hours" 6m:6AM+6PM, 2m:7AM+7PM, 1.25m:8AM+8PM, 70cm:9AM+9PM. Full details including a PDF log sheet are here

<http://www.arrl.org/january-vhf>

Solar Cycle 25. A year ago, I reported that 2019 had the most days with zero sunspots in over a century. But after idling along near 70 for 22 months, the 10.7cm radio flux dramatically jumped to 90 SFU in November. NOAA/NASA predicts the next solar maximum for July 2025 with a smoothed sunspot number (SSN) between 95 and 130. (The peak for Cycle 24 was 116 in April 2014.) But what is more interesting, a new forecast from NCAR (National Center for Atmospheric Research) anticipates that Cycle 25 will peak with a SSN of 210~260. At those values, we could see the MUF rise well into the VHF range! More to come...

Board News

In December, Yahoo shut down their mail lists including our long-serving "**rara-general**" list. You are encouraged to join our new mail list at <https://groups.io/g/RochesterHam> – just click on "**Join this group**"!

For our February and March meetings, our presenters will be Eric Guth, 4Z1UG, and Scott Fybush, K2SDF, respectively. Stay tuned for details!

Reflecting on November's virtual flea market, your Board discussed holding a silent auction, in which members would submit their wares for viewing a month or so before final bidding. But remember that members can always place a **Free, Sale, or Swap notice** in the Rag.)

Your Board would like to make time for members to interact as was possible during our in-person meetings. Would you be interested in having "open mic" period to chat with others either before or following our formal on-line meetings? Let us know!

Lastly, the **93rd RARA Hamfest** is being planned for June 5th in Hilton.

Please do your part to stay safe and healthy until we meet again.

CALENDAR OF EVENTS

WEDNESDAY JANUARY 6, 2021 - RARA General Meeting
7:00 PM - ON LINE

<https://attendee.gotowebinar.com/register/129199625020418829>

TBD JANUARY, 2021 - RARA Board of Directors Meeting
6:30PM ON LINE

Email request for link to secretary@rochesterham.org

SATURDAY JANUARY 16, 2021 - VE Testing



EDUCATION

TIM BROWN, WB2PAY, EDUCATION COORDINATOR

RARA LICENSE COURSES

Technician License Classes will begin Tuesday January 12th, 6 - 8pm
Instructor -- Karl Heinz Kremer, K5KHK

General License Classes will begin Thursday January 14th, 6 - 8pm
Instructor -- Freddie Sulyma, WB2GFZ

RARA established a ZOOM account that will be used for these classes.

Both Classes have seats open Pre-register by emailing:
education@rochesterham.org

Licensing courses are FREE to current members and students.
The cost for non-members is \$15.00.

Not a current RARA member?
Register at: <https://www.rochesterham.org/membership.htm>

ARRL Licensing manuals may be purchased for the discounted rate of \$25.00.
Order License Manuals by emailing:
education@rochesterham.org

MORSE CODE TRAINING

The RARA XRZ CW 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 to join the group.
Register at: pfournia@gmail.com

MORSE PRACTICE FOR ALL LEVELS ON ZOOM

Tim Brown, WB2PAY, hosts code practice for all levels on Wednesday evenings at 7pm.
Register at: education@rochesterham.org

MORSE PRACTICE ON AIR

Monday and Wednesday	11am	28.450 MHz
Tuesday	4pm	50.250 MHz
Tuesday	8pm	50.250 MHz Re-starting in January
Thursday	11am	7.053 MHz
Friday	11am	3.553 MHz

TUNE IN AND JOIN THE FUN

ELMERS

RARA's Elmers have a wealth of Ham Radio knowledge and expertise.

If you have a technical or operational question, let the RARA Elmers help you.
Send your inquiries to education@rochesterham.org

RARA ACADEMY WORKSHOPS

January 9th --10am to 12 noon

GUI Development (Graphical User Interface)

Using a color touchscreen display.
Basic layout of the display and touchscreen
Drawing text, buttons, symbols, etc.
Responding to touch activity on the display.
Discussion will be based on the Teensy 3.2 and
Color Touchscreen from PJRC.com

- Presenter will be **Forest Shick, WA2MZG**

See page 9 of the July 2020 RAG for Part 1 of Forest's presentation.
<https://www.rochesterham.org/documents/rararags/2020-07.pdf>

Register by emailing
education@rochesterham.org

PUBLIC SERVICE REPORT

MIKE MOORE, KC2NM, PUBLIC SERVICE COORDINATOR

The Rochester Museum and Science Center had hoped to offer their Holiday Science and Technology program in late December. RARA has had a strong presence in this program for several years. Due to the Covid-19 surge, the museum has had to curtail much of their program and will only be open Friday, Saturday, and Sundays in December. They regret that they will not be able to hold the Science and Technology Days program this year.

At the time of this writing, information is just becoming available about the 2021 American Diabetes Association Tour de Cure. The ADA has decided to hold a virtual event again in 2021. This means that there will not be a defined road course and RARA will not be participating as SAG and Sweep drivers, nor will there be a command center. This decision was largely influenced by the risks posed by Covid-19, especially to persons with diabetes. Longer term, the ADA is looking at how to restore the Tour de Cure in Upstate New York.

We will continue to work with our served agencies about what the coming year will bring. For up to date information about all of our Public Service events take a look at our RARA website https://www.rochesterham.org/public_service.

PROFESSOR'S PIC(K)S

JEFF SONSTEIN, KD2RRB

Pretty Incredible Numbers

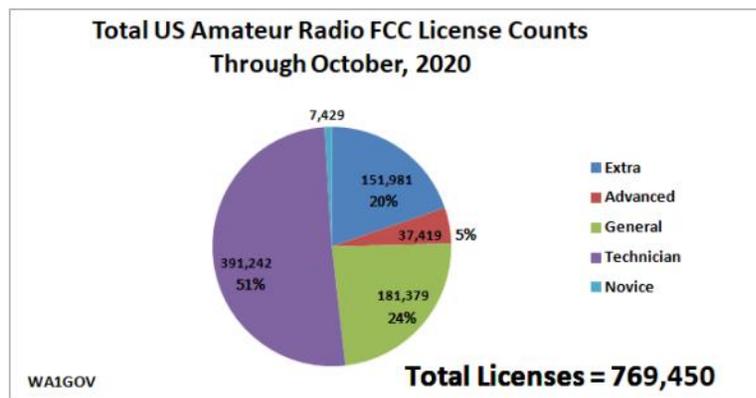
<https://www.eetimes.com/micro-magic-risc-v-core-claims-to-beat-apple-m1-and-arm-cortex-a9/#>

Amusing

<https://create.arduino.cc/projecthub/roni-bandini/book-signer-1d33e4>

Marvelous Marble Machine

<https://kottke.org/20/12/a-marvelous-marble-machine-for-making-music>



STARTING ANOTHER YEAR

FOREST SHICK, WA2MZG

Here we are - another January.

This will be my 8th year as Editor of the RARA RAG. It has been an honor and a privilege and even just good fun.

Beginning with the January 2014 issue, Marisa Ashour, KC2VMM and I became co-editors of the RAG.

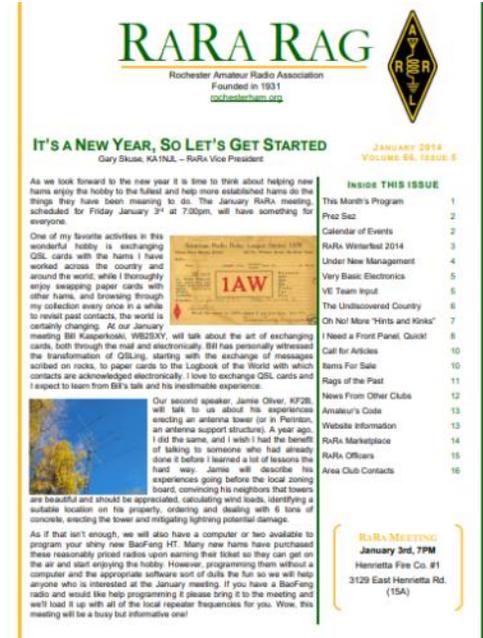
Marisa redesigned the look of the RAG and I added "tweaks" along the way.

I would like to take this opportunity to thank all of our readers.

Then, all of our contributors. Without their articles and announcements, there would be no need for a RAG.

A special thanks to our proof readers who have successfully found typos and suggested updates to articles.

Finally, thanks to all the clubs and organizations that appear at the end of each newsletter.



Silent Key

John Levis
N2JDN
November 23, 2020

Silent Key

Dale A. Foster
KB2HYQ
November 14, 2020

RARA VOLUNTEER SPOTLIGHT

DON KISER, AC2EV

SUSAN AIELLO, W2SBA

I selected Don for the Volunteer Spotlight because I was immersed in studying for my first (and second) amateur exams. I was curious to learn more about VEs and the process. Thank you, Don for your service to RARA and for sharing your ham journey with me and the club!

Don originally got interested in Ham Radio in the late 1980s through his brother, Dan (KB2CIO, KD2CWM SK). Here's Don's story:

What's your first memory of RARA and/or Ham Radio?

My brother had a Kenwood TS520 along with a lot of other gear that I had no idea what it did at the time, and a dipole in the backyard. He would talk all over the world with it. I was fascinated. Looking back, it was amazing to me when a bunch of guys came over to the house to help install an antenna on the garage. I started studying for my license around 1990 and passed the written exam but had trouble with the code portion (High school, work, girls took precedence). One thing led to another and I didn't end up getting licensed.

Then in 2009 I was in Miami, Ohio doing work for a client and found that I had to stay over the weekend. Wednesday evening, I walked out into the parking lot and saw an antenna farm had appeared. I quickly realized that I was there during Dayton Hamvention. With nothing to do that weekend I crammed for the Technician exam and passed, earning the call of KC2VGC. Within a year or so I worked my way up to Extra class (AC2EV). Then I started volunteering.

What volunteer activities have you been involved with for RARA?

My volunteer activities started and continue with the VE team. Under the tutelage of Ken Hall (W2KRH), I quickly learned the ropes and as his health declined, I took over the duties of the VE team. I also volunteer between Christmas and New Years at the Rochester Science Museum where we host a display on Amateur Radio, electricity, and magnetism. I served on the RARA board for a few years but am currently taking a Hiatus.

When I joined RARA I heard about the local VE team but had no clue how it worked. I didn't know many hams in the area and the idea of working an event, on the radio, seemed foreboding. I envisioned that being a VE could be some huge bureaucratic endeavor that would require another test and training but would have a defined structure. I quickly found it to be quite the opposite and enjoyable. I liked being able to give back to the community.

What's the most interesting thing to happen since you started volunteering with RARA?

The most interesting thing to happen was at one of the 'Science and Technology Days' at the RMSC. A young lady approached us with her two young children. The oldest was around 8yrs.

We discussed what we were doing as the son gravitated to the live Ham Radio display. We kept talking about how we're able to make contact with many people all around the world. She mentioned where she was originally from (an Eastern European country, possibly Serbia) and we got on the topic of Nikola Tesla. We also had TV showing our recent logs. She questioned if the data was current. I told her it was, and she got excited. She said, my father, her son's grandfather lives down the street from that guy! We quickly broke contact and tried to get the previous contact back on the air. Luckily, we were able to get him again (I believe it was a contest weekend) and the mom got on the radio and explained who she was and asked if the gentleman knew who her father was. He did and his wife quickly drove down the road to see if he was home. Soon after the boy and mom were talking to their grandfather/father halfway across the world!

When your friends/family find out that you are a Ham and volunteer, what do they think?

My brother Dan (SK) was my original inspiration. We still meet grandpa at the Elmira Hamfest each year although no one else in my family is licensed. I'm still working on the kids.

What might someone be surprised to know about you? What other interests/hobbies do you have?

Girl Scouts, Boy Scouts and work take up most of my time. I like to tinker around in the basement building various props for Halloween. I have a weather station.

Do you think the interest in Amateur Radio seems to be growing or waning? Why do you think that is? What sort of trends do you see?

I see Amateur Radio growing. However, I see it going in new directions then in the past. Currently, a lot of people are getting their license for operating drones and doing digital radio vs the old rag-chew. I just started doing FT8, while I enjoy the quick exchanges and point, click, log nature of it, it still seems like cheating. To make it feel more legitimate to me I try to mix things up with going to lower power levels to see how good my station is.

What would you tell someone who is thinking about volunteering?

Go for it. It may sound daunting, but you'll quickly find everyone wants you to succeed. I have been involved in other hobbies where it's a game of one-up; for ham radio it's the opposite. I have found just about every person is quick to offer a helping hand. Do you have this in your shack? No, well here, use mine, when you grow out of it give it to the next guy.

My Top 10 Ham Radio Rookie Mistakes (So Far)

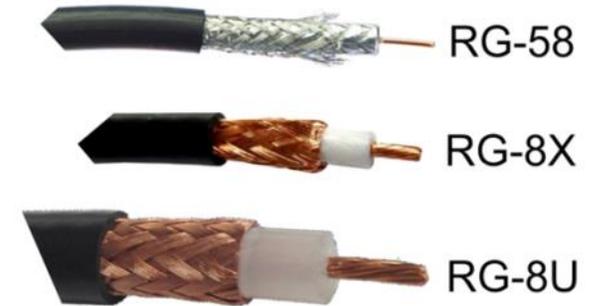
Don Vallone, KD2RE

We all make mistakes, sometimes more often than we care to admit! Some of you have been hams for so long that you probably can't remember (or don't care to remember) what it was like to be a newbie. I've only been licensed for a couple of years now, so my mistakes as an inexperienced ham are still all too painfully clear. I made so many mistakes during my first year as a licensed ham that I thought it might be fun to pass them along to our community for grins and giggles. And who knows - maybe there are still some rookies out there that might benefit from my embarrassment! So, here goes... This month's installment of my TOP 10 Ham Radio Rookie Mistakes! Can you relate to any of these?

#4. Coax Management

Coax cable is a whole conversation unto itself. As a newbie, I had no idea what coax to use. I knew I had a TON of coax from cable TV applications but, fortunately for me, the connectors are completely different so I suspected correctly that I should buy new (see...they have us newbies in mind). But man how I hated to think of all that leftover 70-Ohm coax cable sitting in the garage unused. Fortunately, I resisted the idea of just buying connector adaptors to Frankenstein it up for use with ham radio. It would have just caused more headaches and I was finally starting to learn that shortcuts always cost more in the long run! So I knew that I needed 50-Ohm cable but wasn't prepared for the fact that there were so many varieties available. Do I get RG-58? RG-8X? RG-8U? Something else entirely? I was NOT about to make another newbie mistake so I went to a local radio and electronics store that has been in business for like 100 years. This was a good idea by intent, but it still turned out to be a mistake. The only coax I could find was RG-58 and it was fairly expensive (so that means it must be good stuff, right?). I asked the owner what the best type of coax was for ham radio use, and it was no surprise that he claimed the RG-58 was the best to use (I will go out on a limb and guess that the fact that it was the only cable he had in stock might have influenced his recommendation). There was a sealed bag containing two lengths of 20 foot cable for \$35. I brought it to the counter and prepared to part with my money. "Your total is \$75.60" he uttered as he prepared to take my money. Apparently, they were priced individually. "Well I guess I only want one, then", I said. He acted a bit perturbed and ripped open the bag to remove one of the cables. At this point I was starting to catch on that something was wrong here, but as a generally trusting individual I didn't want to think the worst. Now RG-58 WILL WORK, but the keys to understanding coaxial cable are "signal loss" and power rating. The RG-58 is thinner wire and is meant for short distance and low power. It turned out I needed much more than 20 feet, and fortunately I made it my business to learn more about coax before my next purchase. Later on I discovered that the "owner" of that radio shop had recently purchased the store as an investment from the original owner, and was not knowledgeable about ham radio. He thought he could make a quick profit since there are no other radio supply stores around in the

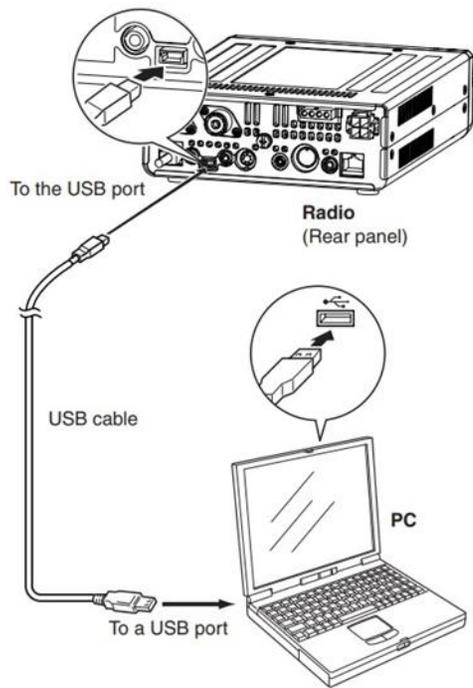
area. He must have made his fortune (or it became apparent to him that he couldn't) very quickly because the store has since gone out of business leaving nothing but the Internet for my future cable purchases (and that is my good fortune!). Speaking of which, another ham directed me to a great on-line company called Wired Communications to buy 50 feet of RG-8X (which is the standard, mid-grade coax for 100-Watt output) for only \$19. Deals are out there to be found - you just need to know a little bit about what you need to look for. RG-8U is best for very long runs and higher power, such as professional and tower usage, but of course is much more expensive. The RG-8X works great for me as my roof antenna is less than 50 feet from my radio. If you need coax and you're running low to mid-power, check out www.wiredco.com for some bargains. They also carry adapters, jumpers, PL-259's, SO-239's, and a few other common radio accessories at a nice discount that you normally don't see outside of a hamfest!



#3. Digital Modes

I love using digital modes. The ability to integrate a computer background with amateur radio was one of the things that made the jump into this hobby more comfortable and exciting for me. This lesson is not about making a mistake by trying to save a few bucks. Instead, it's about making a "costly" mistake (costly here in terms of time, energy, and frustration) by being complacent and overconfident, or just by overlooking the simplest of solutions. I was eager to try out the new FT8 mode that everyone was talking about. I downloaded the free WSJT-X software program and configured my radio to communicate with it. It seemed pretty straight forward and intuitive...to me anyway. Yet I couldn't get the radio to cooperate. I read tutorials and watched videos on the configuration and setup process wondering what I could have overlooked. Nothing jumped out. My connection just didn't work like everyone else's did. I could see others' transmissions but mine didn't show up in the software - nobody could hear me! I had several friends look over my configuration in disbelief that theirs worked with the same radio as I had but mine didn't. I even re-downloaded and re-installed the program a couple of different times to no avail. I went months not being able to play in this fun digital playground until I realized I never downloaded the USB driver for my radio! All along I had assumed I did and wouldn't even accept the possibility that I could have overlooked that most basic step. Or perhaps I did download it all those months ago and the file was corrupt. But I never explored the basic option of reinstalling the driver - just to make sure - until I was absolutely desperate and had lost months of possible contacts. I just insisted that it was the first thing I "would have done" and left it at that. My other take-away from this experience was to be more accepting of the fact that my memory is not infallible. Just because I am a bit younger than some of my fellow radio club members doesn't mean I'm not still an old geezer who doesn't

have the memory he had in his youth. My children now gleefully remind me that I am an "old man".



equipment. I took a deep breath and stopped to realize that many of the hams around me have had 50+ years in the hobby to accumulate their knowledge, experience, equipment, and confidence that I lack in comparison to my minimal time as a licensed ham. I will try to take this into consideration the next time I start to feel that I'm not as far advanced yet into the hobby as I want to be. It all takes time, and it's good to know that there will always be goals on the horizon to keep things fresh and exciting. A valuable lesson I learned was that I feel more enriched as a ham by focusing more energy on fewer things at one time. Give new skills (like CW) the time and focus they deserve to develop, and they will in turn reward you with valuable experience to enhance your hobby and help others to do the same.

#1. Grounding

Well, here's one mistake that is still in the making and has the potential to be the worst. Judging from my record, there is always room for another learning experience! A couple of years ago when I bought my first HF rig (an ICOM IC-7300), I set out to properly ground it with no (well, maybe minimal) shortcuts. I bought a six-foot copper grounding rod and hardware to attach a copper cable to. It seemingly rained the entire Spring and into the Summer. When it finally stopped raining, I selected a spot in the yard not far from the shack and borrowed a sledge hammer from my neighbor (expecting a hassle getting it far enough into the ground). First, I tried to push it into the ground as far as I could before using the sledge hammer. It kept going in farther, so I kept pushing. In fact it slid into the moist ground so easily that I was able to push it all the way down with my bare hands. I was very impressed with my strength. It looked like I would only need the help of the hammer to pound the last foot or so once my leveraging advantage was lost. I took the sledge hammer and gave it a whack. In an instant of regret, the copper rod disappeared under the surface of the dirt. Have you ever tried to pull six feet of grounding rod back out of the ground? I don't yet know of any tools that can help with this. The rod has now truly become part of the ground and to this date my radio remains un-grounded. I expect I can dig a hole around the rod to connect my ca-



#2. Schedule and Commitments

One thing that took me by surprise and completely overwhelmed me during my first year as a licensed amateur radio operator was the sheer volume of radio groups, clubs, organizations, field events, educational opportunities, contests, operating modes, gatherings, DIY projects, license upgrades, travel, and other exciting activities that were available to participate in. Everything was on the table and it all sounded like so much fun (OH, those were the days)! I was eager to do it all. I joined several local clubs, attended all of the club meetings and special events, signed up to be a part of ARES/RACES (and started taking all of the required training for that), signed up for a weekly class to learn CW, started a YouTube channel, traveled to as many hamfests as I could, and attended every training opportunity that was available through my clubs. I'm sure there are other hams who can relate to the fact that I needed a separate calendar just to keep track of all of my ham radio activities! Needless to say, you can't do everything all at once and still be in the process of building your shack and learning to operate your



lected a spot in the yard not far from the shack and borrowed a sledge hammer from my neighbor (expecting a hassle getting it far enough into the ground). First, I tried to push it into the ground as far as I could before using the sledge hammer. It kept going in farther, so I kept pushing. In fact it slid into the moist ground so easily that I was able to push it all the way down with my bare hands. I was very impressed with my strength. It looked like I would only need the help of the hammer to pound the last foot or so once my leveraging advantage was lost. I took the sledge hammer and gave it a whack. In an instant of regret, the copper rod disappeared under the surface of the dirt. Have you ever tried to pull six feet of grounding rod back out of the ground? I don't yet know of any tools that can help with this. The rod has now truly become part of the ground and to this date my radio remains un-grounded. I expect I can dig a hole around the rod to connect my ca-



bles ("someday when I get a chance"). Recently, I added a VHF/UHF rig to the shack (the IC-9700) with the intent to ground the whole system during that "first chance I get". Meanwhile, I'm hoping I can eek out another winter with an ungrounded station and that this will not become the mistake that ends my ham radio hobby. But then I'll need some good stories for a future Rag, right?



Courtesy January 1965 QST

TRAGIC END TO THE RADIO TELESCOPE AT ARECIBO

TIM BARRETT K9VB

Many of you will have read of the structural failure of the radio telescope at Arecibo, Puerto Rico which collapsed suddenly on December 1st. There had been an earlier cable failure on November 7th and engineers were exploring methods to contain the damage when the full collapse occurred. The antenna had been scheduled for dismantling, but this is still a very sad end for such a pioneering piece of engineering. Many astronomical discoveries were made with the telescope and they led to at least one Nobel Prize. It also provided the data for the SETI and SETI@home projects. On a few occasions radio amateurs were allowed to use the antenna, including moon-bounce operations.

The original idea back in 1960 had been to build a reflector on the ground in a parabolic shape like other reflecting dishes. A big disadvantage was that this would not be steerable but just in time it was realized that if the reflector had a spherical shape the detector could be moved to create a steerable antenna. The final design was for the moveable receiving platform to be supported on a gantry held by cables. It was those cables that failed causing the entire receiving platform to fall into the dish.



Although this antenna was a long way from here there is a local connection, it was Cornell university in Ithaca that supervised the construction and ran the operation for the first 40 years of service. There is even a small RARA connection, about three years ago, one of the Cornell engineers involved with the operation donated equipment to RARA that had been used at Arecibo in the set-up of the antenna and they were sold at our annual auction.

There are still other astronomical observatories and radio antennas at Arecibo, hopefully something can be done to replace this telescope at some point.

NEW RARA MAILING LIST ON GROUPS.IO

KARL HEINZ KREMER, K5KHK

I am writing this on December 15th, which means that today Yahoo is discontinuing its groups feature. And with that, our "RaRa-General" mailing list is going away. You can read more about this in Yahoo's FAQ document:

<https://help.yahoo.com/kb/groups/SLN35505.html>

Before I talk about our new mailing list, I'd like to take this opportunity to thank George Masny – KA2GPJ – who ran our Yahoo group. Thank you, George! Thank you for making sure that the list was running smoothly over all these years.

To replace the Yahoo group, we've created a new group on Groups.io. This is the system that most Yahoo groups moved to over the last year or so, since Yahoo started to scale down its groups offerings, so we are in good company. The new group is named "RochesterHam" – just like our web site, which should make it easy to find.

Here is the group description from its home page:

Rochester Amateur Radio Association, Inc.



Rochester Amateur Radio Association (Rochester, NY) RochesterHam@groups.io

This is a place where members and friends of the Rochester Amateur Radio Association, Inc. can exchange messages, ask for and provide help, offer amateur radio related items for sale, and inform others about upcoming events and activities. To learn more about RaRa and ham radio in the Rochester, NY area, visit our website at <https://rochesterham.org>.

Signups on Yahoo are not automatically transferred to the new service, so you will have to sign up for the new service even though you may have been a member on Yahoo. You can do this by going to

<https://groups.io/g/RochesterHam> and clicking on the "Join this group" button.

If that does not work, you can also send an email to

RochesterHam+subscribe@groups.io – it should not matter what you use in the subject line, or the body of the message. The important thing is that it comes from the email address under which you want to receive these RochesterHam

list emails. If this still does not work, please get in touch with the group admins by sending an email to RochesterHam+owner@groups.io – we will do our best to get things straightened out.

Once signed up, you can control how many emails you will be receiving from the group. This can be done by selecting the "Subscription" category (either on the left if you are using a desktop web browser, or at the bottom of the screen behind the "More" menu if you are using a mobile device). You have the option of selecting one of the following:

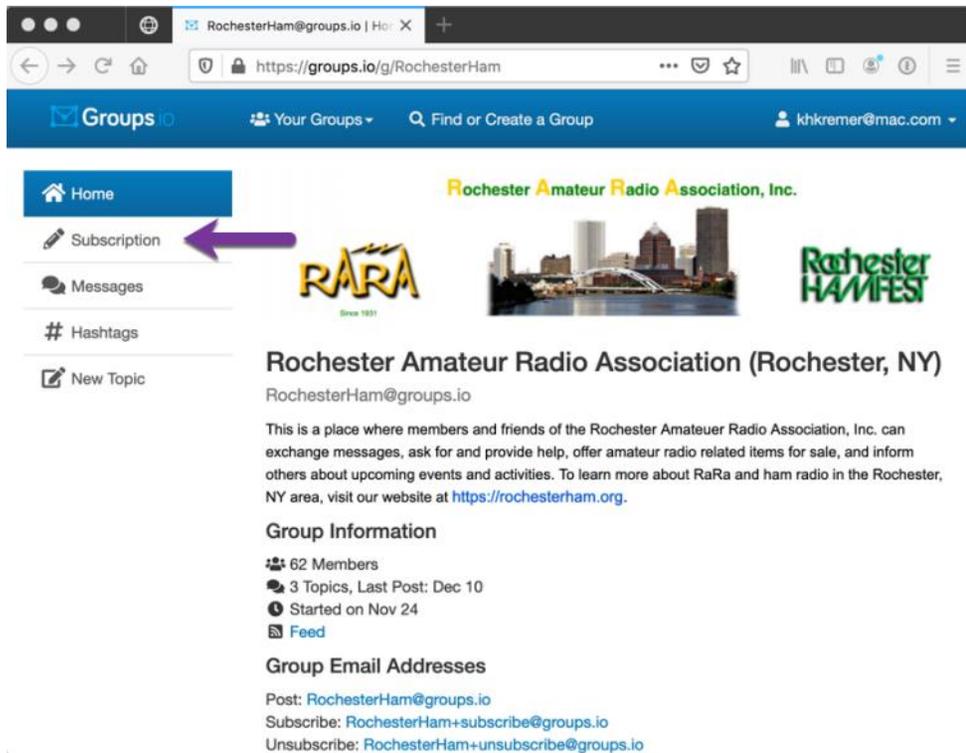
- Individual messages - You will receive each message in an individual email.
- Full featured digest - Group up to 12 messages together as one email instead of being sent individually (rich formatting).
- Plain digest - Group up to 12 messages together as one email instead of being sent individually (plain formatting).
- Daily summary - You will receive a daily summary, delivered in the morning, of the group's messages from the previous day.
- Special notices only - You will only receive special notices from the moderators.
- No email - You will receive no emails.

All group emails can be read on the Groups.io web page in the group archive, so you don't have to receive emails if you don't want to.

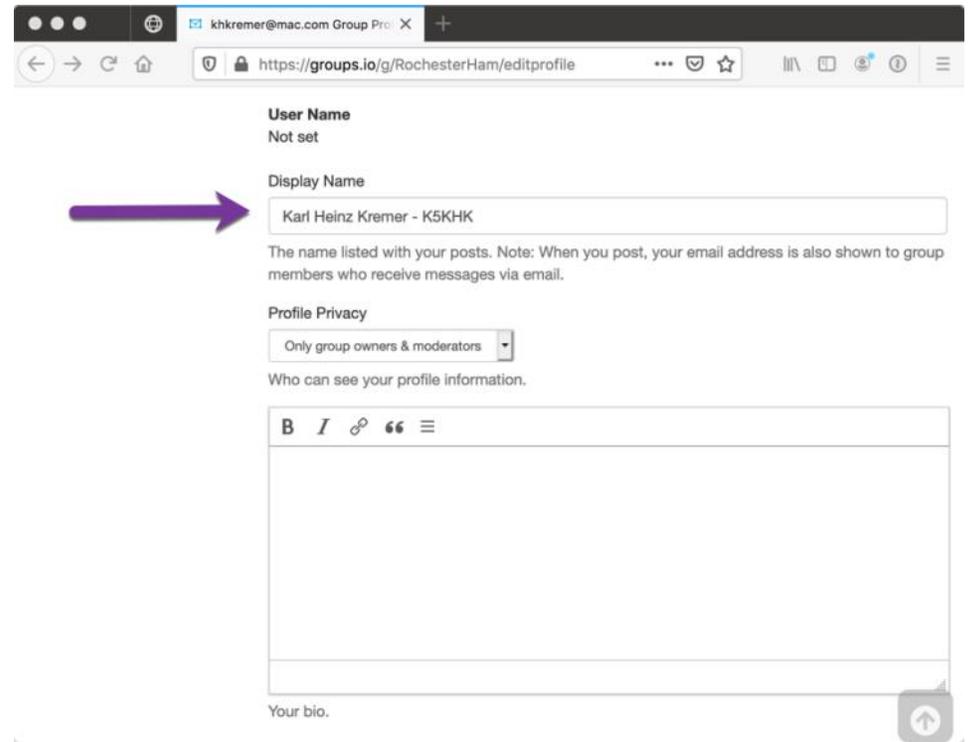
Once subscribed, you can change your email preferences at any time, or unsubscribe from the group. The easiest way to do that is by following the links at the bottom of each email that the group is sending out.

One thing I would encourage is to set your username to something that includes your call sign. This way, we know who you are 😊

This setting can also be found in the "Subscription" section on the left side.



Once in the “Subscription” section, select “Group Profile” and then “Edit Group Profile” ... and now you can set your display name:



All new signups need to be approved, so please be patient, some of us need to eat and sleep sometimes :) Also, the first couple of messages posted to the list by a new user will be moderated, so again, be patient. This is to cut down on SPAM and is a small price to pay for a less spammy email inbox.

We are hoping to grow this new group into a valuable resource for club members where you can ask questions (and hopefully get answers), offer things you no longer need or want – either for free, or for sale – and to have a place to exchange messages with other club members (or friends of the club).

I just checked, and we already have more than 60 members. I hope to see you all in this new group soon.

JANUARY VHF FUN (x2)

EV TUPIS, W2EV

Yes Virginia, there is life beyond repeaters on the VHF bands and the month of January proves it. Twice. January brings two VHF-focused operating events, neither of which require huge antennas or big power.

Look at last month's RARA Rag as proof of the kind of distances that can be covered by modestly equipped VHF stations during the "Pumpkin Patrol QSO Party". Now, imagine a couple of events where many more stations are participating from all across the region. The "fun factor" is sure to be high!

The first event is a brand-new "Winter VHF Sprint". It will be held on Saturday, January 2 at 1600z (11:00 AM, local time). The term "sprint" brings thoughts of fast-and-furious activity, something that this event is designed to deliver because it lasts for only 1-hour and allows people to make contact on all three of the VHF bands: 50/52-MHz, 144/146-Mhz, and 223-MHz.

Full rules are found on the Rochester VHF Group's web page (RVHFG.org), but in a nut shell ... exchange your Grid-4 with other stations. You can work the same station once on each band if you'd like. Logging is optional so if you don't want to keep a log then just make contacts with others to "give away points" to them. Simple, huh?

For FM operators, program-up 50.300 and 52.525 MHz, 146.52 and 146.55 MHz, and finally 223.5 MHz. These are the frequencies that are most likely to have simplex (direct, station-to-station without a repeater) activity, which is what this event is all about.

The second event is "the old standard", the ARRL January VHF Contest. It will be held from 1900Z, January 16 until 0359Z, January 18, 2021. That's 2:00 PM on Saturday, January 16 through 10:59 PM Sunday, January 17. The rules are similar to the Winter VHF Sprint, however because it lasts for much longer and allows operation on more bands, the Rochester VHF Group has suggested specific "activity hours" for each band as follows:

- 6 meters at 6:00 AM and 6:00 PM
- 2 meters at 7:00 AM and 7:00 PM
- 223 MHz at 8:00 AM and 8:00 PM
- 446 MHz at 9:00 AM and 9:00 PM

Here's a hint if you are a casual operator. Simply tune up on 2 meters with your FM squelch "barely on" so you don't hear any background "hiss". When you hear another station calling "CQ", answer them.

Of course, from time-to-time send out a couple "CQ's" of your own. Nobody makes contacts if everyone is listening.

There you have it! January is full of VHF fun. Why not mark both events on your calendar and join-in?

GOOD NEWS! ROCHESTER HAMFEST 2021

The 2021 Hamfest is a go for Saturday June 5th 2021 at the Hilton Exempt Club 137 South Ave, Hilton, NY 14468.

We have reserved the day with Hilton Exempt Club. The forms have been filed with the ARRL and we're expecting approval this week. It's time to start advertising and planning.

Thanks to Anand Choudri KC2KPG, we have an easy to follow procedure that includes all the steps to put on a great hamfest, and the hardest part – finding a venue – is out of the way.

Thankfully, we have committee members returning from last year, but we could use more help to spread the work. There are several steps to be taken between now and June 6th.

To be on the committee, you mostly need to be able to respond to e-mail, make a few phone calls, and attend about one committee meeting per month. (via Zoom for now) If you're interested in being on the committee, please e-mail

- Raffle and Prizes
- Publicity
- Exhibits
- Ticketing
- Parking
- Flea Market
- Facilities
- Food
- Talk-in
- Alternate Activities
- Exams

hfproducer@rochesterham.org

UPSTATE NY WINTER PREP

DON KISER, AC2EV

It should be about January when you're reading this and we should be knee deep into winter. It's about the time of year that the snow squeaks when you walk on it. With that, this month I bring you winter vehicle prep. Adverse opportunities can present themselves at any time and it's always good to have a back-up plan. Winter can be especially dicey here in upstate NY.

Here are some of the rules we should all follow when traveling any distance during adverse weather:

- Make sure someone else knows where you're going and when you plan on arriving. If emergency services have to be dispatched it's easier if they have an idea where you might be. Better yet, use your phone for navigation and share the trip with someone. It will keep them updated of your GPS position and arrival time.
- Travel on a full tank of gas – if you get stranded you could use ¼ to ½ tank to keep warm
- For heat, run the car 10-15 minutes every hour. Keep in mind that on average, you will use ¼ gallon for every 15 minutes of idle.
- Don't travel alone – If you do then, hook your phone to the charger and call someone and let them keep you company. Your phone will be in contact with Cellular towers allowing triangulation of your position should anything happen.
- If you get stranded – STAY IN YOUR CAR, unless it's on fire. It's easier to spot a car than you walking on the road and you're protected and safer in your car.

Some of you may know that I travel between Rochester and Batavia for work every day. While most of this travel is on major roads (Route 490, surface streets), a significant portion is on State Route 33, which can get a little lonely. As of this writing in pre-Christmas December 2020 we recently found Binghamton, NY buried in nearly 4 foot of snow and the tale of a driver [buried by a Snow plow for 10 hours](#) and this got me to thinking if my prep was enough. A quick email to some RARA members (thanks Tim #2 WB2PAY) gave me some good tips to up my preparedness game.

Here is a brief run down of what I keep as my Every Day Carry (EDC) for winter in my van. Keep in mind you don't have to carry all this stuff all the time. Having a van means everything is in the passenger compartment (heated) so keep this in mind if you store items in your trunk. Much of what gets packed in the collapsible tote gets removed in the spring. Many items just stay in the vehicle year round because the van has many places to store stuff and I just choose to leave it there. Things like bivy sacks and Mylar blankets may not be needed during the spring/summer months but since they take up so little space I keep them around, just in case. You can get hypothermia on a 80 degree day just as easily as a 40 degree day. Anything less than 98.7°F and you can get hypothermia. It's all about keeping your core temperature above the danger zone 95°F. Boy

Scouts has always taught me to be prepared, life has taught me to never keep your eggs in one basket. So, I keep items in different places in the van, and keep duplicates. Redundancy is better than not having what you need, when you need it.

Who knows what situation will arise and I may not be able to get to the back of the van for some items so I keep them up front and easily accessible in the personal compartment. Most of these items can be found on/at Amazon, Walmart, Harbor Freight, Pep Boys, Tractor Supply, Runnings, etc.



1. LL Bean "puffer jacket" – pack-able and an extra layer in a pinch
2. Winter gloves
3. Extra Hats and wool gloves
4. Poly (NOT COTTON) blanket and pillows
5. Windshield Washer fluid – I always run out at the worst possible time
6. Emergency lights – MARCALA roadside emergency lights. They have several blinking modes and a built-in flashlight. Easier than flares, better than reflectors and magnetic.
7. Mylar bivy sacks – great for emergency use or the Scout that shows up to Klondike in sneakers and a hoodie.
8. Army wool blanket – When wool gets wet, you don't lose heat. Cotton kills (loses heat when wet). Search the internet for it, easy to obtain and keeps you warm, even when you're watching fireworks on July 4th and it's colder than December 25th was. HiHi.
9. Bungees – you never know, probably need more.

RAGS OF THE PAST

ED GABLE, K2MP, RARA HISTORIAN

20 Years Ago, January 2001

RARA members, and indeed all amateurs in the Rochester area, were fortunate to have for their use excellent VHF and UHF FM repeaters, called then and today the Megaplex System, provided by the efforts and vision of one individual, Bob Shewell N2HJD. Sharing the information on the Megaplex System's 10 sites, operating on six ham bands, utilizing 14 digital controllers, 23 receivers and 19 transmitters, will be RARA's first program for the new year with Bob Shewell the presenter. RARA Historian Ed Gable, K2MP, wrote a short history of amateur radio clubs in Rochester in way of introduction of the Rochester Amateur Radio Association's 70th Anniversary; 1931 – 2001. Scott Blystone, K9EEE, wrote to inform readers that RARA had a new e-mail reflector that anyone could register with and use. As such e-mail reflectors were new to many of our readers, Scott took the time and printed space to carefully instruct people on what and what not to do when using the free service. Richard Goslee, K2VCZ, told members of a RARA incentive to generate a new scholarship program available to a licensed RARA member who will attend college in the next school year. The scholarship was made possible by donations by and for two local hams, Bill Buchan W2OMV and Bill Resch K4VOS. RARA is pleased to have Tim Magee, WB2KAO, returning as Director of the popular Licensing Class program. Tim announced the 2001, class schedule and content in this issue where Technician, General and Extra Class theory instructions were offered. Entry level code classes were also featured. Many Rochester hams from all local clubs started getting ready for an annual operating activity that brought a large number of you working for a common goal. That goal was to combine your January ARRL VHF Contest scores to a

united award winning collaboration by the Rochester VHF Group. You could also choose to have your score go to another Rochester ham organization such as RARA, RDXA, BARK and etc. for competition in The Rochester Cup, an annual award for the local club contributing the highest score to the VHF Group total. The second of four articles by Ed, K2MP, was by him as the Curator of the AWA Museum, telling of a new and exciting display called the Made in Rochester display. There you would see communication items made by General Dynamics, RF Communications, Stromberg Carlson and many others. It remains a memorable highlight of your visit to the museum to this day. Rochester area artifacts were sought after then and now. OK, the number three article was Ed's monthly DX/Contesting Report where he reported on the conditions and highlights of the CQWDX CW, the ARRL 10 meter and ARRL 160 meter contests. DX news told of the 28 member D68C DX'pedition on their way to Comoros. Yeh, I know, you're asking what's the 4th article. That would be his RARA Rag 20 Years Ago column. And since that was 20 years ago, that makes the writing some 40 years in the past. Simple math says Ed Gable has had an article in each and every RARA Rag for over forty years. "Kodak Amateur Clubs become One" was the headline of an article co-written by Charles Escriva KB2SOZ and George Masny KA2GPJ, as they wrote to report that the Kodak Apparatus Division ARC has joined with the Kodak Park ARC to form one organization. There were no Silent Keys reported in this issue and there were also no Want Ads from members. Glenwood Sales on Hague Street remained a very long term commercial advertiser, possibly the longest on record... if such records existed.

The image shows the cover of the RARA Rag magazine, January 2001 issue. The cover features the title "the RARA RAG" in a stylized font, with "Published by ROCHESTER AMATEUR RADIO ASSOCIATION, INC." below it. The issue is labeled "VOL. 53", "JANUARY 2001", and "NO. 5". There are two main articles listed: "Repeaters And The N2HJD Megaplex System" by Peter Fournia, W2SKY, and "RARA Celebrates 70th Anniversary 1931—2001" by Ed Gable, K2MP. A small circular logo on the left says "SPECIAL SERVICE CLUB". At the bottom, there is a box with the text "RARA Meeting January 5, 2001 Social Services Building 111 Westfall Road Repeaters And The N2HJD Megaplex System Presented By Bob Shewell, N2HJD".

Repeaters And The N2HJD Megaplex System

Peter Fournia, W2SKY

A tutorial on repeaters and the N2HJD repeater system is the topic of the January 5th meeting. The meeting will be in the first floor auditorium of the Monroe County Social Services building at 111 Westfall Rd. It starts at 8:00 PM. The topic will be presented by Bob Shewell, N2HJD. Bob has been developer and operator of the Megaplex system, the most extensive system of linked repeaters in and around Rochester.

Bob's N2HJD repeater system is all home brew at 10 sites, involving 6 ham bands, 14 controllers, 23 receivers, and 19 transmitters. There is full telemetry, with normal and reverse auto patch along with a link to NOAA weather. Most sites have emergency power because the system is affiliated with RACES and ARES. This network has evolved since May 1988, is privately owned and is also affiliated with the Rochester Radio Repeater Association (RRRA). About 45 "friends" support this system. Bob also services commercial repeaters in the area.

What better way to get updated on repeater operation than to get it from the guy who operates them, especially on this important local system? Bob will start with a general explanation of repeaters covering the basics including transmitter, receiver, controller, antennas, services and etiquette. He will be using the many pictures from his web site. You can get a good preview by going to the N2HJD web site. Beyond that he has some interesting stories about management, repair and operation of these repeaters. He also has interesting usage statistics related to local events.

Many local hams support our local repeaters by making annual donations. The grateful operators respond by giving codes to the donors that enable hams to access additional repeater services such as auto patches and linking. Find out how to use access the telephone, or get time, temperature, keypad verification and functions using your HT or mobile transceiver.

Come to the RARA meeting on January 5th, 8:00 PM, and get repeaterized.

RARA Celebrates 70th Anniversary 1931—2001

Ed Gable, K2MP

This year celebrates 70 years of the Rochester Amateur Radio Association. Briefly, the first club, the *Rochester Wireless Association*, was formed in April 1913. There were others operating simultaneously, such as the *St. Paul Radio Association*. The reason is that most hams of the time could not communicate across town! Greece to Brighton would be DX. The first club after WWI was the *Rochester Radio Club* of 1920, followed by the *Triangle Radio Club*. These two joined as the *Radio Club of Rochester* in 1921 and remained active until RARA was formed in 1931. Also in that time period was another club, *The Society of Rochester Transmitting Amateurs*, in 1927. In the 40's the *Rochester VHF Group* and *Rochester DX Association* were formed and are still going strong. Other groups, such as the *Rochester Mobile Club* and the *Rochester YL Club*, were not quite so long lived. Congratulations to RARA on 70 years.

RARA Meeting

January 5, 2001

Social Services Building
111 Westfall Road

Repeaters And The
N2HJD Megaplex
System

Presented By
Bob Shewell, N2HJD

Don Drennon W2EBF (sk), RaRa VP and Program Chairman, reported that this month's meeting would cover the subject of how to build your own PC boards. The presenters were Bob Carlson KA2BNL and Mike Borton KA2AFE, both from Rochester Instrument Systems. At this time the venue for RaRa meetings was the Statesman's Club high atop the 19th floor of the First Federal building at State and Main Streets. "Beat the Pack Rats" was the cry of Al Mundy KD2K, writing for the Rochester VHF Group with annual acclimation to get on and beat the score of their long term rival, the Pack Rats, in the ARRL January VHF Contest. This year the Group'ers were especially interested in getting the many new two meter FM users to enter the VHF contest and contribute their log scores to the effort. Dwight Hill K2KWK (sk), wrote to announce the start of the RaRa 50 Year Anniversary contest. Celebrating RaRa's 50th year, this WAS style contest was open to all RaRa members and any ham living in the ARRL Atlantic Division. Ten awards were offered in any combination of modes and bands including, at least reading the rules 40 years later, OSCAR satellite QSO's on 80 meters! (I doubt if many such logs were turned - Ed). We heard from Ed Holdsworth N2EH (sk), reporting the Spring RaRa Licensing classes would start in February with Ed Gable, K2MP, as the new General Class theory instructor. Classes at that time averaged about 40 members per session. RaRa membership indicated new members so far this year added 117 folks to the roster for a total of 684. George Negus K2OIU, informed members of a recently completed new Public Service Activity. Working with Strong Memorial Hospital's spinal injury recovery unit were Chris Reich WB2DYJ, Bud Young WA2UGE and Ed Holdsworth N2EH (sk), who introduced ham radio to the recovering injured as a possible way to use their recovery time to achieve a hobby compatible with future needs. RaRa's unofficial hostess, Lee VanGrol WA2YEK, invited all RaRa members to join the 1981, Valentine's Day Dinner Dance. A steak dinner with all the trimmings for you and the YL could be had for twelve dollars. From the Want Ads you could buy a Heathkit DX-60B with HG-10 VFO for \$125.00 from Paul Alpeter, N2BUL. JR Amateur Radio on Scottsville Road was a commercial advertiser.

The RaRa Rag

Published by

The Rochester Amateur Radio Association
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HOW TO MAKE AND USE PRINTED CIRCUIT BOARDS AT JANUARY 9th RaRa MEETING

by Don Drennan, W2EBF, Vice-President

The RaRa meeting January 9 at 8 p.m. will be our second meeting at our new home, the Statesman's Club. The Club is located on the 19th floor of the First Federal Savings and Loan Building Plaza at State Street/Main intersection downtown.

The meeting will feature a program on the usage and making of printed circuitboards. Our guest speakers will be Bob Carlson, KA2BNL, and Mike Borton, KA2AFE. Mike is a Manager Special Products Group, Rochester Instrument Systems. Bob is a Production Engineer in the same group. They plan to cover the basic concepts of circuitboard usage, composition of the boards and the various methods of creating printed circuitboards including tools and materials needed and where to procure them. A live demonstration is planned plus a handout covering the information presented.

Remember parking under the First Federal Building is free, secure, and dry.

Enter Corinthian Street between the Americana Hotel and First Federal Plaza, off State Street. The end of this street is a city parking garage which is available to you but is not free. Before you get to the city parking garage watch for the entrance to the First Federal Parking Garage on your right. Stop at the entrance to take off or lower, or tie down your antenna. This part is important as an antenna above the car roof may trigger the building sprinklers overhead. "No free car washes allowed please". A guard will observe your car via closed circuit TV and will ask your destination as you approach the gate. You will reply that your destination is the RaRa Meeting. Then the gate will open for you to enter and park. Get to the lobby via one of the nearby elevators.

RaRa Celebrates 50th Anniversary 1931 - 1981

by Bruce Kelley, W2ICE, Club Historian

The history of amateur radio activity in the Rochester area has been covered in earlier issues of the RaRa Rag, notably, a series starting in September, 1963. Additional information was published in September, 1968; March, 1971 and January, 1975.

Briefly, the first club, the *Rochester Wireless Association*, was formed in April, 1913. This club and several other smaller groups, such as the *St. Paul Radio Association*, were phased out at the start of World War I.

The first organized group following that war was the *Rochester Radio Club* (1920) followed by the *Triangle Radio Club*. These two organizations became the *Radio Club of Rochester* (1921) and remained active until RaRa was formed in 1931.

One other group appeared in the 1920's, *The Society of Rochester Transmitting Amateurs* (1927). How these two clubs joined and formed the present-day RaRa will be told in a future issue.

Upon arrival in the lobby from the garage elevator you must take a different elevator to the RaRa Meeting rooms on the 19th floor. You will be getting off for the "Statesman's Club".

Let's make it a big turnout. Bring a friend.

VALENTINES DAY DINNER-DANCE

Tickets are available from "Lee" VanGrol, WA2YEK, who can be reached during reasonable hours at 889-2536. The cocktail hour begins at 6:30 p.m., with dinner promptly served at 7:30 p.m. Tickets for the evening event are \$10.00 for Chicken and \$12.00 for Steak per person excluding cocktails at the cash bar. See the article in the November *Rag* for other details. Just remember how much soft soap you needed after last years contest effort. RaRa presents the ideal opportunity for you, and on exactly February 14th. See you at the Party House?

VE TEAM

Testing on Saturday January 16th

At a **NEW LOCATION**

Damascus Shriners
979 Bay Rd, Webster, NY 14580
With COVID Restrictions
Please Read Carefully!

A **COVID Questionnaire**

Must be Filled Out Either On-site or
Prior to Attending

Online Preregistration is required
The session size is limited to 20

Click to register:

<https://hamstudy.org/sessions/5fbbfa4910802c453b7b5123/1>

Applicants must supply their own PPE
(Mask is a minimum), pen, pencil, calculator and
be COVID negative and symptom free

Testing begins at 10:00AM.
Testing is free!

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	Webster	harryw7872@gmail.com

LICENSE TEST RESULTS

Gared Roessel	KC2UET	E	William Bobzin	KD2VGJ	T
Andrew Levy	KD2VGK	T	Timothy Leckinger	KD2VDN	G
Robert Hannon	KD2VGM	G	Jonathan Shultz	KD2VGO	T
Robert Schultz	KD2VGP	T	Cory Chelini	KC2GQK	G
Clinton Maddox	KD2VGL	T	Anthony Letchworth	KD2VGN	T

New licensees names are in **BOLD**

Next Testing Session
Saturday January 16, 2021

RADIO ELMERS

Name	Call	Area	Email
Tim Brown	WB2PAY	Ogden	tjbrown@rochester.rr.com
Dave Carlson	N2OA	Batavia	kdcarloso@gmail.com
Lawrence Hill	N2AJX	Henrietta	lawrence.hill@rit.edu
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
Peter Schuch	WB2UAQ	Perinton	pschuch@rochester.rr.com
Forest Shick	WA2MZG	Webster	fshick3@gmail.com
Dave Timmons	W2DST	N Greece	dstimmons@gmail.com
Dan Waterstraat	W2DEW	Henrietta	higreen@rochester.rr.com

RARA CALENDAR

TIM BARRETT, K9VB, MEMBERSHIP SECRETARY

January 2021						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1 SARTG New Year RTTY Contest AGCW Happy New Year Contest AGCW VHF/UHF Contest QRP ARCI New Years Sprint	2 ROC City Net 28.4 MHz, 7:30p EUCW 160M Contest PODXS 070 Club PSKFest RSGB AFS Contest, CW Original QRP Contest Winter VHF Sprint ARRL RTTY Roundup ARRL Kids Day
3 Original QRP Contest WW PMC Contest K1USN Slow Speed Test ARRL RTTY Roundup ARRL Kids Day	4 AWA Net 145.110 MHz, 7pm VHF Group 9pm 144.260 SSB K1USN Slow Speed Test OK1WC Memorial ARS Spartan Sprint WW SSB Activity Contest	5 RTTYOPS Weeksprint Phone Fray QRP Foxhunt	6 RaRa Monthly Mtg ONLINE 7pm ROC City Net 3.810 MHz, 7 pm AWA Linc Cundall CW Contest CWOps Mini-CWT Test VHF/UHF FT8 Activity Contest UKEICC 80M Contest	7 RaRa BoD 6:30pm ONLINE ARES Net 146.610 MHz, 7pm VHF Group 9pm 50.200 USB AWA Linc Cundall CW Contest RTTYOPS Weeksprint NRAU 10M Activity Contest SKCC Sprint Europe NCCC RTTY Sprint	8	9 ROC City Net 28.4 MHz, 7:30p AWA Linc Cundall CW Contest YB DX Contest Old new year Contest UBA PSK63 Contest SKCC Sprintathon North American QSO Party, CW
10 AWA Linc Cundall CW Contest SKCC Sprintathon North American QSO Party, CW K1USN Slow Speed Test NRAU-Baltic Contest, SSB, CW Midwinter Contest DARC 10M Contest RSGB AFS Contest	11 AWA Net 145.110 MHz, 7pm VHF Group 9pm 144.260 SSB OK1WC Memorial WW SSB Activity Contest	12 RTTYOPS Weeksprint Phone Fray QRP Foxhunt	13 ROC City Net 3.810 MHz, 7 pm CWOps Mini-CWT Test VHF/UHF FT8 Activity Contest	14 ARES Net 146.610 MHz, 7pm VHF Group 9pm 50.200 USB RTTYOPS Weeksprint NCCC RTTY Sprint QRP Fox Hunt NCCC Sprint	15	16 ROC City Net 28.4 MHz, 7:30p Hungarian DX Contest RSGB AFS Contest, SSB North American QSO Party, SSB WAB 1.8 MHz Phone/CW PRO Digi Contest NA Collegiate Championship,SSB ARRL January VHF Contest
17 Hungarian DX Contest North American QSO Party, SSB PRO Digi Contest NA Collegiate Championship,SSB ARRL January VHF Contest Feld Hell Sprint Run for the Bacon QRP Contest K1USN Slow Speed Test	18 AWA Net 145.110 MHz, 7pm VHF Group 9pm 144.260 SSB OK1WC Memorial WW SSB Activity Contest	19 RTTYOPS Weeksprint Phone Fray QRP Foxhunt	20 ROC City Net 3.810 MHz, 7 pm CWOps Mini-CWT Test NAQCC CW Sprint	21 ARES Net 146.610 MHz, 7pm VHF Group 9pm 50.200 USB RTTYOPS Weeksprint NCCC RTTY Sprint QRP Fox Hunt NCCC Sprint	22	23 ROC City Net 28.4 MHz, 7:30p BARTG RTTY Sprint UK/EI DX contest, CW
24 BARTG RTTY Sprint UK/EI DX contest, CW K1USN Slow Speed Test	25 AWA Net 145.110 MHz, 7pm VHF Group 9pm 144.260 SSB OK1WC Memorial WW SSB Activity Contest QCX Challenge	26 RTTYOPS Weeksprint Phone Fray QRP Foxhunt SKCC Sprint	27 ROC City Net 3.810 MHz, 7 pm CWOps Mini-CWT Test NAQCC CW Sprint	28 ARES Net 146.610 MHz, 7pm VHF Group 9pm 50.200 USB RTTYOPS Weeksprint NCCC RTTY Sprint QRP Fox Hunt	29 CQ 160M Contest, CW	30 ROC City Net 28.4 MHz, 7:30p CQ 160M Contest, CW REF Contest, CW UBA DX Contest, SSB Winter Field Day
31 CQ 160M Contest, CW REF Contest, CW UBA DX Contest, SSB Winter Field Day						

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. Anyone interested, members and non-members, are welcome to attend.

On even numbered months the meetings are held at the Monroe County EOC, 1190 Scottsville Rd. (Media Room, 2nd floor, north end). On odd numbered months we meet at the Red Cross, 825 John St.. W Henrietta. at 6:00 PM. Please check our website for any schedule changes.

If the doors are locked, call WB2EOC on the 146.61 MHz (-) 110.9 Hz PL repeater.

Monroe County ARES/RACES meets on the air every Thursday of the month at 7:00 PM, on the N2MPE 146.61 MHz (-) 110.9 Hz PL and 444.45 (+) 110.9 Hz PL repeaters. Our club callsign is WB2EOC.

There is no net on nights when we hold our regular meeting, generally on the 4th Thursday of the month.

WEB: www.monroecountymcomm.org

Facebook : Monroe County Amateur Radio Emergency Service, Inc.

Twitter @MCARESNY

Severe Weather Alerts: Winter may bring severe weather in the form of heavy snow storms, strong winds, and flooding. If you experience severe weather, especially when accompanied by damage to property in your area, listen to your local ARES/RACES repeaters for information. While official ARES/RACES activation could be a possibility, it is more important that we open a spontaneous net simply to share information about weather conditions in your immediate area. Don't wait for someone else to do it. Pick up the microphone and start a net. Have each check-in station give you a situational awareness report and emergency power report. If you don't have a copy of the directed net protocol, you can find one at the WEB address listed above. (Activities/ARES Net/ Net Script/

Downloads). We encourage all amateur radio operators to take a free Skywarn TM class offered by the National Weather Service. The schedule of classes can be found at <https://www.weather.gov/buf/skywarn>

Monroe County ARES
Ralph Dutcher, Net Control - KD2BDZ@arrl.net

ROCHESTER DX ASSOCIATION, RDXA

Tuesday 19 January, 2021 - RDXA zoom meeting - 7:30pm.



"An homage to ON4UN, John Devoldere (SK, 6 November, 2020) author of the "bible" of low band DXing".

Bill Rogers, K2TER will discuss low band antenna options for limited space, getting on the top band, projects and best practices. "Attendees" are encouraged to discuss their thoughts and 160m antenna designs and their particular operating conditions.

With the CQWW 160m CW and SSB contests yet to come, this may enable more to participate with options presented in this forum.

Login information can be found on our website - rdxa.com

ROCHESTER RADIO REPEATER ASSOCIATION

The Rochester Radio Repeater Association, RRRRA will not be having its regular meeting on January 15th due to the Pittsford Town Hall's meeting room being closed. However, the club is having Zoom meetings on our regularly scheduled meeting nights on the 3rd Friday of each month starting at 7:30PM lasting 40 minutes. If you haven't received an invite in your email you can contact Ed Wilkonski KC2WM at wingstwofly@rochester.rr.com for web login info. All you have to do is hit the link in your email, type in the meeting ID number and pass code and you're in. Remember to activate your video & audio from the bottom of the screen so everyone can see and hear you.

Stay tuned to our web site, www.k2rra.org for current information on whether our meeting place will be available.

The elected RRRRA officers for 2019 - 2020 are, Bob Shewell, N2HJD, President, Bob ODeil, N2BZX, Vice President, Ed Wilkonski, KC2WM Secretary, and Bob Smith, NS2B-Treasurer / Membership Chairman. RRRRA also accepts donations to the club. If you are not currently a member and want to support RRRRA, you can join at our monthly meeting or on our web site www.k2rra.org

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 50.200 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.

XRX AMATEUR RADIO CLUB

The XRX Amateur Radio Club meets the 2nd Thursday of each month. The meetings are 6PM at the Webster Recreation Center. Look for details on our website <http://xarc.us>

AMATEUR RADIO ASSOCIATION OF THE SOUTHERN TIER, ARAST

ARAST meets the third Thursday of every month at the Town and Country Fire Department on Gardner Rd in Horseheads New York. Chemung County ARES (CCARES) meets the first Tuesday of the month except February on Harris Hill, next to the National Soaring Museum. See <http://www.ccares.info> for details. CCARES serves the entire area in Chemung, Schuyler and Steuben counties and all are welcome.

Our new website is up and running, although future enhancements are still planned. Check it out at <http://www.arast.info>.

Both CCARES and ARAST monthly meetings will be held online until further notice. Check out the Upcoming Events on [arast.info](http://www.arast.info) for particulars.

Our 2020 Hamfest, which was scheduled to be held this year on September 26, 2020 at the Chemung County Fairgrounds in Horseheads, New York, has been cancelled because we are unable to meet the strict requirements of the state and county and still make it a viable event.

Anyone who currently holds a ticket may obtain a reimbursement by mailing a stamped self-addressed envelope to ARAST, P.O. Box 614, Horseheads, NY 14845-0614. (Make a photocopy for your records.) Alternatively, you can use this year's ticket at next year's hamfest, scheduled for September 25, 2021, or consider it as a donation.

We regret that the 2020 Guthrie Wineglass Marathon in the Corning area could not take place as a "live" event. Hopefully, in 2021, things will be back to normal, and we will again be looking for extra communicators to join us.

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.

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!

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.

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/>

KEUKA LAKE AMATEUR RADIO ASSOCIATION, KLARA

The purpose of our association is to:

- promote interest in Amateur Radio communication and advancement of the radio art.
- conduct programs, training, and exercises that enhance the skills of the members, and educate the community.
- develop ties with other services and establish relationships with community organizations.
- provide emergency communication services.
- promote enjoyable Amateur Radio related events.

The association was incorporated in 1991 and has been a vibrant part of the community ever since. We have a very active VE testing program. We also participate in numerous public events (the Wineglass Marathon and the Wine Country Classic Boat Regatta are two of the largest).

The Keuka Lake Amateur Radio Club isn't having in-person meetings we are staying in touch on the radio. Just as a reminder we have our 2 meter net every Sunday evening at 8pm on the KLARA Repeater System 145.190 or 147.330 or 147.045 all are PL110.9 and Echolink. You do not need to be a member to join us. We also have a 75 meter net Monday - Friday at 8:30am is check in and 8:45 net starts. 3.896 is the frequency. It's a round table style net. We also use NetLogger so look for us. Sunday mornings at 9am we have the same 75m net with frequency 3.890-3.896. The net is growing so please join in.

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.

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. |

SQUAW ISLAND AMATEUR RADIO CLUB, SIARC

The Squaw Island Amateur Radio Club (SIARC) 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 meeting for Wednesday, January 13th has not been confirmed yet. We may hold a virtual meeting or an in person meeting with social distancing and masks. Check the SIARC website for updates.

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.

GENESEE VALLEY AMATEUR RADIO ASSOCIATION

Email n3dsp@lafireline.net for details.

INTERLOCK ROCHESTER - K2HAX - ROCHESTER'S HACKERSPACE

Visit our website at <http://www.interlockroc.org/>, contact us at info@interlockroc.org, or find us in #interlock on Freenode IRC.

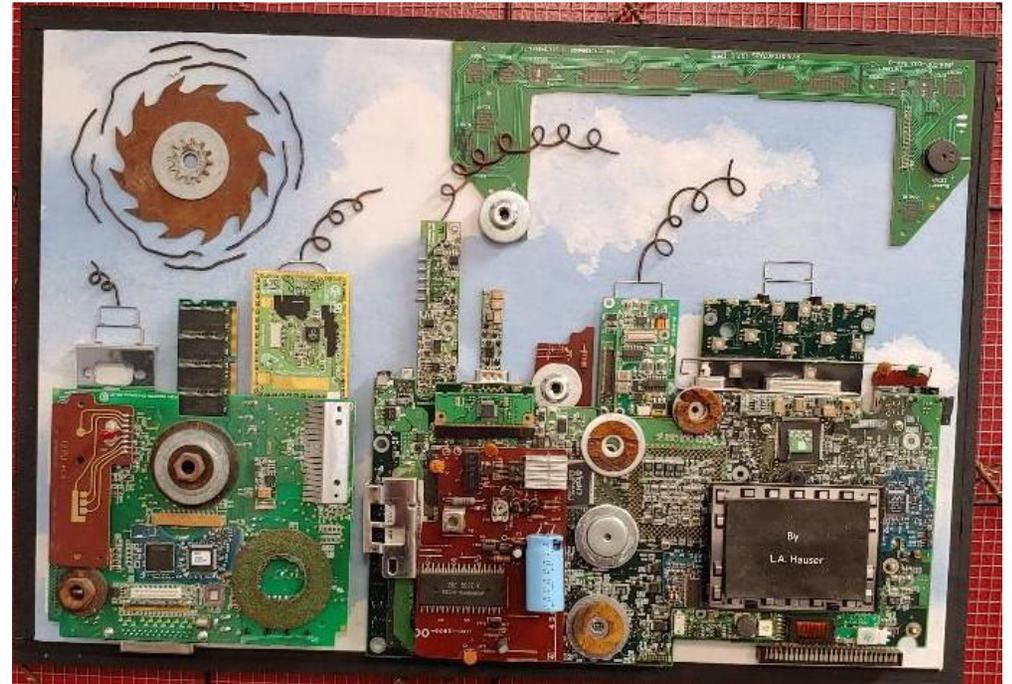
ROCHESTER MAKERSPACE

For more information visit <https://www.makerspacerochester.org/hamradio>

ASTRONOMY SECTION ROCHESTER ACADEMY OF SCIENCE

For more information visit <http://www.rochesterastronomy.org/>

ELECTRONIC ART



Artist is L. A. Hauser
Submitted by Tom Wood

RARA OFFICERS, DIRECTORS AND COORDINATORS

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Squaw Island Amateur Radio Club (SIARC)

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XRX Amateur Radio Club

Brian Donovan, K2AS: k2as@outlook.com

FEBRUARY RAG DEADLINE JANUARY 15, 2021

**RARA MEETS AT 7PM ON THE FIRST
WEDNESDAY OF EACH MONTH.
JOIN US ON-LINE AT:**

<https://attendee.gotowebinar.com/register/129199625020418829>

CONTACT WEBMASTER@ROCHESTERHAM.ORG FOR SUPPORT

Rochester Area Repeater Listing

THE RARA RAG

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