



THE RARA RAG

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

SEPTEMBER 2019
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THE QUEST FOR A RARA CLUB STATION

SCOTT THEIS, W2LW, RARA VICE PRESIDENT

Take some equipment, a place to set it up, some antennas, some money, talent, desire and mix it together and what do you get? Field day? Your Elmer's station? Your station? Maybe a club station?

As a club, we have equipment, talent, some money and desire; what we need is a plan.

After working for 8 months on club station requirements, it is time to come out of the conference room and meet the people who will hopefully use it. The subcommittee has been working on everything from power requirements to noise considerations to questioning "why do we want a station anyway" ...

This month I will sport the presenter's hat and manage a guided discussion on where we are in this process, what we think we want and how we might get there. But in the end, if RARA creates a club station, it belongs to you, the members (if you're not a member, you can join for \$15 for a regular membership – sorry I had to add the plug!). A future Club Station must meet the overall needs of the club.

Here is part of what I would like to discuss:

- What the committee has been doing and what is the expected process
- The primary and secondary goals of creating a Club Station with a review of potential uses
- The minimum requirements for the station
- A proforma cost structure and the financial risks to the club
- Whether we want to raise money to fund this and how that can be done

The Club Station Requirements Subcommittee and the (newly elected) Board of Directors will want to hear your input, desires and concerns. So please join us on Wednesday, September 4th, 2019, 7:00PM at the Boy Scouts Headquarters at 2320 Brighton Henrietta Townline Road, Rochester, New York 14623.

By the way, this meeting is also the Annual Business Meeting for RARA so please plan to attend!

K2JD

N2EH

W2EOC

RARA Banquet
See Next Page



Courtesy W8VG



RaRa Banquet

September 20, 2019

6:00 PM

Dinner at 7:00 PM

Burgundy Basin Inn

1361 Marsh Road

Pittsford, NY

OUR PRESENTER THIS YEAR WILL BE

JIM STEFANO, W2COP.

HE WILL BE DISCUSSING FIRSTNET.

SEE PAGE 3 FOR MORE DETAILS.

Purchase Tickets On Line Only



Don't forget to buy your tickets!

Members: \$20 or 40 Membership points

Non-members: \$20

*Make reservations no later than
September 18, 2019*

NO tickets will be sold at the door.

BOARDZ BUZZ

BRIAN O'CONNOR, KA2CGB, RARA TREASURER

At this writing, I've been on the RARA Board as Treasurer for 30 months. My experience is that the Board puts a lot of its resources into planning and execution. Consider the wide range of Club activities:

- Monthly General Membership meetings with informative presentations.
- Elmer's Corner sessions, before each monthly meeting: for Elmers, these are AMA -- ask me anything! Come early, come often!!
- RARA Academy workshops, which dive into particular aspects of Ham Radio.
- Service events, where we contribute Amateur Radio to the general public while practicing our skills.
- The Winterfest and Summer Picnic, where we get together to socialize and to activate Ham Radio.
- The RARA/XRX CW Special Interest Group where members develop CW skills -- a new group is starting up, so it's time to join in!
- Ham License Courses, conducted separately for Technician, General and Extra categories, with each course led by experienced instructors.
- Ham License Testing, always free, conducted by a team of dedicated volunteer examiners (VEs).
- The RARA Annual Banquet, which will be held on Friday, September 20, at the Burgundy Basin Inn in Bushnell's Basin.
- The Rochester Hamfest. The 93rd RARA Hamfest will be held in June, 2020!!
- The RARA Rag, 12+1 editions throughout the year, with timely news and interesting articles.

Member participation is essential if these Club activities are to be sustainable going forward. In this sense, "participation" includes both:

- Those Who Go -- they have fun with other hams, perhaps sharing a story or some time with a radio; these are those for whom the Club exists.
- Those Who Organize -- they meet together, solve problems, and complete a bunch of tasks to put on each activity for Those Who Go.

We need our members to do both! Participate in events: *Just Show Up!* And if you have talent to share then you might write an article for the *Rag*, make a presentation at a monthly meeting, or participate in planning and organization.

[Here I would like to present a list of the call signs of all those who have contributed to each of these activities and additionally those who have contributed to the Club behind the scenes, but I don't have enough space.]

RARA is building for the future, which means engaging new hams. We are looking at various initiatives such as a 'boot camp' for newly-licensed hams, additional opportunities to get on the air, and establishing a permanent Club Station.

We still need interested members to step forward to support ongoing activities and to develop new projects.

Members, please be sure to attend the Annual Business Meeting on September 4.

RARA BANQUET PRESENTATION

"The 9/11 attacks "highlighted the inability for deployed public safety networks to handle a true crisis situation" and was followed by calls for a National Public Safety Broadband Network, now known as FirstNet. Jim Stefano-W2COP, Chair of the National Public Safety Telecommunications Council 'Broadband Emerging Technology Working Group', a retired police officer and current firefighter, will give a presentation on FirstNet and how First Responders have nation-wide priority and preemption on LTE Networks."

CALENDAR OF EVENTS

WEDNESDAY SEPTEMBER 4, 2019 - RARA Business and General Meeting
7:00 PM at BSA Headquarters
2320 Brighton Henrietta Town Line Rd

THURSDAY SEPTEMBER 5, 2019 - RARA Board of Directors Meeting
5:45 PM at Novaworks, 333 Metro Park, F-500

Friday September 20, 2019 - RARA Banquet
6:00 PM Burgundy Basin Inn
1361 Marsh Rd, Pittsford, NY 14534

WEDNESDAY OCTOBER 2, 2019 - RARA General Meeting

WEDNESDAY NOVEMBER 6, 2019 - RARA Annual Auction

SATURDAY FEBRUARY 15, 2020 WINTERFEST 2020

TBD RARA HAMFEST 2020

TBD RARA PICNIC 2020

Rochester Amateur Radio Association Letter From The Nominating Committee

August 7, 2019

Mr. Mike Morris, KC2NM
Secretary, Rochester Amateur Radio Association, Inc.
PO Box 93333
Rochester, NY 14692

Dear Mike and Members of RARA:

On behalf of the members of the Nominating Committee I am pleased to place the following names in nomination as Officers and Directors of the corporation for the 2019 – 2020 term.

President: Tim Guyot, KB1POP
Vice-President: Scott Theis, W2LW
Secretary: Karl Heinz Kremer, K5KHK
Treasurer: Brian O'Connor, KA2CGB

Directors:
Tim Barrett, K9VB
Tim Brown, WB2PAY
Dave Enright, KD2RER
Don Kiser, AC2EV
George Lama, KC2OXJ
Mike Moore, KC2NM

This completes the work of the Nominating Committee. I wish to thank Anand Choudri, KC2KPG and Gary Skuse, KA1NJL for their invaluable work in the committee and their help in preparing this report.

Sincerely,

Forest Shick, WA2MZG
Chairman, 2019-2020 Nominating Committee
Rochester Amateur Radio Association, Inc

BIOGRAPHIES OF CANDIDATES FOR OFFICERS AND BOARD OF DIRECTORS OF THE ROCHESTER AMATEUR RADIO ASSOCIATION

TIM GUYOT, KB1POP CANDIDATE FOR PRESIDENT

I got into amateur radio during college at RIT in 2007. Thanks to Dave Snyder (KC2REO) and Jim Stefano (W2COP) I had a variety of experiences with the club station, K2GXT, and public service. I enjoyed working on antennas on the roof of the Student Alumni Union, and learning about repeaters in the shack on Ellingson. Public service gave me practical experience helping others and working on directed nets. I earned my general-class license in 2008, but didn't get into HF until 2018.



If elected, this will be my fourth year serving on the board. I've served as Secretary, VP, and President. I've also been heavily involved in producing the last three Hamfests. Only recently have I figured out how to fulfill my role as President AND stay an active participant in the hobby. With this in mind, I look forward to the opportunity to serve another year.

SCOTT THEIS, W2LW CANDIDATE FOR VICE PRESIDENT

I am currently an Extra Class amateur and Vice President of RARA. In the last two years I have served first as a member of the Board of Directors for RARA, and then as Vice President, RARA Academy co-manager/instructor and club webmaster. I hope to continue help the club by continuing to serve as the Vice President and Webmaster. My primary goal is to support amateur radio through club activities in education, web development and operating opportunities.



In the last year it has been wonderful to be able to help and participate in both club and operating activities. My primary goal is to help RARA continue to support hams and our hobby in the Rochester area.

I have been working with electronics from a very young age (playing with lights and batteries at the age of four). As I grew up I quickly realized there was a wealth of goodies in the electronics that adults would throw out. One of my early radio projects (today referred to as a hack) was building a transmitter from a conventional AM five-tube radio. I collected equipment while learning and building as much as possible with radio and TV. This included improving the front

end of various TV receivers to further my fledgling DX hobby receiving UHF stations in Iowa and Wisconsin from my home in Minneapolis. By the way, I had no idea what atmospheric ducting was at the time.

At the end of the 60s, my father introduced me to transistor logic and 7400 series ICs. The computer became the next area of interest and, in fact, from my mostly father's design, I built a working 16-bit computer strictly from 7400 series TTL devices. This was right as the Intel 8080 was released.

While I have only recently been minted as a ham, I have been listening, building and playing since I was a child (I still have my 1974 ARRL Handbook).

In real life (where you make a living), I work as a Software Developer and Business Manager for a local software company that develops, sells and supports products worldwide to help public corporations and mutual funds create and file documents to the U.S. Securities and Exchange Commission. I have been working with the analysis and processing of text, HTML, SGML and XML for the past 30 years which has lead me into the development and support of GUI interfaces, communication protocols and internet functionality. Prior to that, I worked with hardware and software for data stream processing. I have also developed a couple of assemblers as well as several script languages.

BRIAN O'CONNOR, KA2CGB, CANDIDATE FOR TREASURER

Although licensed as KA2CGB in 1978, I rediscovered ham radio following retirement and upgraded to Extra in 2016. My modest shack has all-mode capability from 80m to 70cm. I'm a member of ARRL, RARA and RDXA.

I have served as RARA treasurer since January 2017. During fiscal year 2019 (ending 31 August), the Club transitioned to QuickBooks accounting software and the Board adopted a Savings Investment Plan that is generating income for the Club.

I have also been serving as custodian of Club-owned radios and accessories, and have managed the acquisition of several donations to the Club as well as various consignments to the Hamfest Country Store. We've got a lot of good stuff for the next Club Auction.

Looking at longer-term Club objectives, I served on the Membership Points Review committee and on the Club Station Requirements committee during the past year.

Retired from Harris RF Communications after 30+ years where I helped customers implement complex radio systems from 100 kHz to 5 GHz, and with stations from QRP to 100 kW. To be close to customers, my family and I lived in Europe for two years and in the Middle East for 10 years. Now empty-nesters, XYL Marion & I live in Perinton.

I like testing things: radios, antennas, filters. I also enjoy following Formula 1 auto racing.



KARL HEINZ KREMER, K5KHK
CANDIDATE FOR SECRETARY

Two first names, and no middle name – my friends call me Karl Heinz.

Born and raised in Germany. From a young age on, I was fascinated by all things electrical. I started to take things apart that others were throwing out (TV sets, radios, anything with an electric motor I could get my hands on and so on). Eventually, I started to put those parts that I crudely took out of stuff back together to build other stuff. That got me on the path to become an electrical engineer. My first job after graduation was as a software engineer, and I never actually worked as an electrical engineer.

I worked for Kodak in Germany, and they moved me to Rochester - twice. In '94 I got my Tech+ license as N2XRQ . I made a few 5WPM contacts and then job and life had different plans for me and I put the radio away for more than 20 years. A couple of years ago, I took my radio out of storage, upgraded to Extra (now as K5KHK) loaded up my rain gutters and played around with digital weak signal modes. I've always enjoyed homebrewing (the electronic kind, but I've brewed beer a couple of times as well).

When I got elected to the RARA board last year, I said that I would like to be a champion for new hams. I've been active in the club's "Elmer's Corner", participated in two RARA Academies, and help out wherever I can to help get people on the air. I'd like to continue serving RARA as a member of the board.



TIM BROWN, WB2PAY
CANDIDATE FOR BOARD OF DIRECTORS

I joined the RARA Board of Directors in December 2017. During my time on the board, I focused on Education programs and RARA Academy workshops. I established the Elmers Corner, which meets prior to the RARA monthly meeting to help New Hams get started in Ham Radio. I work on RARA Public Service events and am an ARES/ RACES member. Presently, I am working on the Club Station committed to establish guidelines for a RARA Station.

My electronics career began at Sylvania Electronics in Batavia. When Sylvania moved south, I came to Rochester with RCA Service Company. I retired from Kodak's Electronic Services group which provided support for the Research Laboratories Scientists.

Besides my electronics endeavors, I had a 35 year career as a Paramedic with Greece Volunteer Ambulance. I continue to teach life saving skills for the AHA as a CPR Instructor.

Licensed in 1962, I have touched on many aspects of Ham Radio. I mastered CW at age 15 which later became a special skill I used in the ARMY. Although I am not a contest ham, I enjoy participating in Field Day activities. As an Elmer, I strive to share my experiences with other hams so they may better enjoy the hobby. I look forward to continued service to RARA on the Board of Directors.



TIM BARRETT, K9VB
CANDIDATE FOR BOARD OF DIRECTORS

Born and raised in the UK, I have lived in the Rochester area since 2004. I have had a lifelong interest in radio and electronics, first becoming licensed in the UK as G7NYA in 1987 and later as M0TIM. On moving to the US one of my first actions was to get my Extra ticket and become a member of RARA (Life member since 2006). My main interests are HF and restoring or repairing old test equipment, but I am also interested in the technical / theoretical side of the hobby.

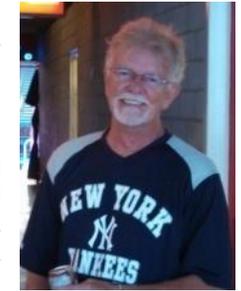
We are very fortunate to have such a great club in the Rochester area and I firmly believe that the progress we have made recently in moving the club forward is a benefit to the Rochester area amateur radio community. I have served as Membership Secretary for the past five years and been on the Board of Directors for four years organizing or helping to organize RARA events. I am now seeking re-election to the Board of Directors and looking forward to working with the rest of the team to continue developing the club.



DAVE ENRIGHT, K3WHD
CANDIDATE FOR BOARD OF DIRECTORS

I have lived my whole life here in Rochester, NY. Like many others my first radio was a crystal set when I was 9. Then in the 70's I got into CB radio (KKH2645) for 4 years. I just got back into radio again after working for Kodak for 27 years, then running a computer repair shop for 32 years. Still doing the longest Computer Talk radio show "Soundbytes" for 30 years on Jazz 90.1fm. I got both my Tech & General ticket this year. Currently study for Extra. Worked my first Hamfest and am a VE team member.

I am enjoying working HF, 2m & 70cm. I have built a 6m dipole and for a beginner it turned out "OK". Have made a number of contacts and want to try my hand at some other antennas down the road.



DON KISER, AC2EV
CANDIDATE FOR BOARD OF DIRECTORS

Another year has passed and I am as enigmatic as ever. We got a lot done this year and had a very successful Hamfest. On a personal front I've yet to find the time to pick up the mic. I think I still know which end of the soldering iron gets hot. Most of my tinkering has been at the keyboard and breadboard, with a smattering of mono block tube amplifiers (audio). I am still an Extra class and life member of RARA. I am also your VE team leader, when I'm not with my children. Speaking of little tax deductions we spent some time building antennas for fox hunting and spent a few weekends finding and hiding the fox in parks around the Greece/Hilton area. I work as the Control Engineer for a dairy beverage company in Batavia. I hope to again be a part of the RARA BOD.



MIKE MOORE, KC2NM
CANDIDATE FOR BOARD OF DIRECTORS

I have been a ham for over 50 years and have found it to be a great hobby! I received my Novice license at the age of 14 with the callsign of WN8ZPY in Southern Ohio. My first ham rig was a Heath HW-16. I graduated the next year to WA8ZPY and an HW-100. I had a lot of fun as a teenager working local stations, DX, and some net work. After High School, I earned a BSEE degree from the University of Cincinnati and while there worked as a Co-op for a gentleman that I knew quite well from 2 meter FM. I upgraded to Advanced in college. Following college, I moved to Rochester with my wife Susan to work for Xerox and picked up an MSEE degree from RIT. I joined RARA sometime in that period as WA2GSG. My career took a turn to sales and then automation software development working for myself. In 1995, I studied for the Amateur Extra license at the RARA prep course and passed the Extra Test with the callsign KC2NM. My current radio interests include D-STAR and the other digital modes. I retired from Exelis in 2014 as a test engineer to pursue my hobbies which include sailing, biking, computers, and cooking. Our two children live with their families here in Rochester. I serve as the RARA Public Service Event coordinator and I am currently a RARA director.



GEORGE LAMA, KC2OXJ
CANDIDATE FOR BOARD OF DIRECTORS

I describe myself as a helper, a fixer, a teacher, and eternally curious as to how and why things work.

I have been involved in tech from a very early age, growing up in an electronics repair shop and store which gave me every opportunity to tinker, disassemble, electrify myself a few times, and even hold onto the wrong end of a hot soldering iron, all before the age of 7. I started in ham radio in the 80s as a teen (cut my teeth with CB, then got into amateur radio like my dad), and was licensed as HI8GLL while we lived overseas. Moving back to the states for college in the late 80s, I managed to get my Novice license (KB4SDK) but college meant other priorities and challenges to focus on. So life happened and it wasn't until 2005 that I obtained my Tech License after relocating from Florida to the Rochester area.



I joined RARA in 2018 and have thoroughly enjoyed the great variety of events, activities and educational opportunities our very active club offers. I served as a member of the 2019 RARA Hamfest Production Team/Committee Member and I'm already looking forward to next year's Hamfest, ready to make 2020's Hamfest a success.

Although a techie at heart, it's teaching and helping others that brings it home for me. As a Teacher of Special Education, Technical Corporate Trainer, Technical Instructional Designer, and Manager of Information Technology for not for profit social services organizations, I've had many opportunities to integrate technology into learning and into helping others. My hope is to contribute to our organization in any way I can, to assist in membership education and club expansion, and to help our wonderful organization continue to grow and thrive in every way.



RARA PUBLIC SERVICE UPDATE

MIKE MOORE, KC2NM, RARA PUBLIC SERVICE COORDINATOR

The single public service event in the month of September is the Fairport Lift Bridge Regatta to be held Saturday, September 28, 2019



The regatta is held on the beautiful Erie Canal and finishes in the very picturesque Village of Fairport. Details of the regatta were described in the [August RARA Rag](#). New information concerns logistics for the event and that is described on the [regatta website](#). Food and drink will be provided.

Timeline: 6:30 AM – 2:00 PM

Our RARA Team Captain for this event is Mark Pedersen KC2UES. I encourage you to sign up for the Regatta team. This event is very well run and presents a great example of sportsmanship in a family friendly environment!

We have learned that the [Challenge Trophy Camporee](#) is being held at camp Babcock Hovey on a different weekend this year than the [Jamboree On the Air](#). This means that we will not be executing our previously announced plans to operate JOTA. A plan may be developed to conduct a demonstration of Ham Radio outside of JOTA. Watch the club website and October Rag for plans as they develop.

Ed Wilkonski is our team captain for the Pumpkin Patrol event where we monitor the 16 bridges over the thruway in Monroe County. Please consider signing up to operate one or both of the nights Oct. 30, 31st. For more information visit our [Public Service Page](#).

Remaining events in the 2019 public service calendar are listed in the following table. Visit our [Public Service Page](#) for more information and to volunteer.

Fairport Lift Bridge Regatta	Erie Canal – Fairport, NY	Saturday	Sept. 28, 2019
Pumpkin Patrol	Overpasses of the New York State Thruway	Wednesday & Thursday	Oct. 30-31, 2019
Holiday Science & Technology Day	Rochester Museum & Science Center	Saturday	Christmas Week

Neighboring Club Events are as follows:

Finger Lakes Triathlon (Canandaigua)	Squaw Island Amateur Radio Club	Sunday	Sept. 8, 2019
2019 Wineglass Marathon	https://www.facebook.com/StarrsAmateurRadioClub/	Sunday	Oct. 6, 2019

September Raffle Prizes

- Ham Radio Deluxe Gift Certificate
- Maxxon OCF-3K80 Antenna
- 1 Year Subscription to QRP Quarterly
 - Pilsner Glasses
- Ham Radio Deluxe Travel Mug

Coming in October

- Bird Technologies Gift Certificate



EDUCATION

Tim Brown, WB2PAY, Education Coordinator

THE ELMERS CORNER

Share your Amateur Radio experiences with other hams.
Volunteer to host a 30 MIN. ELMERS CORNER session.

Our next Elmers Corner will be at the Sept. 4th Meeting from 6:15pm to 6:45pm prior to the start of the regular meeting.

There is no specific topic. Bring your questions and our Elmer will help you.

Karl Heinz Kremer, K5KHK, will host the Sept. session
Scott Theis, W2LW, will host the October session

RARA ACADEMY WORKSHOPS



September Academy
STATION GROUNDING AND LIGHTNING PROTECTION

Saturday September 14th, 2019 (10am-Noon)
Session will be held at the [Irondequoit Library, Ontario Rm#113, 1290 Titus Ave, Rochester, NY 14617.](https://www.irondequoitlibrary.org)

TOPICS FOR DISCUSSION:

- Safety Grounds
- RF Grounds
- Lightning Protection

Don Kiser, AC2EV, and Brian O'Connor KA2CGB, will host this Academy session

October Academy
HF OPERATIONS IN THE PARK, an OUTDOOR EVENT (mini Field Day)

Saturday October 5th, 2019 (10am-5pm)
Operations will be at the **Durand Eastman Park in the Acorn Shelter.**

This is a GREAT opportunity to learn from experienced operators and use a variety of antennas and equipment.

OCTOBER ACADEMY - HF FIELD ACTIVITIES:

Antenna Demonstrations:

Dipoles, EFHWs, Random Wires, Ground mounted Verticals and any others that we can come up with.

Antenna Installation Techniques:

Air Canon, Fishing Pole, Sling Shot, Weight Toss, Tripods and mounts for Verticals.

HF Equipment (12vdc)

Yaesu FT-450, FT-857D, Kenwood TS-440
Bring your own rigs like K2, IC-7300, QRP rigs etc.

Battery Power Types:

Sealed Lead Acid, AGM, Li-ion, Solar Panels

HF Operating (Getting on the Air):

Making QSOs on SSB and CW.

Since this is an **ALL DAY PROJECT**, RARA will provide charcoal so we can BBQ our lunch. BYOB (Bring your own Burgers or Hots). Food is not provided. Latest Academy information is available at https://www.rochesterham.org/rara_academy.htm

RARA LICENSE COURSES

2019 September License Classes

Amateur Technician, General and Extra Licensing classes will commence at 7pm on Tuesday September 17, 2019.

Classes run from 7- 9:30pm for 10 weeks with FREE testing on the 11th week.

Classes will be held at RIT in the GLEASON building #9, rooms TBD the first week in September.

For those taking the Extra Class, which is highly technical, John Vigiano, NV2K, will schedule individual sessions for students who register.

Licensing courses are FREE to **current** members and students and only \$15.00 for non-members.

Not a current RARA member? Membership starts at FREE!
<https://www.rochesterham.org/membership.htm>

ARRL Licensing manuals may be purchased at the RARA September meeting and the first night of class for the discounted rate of \$25.00. Please make checks payable to RARA, or have exact cash amount.

* * * * *

Please take advantage of these RARA sponsored training and operating opportunities.

Sign up for Academy Workshops and License Courses by emailing <mailto:education@rochesterham.org>

BATTERIES FOR MY MOBILE SETUP

KARL HEINZ KREMER, K5KHK

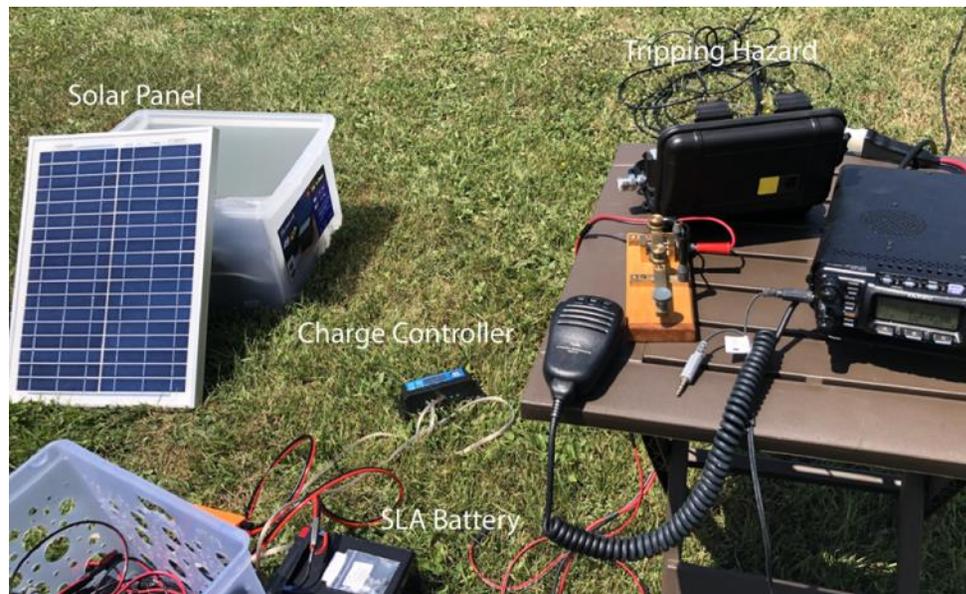
As a regular reader of the Rag, you know of course that I am active in the PO-TA (or Parks on the Air) program - as chaser, but also as an activator. When operating from parks, I use batteries to run my FT-857D. And this being the bottom of the solar cycle - even though I would prefer operating QRP - a big signal is definitely a plus, so I am running 100W.

I use two batteries, a 12Ah SLA (sealed lead acid) and a 12Ah Bioenno Lithium Iron Phosphate (LIP or LiFePO4) battery. Charging an SLA is easy so it does not require any complex (or expensive) charger. That is not the case for the LiFePO4 battery. It is a lot more picky about how it wants to be charged (Anybody remember the exploding batteries in the hover boards from a few years ago? Even though LiFePO4 is the far more relaxed cousin of Lithium Ion batteries, you don't want to mistreat them). Because charging the SLA is simple, it also was cheap to add a solar charge controller and a small solar panel to the SLA setup. I am using a \$7 solar charger and a \$25 solar panel that can deliver a maximum of 20W. Both of these came from eBay. That 20W panel is of course not sufficient to run the rig, but it will slow down the discharge of the battery as long as the sun is shining.

Bioenno makes larger batteries, the reason why I opted for the 12Ah version is that 12Ah is the limit for Lithium based batteries on domestic flights. Anything larger, and you can no longer carry it on a domestic flight. International flights have different (and lower) limits.

Both of these batteries have PowerPoles installed (the Bioenno actually comes with PowerPoles already installed). The battery (one at a time!) gets then connected to a PowerPole distribution block that the radio connects to.

To run other devices off the battery, I have a couple of "buck converters" (these are switching power supplies) that output 5V, which I have then hooked up to a female USB type A connector, which allows me to plug any USB device into my 12V battery setup and charge it (e.g. a cell phone or a tablet). When running digital modes in the field, the tablet will act as my screen, so to extend the battery life having it powered from the "big" battery is very convenient.



If you want more information about the items purchased on eBay, feel free to send me an email, or talk to me at a RARA event.

Resources: <http://bioennopower.com>
<http://parksontheair.com>

EAGLE FLIGHT

MARK PEDERSEN, KC2UES

Eagle Flight is a distinct Scout camp held at Camp Babcock-Hovey (on the east side of Seneca Lake). Eagle Flight Week is for Scouts serious about progressing along their Trail-to-Eagle. Eagle Flight is not a typical BSA summer camp program. The Scouts are engaged in merit badge and other programs all week. Over 25 adult volunteers with extensive merit badge and Scouting experience are available with camp staff to support the Scouts that attend. Each evening Scouts participate in programs that include an inspirational movie or talk, an ice cream social, a Scouting Skills Challenge, shooting sports and aquatics. Scouts are very busy and have an excessive amount of fun!

This year, the camp took place for a week in July and early August and offered the radio merit badge, among many, many others. Tim Ekstrom, KC2PUD, loaned us his ARES trailer and we set up two HF and one VHF station inside. Using a newly-acquired antenna launcher, Mark Pedersen, KC2UES, was able to put a 20m/40m homebrew (thanks to Tim Brown, WB2PAY) dipole



about 40' in the air in an east-west direction. We also put up the club's 40m end-fed, and a V 40m dipole owned by Eagle Flight Program Director Paul Gerwitz, WA2WPI. Paul had a Kenwood HF radio, we had the club's Ten-Tec and Yaesu radios, and Mark's K3, in addition to the VHF radio already mounted in the ARES trailer. We hosted seven Scouts for the merit badge, and several who just stopped by to see what all the noise was, and ended up making contacts, the last one with a special event station for the Indiana State Fair. Although stations in France and Germany came in very strong on 40m one evening, our barefoot transceivers were not able to successfully compete with the kilowatt stations calling him, and he left the air about 2 a.m. German time.



Having the ARES trailer was a vast improvement over last year when Mark set up, and took down, an HF station daily because it was on a picnic table under a car port. With only having to disconnect the antennas, shut off the power and close up the trailer, it was easy to close and re-open the station daily and nightly so the curious and the counselors could enjoy chasing contacts. We used SSB voice and PSK31 modes and ran two HF stations at once thanks to the "filter" created by Brian O'Connor, KA2CGB, that kept 40m SSB out of the 20m digital station operating at the same time.

Eagle Flight takes place annually in the summer and is always looking for merit badge counselors. You don't need any special training to become a BSA merit badge counselor in a field where you have experience or education (<https://www.scouting.org/programs/scouts-bsa/mb-counselor-guide/>).

The list of fields is large (<https://www.scouting.org/programs/scouts-bsa/advancement-and-awards/merit-badges/>) and a relatively new merit badge (actually, a resurrected old one) is signs, signals and codes, which includes Morse code ([https://filestore.scouting.org/filestore/Merit Badge ReqandRes/SignsSignals and Codes.pdf](https://filestore.scouting.org/filestore/Merit%20Badge%20ReqandRes/SignsSignals%20and%20Codes.pdf)).

Towpath District on the east side hosts a merit badge university at RIT usually in late January or early February and RIT has a ready-to-use HAM radio station. Consider sharing your experience with the younger generation by becoming a merit badge counselor.

Photos: <https://photos.app.goo.gl/ZL4BzZvrY7PEjdeD8>

CHALLENGE CAMPOREE

STEPHEN FELL, K2SRF

Any hams interested in helping with the ham radio station at the Challenge Camporee at Babcock Hovey located along the eastern shore of Seneca Lake on October 26 please contact Steve Fell K2SRF There over 1700 scouts registered for this event. We will be in the cabin next to the dining hall K2SRF@ROCHESTER.RR.COM

ANTIQUE WIRELESS MUSEUM OFFERS RADIO FAB LAB YOUTH WORKSHOPS

ROBERT HOBDAV, N2EVB, AWA DIRECTOR

For a number of years, the Antique Wireless Museum has offered a series of STEM (Science, Technology, Engineering, and Mathematics) related classes presented by AWA Staff Members and local experts for students ages 7 to 16. These classes combine learning with fun and hands-on projects. During the classes the students are challenged with an introduction to various theories of electricity, electronics, and radio along with the fabrication of working projects that illustrate the practical application of the theories. To date, we have graduated 51 students from these classes. An adult (parent, grandparent, aunt or uncle) is asked to attend the classes to support the learning and to enjoy some quality time with their students.

MINI SERIES 2019, a series of six, two hour, Radio Fab Lab Workshops for Home-Schooled students, will be offered this fall. The classes will be given in two sets of three workshops each. The classes will be held at the Museum from 9:30 to 11:30 am on:

SEP 19, OCT 3, OCT 17 (Introduction to Electronics, Telegraph and Code Practice Oscillator Project, and Tool Time)

OCT 24, NOV 7, NOV 21 (Waves – Electricity and Magnetism, Radio Transmitter, Photon Communicator)

The six-workshop series will be offered by AWA to groups of 15 students at the Antique Wireless Museum. The cost is \$20 per workshop and there is a discount if all six are attended. If you know a student that would like to participate in these educational and challenging classes, please contact Bob Hobday at education.awam@gmail.com or visit this link <http://www.antiquewireless.org/2019-fall-radio-fab-lab.html> for more information. These workshops make great gifts!

See the last pages of this issue of the RAG for more details.

INTERNATIONAL LIGHTHOUSE LIGHTSHIP WEEKEND



The RARA sponsored special event station, K2R, for International Lighthouse Lightship Weekend on August 17 & 18 was a huge success. This annual event was held at the historic Charlotte-Genesee Lighthouse overlooking the marinas on the north end of the Genesee river.

After a 2+ hour rain delay on Saturday, the sky cleared and the sun, visitors and RARA members reappeared. 52 people signed our visitor log over the two days including 21 RARA members who helped setup, operate, promote amateur radio to visitors, and act as Elmers to new and future RARA members. In addition to the club radios, several members brought their own radios to make some QSOs.

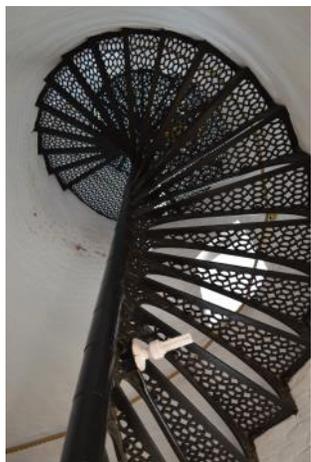
With up to three stations operating, we made 94 contacts in 24 states plus Puerto Rico and Canada. 16 of our contacts were lighthouses!

We wish to thank all those who contributed their time and shared their knowledge to make this a great event for all.

We also thank the Charlotte-Genesee Lighthouse Historical Society for the use of the lighthouse grounds.

Special thanks to Tim Brown, WB2PAY, for showing us how to hand toss a line over a tree and keep it out of the RG&E substation next door.

The next ILLW will be August 22 & 23, 2020. See you at the lighthouse!



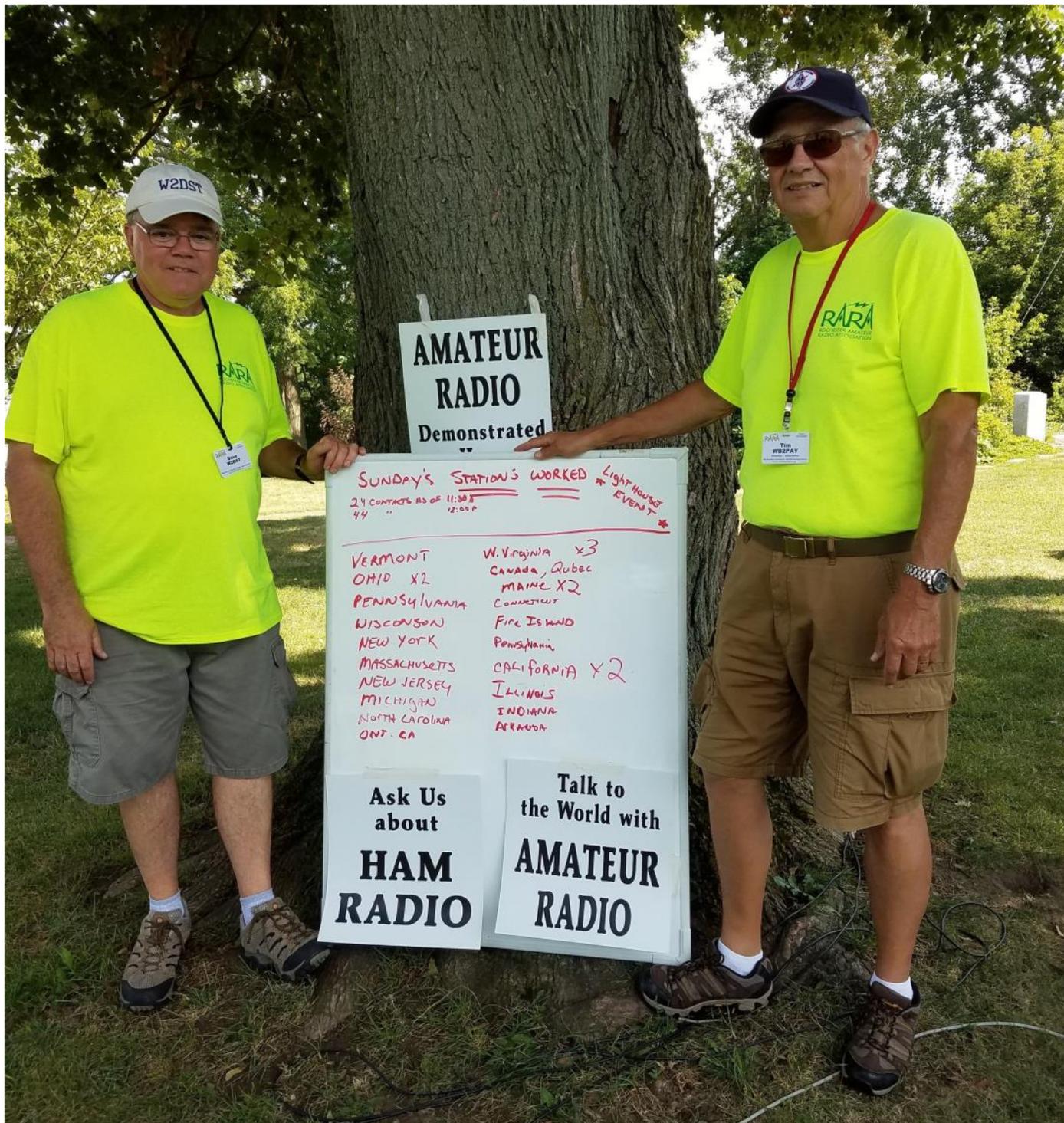
Is this circular polarization?



This is KNOT getting any easier!







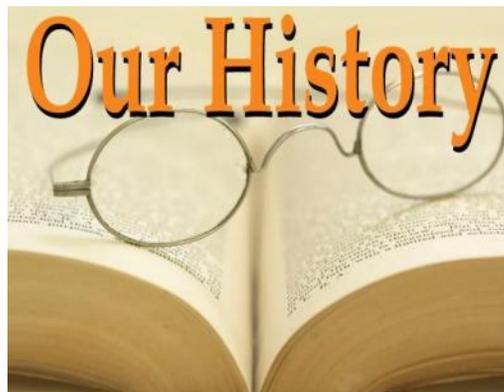
RAGS OF THE PAST

ED GABLE, K2MP, RARA HISTORIAN



40 Years Ago, September 1979

Program Chairman Otto Bluntzer WB2RJB, introduced the next meeting of the regular RARA season as an introduction to the proposed Monroe County 911 Emergency System. Presenting for the evening was Mr. Ronald Brand of the Monroe County Planning Department and Mr. Dennis Rooney from Harris/RF Communications. RARA meetings at this time were held at the Monroe County Farm and Home Center on Highland Avenue. New club officers and Board members for the year included Alan Komenski AC2K as President, Otto Bluntzer WB2RJB as Vice President, Secretary duties were picked up by Don Drennon W2EBF with Ron Jakubowski K2RJ as Treasurer. Sitting on the new Board of Directors were Jim Collinsworth N2JC, Robert Erskin W2NVZ, Ed Gable K2MP, Ed Holdsworth N2EH, Len Gessin WA2ZNC, Jim O'Brien K2UDP and Harold Smith K2HC. Bruce Kelly W2ICE, RARA Club Historian and Curator of the AWA Museum, wrote announcing the three day AWA Wireless conference held in Canandaigua, NY. This issue announced that the new RARA Directory would be available in October. Waiting one extra month assures the very latest FCC data base for up to the minute listings. Licensing Course Director Ed Holdsworth N2EH, told of the Fall, 1979, plans that include both Novice and General class offerings. A well known DX'er and longtime Rochester ham Ray Leigh W2SNI, entered an article prepared for the Rochester DX Association. At this time RDXA gatherings were combined with a pre-meeting dinner held at the Colonial Hotel on Empire Boulevard and a coat and tie was expected. It was a different time! Also on the DX theme, Bob Roberts WA2QAU continued his DX column with hints on DX QSL'ing. With regret it was reported that Bruce Elle, W2VTR, was reported a Silent Key. There was only one Want Ad listed and an unusual one at that. You could buy used broadcast equipment from the old WSAY studio location at 250 East Avenue. Also eye catching was a commercial advertisement from JR Amateur Radio that was two full pages and included a list of their used equipment taken in trade.



20 Years Ago, September 1999

Kicking off the new 1999/2000 RaRa Season found guest speaker Chris Hauf who enlightened and entertained members with the program Secrets of Railroad Communications Then and Now. Meetings at that time were started at 8:00 p.m. and held at the Henrietta Fire Hall. This new RaRa session brought both new and returning officers and directors, elected by you, and consisting of: President Robert Moore N2USB, Vice-President Keith Freeberg N2BEL, Secretary Norm Turner WB2LQB and Richard Goslee, K2VCZ, returning as Treasurer. Elected to the Board of Directors were Lloyd Caves WB2EFU, John Woika W8JW, Ed Holdsworth N2EH, Scott Blystone K9EEE, Jack Tripp N2SNL, Allen Skiles W2AES and Jamie Ananko N3ZSS. Appointed by the Board was George Platteter AA2FO as

RaRa Rag Editor with Lloyd Caves WB2EFU as Assistant Editor. President Moore wrote a full page welcoming piece with news of plans for the coming year as well as closing comments on the club's 1999 accomplishments. Licensing class Director Tim Magee, WB2KAO, announced the Fall RaRa Licensing class schedule and instructors. This year Tim Magee WB2KAO and Art Debruycker W2YGW will teach Morse code and manning the chalk board with theory discussions will be Rick Wells W2RW, Bill Kasperkowski WB2SXY and Tim Stoffel NS9E. Ed Gable K2MP, wrote for the Rochester DX Association with news and welcoming newbies to the RDXA and DX'ing. Nice calls to log at that time were EP2FM in Iran, FW8ZZ on Wallis Island and some HK0 guys on Malpelo Island. In a similar fashion, Tom English N2YJY, wrote for the Rochester Radio Repeater Association and Tim Stoffel NS9E, writing for the Rochester VHF group, both used this opportunity to introduce their associations to the over one thousand recipients of the annual kick-off Rag that was mailed free to every FCC licensed ham in Monroe and nearby Counties. With regret it was announced that Louis Minsk N2LM, Bill Bedette KF2NL, John McMullin N2MXG, Manuel Beltran KB2QAM and Colen Corke WB2RNS were reported as Silent Keys. From the Want Ads you could buy rotary antennas for all bands 40 through 2 meters, from Len Gessin WA2ZNC. An old time and familiar commercial advertiser was Glenwood Sales on Hague Street, Rochester.

VE TEAM

The next **ALWAYS FREE** testing session:
 Saturday September 21st (Third Saturday)
 Rochester Institute of Technology
 Kate Gleason College of Engineering
 Gleason School of Engineering
 Room 3139, Bldg. 9
 Use "J" parking lot

Registration at 9:45AM
 Testing at 10:00AM

You do not have to preregister.

To avoid giving your SSN go to:
<http://wireless.fcc.gov/uls/index.htm?job=home>
 Register and bring the resultant FRN to the exam.

For more info and a map:
https://rochesterham.org/license_testing.htm

Don Kiser - AC2EV
 RARA Board member
 VE Team Leader
 585-613-1035

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New licensees names are in BOLD

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
Larry Lavery	WW2J	Fairport	ww2j@arrl.net
Joe Rowe	AG2Y	Webster	ag2y@rochester.rr.com

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
Bill Kasperkoski	WB2SXY	Pittsford	wb2sxy@arrl.net
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

September 2019						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
1 ARRL Hiram Maxim 150 Celeb CO, TN QSO Parties UK/EI DX Contest WW Digi DX Contest	2 ARRL Hiram Maxim 150 Celeb RSGB FT4 Contest MI QR1P Labor Day CW Sprint	3 ARRL Hiram Maxim 150 Celeb Phone Fray	4 ARRL Hiram Maxim 150 Celeb RaRa Monthly Mtg 7:00pm, BSA HQ, Brighton Henrietta TLR ROC City Net 8:00pm 3.826 MHz CWOps Mini-CWT Test UKEICC 80M Contest	5 ARRL Hiram Maxim 150 Celeb RaRa BoD Meeting 5:45pm Nova- works 333 Metro Park Rochester 14623 ARES Net 146.61 MHz 7pm NRAU 10M Activity NCCC Sprint SKCC Sprint Europe	6 ARRL Hiram Maxim 150 Celeb	7 ARRL Hiram Maxim 150 Celeb AWA Museum Open 1pm - 5pm Russian RTTY WW Contest All Asian DX Contest, Phone Wake Up! QRP Sprint SKCC Sprint RSGB SSB Field Day Region 1 SSB Field Day OH State Parks on the air AGCW Straight Key Party NE QSO Party
8 ARRL Hiram Maxim 150 Celeb All Asian DX Contest, Phone Wake Up! QRP Sprint SKCC Sprint RSGB SSB Field Day Region 1 SSB Field Day NA Sprint, CW	9 RSGB 80M Autumn Series, SSB	10 Phone Fray	11 ROC City Net 8:00pm 3.826 MHz SIARC 7.30pm CWOps Mini-CWT Test	12 ARES Net 146.61 MHz 7pm NCCC Sprint	13	14 AWA Museum Open 1pm - 5pm WAE DX Contest, SSB FOC QSO Party SARL Field Day Contest Russian Cup Digital Contest TX, AL QSO Parties ARRL 144 MHz Contest NA Sprint, RTTY
15 WAE DX Contest, SSB SARL Field Day Contest Russian Cup Digital Contest TX, AL QSO Parties ARRL 144 MHz Contest NA Sprint, RTTY Classic Exchange, CW	16	17 RDXA 7.30pm Monroe Cty EOC Phone Fray Classic Exchange, CW	18 ROC City Net 8:00pm 3.826 MHz CWOps Mini-CWT Test RSGB 80M Autumn Series, CW	19 ARES Net 146.61 MHz 7pm NCCC Sprint AGB NEMIGA Contest	20 Annual RaRa Banquet, Burgundy Basin	21 AWA Museum Open 1pm - 5pm Collegiate QSO Party ARRL EME Contest ARRL 10GHz and Up Contest All Africa DX Contest Scandinavian Contest, CW IA, NJ, NH QSO Parties
22 Classic Exchange, Phone Collegiate QSO Party ARRL EME Contest ARRL 10GHz and Up Contest All Africa DX Contest Scandinavian Contest, CW IA, NJ, NH QSO Parties	23 144MHz Fall Sprint	24 Phone Fray Classic Exchange, Phone	25 ROC City Net 8:00pm 3.826 MHz CWOps Mini-CWT Test UKEICC 80M Contest	26 Monroe Cty ARES 6pm, Red Cross Center, Prince St NCCC Sprint RSGB 80M Autumn Series, Data	27	28 AWA Museum Open 1pm - 5pm CQ WW Contest, RTTY Maine QSO Party
29 CQ WW Contest, RTTY Maine QSO Party QCX Challenge	30					

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

The next ARES Meeting will be held on: Thursday, September 29, 2019, 6:00 PM, at the Red Cross, 825 John St., W Henrietta. Meetings are held at the John St. building on odd numbered months. On even numbered months the meetings are held at the Monroe County EOC, 1190 Scottsville Rd. (Media Room, 2nd floor, north end). 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 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

Severe Weather Alerts:

Summer brings severe weather in the form of heavy thunder 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>

ROCHESTER DX ASSOCIATION, RDXA

RDXA meets the 3rd Tuesday of every month (September through June) except for December, which is the Annual Holiday Banquet. Meetings are open to everyone and all are encouraged to attend.



The next meeting is Tuesday September 17, 2019. The presentation this month will be "Show Us Your Shack."

Meetings are held at the Monroe County EOC 1190 Scottsville Rd. (second floor), Rochester, NY 14624 at 7:30PM.

ROCHESTER RADIO REPEATER ASSOCIATION

The Rochester Radio Repeater Association, RRRRA invites you to attend its meetings. Meetings are held on the 3rd Friday of each month in the Pittsford Town Hall Basement starting at 7:30 PM.

We will resume our regularly scheduled meetings on September 20th 2019.

There will be VE Testing before this meeting starting at 7:00PM. Members are encouraged to attend and see how it's done. The topic for the meeting will be, what things did you do during the vacation?

The RRRRA officers for 2019 - 2020 are Bob Shewell, N2HJD President, Bob O'Dell, N2BZX Vice President, ED Wilkonski, KC2WM Secretary, and Bob Smith, NS2B-Treasurer / Membership Chairman.

RRRA also accepts donations to the club. Please consider volunteering to become an officer of RRRRA. This club can't exist without members.

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

The Rochester VHF Group sponsors an informal On-Air Net every Monday at 2100 local time on 144.260 MHz USB and a 6 Meter Net every Thursday at 2100 local on 50.200 MHz USB.

More club information can be found by visiting www.rvhfg.org or just calling in any Monday or Thursday night. All are welcome to check in to these nets.

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>

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/>

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 at Harris Hill. See www.ccares.info for details. CCARES covers the entire area in Chemung, Schuyler and Steuben counties and all are welcome.

Communicators are needed to help out with the 2019 Wineglass Marathon October 6, 2019 (one week following the Hamfest) . If you would like to help out, contact the emergency coordinator: emergencycoordinator@stny.rr.com

The Hamfest is this month. Pre-sale tickets available from any board member for \$6.00 each. Tickets at the gate are \$8.00 . Flea market gate opens at 6:00 am; regular gate opens at 8:00am.

2019 Hamfest will be the last Saturday of September 2019.. Check the hamfest page on our website for more details.

Our website is still under construction. It is anticipated that construction will continue well into the year. Until that is finished check us out at www.arast.info .

Don't forget to check out our repeaters when you visit the area. The N3AQ 147.36(+) and the 146.70(-) are the principal 2 meter repeaters. Also Echolink is available using the call sign KA2BED-R. Check it out. A full list of available repeaters that can be heard in the twin tiers area surrounding Chemung County can be found at www.arst.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! Take a look at the club website for more info: www.k2srv.org

DIGITAL COMMUNICATIONS ASSOCIATION OF PERINTON, DCAP

DCAP members continue to experiment with leading edge digital communications 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 public [DSTAR hotspots](#) (using the dvrptr board), Yaesu fusion systems on non-club repeaters and DMR. The last mode is being enjoyed locally through a [DV-Mega-Raspberry PI](#) combination. DCAP meets for breakfast at 7AM nearly every Saturday morning at [Rikki's Family Restaurant](#) in Fairport and everyone is welcome to join us. Talk in is on the KB2VZS analog repeater on 146.715 MHz with a PL of 110.9 Hz.

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).

We operate a system of three repeaters (which are linked), providing a large area footprint for two meter FM amateur use. Please see our website for details. (klara.us)

Our meetings are held on the second Wednesday of each month at the Civil Defense and Fire Training Center on Route 54 in Bath, NY.

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 next meeting will be Wednesday September 11th. This meeting will include election of officers for the upcoming year. If you are interested in a office please plan on attending. <http://siarc.us/> 73's Steve Benton VP SIARC WB2VMR

[Squaw Island Amateur Radio Club \(SIARC\)](#) is planning for the Finger Lakes Triathlon. It will be held on Sunday, September 8, out of Canandaigua from about 6:30AM to 2:00PM. They could use a minimum of 14 operators to do the event justice. It is a big event that SIARC supports every year for Safety Communications, especially on the bike course, that runs out to Gorham, down to Rushville, and back to Canandaigua. The event raises money for the Mary Gooley Hemophilia Center. If you would like to participate, please contact Tom Sanders kb2nci@arrrl.net

Day	Date	Event	Location	Contact
Sunday	September 8	Finger Lakes Triathlon	Canandaigua	kb2nci@arrrl.net
Sunday	October 6	Wine Glass Marathon	Steuben County	kb2nci@arrrl.net

WESTSIDE AMATEUR RADIO CLUB

The mission of the Westside Amateur Radio Club is to provide emergency communications services to the community, to assist other civic organizations, to promote the technical craft of amateur radio through class training and testing, to mentor new members, and enhance fellowship among radio amateurs.

The Westside Amateur Radio Club meets on the first Tuesday of the month, 7PM, at the Prudential Kares Realty, 3313 Chili Ave., Rochester, NY 14624. Park / enter on the left side of the building and meet in the lobby.

The talk in repeater for all meetings is the WR2AHL Repeater 146.760MHz - 110.9. AllStar, Echolink, and web streaming connections are available. Website: <http://WestsideAmateurRadio.club>

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>

GENESEE VALLEY AMATEUR RADIO ASSOCIATION

Email n3dsp@lafireline.net for details.

ASTRONOMY SECTION ROCHESTER ACADEMY OF SCIENCE

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

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.

LANCASTER HAMFEST
Saturday September 14, 2019

Bowen Road Grove [MAP](#)
Only \$7.00 admission and free tailgating

Large flea market for tailgaters
Outdoor covered Pavilion that sellers can use

3845 Bowen Rd, Lancaster NY 14086
(Located across from rear entrance of Como Lake Park)

Talk in – 147.255 pl 107.2
6 am till 1 pm
Admission only \$7

Sponsored by : The Lancaster Amateur Radio Club

KEUKA LAKE AMATEUR RADIO
ASSOCIATION, KLARA

All Day Technician Question Pool Review

Please send an email to: keukalakeara@gmail.com to register
for the class.

Civil Defense Fire & Training Center
Rt. 54
Bath, NY
Saturday
September 14th
9am to 3pm

Technician Exam at 3:15 pm

FOR SALE

Rohn 25G tower

- four 10' straight, \$30 ea
- 25AG 9' top section, \$35
 - all five \$125;
- GA25G guy bracket w/ torque bars, \$50.

M2 Antenna Systems:

- 6M5X 5el 6m beam, \$250.

Mosley

- TW-21-M 12m & 17m rotary dipole, \$75.

Please contact Jim: W2WWV@arri.net

QRP Quarterly

QRP Amateur Radio Club
International

www.qrparci.org

CHAMELEON
ANTENNA

[https://
chameleonanten-
na.godaddysites.com/](https://chameleonantenna.godaddysites.com/)

DX
ENGINEERING

www.dxengineering.com

WEST MOUNTAIN
RADIO

www.westmountainradio.com

Maxcon
Antennas

www.maxconus.com

MFJ

www.mfjenterprises.com

HAM RADIO DELUXE

HAM RADIO DELUXE SOFTWARE
The Radio Amateur's Best Asset

www.hamradiodeluxe.com

Tigertronics
Grants Pass, Oregon

www.tigertronics.com

NUTS AND VOLTS

www.nutsvolts.com

HobbyPCB

www.hobbypcb.com

SERVO
MAGAZINE

www.servomagazine.com

Bird

www.birdrf.com

N3FJP
Amateur Radio Software.

www.n3fjp.com

ME ME Labs, Inc.
719-520-5323

Melabs.com



MOSLEY ELECTRONICS, INC.

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OCTOBER RAG DEADLINE SEPTEMBER 15, 2019



**RARA meets at 7PM on the first
Wednesday of each month. Join us at:**

Seneca Waterways Council, BSA Headquarters
2320 Brighton Henrietta Town Line Rd
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Homeschool Radio Fab Lab 2019 - Hands-on Workshops

Six STEM workshops of making and exploring...for ages 9 - 16

Session 1

September 19: Introduction to Electronics and Building Basic Circuits

- An introduction to electricity, circuit components, Ohm's Law, and measurements using a digital multi-meter provided to students in their tool kits for them to take home
- Tour the Museum and learn about 200 years of communication technologies

October 3: Telegraph, Morse Code & Build a Code Practice Oscillator

- Learn the history of the telegraph and learn Morse Code
- Build an electronic circuit to send Morse Code – a Code Practice Oscillator and take it home

October 17: Tool Time and Prototyping

- Learn how to create projects from scratch by building the beginnings of a more complex circuit and then layout/cut a wood board, measure components, cut/strip wires for electrical connections, etc.
- This will empower the student to build their own projects without needing to purchase an expensive kit.

Session 2

October 24: Catch the Waves

- Learn about the amazing properties of waves, how to make them, measure them, and use them to communicate information.
- Build a cool project and explore the world of RADAR.

November 7: Build a Crystal Transmitter Using a Transistor

- Learn about transistors and the basics of radio transmitters
- Build and test a crystal transmitter and listen to your signal at the Museum

November 21: Build a Photon Transmitter and Receiver

- Build a photon transmitter & receiver that sends & receives light waves encoded with music & voice
- Learn about light emitting diodes (LEDs) and apply knowledge of amplitude modulation
- Work with a laser measurement system. Light can be used to measure tiny objects like individual molecules and living cells. Light is "tiny" and can be used to "see" things that radio waves can't.

COST: \$60 per session; register for both for a \$10 discount
Workshops are held 9:30am-11:30am at AWA Museum, 6925 Routes 5/20

For more information and registration form, visit:

<http://www.antiquewireless.org/2019-fall-radio-fab-lab.html>

Younger registrants needing assistance, adult attendance is required.

Send questions to Education.awam@gmail.com





Registration Form for Radio Fab Lab – MiniSeries at AWA Museum

Please Print or Type

Date: _____

Name: _____ Age (9-16): _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone: () _____ Email: _____

Emergency contact; name, telephone, email: _____

Photos and videos may be taken and used by AWA for promotional purposes, which may include media such as websites, newsletters, brochures, and news articles.

I have given my child permission to attend workshops at the AWA Museum.

Parents/Guardian Name (Print): _____

Parents/Guardian Signature: _____

Workshops are held from 9:30am to 11:30am

Payments are non-refundable.

Registration includes AWA Technology Explorer Membership **.

One parent, grandparent or guardian may attend for **free!** Younger students requiring assistance, adult attendance is required.

Session	Attend?	Cost
1 – 9/19, 10/3, 10/17		\$60.00
2 – 10/24, 11/7, 11/21		\$60.00
* Discount (see below)		- \$10.00
TOTAL		

* Those who register for both sessions may deduct \$10 from total.

** AWA Membership includes many benefits...for details about the **Technology Explorers Membership**, please see: <http://www.antiquewireless.org/tech-explorer-membership.html>

Registration is limited to the first 15 registrants. To reserve a spot, please make payment and mail registration form by September 1st to:

Terri Renner
4025 Windy Knoll
Livonia, New York 14487

Payment can be made by Paypal (preferred) to WM3D@arrl.net. This Paypal address belongs to AWA and its Treasurer, Mr. Stan Avery. 6925 Rt 5/20 in Bloomfield. Checks are also accepted, payable to ANTIQUE WIRELESS ASSOCIATION.

Please email with any questions: Education.awam@gmail.com