



THE RICHMOND HAM

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November 2024

THE RICHMOND AMATEUR RADIO CLUB RARC Meeting in person!

Our monthly meeting is on Friday November 8th, 2024, 7:00PM, at the Bon Air United Methodist Church, 1645 Buford Road.

This month's meeting will be in-person and also on Zoom.

<https://us02web.zoom.us/j/88518058584>

QR Code for Zoom Link



November presentation

This month's presentation will be entitled "Geochron Resurrected" by Patrick Bolan, KJ7ZSU.

Patrick's presentations typically include:

A brief history of Geochron's mechanical clock since 1964 and its connection to U.S. Presidents. An exploration of the digital Atlas features, including the Ham Radio Bundle.

How Patrick resurrected the old company by visiting dozens of Ham Radio operators around the country.

Richmond Amateur Radio Club (RARC) Monthly Meeting Minutes Friday, October 11, 2024

President Rick Waller (K4OHM) called the meeting to order at 19:00 EDT (23:00 UTC).

A quorum was reached with 29 in-person attendees and 9 Zoom attendees.

President Rick invited visitors to introduce themselves. Keith Vincent joined us and is currently studying to earn his Technician License.

President Rick invited the in-person & Zoom attendees to introduce themselves. Two

soon-to-be members joined the Zoom audience who were Steve Eillert (KM4IBQ) and Diane Enroughty (KQ4VYJ). Congratulations to Dianne who just earned her license last week!

New Business

President Rick asked for a motion to approve last meeting's minutes which were presented to the RARC members in the Newsletter. Bruce MacAlister (W4BRU) moved, and Dennis Farmer (K4DAF) seconded. The motion passed unanimously.

Treasurer Ken Leidner (WV0L) presented the Treasurer's Report. The Club's September 2024 balance ended at \$17,671.25.

Treasurer Ken announced the following new members applied for Club Membership: Stephen Eilert (KM4IBQ), Technician Class License, Keith Vincent, Not Yet Licensed and John Warkentin (KB4SCB), Extra Class License. Treasurer Ken asked for a motion to approve the applicants as club members. Dave Robinson (KJ4LHP) moved, and Jim Rubin (W4PKR) seconded. The motion passed unanimously. Welcome to our three newest members!

Bruce MacAlister (W4BRU), head of the RARC Radio School, updated us that classes are going well. However, Long time Technician Class teacher George Starke (WB4VWR) will be stepping down starting in the Spring Semester. RARC is now looking for someone interested in teaching the Technician Class, and we thank George for his years of teaching.

New Business - Miscellaneous

Armand Hamel (WA1UQO) updated that the Club's D-Star Repeater is still down.

Armand said that it is a software problem and that Jim Bates (K8OI) who previously handled this is stepping down. Win Grant (W4WIN) is looking for someone else to help with the software portion of the D-Star Repeater. Jim Rubin (W4PKR) made an announcement asking for more volunteers for the Monument Avenue 10k on behalf of RATS. Amateur Radio operators are the primary

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method of communication for this event. Treasurer Ken announced the Club's website's software is now fully updated. Treasurer Ken was wondering if it would be helpful for people to be able to publicly comment on the RARC website. The consensus was that this is too much work for Ken. Ken reminded the Club there are multiple ways to give comments to the Club including forms and RARC email addresses to send emails to board members actual personal emails. This also brought up a discussion about past spam and email phishing problems. Tom Tinsley (KJ4WQ) inquired about a central place to post current information on local nets. Bruce MacAlister (W4BRU) reminded us about the Club's net calendar on our website which he says is as current as he is aware. He is happy to update it as necessary. Tom also inquired about the Club also taking a tour of the Green Bank Observatory in West Virginia. He was wondering if this could be formally arranged via new leadership as a Club activity. President Rick inquired about the upcoming dues renewal process. Treasurer Ken said that he will send the first reminder email out in late November.

More New Business

Kathleen Adams (K5HTZ), daughter of our friend John DeMajo (Silent Key K5HTZ), announced that she is finishing up her dad's radio collection exhibit at the Keystone Tractor Museum. She will be holding an opening on John's birthday, October 29th. It does cost a little money which is Museum admission. Kathleen said that she has made a video highlighting her experience with the radios and would like to share it. We agreed to put this on the club website. Bernie Primm (KE4FQD) was visiting and received his Technician license from RARC. He just renewed it after a break and is looking for assistance with getting on the air again. President Rick reminded the members who the nominees standing for this year's club election are. He also introduced them. The nominee slate was:
President – Darrell Basinger (WW4F)
Vice President – Lauren Ware (W4LEW)
Treasurer – Ken Leidner (WV0L)
Secretary – Will Jackson (KR4CE)
Directors – Volker Schweyer (KQ4GP) & Dan Bryant (N4DOB)

Director to be appointed by President Nominee Darell Basinger
Rick Waller (K4OHM) to serve on the board in the Past President position
Since all nominees are running unopposed, President Rick asked for a motion to elect the candidates as a single voice vote. Dave Robinson (KJ4LHP) moved, and Tom Tinsley (KJ4WQ) seconded. All candidates were unanimously elected.

Closing

President Rick asked for a motion to close the business portion of the meeting. Dave Robinson (KJ4LHP) moved, and Judi Lehuquet (N4JDI) seconded.

The business meeting closed at 19:38 EDT (23:38 UTC).

Show & Tell

President Rick discussed the upcoming Solar Cycle and shared a \$85 Texson portable radio with a built-in antenna. Steve Boles (W4SB) shared an early Lionel Morse key as well as a Navy "flame proof" key he found on eBay. Dan Brown (W4ERF) demonstrated what a nibbling tool can achieve.

Meeting Program

Bruce MacAlister (W4BRU) gave a presentation on the upcoming MakerFest which is being held at Deep Run High School. The Event is Saturday November 2nd from 10:00 AM to 5:00 PM EDT.

Respectfully submitted,
Will Jackson KR4CE, Secretary Elect

From the Prez

My 2 years as president of RARC has gone by fast. It was interesting and I learned a few things. I want to recognize a few fellow hams who were particularly helpful to me. Thanks to Bruce MacAlister, Win Grant and Armand Hamel. The first two guys "persuaded" me to seek office and guided me along the way. Armand was invaluable in creating the newsletter and stepping up to make sure we had minutes for our meetings. I don't want to forget Tom Flippen our liaison with the church. He does a lot of things we can see but also even more behind the scenes so that we can have a nice place to meet. I look forward to returning to being just a regular club member. I have no doubt that Darrell Basinger and the incoming team will do a great job. 73, Rick, Ka4ohm.

RARC VE News

We have two different groups that provide testing. One is free, but only offers testing sessions on the second Saturday of odd months except June (Field Day) replaces July. The next session will be on **Saturday November 9th 2024** at 10:am

**Chesterfield Library Bon Air Branch
9103 Rattlesnake Rd
North Chesterfield, 23235**

The other one cost \$15.00, but offers testing sessions on the 1st Saturday of every month. RARC offers Free VE Testing Sessions on the second Saturday of odd months except June (Field Day) replaces July. Currently all testing starts at 10:00 AM and is at: Chesterfield Library Bon Air Branch 9103 Rattlesnake Rd North Chesterfield, VA 23235.

Pre-registration Required. Walk-ins Accepted. Pre-Registration required for Techs and for special needs applicants. Anyone taking the Tech exam needs a FRN from the FCC (Google obtaining a FCC FRN) and bring that info to the session. If you have questions about a session, please see our website, www.rarclub.net or contact Allan, WA3J, at 804-399-8724, or ve@rarclub.net

KC4TS Cats Vet (Cats Volunteer Examination Team) offers VE Testing Sessions that cost \$15.00 on the 1st Saturday of every month. Currently all testing starts at 10:00 AM and is at: Gospel Light Church 2109 Anderson Hey Powhatan VA. Check-in is between 10am and 12pm and we stay as long as needed to finish all the exams. Walk-in candidates are welcome! You just need a valid ID, an individual FCC FRN, and the testing fee of \$15 which goes directly to the ARRL (cash or check made payable to "ARRL VEC"). We can provide pencils and a very simple calculator or you can bring your own. See <http://kc4ts.org/> for more information.

Club Info...

RARC meets on the second Friday of each month at 7:00 PM, at the Bon Air United Methodist Church, 1645 Buford Road.

We offer 10-week license prep classes in September and March with exams following. Members provide VE testing sessions on odd-months during the year.

Join the Richmond Amateur Radio Club.

You don't have to have a ham license, just have a genuine interest in the hobby.

Annual Dues are:

80 and over \$0

Regular Membership \$22.00

Lots of information about the Club and our activities is available on our website, www.rarclub.net.

QR Code to RARC Website



Nets

RARC has the first and only D-STAR digital repeater in the area: 147.255 (+ 600), 443.7125 (+ 5) and 1284.0000 (-20). In addition to our Wednesday local D Star net (below), we link Module C (VHF) on Tuesday nights at 9pm, to REF 054C for the North Carolina D Star Net.

The RARC D Star Net meets on Wednesday nights at 8:00pm and is accessible on our three D Star modules, all of which will be linked together via REF 097B. So if you are in RF range of the repeater, you can join the net on any of the three RF modules and be heard by everyone.

If you participate in the net via DVAP, DV Dongle or a Hotspot (such as Pi Star), you should link your device to REF 097B rather than to any of our modules which will allow you to be heard by everyone.

Any questions, contact Win - W4WIN at wingrant@gmail.com

Sunday	7:00 pm	50.135	USB
Wednesday	7:00 pm	28.475	USB
	8:00 pm	147.255	D-Star Rptr
Thursday	7:00 pm	52.525	FM

MRA

Interested in information or support of the Metropolitan Repeater Association (MRA)?

The sole business of the MRA is to own, operate and maintain the **145.430** and **224.42** repeaters.

For information please visit our website at <https://sites.google.com/view/kg4mra/>



50.215Mhz @ 8:00am daily

Show and Tell!

If you have an item, idea, latest and greatest, or whatever gizmo; please bring it to the RARC meeting. We have a table (usually) set up near the front where you can place your item and share/discuss it with others as they arrive. We also have a section of the agenda set aside for members to discuss their "Show and Tell" item(s). No need to be tentative; we are INTERESTED in what you are doing, how you are doing it and, in true Ham fashion, how much it costs!

Articles Requested!

Everyone has a story to share. Your first rig, your first contact, your most memorable QSO? How about a description of your shack with a picture? Old to the hobby – New to the hobby, there are lots of interesting stories out there to share. Consider writing an article for the newsletter. Any topic, any length any format, all will be welcomed. Any questions, send me an email at wa1uqo@gmail.com or call @ 508-838-8353.

Mahlon Loomis (who knew?)



When talking about the invention of radio, the first name that comes up is always Guglielmo Marconi, who began experimenting in 1895. While it is true that Marconi was very successful (by 1899 he had established wireless connections between Britain, France, and several prominent islands), the moniker "The Father of Radio" is not one hundred percent true. In fact, the first known occurrence of wireless aerial communication was conducted in the Blue Ridge Mountains just outside of Lynchburg by Dr. Mahlon Loomis in 1866, a full eight years before Marconi was even born. Loomis was a dentist and an inventor for most of his adult life, and unsurprisingly came from a very intellectual family: his father a

professor said to be involved with the founding of the American Ephemeris and Nautical Almanac, his grandfather a reverend, and his brothers poets, astronomers, and philosophers. Although Loomis by chance lost the financial backing to gain patents for his discoveries and inventions in radio, Loomis should still be remembered for his contributions to the field.

Mahlon Loomis was born in Fulton County, NY, on July 20, 1826, to Professor Nathan Loomis and Waite Jenks Barber Loomis. Around 1840, the family relocated to Springfield, Virginia, about twenty miles south of Washington. From 1848 and 1849, Loomis studied dentistry and taught school on the side in a couple of towns in Ohio. Then, between 1848 and 1856, he was practicing dentistry in Virginia and at some point moved to Massachusetts and set up a practice there as well. In May 1856, Loomis married Achsah Ashley, and in November, they moved back to Washington, D.C., where Loomis started another dentistry practice. For a year or two around the time of his mountain top experiments, Loomis lived in Lynchburg and worked for Piedmont Manganese Co. as a mineralogist. Later Loomis conducted experiments in West Virginia. Dr. Loomis died at his brother's summer home in Terra Alta, West Virginia, on October 13, 1886.

While Loomis may not have had lasting success as a radio and telegraphy giant, he was still granted several patents throughout his life and continued to be ambitious in his ideas. Loomis was granted patents as early as 1854, when he patented the creation of a certain kind of porcelain false teeth. In 1881, he received patents for a kind of cuff-and-collar fastening and for a convertible valise (a kind of suitcase). In 1886, he received a patent for electrical thermostat improvement. It is noted that while living in Lynchburg to conduct his telegraphy experiments, Loomis was involved with the city and was interested in fitting Lynchburg with electricity. While this aim was never seen through, it shows Loomis had an ambitious inventive and entrepreneurial spirit.

In 1866 (some sources say 1868), Loomis conducted experiments in the Blue Ridge Mountains. He had been inspired for many years to experiment with wireless telegraphy; in a journal on February 20, 1864, Loomis wrote "I have been for years trying to study out a process by which telegraphic communications may be made across the ocean without any wires, and also from point to point on the earth, dispensing with wires." In October 1866, Loomis used two kites, between 14 and 18 miles apart, a vertical antenna, a high frequency detector, and a spark gap transmitter to conduct his experiment that is credited by the Library of Congress as the first known instance of wireless aerial communication. The transmitter and the detector

worked together to successfully cause one kite to move the other, speaking to one another through the radio waves.

Radio as we know it today, works just this way: a transmitter moves electric charges up and down rhythmically on an antenna, which sets the signal to be set in motion. These electric charges make up radio waves, which are made of a repeating series of peaks and valleys. The waves sent then move in a straight line to a receiver/detector, like the antenna on your radio. Adjusting the strength (amplitude) of the wave gives us AM radio waves, and adjusting the frequency of the waves gives us FM radio waves. The shape of these waves tells the receiving radio's speakers how to move to emit sound waves. Loomis successfully got his two kites and their electrical mechanisms to talk to each other in this way over several miles, marking a great leap in the discovery of radio

The man known today as the "Father of Radio," Guglielmo Marconi, was born in Bologna, Italy, in April of 1874. He began lab experiments in 1895 and then succeeded in sending wireless signals 1.5 miles. This is obviously a much less impressive distance than Loomis was able to achieve nearly thirty years prior, so why do we not call Loomis the Father of Radio? As was common during the invention- and patent-boom of the Industrial Age, it all comes down to funding.

Loomis struggled to maintain a financial backing for his telegraphing experiments and goals of creating a telegraph company. Particularly, obtaining government funding was an especially slow-moving process. In 1869, Senator Charles Sumner of Massachusetts introduced a bill to the U.S. Senate to try to obtain funds for Loomis, but the bill was sent to the Committee on Patents and no action was taken. The bill reached the floor of the House of Representatives two years later, in 1871, and was passed the next day; this was lucky for Loomis, as this same year he lost his private financial backing due to the Great Chicago Fire. However, this luck would not last. A bill introduced in 1870 by Congressman Bingham of Ohio, who was one of the

witnesses to Loomis's 1866 experiments, sought to incorporate the Loomis Aerial Telegraph Company with the right to capitalize "not in excess of two million dollars." The House of Representatives did not act on this bill until 1873, when it was signed into law by President Grant; this was after Loomis finally received a patent the previous year for "Improvements in Telegraphing." This would have been a great win for Loomis and the upstart of his company, but the government had no funds to grant him. The year 1873 saw the beginning of the first 'Great Depression' in the United States and abroad, with the Panic of 1873 triggering a six-year long depression. Around 5000 U.S. commercial businesses failed, around 90 railroad companies went bankrupt, and more than 100 banks in the Midwest and along the East coast failed. Back-to-back recessions in the 1880s made sure that Loomis's dreams of creating a telegraph company never recovered.

In contrast, Marconi was mostly working in Britain in the 1890s and was very financially successful. Although at the end of the century the European continent was forced to impose high tariffs, British businessmen focused more on supporting imperial efforts in Africa and Asia to make up for those European markets they lose due to expense. This allowed for a solid economic base for Marconi to work in. In 1896, Marconi was granted "the world's first patent for a system of wireless telegraphy," and on 1897, he formed The Wireless Telegraph and Signal Company. By 1899, Marconi had established wireless communication between England and many islands as well as across the English Channel to France, and had placed many permanent wireless stations. Had there been enough financial backing, it is likely that a permanent system like this between the states was what Loomis had envisioned with his own company. Marconi, along with fellow researchers, received the Nobel Prize in Physics in 1909 "in recognition for their contributions to the development of wireless telegraphy."

The SWAP SHOP

Club members may list their wares in the newsletter. Send descriptive information to Armand at wa1uqo@gmail.com, or call me at 508-838-8353. The Swap Shop is presented in the newsletter as a benefit to our members. RARC takes no responsibility for items sold or traded in this newsletter. The ad will appear three times unless extended. Interested parties will contact you directly. ***You must be an RARC member to place an ad.***

Thought For The Day

My bed is a magical place where I suddenly remember everything I forgot to do.

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Dave Robinson	KJ4LHP	Secretary	
Ken Leidner	WV0L	Treasurer	

