



THE RICHMOND HAM

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May 2024

THE RICHMOND AMATEUR RADIO CLUB RARC Meeting in person!

Our monthly meeting is on Friday May 10th, 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



This month's program: Will be by Rob Thomas, KC4NYK, on 3D Printer selection.

RARC Meeting Minutes April 12th 2024

Meeting was started at 19:01 by president Rick Waller, KA4OHM.

Minutes approved by voice vote.

Old Business: School has completed the General classes. Technician and Extra will be finished on May 7th with testing on May 11th. The Antenna Modeling seminar is done and the D-Star seminar will be on April 27th. Radio Sport and Contesting and Remote Station were also completed.

Remote station continues to work well.

Treasurer's Report: Balance of \$17,787.22

New Business: None

New Members: The club welcomed six new members this month. Steven Bhatt, KN4AVN, General, Carl Cash KF4UBE, Extra, Dwight Durmon, KF4AUZ, Extra, Scott Hopkins, N1TZZ, Advanced, Warren Johnson, KQ4MML, Technician and Craig Rader, KC9CR, Advanced.

Business Meeting was closed at 19:09.

Members on Zoom and in person introduced themselves.

Melanie Carriveau, announced a Special Event on the 26th of April for the HadiHams program celebrating their 57th anniversary.

The meeting ended at 19:25 followed by a short break.

This month's presentation was by Darrell Basinger on his Ciro Mazzoni Baby Loop antenna.

The meeting was ended at 20:25.

Special Olympics!

From Darren Faulkner: Special Olympics VA have once again requested amateur radio support for their summer games this year. They will be held Friday June 7th and Saturday June 8th. Primarily on the campus of the University of Richmond but will also need a few volunteers at their softball and swimming venues. I'm looking for as many volunteers as I can get so would appreciate it if you can pass this on to your members.

Only equipment needed should be an analog UHF HT, a battery in good shape (and perhaps a spare), and an external audio accessory that allows you to hear, and be heard, in a high noise environment.

Please note that most positions will be outside or potentially strenuous.

Volunteers may sign up with me at darrenfaulkner@gmail.com and I'm happy to answer any questions anyone may have.

Thank You, Darren Faulkner, KG4IN

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 May 11th 2024** at

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

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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

Table with 4 columns: Day, Time, Frequency, and Mode. Rows include Sunday (7:00 pm, 50.135 USB, 7:30 pm, 52.525 FM), Wednesday (7:00 pm, 28.475 USB, 8:00 pm, 147.255 D-Star Rptr), and Thursday (8:00 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 and 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.

Tired of winter? Cabin Fever got you down?

Here is a list of upcoming hamfests and tailgate fests.

June 1st - Manassas tailgate, put on by Ole Virginia Hams, <https://w4ovh.net/welcome-to-manassas-hamfest/>.

August 3rd – Roanoke Hamfset, Vinton, VA by the Roanoke Valley ARC.

August 4th – Berryville Hamfest by the Shanandoah Valley ARC.

August 10th – Tidewater Hamfest and swap meet in Portsmouth, VA

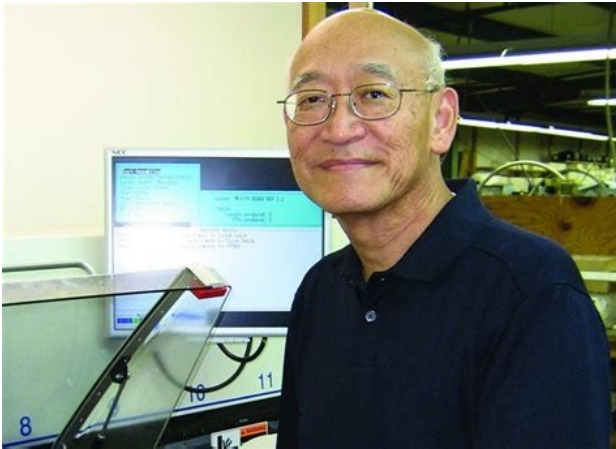
Mark your calendars and save all your loose change!



Field Day will be here before you know it!

Are you ready? Is your gear ready? June 22nd and 23rd are fast approaching. Don't wait till the last minute. Get those batteries charged and generators checked out!





Dear Fellow Hams and Friends,

April 25, 2024

Dear Fellow Hams and Friends, It is with a sad heart as I write this letter. As many of you have heard by now, MFJ is ceasing its on-site production in Starkville, Mississippi on May 17, 2024. This is also the same for our sister companies' Ameritron, Hygain, Cushcraft, Mirage and Vectronics. Times have changed since I started this business 52 years ago. Our product line grew and grew and prospered. Covid changed everything in businesses including ours. It was the hardest hit that we have ever had and we never fully recovered.

I turned 80 this year. I had never really considered retirement but life is so short and my time with my family is so precious.

I want to thank all of our employees who have helped build this company with me over the years. We have many employees who have made MFJ their career for 10, 20, 30, 40 and more years.

We are going to continue to sell MFJ products past May 17, 2024. We have a lot of stock on hand. We will continue to offer repair service work for out-of-warranty and in-warranty units for the foreseeable future.

Finally, a special thanks to all of our customers and our dealers who have made MFJ a worldwide name and a profitable business for so many years. You all are so much appreciated.

Sincerely Yours, 73s

Martin F. Jue, K5FLU

A Perfect Solar Superstorm: The 1859 Carrington Event

In 1859 a massive solar flare spewed electrified gas and subatomic particles toward Earth, wreaking havoc on telegraph networks.

On the morning of September 1, 1859, amateur astronomer Richard Carrington ascended into the private observatory attached to his country estate outside of London. After cranking open the dome's shutter to reveal the clear blue sky, he pointed his brass telescope toward the sun and began to sketch a cluster of enormous dark spots that freckled its surface. Suddenly, Carrington spotted what he described as "two patches of intensely bright and white light" erupting from the sunspots. Five minutes later the fireballs vanished, but within hours their impact would be felt across the globe.

That night, telegraph communications around the world began to fail; there were reports of sparks showering from telegraph machines, shocking operators and setting papers ablaze. All over the planet, colorful auroras illuminated the nighttime skies, glowing so brightly that birds began to chirp and laborers started their daily chores, believing the sun had begun rising.

Some thought the end of the world was at hand, but Carrington's naked eyes had spotted the true cause for the bizarre happenings: a massive solar flare with the energy of 10 billion atomic bombs. The flare spewed electrified gas and subatomic particles toward Earth, and the resulting geomagnetic storm—dubbed the "Carrington Event"—was the largest on record to have struck the planet.

Bright Flare, Dark Lines

Compared to today's information superhighway, the telegraph system in 1859 may have been a mere dirt road, but the "Victorian Internet" was also a critical means of transmitting news, sending private messages and engaging in commerce. Telegraph operators in the United States had observed local interruptions due to thunderstorms and northern lights before, but they never experienced a global disturbance like the one-two punch they received in the waning days of summer in 1859.

Many telegraph lines across North America were rendered inoperable on the night of August 28 as the first of two successive solar storms struck. E.W. Culgan, a telegraph manager in Pittsburgh, reported that the resulting currents flowing through the wires were so powerful that platinum contacts were in danger of melting and "streams of fire" were pouring forth from the circuits.

In Washington, D.C., telegraph operator Frederick W. Royce was severely shocked as his forehead grazed a ground wire. According to a witness, an arc of fire

jumped from Royce's head to the telegraphic equipment. Some telegraph stations that used chemicals to mark sheets reported that powerful surges caused telegraph paper to combust. On the morning of September 2, the magnetic mayhem resulting from the second storm created even more chaos for telegraph operators. When American Telegraph Company employees arrived at their Boston office at 8 a.m., they discovered it was impossible to transmit or receive dispatches. The atmosphere was so charged, however, that operators made an incredible discovery: They could unplug their batteries and still transmit messages to Portland, Maine, at 30- to 90-second intervals using only the auroral current. Messages still couldn't be sent as seamlessly as under normal conditions, but it was a useful workaround. By 10 a.m. the magnetic disturbance abated enough that stations reconnected their batteries, but transmissions were still affected for the rest of the morning.

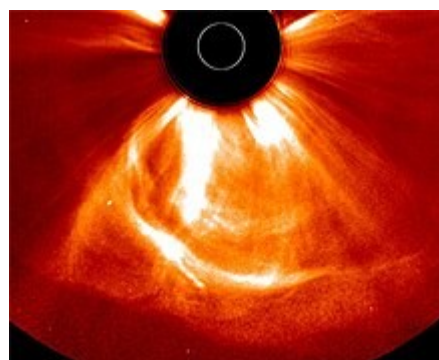
When telegraphs did come back on line, many were filled with vivid accounts of the celestial light show that had been witnessed the night before. Newspapers from France to Australia featured glowing descriptions of brilliant auroras that had turned night into day. One eyewitness account from a woman on Sullivan's Island in South Carolina ran in the Charleston Mercury: "The eastern sky appeared of a blood red color. It seemed brightest exactly in the east, as though the full moon, or rather the sun, were about to rise. It extended almost to the zenith. The whole island was illuminated. The sea reflected the phenomenon, and no one could look at it without thinking of the passage in the Bible which says, 'the sea was turned to blood.' The shells on the beach, reflecting light, resembled coals of fire."

The sky was so crimson that many who saw it believed that neighboring locales were on fire. Americans in the South were particularly startled by the northern lights, which migrated so close to the equator that they were seen in Cuba and Jamaica. Elsewhere, however, there appeared to be genuine confusion. In Abbeville, South Carolina, masons awoke and began to lay bricks at their job site until they realized the hour and returned to bed. In Bealeton, Virginia, larks were stirred from their sleep at 1 a.m. and began to warble. (Unfortunately for them, a conductor on the Orange & Alexandria Railroad was also awake and shot three of them dead.) In cities across America, people stood in the streets and gazed up at the heavenly pyrotechnics. In Boston, some even caught up on their reading, taking advantage of the celestial fire to peruse the local newspapers.

Ice core samples have determined that the

Carrington Event was twice as big as any other solar storm in the last 500 years. What would be the impact of a similar storm today? According to a 2008 report from the National Academy of Sciences, it could cause "extensive social and economic disruptions" due to its impact on power grids, satellite communications and GPS systems. The potential price tag? Between \$1 trillion and \$2 trillion.

The [July 2012 solar storm](#), as photographed by [STEREO](#), was a CME of comparable strength to the one which is thought to have struck the Earth during the 1859 Carrington Event.



The SWAP SHOP

Club members may list their wares in the newsletter. Send descriptive information to Armand at wa1ugo@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.***

WANTED: ICOM 706 MKII G . Contact Jon Bennett, NQ4A. motexa@verizon.net.

For Sale:

Comet CX-333 tri-band antenna. Used 3 years, still in very good condition and had a low SWR on all bands when decommissioned.

SPECS: Coverage: 2M, 1.25M, 70cm, VSWR: 1.5:1 or less, Max Power: 120 watts, Length: 10' 4", Weight: 3 lbs 8 oz , Connector: SO-239.

Construction: Heavy-duty Fiberglass, 2 sections

Asking \$90. Contact Dave White, W4IIA for information.

804-501-8857

For Sale

YAESU FTDX-5000 HF + 6m All Mode 200W Transceiver. In very good condition. Includes Heil Gold Elite microphone, manual and original box. \$1,800.00 (pickup in Glen Allen, VA) No shipping.

Below is a partial list of a SK Estate which Alan Swinger is selling on behalf of the widow. Although the SK's estate is in Hanover, VA, almost all items listed are at Alan's QTH for test and check out. Details and photos are available to anyone who contacts Alan directly at: alan.swinger@gmail.com.

-MFJ 409D Deluxe Keyer & Manual copy - \$85

-HF Go-Bag Complete HF Station: IC-718 & PS w/ MIC & Headphones, MFJ Versa Tuner II, Vibroplex Paddle, etc, w/ Manuals - \$785 OBO (Will consider selling individual pieces)

-Murch UT-2000A Transmatch and manual copy - \$190

-Heath 610 Station Console w/ manual copy - \$135

-400 ft roll of 1/4" steel Cable (Retail \$0.82/ft) - \$180

-Dummy Loads – have 2; oil filled can type - \$50 ea

-Other equipment includes Kenwood TS-830 & VFO 230, Swan 350 & PS, Drake line: TR3, TR4c, TX4s, R4s, RV3s and various AC4 and MS4 power supplies and speakers. These are all in various states of test and check-out but will negotiate if interested.

--500 ft of Anderson 50 ohm Heliac hardline (FSJ4-50) - \$800

and 8 PL-259 connectors (\$5 ea) and tool to mount available (\$40)

More to come later, including some Vintage Heath radios -SB-102, Mohawk, etc

73, Alan Swinger K9MBQ

Charlottesville, VA 22903

434-975-6237 (H); 434-760-0258 (Cell & Text)

Thought For The Day

Acquaintance, *n.* A person whom we know well enough to borrow from, but not well enough to lend to. - Ambrose Bierce

Rick Waller	KA4OHM	President	(804) 971-5815 president@rarclub.net
Darrell Basinger	WW4F	Vice President	(804) 672-7928 vicepresident@rarclub.net
Dave Robinson	KJ4LHP	Secretary	
Ken Leidner	WV0L	Treasurer	

