



THE RICHMOND HAM

Published Monthly by the Richmond Amateur Radio Club

P.O. Box 35279, Richmond, Virginia 23235

January 2024

THE RICHMOND AMATEUR RADIO CLUB RARC Meeting in person!

Our monthly meeting is on Friday January 12th, 2024, 7:00PM, at the Bon Air United Methodist Church, 1645 Buford Road. This months meeting will be in-person and also on Zoom.

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

QR Code for Zoom Link



This months program:

Easy Yagi Design for Hams

RARC members may remember the program on roll-your-own baluns given by John Portune, W6NBC. For the January 2024 meeting he is back via Zoom from the west coast to show us how to design Yagi* antennas.

John's comment: "Hams tend to fear building their own Yagi beams, thinking that only professional radio engineers can design Yagis. The equations seem way too complex and the many on-line Yagi calculators all conflict with each other, and they do not know which one to trust. GOOD NEWS. Ham yagi design is really simple as this presentation shows. Only three easy to remember no-math, no-calculator rules of thumb yield results that can't be distinguished from yagis designed with the calculators and the fancy math."

And don't miss John's video on the SWR preventative, Neodymium Hydroxide Coax Spray at

the bottom of his webpage,
<https://w6nbc.com/>

. It's an old video but hasn't lost its value.

* To give the main inventor his due, it's a Yagi-Uda antenna invented in 1926 by "Shintaro Uda of Tohoku Imperial University, Japan with a lesser role played by his boss Hidetsugu Yagi," see Yagi antenna on Wikipedia.

December 8th Meeting Minutes

Treasurer's Report: Checking Account Balance, \$21,585.47

New member, Dennis Sloatman, KZ4CG Extra. Welcome Dennis!

From The Prez

The Richmond amateur radio community has lost a great friend and advocate with the passing of John DeMajo, K5HTZ. Despite serious illness, John remained an active participant in RARC until the very end. He remained interested and engaged in amateur radio. John had a major role in keeping our club going during the COVID pandemic. In addition to being an engineer and having great responsibilities for his beloved city of New Orleans, he was a professional organist and organ technician. He loved old radio and restored numerous radios to working order. I was fortunate to have visited John's radio museum and hear him play the pipe organ that he built into his home. John also loved to build electronic gear. In addition to the innards his projects also looked good on the outside. John was truly a renaissance man for our time. Sadly, he was one of the last of a fading generation. John DeMajo cannot be replaced. He is fondly remembered by family and ham friends. He continues to inspire us.

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 January 13th 2024 at

Chesterfield Library Bon Air Branch
9103 Rattlesnake Rd
North Chesterfield, VA 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
	7:30 pm	52.525	FM
Wednesday	7:00 pm	28.475	USB
	8:00 pm	147.255	D-Star Rptr
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 repeater.

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. Thanks!

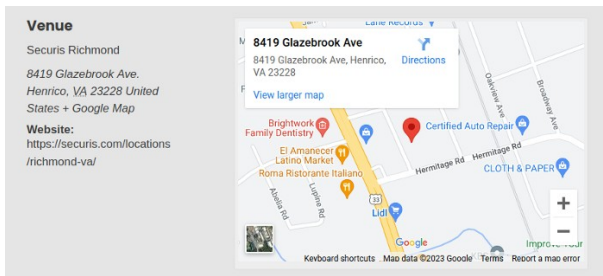
Electronic Recycling

The first Saturday of the month Securis takes electronics for recycling at their office just off Staples Mill Road north of the Amtrak train station, see the attached map. The hours are 10am to 2pm. (At the December RARC meeting I said it was the second Saturday. Wrong!)

They take most anything electronic or electric. There is a fee for items with a display such as a computer. The charge runs between \$5 and \$25 depending. They told me the disassembly process for screens was especially costly for them.

When the RARC has been given the gear of a late ham, we tell the family member that we'll find a home for it or send it to electronic recycling. Most are comforted that their loved-one's station won't just be thrown in the trash.

I'm comforted that the often-toxic chemicals in the PCBs and other parts of our gear won't be seeping through a landfill and polluting the ground water. Bruce MacAlister, W4BRU.



John DeMajo, K5HTZ, SK

Armand Hamel, Wed, Dec 20: "Good afternoon folks, I received a call from Dan Bryant earlier this afternoon. He had just received a text from Kathleen De Majo to say that John had passed peacefully at home at 1:pm."

John had several close calls before and plenty of hospital visits. This time he said he knew there would be no medical fix. He said he could feel himself drifting away. However, John being John, that did not prevent him rewiring a broken lamp his daughter brought him that needed fixing. He had her bring the tools he needed did it while lying in bed! She posted the picture on Facebook.

The email note brought lots of memories and the mourning of John's passing. This is a compilation of those responses.

Bruce MacAlister, W4BRU

Thanks Armand for the nice note. I was just thinking of John yesterday. He made me feel very welcome when I first reached out to RARC several years ago. So sorry to learn of his passing.

I know it was inevitable but I don't like it! John was one of those consequential people who did so much good and you don't want to lose them.

John was a giver. He gave more to RARC and our hobby than he took. I will miss him.

R.I.P. to a good man and an important player in ham radio in Central VA for decades. Deepest condolences to his family and friends.

Sad news. I recall several nice conversations with John about growing up in New Orleans, our shared point of origin. He was always happy to lend a hand or answer any questions. He will be missed.

So sorry to hear that. John carried on to achieve so many things despite his medical challenges. He had such an interesting background that made him a super technician/Engineer in the Amateur Radio community. Very few will be about to fill his shoes. God rest you John, 73.

As someone said, even when you know it is coming it is still hard. We'll keep John's family in our thoughts.

I so sorry to hear. John was well liked by all. I loved to hear about his projects. He'll be missed.

John was, without question, one of the finest people I have ever known and had the pleasure and honor to

work with. As some may not know, John was not only a dedicated and knowledgeable Ham but also an accomplished musician and the notes he created not only brought pleasure to his listeners but were also a firm statement of his Faith that the Good in each of us will always triumph over the flaws that would tear us down. My deepest condolences to John's family and may John find the Pax that he so richly deserves for making the lives of us all a little better.

Very sad news. John was an inspiration to me working on projects together, as someone that never let a minor difficulty stand in the way of getting something done and usually something really interesting. That was also true of things of a major nature and he never let his illness get him down that he did not figure out a way to get back up and continue on. Somewhere out there I'm am very sure that his spirit is moving forward and taking him to new knowledge and accomplishments. It's just his nature. He was a kind teacher and good friend. I will miss his calls and our insightful conversations. Peace John and thank you! I will think of you often.

I didn't know John personally anywhere as well as those who have expressed their emotions and feelings about him in this thread of mourning...The outpouring of affection and care is awe inspiring. And, though I didn't have the privilege of meeting and knowing John as well as many others. I do have a sense of celebrating his life and at the same time feeling a sadness seeing how his parting has moved so many in our Ham radio community. He will rest in peace knowing he was loved and cared about!

John De Majo, K5HTZ SK



Deaf Receiver? – Check the Lightning Arrestor

When we installed the new Icom D Star repeater stack in October, we immediately noticed the UHF module had significantly worse receive coverage than the 15 year old device which it replaced. Since the only thing we changed was the repeater itself, we suspected we had just gotten a bum unit from Icom. HRO was wonderful in working with us to quickly obtain a replacement, but that did not solve the problem.

Something coincidental with the repeater swap, rather than the repeater itself, had degraded our receiver sensitivity. Diagnosing receiver sensitivity on a digital radio is a near impossibility for anyone other than the manufacturer. I began with the easy stuff. Where our Heliax transmission line enters the building, we had installed a Polyphaser lightning arrestor years ago. I removed the device and inserted a barrel connector (double female) where the arrestor had been. Unfortunately, that did not solve the problem.

But I learned something about Polyphaser lightning arrestors: “they cannot be tested with a resistance or ohmmeter. A properly functioning product will show the same results as a damaged one . . .” This quote is from an excellent article by the manufacturer and goes on to suggest a suspect device “should be removed from the line and replaced with a barrel adapter.” Here’s a link to the full article:

<https://static.dxengineering.com/global/images/instructions/testingpolyphaser-whitepaper.pdf>

If your receiver appears to have suffered a significant loss of sensitivity, the lightning arrestor is a place to start and the test procedure is very simple.

We eventually solved the problem with the D Star repeater when Dave Meier, N4MW, took the duplexer home and checked it on a vector network analyzer. Dave did not find the tuning was significantly off, but he replaced two BNC to N adapters that came with the duplexer from the factory and that, along with an additional receive cavity that Dave provided, has resulted in even better receiver performance on the new UHF D Star repeater than before.

Win Grant – W4WIN



Shintaro Uda

Hidetsugu Yagi and Shintaro Uda, both working at Tohoku University in Sendai, Japan, invented this beloved antenna in 1926. The antenna design (a parasitic array antenna with a single driven element, a reflector, and parallel thin rod elements—“directors”—in a line) got

its first major workout assisting airborne radar during World War II, followed by appearances on many rooftops with the rise of post-war television broadcasting. Both Yagi and Uda introduced the antenna to Japan in a 1926 publication. The first English-language reference to the antenna can be found in a 1928 article published by Yagi—perhaps a reason why the official name of the antenna, Yagi-Uda, was truncated to simply a single name. Further, it was Yagi who applied for the Japanese patent (awarded in 1926) and later the U.S. patent under his name only. Despite the name becoming synonymous with Yagi, it is widely acknowledged (by the scientific community and Yagi himself) that Uda—an assistant to Yagi and radio engineer—played the lead role in the antenna’s design.



NEW! 1953 "Space Commander" VIBRO-MATIC WALKIE-TALKIES **2 PHONES ONLY \$1**

2 WAY SENDS! RECEIVES! VOICE - SONGS - MUSIC

Thrills & Fun Galore!

If by some magical means you could talk with your neighbor and friends—without electric wires, without batteries or electric current, wouldn't you pay \$100 or more? Well you can do just that and the entire cost to you is only ONE DOLLAR for TWO "Space Commander" Walkie-Talkies. Not just a toy—but an amazing communication system. NOW you can talk back and forth from house to garden, between rooms, between your house and your friends. How thrilling to "speak thru space"!

Works like Magic . . . Guaranteed!
This latest, newest 1953 model is a well-made product of the world's largest manufacturer of Walkie-Talkies. Uses highly sensitive Vibromatic design. Each phone is self-contained and stands as well as receives messages, songs, music, etc. which travel over the conductor line for hundreds of feet, clear and distinct. Requires no license. Will not interfere with radio reception. Works equally well indoors or out.

Endless Fun . . . Educational!
This new 2-WAY Walkie-Talkie System provides endless fun for the entire family, for boys and girls and adults feel inspirational. Helps overcome shyness, aids voice training. Real "Space Pioneer" design in handsome colors. Hard to break. They're rugged!

5 Day Trial — Money Back Guarantee.
Send only one dollar, cash, check or money order and your Walkie-Talkies will be shipped on 5 day home trial—instantly! Easy to use directions—even a 5-year-old child can do it! Enjoy them with your family and friends for 5 whole days free of any obligation to keep them . . . entirely at our risk! If you're not thrilled and satisfied in every way your dollar comes right back! Supply limited! Rush order now! Don't lose this big bargain! Mail coupon TODAY!

CONSUMERS MART, Dept. 131 West 33rd Street, New York 1, N. Y.

Rush this MONEY-SAVING COUPON

CONSUMERS MART, Dept. 125 E-28 131 West 33rd Street, New York 1, N. Y.

SPECIAL! \$1 2 PHONES COMPLETE

NAME _____
ADDRESS _____
CITY _____ STATE _____
I hereby authorize you to bill under mail C.O.D. You pay \$1.00 AID 15 cents postage on delivery.

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.**

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

Estate Sale

Elecraft K2 - HF Transceiver - \$1,200.00

ACOM 1000 - 1KW amp. 160 - 6 meters - \$1,600.00

AT1500DT - 1500 watt Ant. Tuner - \$380.00

MFJ-815B - SWR/Power Meter - \$60.00

MFJ-4125 - 35 watt Power Supply - \$69.00

MFJ-993B - Automatic Ant. Tuner - \$320.00

Yaesu MD-200A8X - Microphone - \$225.00

TS-930 - HF Transceiver - \$300.00

Swan 500C - HF Transceiver - \$300.00

FT-1000 Mark V - Transceiver - \$800.00

These are very fair prices but will consider all offers.

Contact: Phil, WB2DHY - wb2dhy@arrl.net

WB3D Estate sale – please visit this website:

<https://c-v-c-c.us/wb3d-estate-sale/> Contact information is posted in the list.

Thought For The Day

If you think you are too small to be effective, you have never been in bed with a mosquito.

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		



John De Majo, K5HTZ SK