



THE RICHMOND HAM

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September 2025

THE RICHMOND AMATEUR RADIO CLUB RARC Meeting in person!

Our monthly meeting is on Friday September 12th, 2025, 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



September Program:

ZUMspot assembly, programming and settings for D-Star and DMR. By Gene Damon, K4GNE

Richmond Amateur Radio Club (RARC) Monthly Meeting Minutes

Friday, August 8, 2025

Business Meeting

Call to order: President Darrell Basinger WW4F called the meeting to order at 19:02 ET (23:02 UTC).

Recognize Visitors: RARC welcomed the following visitors to our meeting:

Allison Andrews KM4TWH

Bob Moss W7WOW

Ryan Shipman W5OAT

President Darrell welcomed in-person & Zoom attendees to introduce themselves.

Approval of past meeting minutes:

Tom Flippin KD4CMK moved

Dennis Farmer K4DAF seconded

July meeting minutes unanimously approved

Treasurer's Report: Treasurer Ken Leidner WV0L presented

July 2025 Checking Account balance was \$14,670.90

New Member Applications: Treasurer Ken asked for a motion to approve the following new members:

Emily Boots WB4EMY, Technician Class License

Matt Sasser, Not Yet Licensed

Warren Winner W4UIE, Extra Class License

Todd Wittemann, Not Yet Licensed

Tom Flippin KD4CMK moved, none opposed,

Welcome to our four newest members!

School Update & Elmer Corps: (Bruce MacAlister W4BRU, Head)

Bruce MacAlister W4BRU noted that different classes & seminars have different registration deadlines so make sure to check them.

Remote Station – status: Bruce MacAlister said there's been a computer RFI issue for one member on the 80 m band.

D-Star Repeater – status: Win Grant W4WIN said the repeater's working well.

RARC Net Status / Activity: President Darrell reminded us to please check the website calendar for nets.

Local Club Activities / Announcements:

President Darrell reminded us about the 6M Club Tailgate on Sunday, September 13th at Hatcher Memorial Baptist Church from 8:00 AM to noon ET.

Old Business: none

New Business: Treasurer Ken reminded us to please email the webmasters on our website if you have any questions or problems.

Bruce MacAlister also noted that the school classrooms have moved upstairs over the gym. President Darrell announced that members can purchase club name tags via the form on our website.

President Darrell also announced that RARC is testing a groups.io for the Board with intent to go live to the membership soon.

Jim Rubin W4PKR asked for volunteers for the Ashland Half Marathon on August the 23th.

President Darrell announced our Nominating Committee for annual elections:

Win Grant W4WIN, Bruce MacAlister W4BRU and Rick Waller KA4OHM.

Please contact them or a current Board member if you are interested in running for office or nominating someone.

Announcements Show and tell: Bruce MacAlister W4BRU is asking for help with a 2 m / 70 cm vertical ground plane antenna.

Alex Sahhar KN4QGQ is asking for help mounting a microwave dish to a tower.

Nora Pozzi KQ4YLE is asking for monthly volunteers to show their QTH in real life to the "Ham Radio Chicks".

Dave Krynski KR4EYF shared his experience listening to an ARRL Region speaker discussing how to best engage with new Techs and Dave's experience getting into the hobby.

Dave Stevens WB4DES asked if the club has any HF stations to lend.

Motion to conclude business meeting:

Tom Flippin KD4CMK moved, Bruce MacAlister W4BRU seconded.

Business Meeting closed at 19:50 ET (23:50 UTC)

Meeting Program: John Watkins-Pitchford KX4QC gave a presentation about Slow Scan TV (SSTV).

Respectfully submitted,

Will Jackson KR4CE, Secretary

From The Prez

There are two club related topics to keep in mind for September.

RARC Club Badges:

Thanks to Rob Thomas for his design of the RARC club badge. Rob will also guide us in manufacturing our badges at HackRVA in the coming weeks. You can reserve your badge by completing the form on the club website. <https://rarclub.net/rarc-club-badge/>

Completing the online form helps us to ensure we have the correct name, call sign and spelling. The cost for the badge will be covered by the club. To help us firm-up manufacturing plans, please reserve your badge online by September 15. The only requirements for reserving a club badge are:

1. Must be a club member
2. You must come to the club meeting to pick up your badge

We will let you know when your badge is ready. The process may require us to manufacture the badges in batches. We appreciate your patience as we work through this process.

RARC 2026 Elected Officers and Directors:

RARC officers and directors are to be elected at October's meeting. The slate of candidates nominated by the Nominating Committee will be presented at September's meeting. Additional

nominations may be made from the floor at September's meeting. Thanks to Rick Waller, Bruce MacAlister and Win Grant for serving on the Nominating Committee.
73, Darrell / WW4F

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 September 13th 2025 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

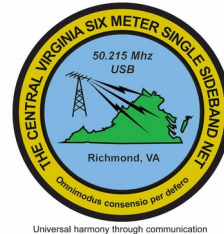
Interested in information or support of the Metropolitan Repeater Association (MRA)?

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/>

Back in Business!

The MRA repeater is back in business and back on the air. Much thanks to all those who contributed to a remarkable effort to make it all happen and all those who donated for the repair.



50.215Mhz @ 8:00am daily

Central VA Six Meter Group Tailgate

Will be held on April 12 and September 13, 2025; 8:00 am to Noon. The fenced rear parking lot of Hatcher Memorial Baptist Church, 2300 Dumbarton Road, Henrico, VA. Located on Clarke Street, between Hermitage Road and Wilson Avenue, directly behind the church building.

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 cost.

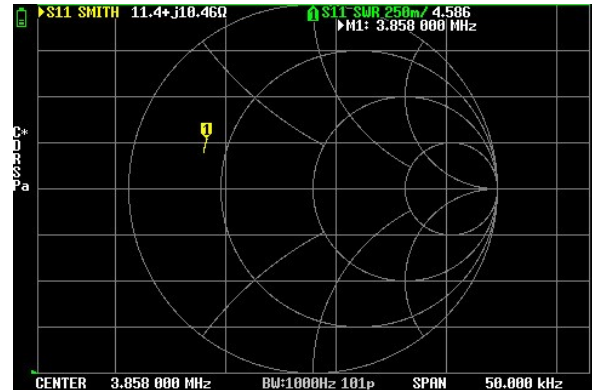
Everyone has a story to share.

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

Complex Impedance Isn't Complex

By Will Jackson KR4CE

I've only taught one Extra class so far and am constantly reflecting on ways to be a better teacher. Something that's a bit of an art is communicating what appears to be scary math concepts into accessible radio concepts. One of these that I often think about is complex impedance, which is expressed as a "complex number". I call this "translating", and this is a useful skill to have as a radio operator. For those who find this weird, when looking at an impedance in the form $Z (\text{impedance}) = R + jx$, a neat trick is that this number tells you three things about how closely your antenna (or other load) is matched. The first part tells you the resistance, and we know this should be as close as possible to 50 Ohms. The second part tells you not only the reactance but is even kind enough to tell you if its capacitive or inductive depending on the sign before the j . Capacitive is negative, and inductive is positive. That's it! That strange format of a number actually combines three pieces of information into one. On my dipole, I swept our Monday night 80 m net frequency (3.858 MHz) with my NanoVNA as an example. The results yielded a $11.4 + j10.46$ impedance. Robert Orndorff W4BNO kindly reminded me to multiply these values by 4 given my 4:1 balun. As such, the result was $45.6 + j41.84$. With the "translation", we know that my resistance is 45.6 Ohms (pretty close), but I do have 41.84 Henries of inductive reactance. This would explain my 4.586 SWR, which is also noted. In reality, my antenna is working great for me, and I do have a tuner. So I could tweak it on the 80 m band, but I don't want to mess with it. Hopefully this goes to show that spending a little time learning terminology can pay off in your radio career. All of us mentors love helping people, and the terminology will pay off big time!



Invitation to Join Dominion DX Group Meeting

**9:00 AM Saturday, September 27th, 2025
For Flex Radio Aurora Presentation**

Flex radio has introduced a revolutionary new radio, the Aurora AU-510 / 520. It is touted as the next generation of technology in the evolution of amateur radio. It packs a 500 watt transceiver, antenna tuner, and power supply in a compact, 18-pound package that will run key-down all day, no problem. Flex Radio's Michael Walker, VA3MW, will Zoom into our meeting to fill us in on all the details of this very interesting new radio. You are invited to join our DDXG meeting at 9:00 AM on Saturday September 27th via Zoom at the link below, or in person at the Deep Run Recreation Center, 9900 Ridgefield Parkway. Hope to see you then.

DDXG is inviting you to a scheduled Zoom meeting.
Topic: DDXG September Meeting via Zoom / Flex Radio Presentation
Time: Sep 27, 2025 08:45 AM Eastern Time (US and Canada)

Join Zoom Meeting

[https://zoom.us/j/98204004280?](https://zoom.us/j/98204004280?pwd=19Vi3qbny66aMoRDo2Alp7uQyHQ8F7.1)

[pwd=19Vi3qbny66aMoRDo2Alp7uQyHQ8F7.1](https://zoom.us/j/98204004280?pwd=19Vi3qbny66aMoRDo2Alp7uQyHQ8F7.1)

Meeting ID: 982 0400 4280

Passcode: 135338

Mentoring 100 New Hams a Year

Richmond is rich in hams. Ken Leidner, WV0L, who loves statistics, counts about 3,000 hams in the metro area and 17,000 in the state. And we seem to license about 100 new Technicians a year yet we don't hear many of them on the air. To fix that we say we need more mentors (aka Elmers), but where do you find 100 ham radio mentors a year?

Accidentally I discovered group mentoring and I think it's an answer, maybe the answer.

When I sent out my "anyone need a mentor?" email to newly licensed hams last winter, Emily Boots, WB4EMY, replied that she did. And she had three or four friends who were part of her Tech class study group who wanted mentoring too. Suddenly I went from one-to-one mentoring, that I was comfortable with, to group mentoring that I was not comfortable with. Time to invent.

I asked what they wanted to know. Here's a partial list:

- What should I buy to get started? And where do I buy it?
- What do I say on the air, how do I find another ham to talk to?
- How do I keep from saying stupid things because I don't know better?

It's now been 9 months since I started group mentoring with this group. (It's all women and they named themselves the "Ham Radio Chicks.") For those of you who are interested in being a mentor to a group, here is what I learned in those 9 months:

- New hams don't have mic-fright, they have saying-something-stupid-on-the-air fright. The solution is practicing simplex communications with each other in a room. When we began using repeaters we got together in a Zoom session. That lets them use Zoom to ask "How do I reply?" "What should I say?" without doing it on the air.
- As one new ham put it "I had learned all kinds of things about radios and passed the exam but I had no idea what a radio really looked like." We solved that by gathering in a classroom and handing out the RARC's loaner HTs unassembled and talking them through putting them together and getting them on the air.
- With guidance from my ham radio friends, I got opinions on what radios and antennas to suggest as starters.
- I found that I don't have to know it all. When I got asked questions I couldn't immediately answer I would see one of them looking it up on her phone. Before the gathering ended they had the answer. They are teaching each other.

As they get more confidence I am seeing them join groups of hams at club meetings, breakfasts, Field Day, and other gatherings. For example, they decided they needed to see ham radio shacks, created a sign-up sheet, and got hams signed up at an RARC meeting. They are now handling the "tour" schedule. They even invited me to come with them if I'm interested!

So, how long do I expect to be mentoring this group? This is new to me but I'm guessing two years. Most are moving to getting their General licenses. That means new subjects like HF transceivers, power supplies, transmission lines, larger antennas, etc. As they get more connections to more hams they need my guidance less but I still expect they will want some until they feel established as HF operators.

Interested in being a group mentor? We have a "crop" that graduated and got licensed in the spring so you can build a group from that. We'll have a fresh "crop" in November. Let me know of your interest and I'll help you find a group that can use your help.

For anyone who signs up to be a group mentor, I will be happy to share the information I passed to my group. It needs some revision from what I learned from them about what was useful and what was not. Group mentoring is fun! It is fulfilling, you feel like you get a lot done. And it's efficient. You help many more new hams than you can with one-to-one mentoring.

73 de Bruce MacAlister, W4BRU

w4bru@arrl.net

Graphic "Chicks-radio-shack-k5htz" is by Kathleen DeMajo Adams, K5HTZ, one of the chicks, and is used by permission.



“Ham Radio Chicks: Radio Shacks’ Tour”

by Nora Pozzi, N4POZ

On October 2024 I got my Technician License after an 8-week course and a most challenging exam, comparable only to my Architecture Board Examinations back in the early 90’s. Little did I know that it would be one of the most important landmarks in my life as I was dreading a slow path into losing my memory as I was entering old age, crossing the 70 year old mark a few years ago. My self-diagnosis proved to be wrong, as my “narrative” did not match the reality of successfully memorizing so many of the 400 exam questions I made myself learn. That motivated me to continue to the next level, passing the General License exam this Spring 2025.

With two Licenses, a Call Sign and a small 5w Baofeng handheld radio, I was ready to start to learn the “ropes” on how to implement everything I had learned. Good try! I was lost in a world and culture I knew nothing about.

A few things helped me to survive the leap into the “real world” of Ham Radio.

The first was the good luck of stumbling into a group of women who had enrolled in my Technician Course (Sandra, Lynne, Emily). I dreaded a two-months course of boring and technical stuff and instead I found a fun group of women who started a “study group” (thanks Lynne), dinners at Joe’s Inn before class and at one of our fellow student’s house (thanks Sandra). We shared life stories as we faced new technical information, we knew nothing about. We asked silly questions to the teacher (George Starke) and supported each other in starting this journey, one that we all began for different personal reasons. From the “General” course at the church, the “Chicks” were joined by two other women: Kathleen and Allison

The second was the good luck of having a “mentor” who selflessly offered to help us make the leap from “theory to practice”. Without Bruce Mac Allister, W4BRU, the head of the Club’s Educational department, I believe we would have drowned in ignorance, lack of stimulus and stifled our progress into becoming active hams with a desire to learn more and be better equipped to communicate on the air.

Bruce adapted to our personal logistics and circumstances. He visited some of us who couldn’t attend his mentoring meetings at his house, offering some of his equipment that he did not use anymore, such as antennas, loaning us radios before we got our own, helping us to download repeaters frequencies into our radios, educating us about the computer programs so we would know how to do it ourselves, and practice in person the “art of communicating on the air”. His role as a mentor was that of empowering us and supporting us in our learning curve. We giggled, and laughed a lot, and we are now learning how to be “net coordinators”, on a net he created for “new hams”. We zoom every week before, during and after the net call, so we can learn “the ropes” on how to maneuver the path of ham radio in real time, how to identify and remember “call signs” (a huge challenge for me) and keep the net flowing smoothly.

One of the things that we created to help us in our “continuing education”, was to organize a “Ham Radio Chicks Shack Tour”, so we could visit the many experienced Ham Operators shacks, and learn from each of them, their equipment, radio rigs and antennas, and personal stories and experiences.

In our last RARC Club Meeting, we presented the idea, and we had a Sign-up form for anybody interested in inviting us to visit their shack. We were happily surprised to see how many Hams were ready to support our plan.

So far, we have visited three shacks: Kathleen Adams who is operating her dad’s legendary rig, then Tom Flippin’s and last Armand Hamel’s shack. *(to be continued in the next newsletter with a description of our “Shack Tour” experience, at each of the shacks, including photos and videos and each of the “Chicks” personal learning from each rig)*

It is with profound gratefulness that I want to thank all and every Ham I have met and talked to, and to the discovery of this new group of Ham Radio amateurs, that strives to be helpful and compassionate towards all and anyone who

wants to learn and/or needs help to address technical challenges in the field. Their sharing of what they have learned themselves without expecting anything in return, just for the joy of giving, is outstanding. I look forward to meeting every Thursday morning at McDonald's, where I have learned so much so far and to listening to their Call Sign on the air.

Nora Vimala Pozzi, N4POZ

vimalap@yogahelps.com

September is [National Preparedness Month](#),

and ARRL is working to arm members with knowledge and resources to be resilient in the face of disaster. Amateur radio serves as a powerful tool and national resource before and [When All Else Fails®](#), but being prepared goes beyond radio. "Being ready to serve your community through ham radio begins with being ready yourself," says ARRL Director of Emergency Management Josh Johnston, KE5MHV. Johnston spent 17 years as a county emergency manager before coming to lead programs such as the ARRL Amateur Radio Emergency Service® (ARES®). "Having a plan and preparing yourself will improve your chances of being resilient in the face of disaster."

ARES works closely with the Federal Emergency Management Agency (FEMA), which has shared this checklist of [12 ways to prepare](#) [PDF]:



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.***

EQUIPMENT REQUEST:

I'm a new Ham part of the Ham Radio Chicks. The original group started during our Technician License Course at the Bon Air Church offered by the RARC in October 2024. Some of us passed the exam and some went on to get the General. One of us is studying to get the Extra. We have invited other new "ladies Hams" to join us, so we are nine in total now.

We are all trying to set up our shacks and could use some unused equipment that most experienced hams may have in their closets, such as antennas, power supplies, coax cables, connectors, etc.

Thank you so much. Nora Vimala Pozzi, N4POZ (vimalap@yogahelps.com)

Thought For The Day

"A clever person solves a problem. A wise person avoids it."

Darrell Basinger	WW4F	President	(804) 219-8167	president@rarclub.net
Lauren Ware	W4LEW	Vice President	(804) 513-4950	vicepresident@rarclub.net
Will Jackson	KR4CE	Secretary		
Ken Leidner	WV0L	Treasurer		

