



THE RICHMOND HAM

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SEPTEMBER 2021

THE RICHMOND AMATEUR RADIO CLUB RARC Meeting Virtually Happening !

Our monthly meeting on Friday September 10th, 2021, will be a virtual one. The Zoom meeting will start at 7:00pm.

Upon joining the meeting you will be muted. You may exchange greetings with members through the chat feature (keyboard).

Cell phone and tablet users please use Landscape orientation for better imaging.

Kenneth Leidner is inviting you to a scheduled Zoom meeting.

Topic: RARC Monthly Meeting - Virtual
Time: September 10th, 2021 07:00 PM Eastern
Time (US and Canada)

Every month on the Second Fri.

Please download and import the following
iCalendar (.ics) files to your calendar system.

Monthly:

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

Join Zoom Meeting

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

Meeting ID: 885 1805 8584

One tap mobile

+13017158592,,88518058584# US

(Germantown)

+13126266799,,88518058584# US (Chicago)

Dial by your location

+1 301 715 8592 US (Germantown, MD)

Meeting ID: 885 1805 8584

Find your local number: <https://us02web.zoom.us/j/88518058584>

Ken Leidner , WV0L

This Month's Program:

This month's presentation will be **Pi-Star Hotspots (A Ham's Personal Repeater)** by **JB Edmonds, N4NQY**.

JB was first licensed in 1972 and has been continually active since then. During his early ham career he was a member of RATS, RARC and VARA. An avid contester, JB is an ARRL member past Trustee of the Potomac Valley Radio Club (PVRC) and his main contest interest is RTTY and 6M contesting. He is active on all bands from 160M to 900Mhz. The station consists of a Flex Radio 6300 and an Elecraft K3, as well as an Icom 7100 (for VHF and UHF contests) and various VHF and UHF radios. JB first became involved in radio Hotspots in 2014 and operates several on all of the popular VHF/UHF modes (AllStar, DMR, D-Star, P25, Fusion, Echolink). His particular interest is Cross-Mode operation and linking of repeaters.

Richmond Amateur Radio Club Meeting Minutes August 13 , 2021

The regular meeting of the Richmond Amateur Radio Club was called to order at 19:04 on August 13th, 2021 on Zoom by President John DeMajo, (K5HTZ) with a Quorum present online.

Members Present: Check-ins on Zoom.

Last month's Minutes - Motion to approve and seconded. Approved unanimously.

Treasurer's Report:

1) Ken Leidner, (WV0L) gave the Treasurer's Report. We had an ending balance of \$1 5,750.72

The Report was approved unanimously by voice vote.

2) 3 new membership applications: Adam Zappe (NU7E), James Campbell (KE4FSN)General, and Wayne Burgess(WA4CHM)Advanced. All were approved unanimously by voice vote.

3) Bruce MacAlister (W4BRU) reported on the License School. Classes will run

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September 13 - November 15 and will start on Zoom with possible in-person if the Church allows it.

4) Ken Zutavern is holding Builder's Group meetings in his garage on Tuesday. Anyone attending must be fully vaccinated. Contact Ken at K4ZUT.ham@gmail.com if you want to join the group.

Adjournment at 07:12

Program: Tonight's presentation was by Fred (AB1OC), President of NASHUA Area Radio Society, 2019 Dayton Hamvention Club of the Year. Fred talked on growing their Club, from 35 to 430+ members in a 5 year period, with focus on STEM, new hams, education, licensing, and youth outreach.

The next general meeting: September 10th, 2021 via ZOOM

Minutes respectfully submitted by:
David F. Robinson, (KJ4LHP), Secretary

From The Prez

The in-person meetings have been postponed for another month because of the uncertainty of the Covid situation, but we hope to have an in-person meeting at BonAir in October.

John DeMajo, K5HTZ

RARC VE News FCC EXAMS EVERY OTHER MONTH

RARC offers VE Testing Sessions on the second Saturday of odd months except June to cover Field Day instead of July.

The September testing session will be on the 11th 10:AM at Chesterfield Library Bon Air Branch 9103 Rattlesnake Rd, North Chesterfield.

Pre-registration Required.

Walk-ins Accepted.

Pre-Registration required for Techs and for special needs applicants. Also 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

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. All meetings will be virtual until the pandemic situation is resolved.

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.

Nets

RARC has the first and only D-STAR digital repeater in the area. 147.255 (+ 600), 443.7125 (+ 5) and now 1284.0000 (-20). In addition to our Wednesday local D Star net (below), we link the D Star VHF module for the National Capital Region D Star Net on Wednesday nights at 9pm. On Tuesday nights at 9pm, we link our VHF module to the North Carolina D Star Net, and on Sunday nights at 9pm to the South Eastern D Star Weather Net.

Beginning on March 5, 2014, the RARC D Star Net which meets on Wednesday nights at 8:00pm will be accessible on our three D Star modules, all of which will be linked.

You can use any of the three frequencies, 2 meters, 70 cm or 23 cm, and you should hear and be heard by everyone.

If you participate in the net via DVAP or DV Dongle, you must link your device to Ref 062D rather than to any of our modules. Since the W4FJ stack will all be linked to Ref 062D, anyone linked to that reflector will be connected to the net.

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
	8:15 pm	145.730	Packet

MRA

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

Call Ed, KG4SNK, at 804-513-1947. The sole business of the MRA is to own, operate and maintain the 145.430 repeater.

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!

RARC ELMER PROGRAM

Over the last few years, our license school and volunteer examiner programs have added many new hams to the ranks. When asked about the services they receive from the club, many new hams say that they need some further help in order to set up a station and to feel comfortable in communicating on the air.

To this end, it has been suggested that we place more emphasis on helping newly licensed hams gain the confidence and technical help that they need to get started. Suggestions have centered around the need for a formal Elmering program. In order to fulfill that need, we would need a committee of volunteers who would be willing to help, on an as-needed basis, one or two new hams per Elmer. This would involve possibly a few Zoom sessions, and perhaps answering an occasional question. To assist new hams, and minimize the need for help by the Elmers, we will be designing a kit of material that will be issued to anyone who obtains a technician license through our programs. It will include items such as a script that could be followed when attempting to use repeaters, a chart of allowable frequencies and modes, an explanation of how to program a VHF/UHF radio, and most importantly a membership application to the RARC.

Along with the kits, we would like to establish a pool of persons who would be willing to assist these new hams while they are getting started. Any member who would be interested in helping in this way, please contact Bruce McAlister, W4BRU.

RARC Elections

As required by the By-Laws, the Election of RARC Officers for 2021 - 2022 will be held at the regular October meeting. Nominations of the Nomination Committee are published in the September edition of the Club Newsletter with any additional nominations from the membership accepted at the October meeting.

Instillation of new Officers is then conducted at the regular November meeting.

This year the Nominating Committee has endorsed the following to serve for the 2022 term:

President: John DeMajo, K5HTZ
Vive President: Allan Johnson, WA3J
Secretary: David Robinson: KJ4LHP
Treasurer: Ken Leidner, WV0L
Director: Robin Jones, KM4TWQ
Director: Joey Hairfield, WJ3H

Mac McNeer, K4YEF, Chair, Nominating Committee

W4FJ D Star Repeater Upgrade

The W4FJ D Star repeater went on the air in 2008 as the area's first digital repeater. The VHF repeater was located at Bon Air United Methodist Church and had a limited coverage area given the antenna elevation. A few years later, the repeater was moved to a down town location on the roof of what is now the Virginia Lottery headquarters with an elevation of 320 feet above average terrain. Over the years, UHF and 23 cm modules were added along with a gateway connection that allows hotspot users with an internet connection to connect directly to any of the three modules and for the repeater modules to link to reflectors.

We have over 300 registered users on W4FJ. While not all of these users are in the area, for most of the registered users, W4FJ is the closest D Star repeater to their QTH. We have been very fortunate that many of the big ticket items that make up the repeater were contributed to the Club, and our ongoing

expenses have been close to zero for many years. For some months, we have had intermittent problems linking the repeater modules together for the RARC D Star net on Wednesday nights at 8:00 pm. A few weeks ago, we lost our internet connectivity completely and the problems appeared to be related to the computer which serves as the gateway device between the repeater controller and the internet. That computer was a used one when we acquired it about five years ago.

I'm pleased to report that the RARC board of directors approved a request to fund a replacement for the gateway computer. It took some heroic efforts on the part of Jim Bates, K8OI, to configure the device, but it was installed on August 26, and is working great. We encourage members to use the D Star repeaters and participate in not only our Club's Wednesday net, but various other nets which we link the

VHF module to every week, the details of which can be found in the RARC monthly newsletter. And remember that almost all of the Pi-Star based hotspots allow those with a D Star radio, hotspot and internet connection to use the repeaters from anywhere in the world.

Win Grant
W4WIN

Sailing Vessel with Ham Radio History Marks 100 Years

The schooner *Bowdoin* is a century old this year. Now owned by the Maine Maritime Academy (MMA) as a training vessel, the ham radio history of the 88-foot (LOA) *Bowdoin* is often neglected. Constructed in Maine specifically for Arctic exploration, the vessel relied on amateur radio for communication during explorer Donald B. MacMillan's Arctic Expedition of 1923 and on the MacMillan-McDonald-Byrd Expedition of 1925 -- thanks in part to ARRL co-founder Hiram Percy Maxim, W1AW. The venerable



vessel, the official vessel of the State of Maine and the [flagship](#) of Maine Maritime Academy's Vessel Operations and Technology Program, recently underwent a complete hull restoration and refitting and has done a little touring to mark its centenary. Its home port is Castine, Maine.

The longwave transmitters MacMillan used on his earlier missions had proved "unable to penetrate the screen of the aurora borealis," ARRL historian Michael Marinaro, WN1M, explained in his article, "Polar Exploration," in the June 2014 issue of *QST*. In 1923, MacMillan turned to ARRL for help in outfitting his next expedition with better wireless gear. Marinaro recounted, "It was enthusiastically provided." Maxim and the ARRL Board recruited Donald H. Mix, 1TS, of Bristol, Connecticut, to accompany the crew as its radio operator. M.B. West, an ARRL Board member, designed the gear, which was then built by amateurs at his firm, Zenith Electronics. The transmitter operated on the medium-wave bands of 185, 220, and 300 meters, running 100 W to a pair of Western Electric "G" tubes. Earlier exploratory missions had used gear that operated on longwave frequencies. The shipboard station on board the *Bowdoin* was given the call sign WNP -- Wireless North Pole.

"WNP transmitted weekly 500-word press releases and listings of stations worked and heard," Marinaro

said. "Once received by amateur stations, these reports were delivered to local affiliated newspapers of the North American Newspaper Alliance; from there, they were distributed syndicate-wide by telegraph."

MacMillan's subsequent attempt at the North Pole centered around wireless. The objectives supported by the Navy and the National Geographic Society were to determine the full capabilities of radio north of the auroral belt and to explore the northern reaches by air. The outstanding accomplishment of the 1925 expedition was in the sphere of radio. Utilizing shortwaves, the expedition was in consistent contact with the outside world throughout the journey, to the delight of the amateurs who were able to work them. The phenomenal success proved to the Navy that shortwaves were definitely superior to the longwaves and ultra longwaves that fleets had been using.

ARRL Newsletter



ON BOARD THE "BOWDOIN," AFTER UNPACKING THE EQUIPMENT from a mountainous pile of packing cases. Left to right, F. H. Schnell, ARRL Traffic Manager; D. H. Mix, WNP's operator; K. B. Warner, Editor of "QST"; M. B. West, Zenith engineer who designed the installation; and Dr. MacMillan, the "Bowdoin's" skipper.

The SWAP SHOP

Club members may list their wares in the newsletter. Send descriptive information to Armand at wa1uqo@arrl.net, 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.**

The Richmond Amateur Radio Club has a set of original complete years of QST from 1925, 1927, 1928, 1929, 1930 and 1931, available for sale in ARRL binders, for \$25 per year. We also have a 20Mhz oscilloscope for sale. Proceeds of sales go directly into the RARC club treasury. These old issues of QST are priceless for anyone interested in the history of ham radio and are being offered for way below what QSTs are selling for on EBAY.

Contact John DeMajo, K5HTZ (jdemajo@demajo.net) if interested.

For Sale: Yaesu 857 with LDG YT-100 Autotuner. \$700.00 Contact David Robinson at (804) 833-3351 or thedarbinian@comcast.net.

Thought For The Day

Don't base your decisions on the advice of those who won't have to deal with the results.

John DeMajo	K5HTZ	President	(504) 858-7689	jdemajo@demajo.net
Allan Johnson	WA3J	Vice President	(804) 318-6951	wa3j@arrl.net
Dave Robinson	KJ4LHP	Secretary		
Ken Leidner	WV0L	Treasurer		

