



THE RICHMOND HAM

Published Monthly by the Richmond Amateur Radio Club

P.O. Box 35279, Richmond, Virginia 23235

March 2023

THE RICHMOND AMATEUR RADIO CLUB RARC Meeting Virtually Happening and in person!

Our monthly meeting is on Friday March 10th, 2023, 7:00PM, at the Bon Air United Methodist Church, 1645 Buford Road, and also 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:

March 10th, 2023 07:00 PM Eastern Time (US and Canada).

Every month on the Second Fri.

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

Monthly:

https://us02web.zoom.us/meeting/tZwoduGoqzMvEtBdpM3wG1LJ7Ro1ZcdB0qf1/ics?icsToken=98tyKuGgqzoiGtGdtRGDRpw-GYj4WfTwmFxyj7d_mA_IUDd0My_cYdBNY4h8FPqA

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/kbj882gslc>

Ken Leidner , WV0L

This Month's Program:

March Program: "How to hook your radio to a computer for logging and digital modes." Many hams have their radio connected to a station computer for logging and digital modes. Many do not have them connected and want to know how to do it. A few have the connection but don't know how to fix connection problems when they occur. Bruce MacAlister, W4BRU, will cover:

Connecting for digital modes – PSK, FT8, JS8CALL, etc – the simplest connection.

Logging assistance, having information from the radio sent directly to the computer logging app.

Computer control of the radio in order to – whatever.

Station control from another location such as your cottage in Aruba.

Some of this can be demonstrated at the meeting and some will be by slides.

Richmond Amateur Radio Club Meeting Minutes

February 10th, 2023

The regular meeting of the Richmond Amateur Radio Club was called to order at 19:07 on February 10th, 2023 on Zoom and in-person by President Rick Waller, (KA4OHM).

Members Present: Check-ins on Zoom and in-person at the Church plus four visitors, David Haywood (KQ4EJJ), Kevin Hines (KO4CTL), Carl Cash (KF4UBE) and Nathaniel Wooley (W1OLE).

After a brief introduction of members present the business meeting was called. Minutes of last months meeting were approved unanimously.

Old business: None

Treasurers Report: Ken Leidner, (WV0L) gave the Treasurer's Report. We had an ending balance of \$20,809.16. New member Brook Estes (WF4J) voted in unanimously. Welcome Brook!

New Business: Rick (KA4OHM) mentioned that he had been contacted by Sports Backers with an interest to having the club provide communications for its events.

THE RICHMOND HAM March 2023

John De Majo proposed that the club acquire some basic test equipment that could be loaned out to new Hams to help them in setting up their station. Enough Board members were present to approve the motion to purchase.

Dave Stevens (WB4DES) asked for volunteers to assist with a demonstration at the Hopewell Middle School and to help teach a Technician class there in March.

Bruce Mac Alister (W4BRU) showed changes to the RARC website concerning this semester's registration and classes.

Business Meeting was closed at 19:21.

Rick, (KA4OHM) asked the members about any recent interesting radio related activity and gave an explanation of what a Dxpedition is.

A presentation followed by Rick (KA4OHM) entitled "Transmission Lines 101".

Meeting adjourned at 20:09

Meeting minutes submitted by A.Hamel, WA1UQO.

From The Prez

Greetings RARC members. The Richmond amateur radio community has been approached by Sports Backers, the organization that puts on the monument Avenue 10K and Richmond Marathon, to provide amateur radio communications for the 10K on 4/22/23. Sports Backers has not previously had amateur radio communication support for these events. They have learned about the value of amateur radio communications support from other race organizers. I have met with the race organizers. Jim Rubin, W4PKR is taking on a leadership role moving forward. Thanks to Jim for stepping up. I have also talked with Jeff Walton, KN4SYE, President of RATS. The two clubs will participate jointly. We will likely need at least 20 amateur volunteers. This is a good opportunity to publicize and demonstrate the value of amateur radio in our community. Please let Jim Rubin know if you wish to volunteer as soon as possible. 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 March 11th. 2023.**

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 Hwy 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.

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) to REF 062A for the National Capital Region D Star Net on Wednesday nights at 9pm. On Tuesday nights at 9pm, we link Module C (VHF) 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 062D. 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 062D 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
	8:15 pm	145.730	Packe

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/>.

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!

Middle School Radio Camp

On March 20 to 24 the Carter G Woodson Middle School in Hopewell will have a radio camp. It will be taught by RARC members. It came out of the year-long teaching that RARC instructors gave to prepare the sixth grade science classes for the 2022 ISS contact. After the contact I said – kind of offhandedly – that we could teach a class or something if any students were interested in getting their licenses.

Surprise! Several students told teacher Alexandra Perry, the initiator of the ISS project, they they were interested. The school set up the intercession camp “Becoming a Radio Amateur Operator” and got \$800 from the school system to fund it. It will be led by Dave Stevens, WD4DES. Mac Lyle, K4ZX, who handles the ham station at the Goochland Scout camp, will assist with content and teaching as he can, given that he works full time. Several RARC instructors will teach modules as assigned.

We do not know how many students will sign up and we do not know how many will study hard enough to get their licenses, but it’s a start on getting new, young hams. We didn’t want to pass up that chance.

Bruce MacAlister, W4BRU



**QSO Today Virtual Ham Expo
Will Return
March 25-26, 2023**

The QSO Today Virtual Ham Expo is the first and only on-line amateur radio convention, since August 2020.

For more info visit <https://www.qsotodayhamexpo.com/>

John R Carson



John Renshaw Carson was a transmissions theorist who worked to develop early communication systems. He was also the inventor of the single-sideband modulation.

Carson was born on June 28, 1886 in Pittsburgh. He received his bachelor's of science degree from Princeton University in 1907, and went on to attend the Massachusetts Institute of Technology in 1907.

THE RICHMOND HAM March 2023

Carson decided to return to Princeton after spending one school year at MIT. He received his engineering degree in 1909 and a master's of science degree in 1912. Upon graduation, Carson worked as an instructor in Electrical Engineering and Physics at Princeton. He remained there until he joined American Telephone and Telegraph (AT&T) in 1914.

Much of Carson's research at AT&T focused on early radio telephone experiments. In 1915, in invented the single-side modulation. This technology allowed for the transmission of multiple telephone calls simultaneously within one electrical circuit. Carson installed this system, the first of its kind, between Pittsburgh and Baltimore. Between 1917 and 1925, Carson also studied the effects of filters on amplitude modulation, which would allow telephone system designers to predict whether or not crosstalk would occur between multiple calls over a single set of wires. In 1922, Carson introduced the Carson

Bandwidth Rule, which presented a mathematical analysis of frequency modulation (FM). Four years later, he published his book, *Electrical Circuit Theory and Operational Calculus*. Carson left AT&T in 1925 and joined [Bell Laboratories](#) as a mathematician and electrical engineer. One of his most notable accomplishments at Bell Labs was his mathematical analysis of [George C. Southworth's](#) 1932 waveguide experiments. Carson remained at Bell Labs until 1940.

Carson received the IRE [Morris N. Liebmann Memorial Award](#) in 1924 for "his valuable contributions to alternating current circuit theory and, in particular, to his investigations of filter systems and of single side band telephony." In 1939, he received the Elliott Cresson Medal from the Franklin Institute. He was also the recipient of an honorary Doctor of Science degree from the Brooklyn Polytechnic Institute (1937). Carson died on October 31, 1940.

The SWAP SHOP

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

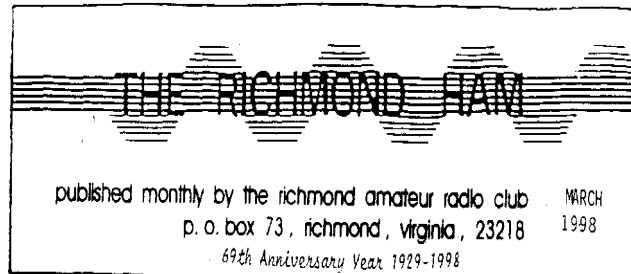
Thought For The Day

A smart person knows what to say, a wise person knows whether to say it or not.

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		



Your Newsletter 25 Years Ago



W4ZA Repeater - 146.34/.94

MEETING NOTICE: THE RICHMOND AMATEUR RADIO CLUB WILL MEET FRIDAY THE 13TH
8.00PM AT THE BONAIR METHODIST CHURCH ON BUFORD ROAD.

PROGRAM: HI VOLTAGE SAFETY... STEVE STANLEY, an engineer with VIRGINIA
POWER, will discuss protection from electric lines, towers,
wires. etc. He will use demonstration and videos.

HAMFEST: SUNDAY APRIL 5th Raleigh, North Carolina . State Fairgrounds
I-440 Hillsborough St W. Jim Graham Bldg. TI 146.64 8.am-4.pm
STATE CONVENTION. Forums (DX,ARRL, MARS, ARES) VE session 11.am

VE EXAMS: SATURDAY APRIL 4th 9.00AM at the JOHN TYLER Community College
Chester, Va. Pre-register with TONY AMATO, KR4Q, at 717-5237
enter #999 Leave your name, fone nr. and other details.

VE EXAMS: SATURDAY APRIL 11th 9.00AM at the J.S.REYNOLDS College
on E. Parham Road. Pre-register with PAT WILSON, N4PW,
at 804-932-9424 or Ray Roberts, W4MY1, at 740-5850

LICENSE CLASSES: The February 19th V Exams at the Westhampton School
saw three new Licensees, one upgrade, and one with an
element Certificate. TONY AMATO, KR4UQ, will return
with his VE Team on Thursday 19 March to give exams
to the remaining students.

We are very grateful to TONY AMATO, KR4UQ, for making
it so convenient by coming to the school site with
his VE Team.

TEN-TEN NET: WEDNESDAYS at 7.00PM on 28.470 MHz. LUKE BANNISTER, AD4MG is NCS.

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THE RICHMOND HAM March 2023

REPEATER NEWS: MONDAYS at 9.00pm .tune to the 145.511 repeater.
JIM FITZGERALD, K4OJE, is the Newscaster. He will give news of Club programs and other items of interest

N.Y.TIMES: HAM RADIO makes the TIMES. The March 5th edition of the TIMES carried a half-page article entitled "HAM RADIO, Version 2.0 Email, satellites all with a handheld \$250 radio. "Practitioners are mainly the over-40 crowd. people who were bitten by the radio bug before the computer and internet revolutions." There is a quote from the ARRL, a story about KB1SF, Keith Baker Vice Pres. of AMSAT. with his foto in his "shack". GREAT publicity for ham radio.

SATELLITE CONSTELLATIONS. With over a thousand satellites now in orbit, and another thousand scheduled for launching in the next few years...there are problems of adequate frequencies, operation over and into developing countries, interference between geostationary and low-orbit satellites, etc
Teledesic Corp is proposing a \$9 billion system of over 300 satellites Bill Gates of Microsoft and Craig McCaw of McCaw Cellular manage and finance the system. The altitude of the "birds" will be under 875 miles. Boeing has the entire contract to build and operate the system. Boeing invested 100 million itself. When operational in 2002 it will be a world-wide "internet in the sky". 100 per cent of the Earth's population will be able to obtain two-way broadband access with each other. The uplink frequency channel is 18.8 to 19.3 gigahertz. The downlink channel is 28.5 to 29.1 gigahertz. The uplink will be affected by rain. The need for laying optical fibre thruout every area is eliminated. Thus AT&T invested \$130 million for 13% ownership of the system. Users will be able to downlink data at a rate of 64 megabits p/sec.

JOIN THE RICHMOND AMATEUR RADIO CLUB

Dues	\$15.00
Family	20.00
Under 18 or over 65	10.00

73

Walt Wessell

Martin Gary, W2MG
Vice-President

WALTER WESSELL, KC4PQM
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