



THE RICHMOND HAM

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P.O. Box 35279, Richmond, Virginia 23235

July 2020

THE RICHMOND AMATEUR RADIO CLUB RARC Meeting Virtually Happening !

We are meeting in one place for sure and another if we can.

Our monthly meeting on Friday July, 10th, 2020, 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.

We will meet at the same time on the Chesterfield repeater - if we can.

147.3600 +0.6 MHz CSQ / 74.4 Chester
(We considered 146.88 and 145.43. A regular net meets at that time on 146.88. We found that hams in the most southern and southwestern parts of Chesterfield and in Powhatan can't reach 145.43.)

This Month's Program:

This month's presentation will be on a new and inexpensive NANO antenna analyzer that has some neat features.

Richmond Amateur Radio Club June meeting minutes

The regular meeting of the Richmond Amateur Radio Club was called to order at 19:00 on June 12th, 2020 on Zoom by President John DeMajo, (K5HTZ).

Members Present

Roll called on air by Tom Flippen (KD4CMK)

Last month's Minutes – Approved unanimously.

Treasurer's Report

1) Ken Leidner, (WV0L) gave the Treasurer's Report. We had an ending balance of \$12,901.51. The Report was approved unanimously.

2) Ken presented new membership applications: Robert Bohmer (KM4BHT), accepted unanimously.

Committee Reports

- 1) Builders Group is meeting on ZOOM. Contact Ken Zutavern (K4ZUT) for details
- 2) The Club station is back online
- 3) .Show and Tell: President John DeMajo brought a 1925 RCA tube type portable radio, the first truly portable radio

Adjournment at 07:33

Program

Doctor Rick Waller (KA4OHM) presented "Electromagnetic Radiation's effect on the human body"

The next general meeting: July 10, 2020 via ZOOM

Minutes respectfully submitted by:

David F. Robinson, (KJ4LHP), S

From The Prez

Greetings,

Despite the continued constraints on the club with regard to in-person meetings, I have some important news to impart this month. First, the board has approved the rental of a small storage unit for the purpose of safely and centrally storing the 100 years of historical records that have been passed from one president to another over the years. The material will be organized and placed in file cabinets so that it will be available to future generations. We may, if volunteer help can be found, begin to digitize records as well so that we will have a backup in the event that the originals are ever destroyed.

At the same time, the board intends to use this storage space to house equipment that is given to the club, and material that can be sold or

auctioned. Over the last year, we received a large quantity of parts and equipment donations which have to be stored until we can dispose of them through auction. Our planned May flea market had to be cancelled this year due to the Covid-19 lockdown. At this time, we have decided not to prolong the suspense, so we are going to offer a series of on-line auctions wherein members can bid on items that the club wishes to place into good homes. The first of these auctions will go "live" with the circulation of this newsletter. It will end at 12:00 Noon on Saturday, July 18th. Anyone wishing to review the items for sale and to bid, can go to the club website at www.rarclub.net where you will find a link to the auction page. Simply use the button on the auction page to email your bid on any item in to the treasurer. Winners will be notified by email as soon as possible after the auction closes.

Our monthly meetings on Zoom have been going well, and the club has now purchased a license for Zoom in order to allow our instructors to conduct license classes via Zoom. Bruce W4BRU will have more to say about that, so be watching for info on the school activities. Our last

meeting was videoed, and you can see that meeting, along with several previous meetings and presentations, on the club's YouTube channel. The link to our channel is posted on the club website. We are able to again feature educational presentations as part of the Zoom meetings, and I want to thank Dr. Rick Waller for his informative presentation last month, and this coming meeting will feature a presentation on a new and inexpensive NANO antenna analyzer that boasts some really neat features. Please be sure to join us on Friday July 10th at 7:00 pm. Instructions for Zoom are posted on the website.

Don't forget to check out the various nets that are offered, and enjoy the rest of the summer.

73,

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 July testing session is cancelled due to the lock down situation.

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.

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 \$20.00

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!

A HISTORY OF NATIONAL RADIO INSTITUTE

By John DeMajo, K5HTZ

National Radio Institute was a privately owned and operated "for profit" trade school based in Washington, D.C. The school was founded in 1914 as The National Radio School, an on-campus institution for post-secondary school training of radio technicians and operators. James Ernest Smith (1881-1973), the original co-founder with Emmanuel R. Haas, was a graduate of Worcester Polytechnic Institute (B.S.E.E.). He previously was employed by Westinghouse, and he entered the education field when he first substituted for an ill instructor at McKinley Manual Training High School, and was shortly thereafter offered a permanent teaching position. Soon, students began coming to Smith for private instructions on material more advanced than what was being offered in the high school.

Smith realized the potential and soon rented a room in a local movie theater building, where he established a small school able to handle four students. He hired another instructor, Albert Dowie, who remained as the school's chief instructor until his death in 1958. Co-founder Emmanuel Hass was an employee of the theater, the person who was able to offer the space for the school, and he remained as V.P. and business manager for the school.

During World War I, Smith was asked to organize training programs for the military at both Howard and Yale Universities. At the end of the war, Edward Degener joined NRI as the advertising manager, and began performing many of the duties of Haas, who was on leave of absence.

The school attracted many students, and it was soon moved to larger quarters and renamed National Radio Institute. In 1923, a decision was made to eliminate on-campus classes, and to offer training to a much larger potential student body through home study programs. Throughout the next four decades, NRI produced many of the engineers and technicians who worked in the radio industry. The school advertised heavily in magazines such as Boys' Life, Popular Science, Electronics Illustrated, and others. This was responsible for attracting most of NRI's students in that era.

In 1947, Hass died, and his responsibilities were passed down to Smith's son James Morrison Smith. The elder Smith retired in 1956 at the age of 75, turning over the presidency to his son. The following year, a new 56,000 square foot building was erected on Wisconsin Avenue in Washington, in which it remained until its closing four decades later.

NRI was famous for the introduction of its CONAR (**C**ompany **N**ational **R**adio) kits which allowed students to build their own test instruments, TV sets

and radios as part of their training. It is believed that the success of the CONAR model was the basis for the idea of kit sales to the public by companies such as Heathkit, Allied Radio and EICO.

IN 1967, McGraw-Hill Publishing bought NRI, thereby allowing NRI's technical material to be sold through books published by the company. NRI was renamed The McGraw-Hill Continuing Education Center. The younger Smith retired in 1976, and he was succeeded by Jack Thompson and Edward Beach. The last director was Nick Maruhnich who held the post until 1999. He was also a senior VP for McGraw-Hill's Special Projects Division. The school's enrollment peaked at 80,000 in the 1980s, and it is credited as the first school to offer students a digital computer as part of their training.

By the 1990s, market and economic forces had weighed heavily on NRI, and the school was forced to close in 2002. Nevertheless, what once began in a small room behind a Washington D.C. movie theater, remained, throughout the 20th Century as one of the great institutions in the field of electronics and radio in America.

Note: Much of the information contained in this article is from Wikipedia (www.wikipedia.org) and from NRI documents contained in the library of the Museum Of Yesterday (www.MuseumOfYesterday.org).

The National Capital Radio and Television Museum (nctv.org) in Washington D.C. currently serves as the official repository for the files of the National Radio Institute.

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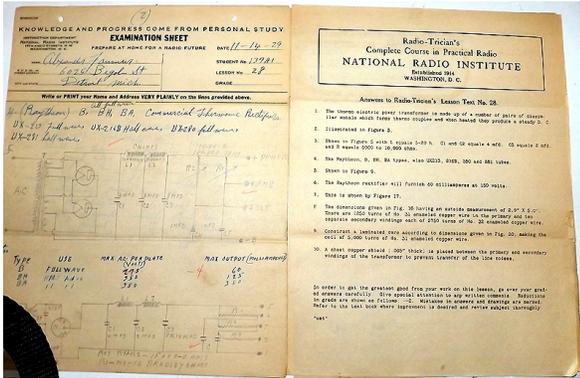
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Actual examination sheet from NRI "Radio-Trician" course.



One of the many kits offered to NRI students as part of their training.

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.**

Wanted: sub-miniature electron tubes military surplus of the types JAN-CK6418 and JAN-CK6206 or equivalent pentodes with 1.25 vdc filament voltage rating. Will buy or trade.
Contact Alex Sahhar KN4QGQ at agsahhar@gmail.com

For Sale: Kenwood TS430s, PS430 power supply and AT250 antenna tuner for sale \$950 plus shipping in US. It passed all the tests, USB, LSB, CW & AM on the Ham bands. Bought new in the box, 1984. call Bruce Haynes at brucehaynes@comcast.net

Cushcraft A4S 20-15-10 Beam Antenna <https://www.cushcraftamateur.com/Product.php?productid=A-4S>. A4S is the true, high performance tribander for 2-15-10. Precisely tuned high-power traps, carefully selected element lengths, and proper spacing combine to make the A4S the preferred antenna for your HF work! This is the premium antenna with all the features that you want. High gain, low SWR, and wide bandwidth keep the contacts coming in. All U-bolts, clamps and hardware are stainless steel. A4S has pinned boom sections and formed aluminum brackets to keep elements straight in all conditions. Our solid construction keeps the A4S on the tower! The antenna is only 2-years old and is ready for immediate pick up at my QTH. I am asking \$450.00 . Please contact me at 804-730-0221 or e-mail me at kj4it.jw@gmail.com 73, Jerry KJ4IT

2225 Tektronix Analog Oscilloscope: The Model 2225 is a 50 MHz analog oscilloscope from Tektronix. Measure voltage or current signals over time in an electronic circuit or component to display amplitude, frequency and rise times, etc. Applications include troubleshooting, production test, and design. This scope comes with an operating manual, and 10:1 Scope Probe. I am asking \$275.00 . Please contact me at 804-730-0221 or e-mail me at kj4it.jw@gmail.com 73, Jerry KJ4IT

I am selling a GE MVS 40w 2 meter radio with APRS cable mod, Garmin marine GPS, TinyTrak3 interface module and home built MVS programmer / tinytrak programmer. This is a complete functioning system; just connect to an antenna, plug it into a cigarette lighter and it's on the air. It is currently programmed with my call sign; I could tell you how to reprogram it with yours. \$150. Call John Harlow @ 804 464 8248.

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 B&K 15Mhz oscilloscope for sale \$40. 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.

Thought For The Day

“As I grow older, I pay less attention to what people say...i just watch what they do.”

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		

Heathkit job interview:

