



THE RICHMOND HAM

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March 2020

THE RICHMOND AMATEUR RADIO CLUB will meet Friday, March 13th 2020, 7:00PM, at the Bon Air United Methodist Church, 1645 Buford Road.

Coming Events:

RARC VE testing session March 14th

RARC Fleamarket May 9th

Virginia QSO Party March 21-22

This Month's Program:

Will be on AM/FM Broadcast Hybrid Digital Radio and a TV repack update by Mike Friedman, W4MAF

John DeMajo (K5HTZ) gave a short report from Mac Lyle that the boy scouts bankruptcy filing would not affect the local troop or his radio club station plans.

Adjournment: Motion to adjourn was given and seconded.

Meeting was adjourned by voice vote.

Program

A presentation on 5G wireless technology was given by Bruce Mac Alister, W4BRU

The next general meeting will be held at 19:00 on March 13th, 2020 at Bon Air United Methodist Church.

Meeting Minutes February 14, 2020

The regular meeting of the Richmond Amateur Radio Club was called to order at 19:00 on February 14th, 2020 at Bon Air United Methodist Church by President John DeMajo, (K5HTZ).

Members Present

All present signed RARC Log Book

Last month's Minutes – Approved unanimously.

Treasurer's Report

1) Ken Leidner, (WV0L) gave the Treasurer's Report. We had an ending balance of \$12,314.39. The Report was approved unanimously.

2) Ken presented new membership applications: Richard Champigny, John Kirby, K4TAO, Bernard McGroarty, KO4AYB, John Thomas JR, KO4AXW and Jefferey Walton, KN4SYE

All were accepted unanimously by voice vote.

Committee Reports

Win Grant (W4WIN) gave a report that the legislature had agreed to the provision in the distracted driving law that CB and Hams were excluded. He went on to say that we would deal with the city ordinance if that became an issue.

From The Prez

Our organization has recently been the recipient of contents from several successions. I want to thank the estates and heirs of silent key members Morris Goldberg KD4YCP and Bob Talbot, KC4PKB for remembering the Richmond Amateur Radio Club with equipment that will be passed on to those who will appreciate it. We also received a donation of vintage electronics text books which were made possible through the efforts of Gene Damon K4GNE, and there is a distribution from the succession of Harry Miller, which is still in probate.

These donations aid the club through providing revenue at our flea market sales. Our next sale is scheduled for Saturday, May 9, 2020 at Bon Air Methodist Church. In addition, equipment can be passed on through our outreach program to organizations such as the Boy Scouts, high school radio clubs, and such. These gifts help to provide the ham radio experience to young people who might otherwise never experience the joys of our hobby. On that same subject, I am happy to announce

that we have been contacted by an instructor with the Richmond Public School system, and asked to work with them on possibly starting ham clubs in a couple of the high schools. I will have more on this later, but at least we are seeing interest in the schools toward presenting Ham Radio to students.

RICHMOND THE HAM March 2020

Finally, we still have several openings for presentations at our monthly meetings. If you would like to share your knowledge with other members, please sign up for a presentation.

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 March testing session will be on the 14th at the Bon Air United Methodist Church, 9 AM.

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!

Virginia QSO Party !

Never too early to plan ahead. The Virginia QSO Party will be on the weekend of March 21-22. Details can be found here,

https://www.qsl.net/sterling/VA_QSO_Party/2020_VQP/2020_VQP_Main.html

Distracted Driving Legislation Update

For the last few years there have been bills introduced in the General Assembly to amend the current distracted driving statute. The impetus for the legislation is the use of cellphones and texting in particular. In prior years, individual hams and ham clubs (including RARC) reached out to legislators and spoke at committee hearings to insure that ham radios were not swept up in legislation that was prompted by a very different technology. Two years ago, we were successful in getting one of the bills to include a specific exemption for ham radio, but the legislation was not enacted. This year there were multiple distracted driving bills introduced, all very similar, and all with a specific exemption for amateur and citizens band radio from the outset. I think our efforts in prior years paid off.

One bill has been approved by both the House of Delegates and Senate, and the final version retains the exemption for amateur radio. The legislation is awaiting signature by the governor who must act by April 6, 2020. Given the large majorities by which the legislation passed the General Assembly and the governor's prior commitment to enacting this legislation, it is almost a certainty that the legislation will be enacted.

The new distracted driving legislation has an effective date of January 1, 2021 at which time the current legislation will be repealed. This is good news for amateur radio operators. Stay tuned for more details once the legislation is signed by the governor.

Here is a link to the final version of H 874.
<https://lis.virginia.gov/cgi-bin/legp604.exe?201+ful+HB874ER>

Win Grant,
W4WIN

Spring Radio School Registration Closed

Fifteen folk signed up to become new hams by taking the Technician class taught by George Starke. We did not have enough students for any of the other classes or seminars. That usually doesn't happen in the spring. Maybe it was the not-really-winter season we had.

The following article is offered to anyone who may have purchased a vintage radio at the recent FrostFest.

SO YOU BOUGHT AN OLD RADIO!

Here is what you need to do:

NEVER NEVER plug a vintage radio into power until you have performed the following checks and replacements. The chances of electrolytic filter capacitors being bad increase 15% for each decade of age. As a basic precaution, always replace electrolytics on any radio over 15 years old. If the capacitor is open, you will throw pulsating DC on components, which could possibly damage them. In the case of a shorted capacitor, it could result in a destroyed power transformer, rectifier tube, burned resistors, or worst case, an explosion or fire.

It is also a good idea to replace any paper and wax capacitors, or any "bumble bee" capacitors, especially if they are anywhere in the B+ chain.

Always replace the coupling capacitor between the first audio and the audio output tube. A leaking

capacitor here can result in damage to the output tube if plate voltage is transferred to the control grid of the output tube.

Inspect all wiring, including chassis wiring, line cord and plug for deteriorated insulation. Pay attention to line cords as line cords on some radios from the 1930s and 1940s had filament ballast resistor windings incorporated into the line cord. Some older cords also contained asbestos insulation, so these must be dealt with under proper protective procedures.

Dial cords are usually bad after 50 years. Expect a broken dial cord to occur if it hasn't already. Make a drawing of any cord configuration so that it can be duplicated if cords need to be replaced.

Test all tubes if possible. A shorted tube can be just as detrimental to associated circuitry as a shorted capacitor or other component.

DO NOT attempt adjustment of IF transformers, RF or Oscillator coils until the set has been fully checked, re-capped, and tested for basic operation.

In the case of Electro-Dynamic speakers, assume a shock risk is possible. If the field coil is deteriorated, and shorts to the frame of the speaker, you could be subject to a shock at full plate voltage if you touch between the speaker frame and the radio's chassis. Verify with a volt meter that the speaker is clear before touching components.

When applying power to a radio for the first time (assuming that you have completed the suggestions above) it is wise to power the set at reduced voltage. By using a Variac transformer coupled with an ammeter, you can generally see if a set is going to draw excess current before you apply full voltage. This will usually prevent substantial damage, while still alerting you that there is a problem remaining.

In the case of series string sets, it is advisable to replace any non-polarized line cord plug with one that has modern keyed prongs (neutral prong larger than hot prong) so that the cord can't be reversed in an outlet. This is one way to prevent 120 volt power from being applied to the chassis frame. "Hot Chassis" radios should, whenever possible, be serviced and even operated permanently through an isolation transformer.

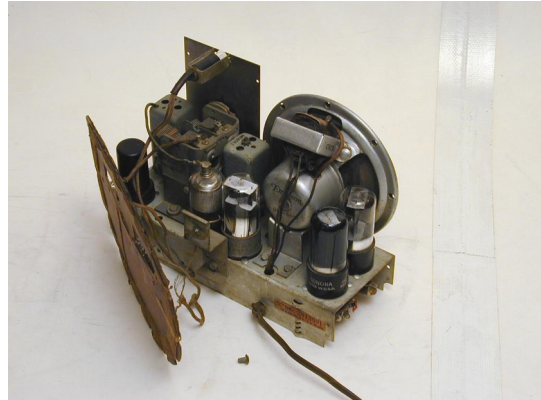
Be aware of possible tube replacements in series string radios. Tubes of different filament voltages can look similar. For example, a 50L6 and a 25L6 are similar in appearance. Make sure that the tubes that are in a radio are the proper tubes, and that they are plugged into the correct sockets. This will prevent blowing tubes because of the errant work of a previous tinkerer. The first number sequences of octal or miniature tubes can be added together to insure that they equal 120 volts. Example: 50 for the 50L6, plus 35 for the 35Z5, plus three twelve volt tubes 12SA7 + 12SK7 + 12SQ7 = 121 volts. So

these tubes, when operated in series, can be powered from a 120 volt supply.

Finally, if it should become necessary to check the alignment of a radio, alignment instructions for most vintage radios can be found on line, or through service bulletins such as SAMS Photofacts, M.N. Beitman, or Ryders'. The Museum Of Yesterday library also contains complete listings of instructions for radios made during the 1930s-1960s. It is advisable to always pull the available paperwork on a set before you begin working on it.

Good luck and good listening.

John, K5HTZ



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.**

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

RICHMOND THE HAM March 2020

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

If you look like your passport picture, you probably need the trip.

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		

