



THE RICHMOND HAM

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July 2018

THE RICHMOND AMATEUR RADIO CLUB will meet Friday, July 13th 2018, 7:00PM, at the Bon Air United Methodist Church, 1645 Buford Road.

Coming Events: Berryville Hamfest. Sunday, August 5, 2018 Clarke County Ruritan Fairgrounds 890 W. Main Street Berryville, Virginia 22611

RARC VE Testing Session. Sept. 8th.

This Month's Program: RARC Builders Group presentation of Homebrew projects and topics.

June 2018 RARC Meeting Minutes

Meeting Date: June 8, 2018

Meeting Time: 7:00 P.M.

Presiding Officers: George Golding, W3PPY, Vice President; Tom Newman, KJ4LVC, Secretary; Ken Leidner, WVOL, Treasurer. Directors: Allen Johnson WA3J, Tom Flippin KD4CMK, Win Grant WA4SSG, David Robinson, KJ4LHP. Trustee for W4FJ Mike Owens K4RKO.

Meeting was opened by George Golding Vice President with the Pledge of Allegiance. He then encouraged the group in his opening remarks about participating in the Radio Run which had begun June 1 and would run until the end of the month. A call for those with upgrades was recognized as well as new members that were present. All members were then recognized as each were given an opportunity to give their name and call sign. The minutes for the previous meeting was then approved.

The Treasurers Report from Ken Leidner showed that deposits from seminar classes, donation,

50/50, new members and a renewal plus dues from a new member gave a total in recent deposits of \$380.00. After newsletter expenses and Ferrite core expenses the Balance was \$7,233.58. Ken then read the names of the new members with introductions of those that were there and presented them for membership to the club. They were then approved. Tom Flippin then gave a short Tech Committee report stating that the noise problem of before is still being worked on, but the D Star is doing fine.

It was noted that the pass rate for students from the classes was very high.

Field Day this year as before would be at Laurel Park on Hunger Spring Road on June 23 and 24, 2018. Again there would be testing offered during Field Day. It would give members a time to work with some very fine equipment and due to the the 24 hour time period for the event, a chance to see how propagation changes with the time of day effects radio reception. George reminded the club that they still needed volunteers for set up and more for the event.

During Show and Tell attention was made that the back table had brochures on "Stay Informed", "CERT Community Emergency Response Team" and "911:CALL if you can, TEXT if you can't" a service available in City of Richmond, City of Colonial Heights, Chesterfield County, Hanover County and Henrico County. More Show and Tell included a tube G.I. Radio, and an announcement that a former member had passed away. Allen Johnson showed the group a new device he picked up at the Dayton Radio Fair which was a raspberry pi combined in one unit with a VHF radio and not much bigger than a credit card.

The 50/50 was held and many were winners of prizes of all kinds. A motion was then made and approved to adjourn.

The program that followed was presented by Ed

Kritsky NT2X - RV7AA and Phil Lorito WB2DHY - R3/WB2DHY. The program was titled "Mother Russia Calling" and was enjoyed by all. Respectfully submitted by Tom Newman KJ4LVC.

working on. I'm excited to learn what things I can anticipate putting on my "list" of things to do!
73 de K8OI

Letter from the President

July 2018

How many projects are you working on right now? 1, 3, 10? How many have you completed this year? Any?

I love new projects, it's so interesting to get involved in learning something new; figuring out how something works; deciding how it'll make my life SO much better than it was before and then... I just move on to the next shiny project without ever finishing what I just spent so much time working on. I don't think it's a waste of time because I have enjoyed pretty much all parts of it - but still, there's something that isn't quite guilt but I just don't feel good about leaving something incomplete. It doesn't seem to really affect me slowing down and finishing the project I'm working on; but still...

The project of the moment has to do with speech processing. I recognize this is a contentious topic - some folks care about the content of the communication (in short, is the message understandable and complete) and don't care at all about the audio fidelity. Other folks are interested in eSSB and sounding like a professional AM broadcaster. I think most folks just don't really care one way or the other.

Fortunately, nobody cares what projects I work on except me and occasionally my XYL :) With that background, I'm in the weeds of figuring out how to use FREE windows software to do all kinds of interesting (at least I think so!) stuff with noise gates, equalizers, compressors, and other stuff. I've never worked with sound equipment or done any voice processing except turning the Bass/Treble knobs up or down a little bit with an occasional turning the compression knob back and forth.

Is there a point to all this? Well... I dunno... Do I think that I'll be using all this stuff in 6 months? Probably not. So, why am I bothering with all this time, effort, energy and expense? Go back to the top of this article and re-read! I love LEARNING stuff; particularly how stuff works is just part of our DNA in Amateur Radio!

This month we'll be discussing what our Builder/Maker/Gadget/Tinkerer RARC community is

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: Bon Air United Methodist Church, 9 AM.

The September testing session will be on the 8th 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.

RSS – a quick summary of RARC news

Look near the top of the club web site, <http://rarclub.net/>, and on the left you see an icon that looks like something radiating a signal. Actually it is a quick way to check on new entries on the website called an "RSS feed." Click it and you get a summary of the last few posts. You can have it put as a link in your on the browser list as you see in yellow. So each day or four you click the that link and you get a quick list of the most recent posts. If one looks interesting, click it in the list and it takes you directly to it. If everything looks boring, just go back to what you were doing.

Reported by Bruce MacAlister, W4BRU

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!

Radio 101, #13 By John DeMajo, K5HTZ

In our past installments, we have looked at the major players in the pre-WW-II manufacture of radios. This month, we will begin to take a comprehensive look at war-time radio manufacturing.

While civilian radio manufacturing was virtually non-existent during the period from December 1941 through late 1945, a number of radio manufacturers who were able to quickly re-tool for the supply of

military spec equipment, enjoyed some of their most lucrative years. While there were many "major" manufacturers involved in the war effort, lesser known companies also saw their share of the action.

Of course, the leaders in the supply chain included familiar names such as Hallicrafters, National, RCA, GE, Bendix, Collins and Crosley. But there was a contingent of smaller "niche" manufacturers who were called upon because of their ability to fulfill specialized applications. Belmont, for example, was a maker of what would have been considered "inexpensive" home radios, yet their ability to cut corners won them a contract to produce a widely used general coverage receiver known as the BC-348. This radio found its way into many general military applications, and fully working examples still exist among surviving "boat anchors" today. But probably the most persnickety niche manufacturer to supply radios that met specific military requirements, was E.H. Scott Laboratories, which happens to be the subject of this month's study in Radio 101.

Ernest Humphrey Scott, born in New Zealand, was orphaned at the age of fourteen. Once an adult, he began to work in the growing automobile parts industry where he became interested in electricity and radio. From his entry into the radio business in 1924 until his retirement shortly after WW-II, E. H. Scott designed and built custom radios that were considered the "Stradivarius of Radio." The quality of Scott's work became world renown, and his advertised client list included such names as Arturo Toscanini, Eugene Goosens, John Barbirolli, Frank Lloyd Wright, Guy Lombardo, Deems Taylor, Walter Winchell, and others who were considered connoisseurs of the very best that the industry had to offer. Despite the Depression, Scott's business doubled in just two years from the date that he opened his Chicago laboratory. He refused to employ mass production techniques, and his radios, some of which boasted as many as forty-eight vacuum tubes in a single set, were hand built and laboratory tested as orders were received.

Near the beginning of World War II, the U.S and our allies realized that German submarines were tracking ships from as much as one-hundred miles away by following minute signals generated from the local oscillators of superhet radios on board. Scott, because of his successful adaptation of heavy shielding and filtering in his notoriously super-sensitive static free radios, was asked to produce a radio which had virtually no external RF leakage. In

response, Scott produced a military radio that had no measurable RF radiation at twenty-feet away from the set. That innovation became the standard for all shipboard receivers operated by the U.S. Navy, and our allies.

Aside from strategic receivers used in war related communications, such as the RCH-CZC and the widely deployed SLR-12B, Scott also produced a radio that was billed as a Morale radio, intended to provide entertainment and news type programs to sailors who were in submarines and stationed on ships. Also designed for low RF radiation, the E.H. Scott Model SLRM, an example of which is housed in The Museum Of Yesterday, was heralded as an extremely sensitive Morale radio that would operate on almost any power source, which made it ideal for shipboard and submarine use.

When the war ended in 1945, Scott's laboratory returned to the production of high-end home radios. His most popular post-war offering was probably the Model 16-A "Metropolitan," which featured dual chrome plated chassis with chrome transformers and IF cans, a fine furniture cabinet, amplifiers that featured push-pull 6L6-G tubes in the high fidelity audio output stage, two separate power supplies, a fifteen inch bass speaker along with a separate tweeter and cross-over, AM, FM reception, an imported British Garard record changer, and an unheard of 1946 price tag of \$1500.00.

This author can attest to the performance of the Scott Metropolitan, as my grandfather purchased one when they were first introduced. After waiting three months for delivery, the set finally arrived via REA Express, accompanied by a Scott factory technician from Chicago who traveled to New Orleans on the Illinois Central Railroad specifically to see that my grandfather's radio was installed and working to Mr. Scott's expectations. A few days later, my grandfather received a long distance phone call from Mr. Scott, who was personally checking to see if he was satisfied with the performance of his new radio. Imagine if we could get that kind of attention to detail today from companies like Panasonic or Fujitsu.

Shortly thereafter, E.H. Scott was forced into retirement, and the company started on a gradual decline mainly due to the absence of Mr. Scott's personalized customer service, and access to properly trained local service personnel who could support these extremely complex and expensive radios. Later, the name of the company was changed to H. H. Scott, reflecting a member of the

Scott family who ran the company for a brief period. By 1950, the grandeur of Scott Laboratories had all but disappeared, and the Scott name joined the likes of Atwater-Kent, McMurdo-Silver, Kennedy, Freed-Eisemann and other once great names of radio pioneers that are now but memories.

The Museum of Yesterday contains a few examples of the work of E.H. Scott Laboratories. Shown in the accompanying photo are our SLRM set, along with two other war-time sets, and a 16-A chassis for which we hope to some day locate a matching console cabinet. The museum also houses an original letter, signed by E.H. Scott, to Mr. D. O. Williams, Jr, congratulating him on the purchase of his Scott Metropolitan radio. A copy can be seen on our website at www.MuseumOfYesterday.org.

Attached photo:

The top-bottom, right to left:

The Scott SLRM Morale Radio,

Scott trademark,

RCH-CZC wartime shipboard receiver,

E. H. Scott with a client, witnessing a receiver test,

The 16-A Metropolitan chassis,

SLR-12B military receiver,

A 16-A Metropolitan within cabinet.



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 804-454-0564. 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.**

COMPLETE AMATEUR RADIO STATION

At age 91, must sell my amateur radio station after operating some 50+ years.
In last 11 years have checked into Central Virginia 6M SSB Net 50.215 MHZ USB
(web site www.50215.NET).

All items included for \$1500 cash:

ICOM I-C 746 Pro all band transceiver, includes instruction manual

Matching power supply (original box), foot switch can also be used

Tailor-made cover

Ear phones, RCA stereo 10R-216

HO Square loop antenna, mounted set for 6 meter band

100' coax, 40' green copper grounding wire

50' hard copper grounding wire

Dual tracking one thousand channel Pro 2052 scanner with owner's manual (serial #96012176-10A-99) with AC adapter

Serious inquiries only.

Floyd Callihan K4ROG

(804) 424-6009

Kenwood TS-520-S, with CW and SSB Crystal filters. The radio is in good shape, with AT-230 Antenna Tuner and MC-50 Mic. All 3 - \$400.00.

Assorted 75 ohm cable lengths- \$30.00

Assorted meters: Transmatch SWR meter, SWR/Watt meter and Antenna Rotator: \$50.00

Contact benvec@gmail.com KF4HEV

Antenna equipment: New, never installed

Moved from house on ¾ acre to HOA townhouse not long after purchasing this gear. No hope of erecting it here, so must sell. Items in clean, like-new condition.

myAntennas.com Model OCF-4010E off-center fed dipole. 40/20/15/10M 65 feet long. Integral 4:1 current balun. Rated 3 kW ICAS; fully assembled including end insulators \$90.00

antennaTensioner.com Model 30-100. Maintains 30 to 50 pounds tension on antenna. Useful if one or both ends of wire antenna are supported by moving trees. Tension adjustment is set and visible from ground. \$50.00

Misc. : 250 ft (approx.) 3/16" black Dacron rope (USA), pulley, large screw eyes (All included with purchase of both items above)

Tom Tinsley KJ4WQ ttinsley@wlu.edu

Thought For The Day!

There are 10 types of people in the world; those who know binary, and those who don't.

Jim Bates	K8OI	President	(804) 592-1068	jlbbates4@gmail.com
George Golding	W3PPY	Vice President	(804) 318-6951	w3ppy@arrl.net
Tom Newman	KJ4LVC	Secretary		
Ken Leidner	WV0L	Treasurer		