



# THE RICHMOND HAM

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August 2017

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**The RICHMOND AMATEUR RADIO CLUB** will meet Friday, August 11th 2017, 7:00PM, at the Bon Air United Methodist Church, 1645 Buford Road.

## Coming Events:

**This Month's Program:** Win Grant, WA4SSG and Brewer Pedin, W4MGA will give a presentation on test equipment.

Jim announced that the Club is starting the nomination process for next season and wants volunteers. All officer positions are open. If you are interested or want to nominate someone please let him know.

Next months program will be given by Win Grant, WA4SSG and Brewer Pedin, W4MGA.

A motion was made and passed to adjourn the meeting. A program followed the meeting.

## July 2017 RARC Meeting Minutes

Meeting Date: July 14, 2017

Meeting Time: 7:00 PM

Presiding Officers: Jim Bates, K8OI, President; George Golding, W3PPY, Vice President; Richard Arnold, WA4FEH, Treasurer; and Maylon Pearman, N4EG, Secretary.

Jim opened the meeting with the Pledge of Allegiance. Then introductions of members and guests were made. He called for any new license or upgrade to license.

Minutes from the June's newsletter were voted on and approved.

Richard gave the treasurer's report for the month of June. He read a list of applicants for membership. All were voted on and approved.

Jim announced that the remote station at the church was up and running fine. The D-star repeater was upgraded and running better.

The June radio run winners were announced and awards were issued.

Jim suggested that the club have an event in October for Boy Scouts at the church. The event would help scouts with merit badges. He wants to plan a cookout with Hot dogs and Hamburgers. Bruce MacAlister spoke about the upcoming Makers Fest. He also said that Norm Marshall, KN4CZZ is interested in APRS. Norm is a teacher and wants to teach students about radio by tracking a balloon flight.

## Letter from the President

August 2017

Welcome to the August RARC Letter from the President.

The dogs days of summer are upon us in full force; I hope your A/C is running strong and you're able to "play radio" within the cool comfort of your favorite EZ Chair; or burn solder; or read a good book (like "[SolderSmoke: Global Adventures in Wireless Electronics](#)") without sitting in a drenching sweat.

Want to talk about hot? Win Grant (WA4SSG) can tell you about **HOT!** Armand Hamel (WA1UQO) had just started the Wednesday night D-Star net and BLAMMO; the Sounds of Silence (not Simon and Garfunkel) kicked right in. No more D-Star on ANY bands! That's right, the D-Star RF decks were all offline - why were they offline you ask? The RigRunner which supplied power to the RF decks MELTED the power supply Power Pole connection. Nope, no blown fuses!



Win jumped on this, got a replacement RIGrunner and W4FJ is back in business. Thank you Win!!! Speaking about MORE HOT - how about 6m during the last week of July! RARC has formed a group, focused on CW and/or QRP, and I was looking for someone to practice CW with me. I was calling CQ at about 8 WPM, looking for one of our local members to say hello and "practice" and all of a sudden I get a RESPONSE from a ham in Wisconsin!!! He was coming in at about 20 WPM and all of a sudden the "pucker factor" kicked into high gear - I was completely surprised...

What in the world was going on? This guy was S9+20 easy copy... I was just hoping to be able to hear folks 20 miles away - well, guess what - the 6m band was WIDE open! It was awesome, I made CW contacts all over the Midwest, Louisiana, Texas and Arizona - yes, with my crappy CW skills... They all slowed WAAAYYYY down for me, but it was really neat. I jumped over to USB and had a bunch of voice contacts as well.

Bottom line? You just never know who you're gonna talk to when you call CQ :)

RARC has received approval from Bon Aire United Methodist Church (BAUMC) (where we meet monthly) to use the facility for the picnic, Jamboree on the Air, Radio Merit Badge class, and our Go-Kit competition. I need people to volunteer to lead some of these - please help!

I look forward to seeing you all on Friday evening!  
73 de K8OI

### Officer Nominations

RARC is taking Officer and Director nominations for the Fall 2017 election. Please consider "running" for a position. If you would like to discuss options, please contact Mac McNeer (K4YEF) for further details. RARC is a volunteer organization and requires members to participate. If you have not participated

or served RARC in the last 3 years, you should give serious consideration to where and how you can serve. The only way the club operates, grows, and evolves is by MEMBER participation! We need your investment of time, energy, and dedication today!

### RARC VE News

#### FCC EXAMS EVERY OTHER MONTH

on the SECOND SATURDAY. For January and all odd-numbered months: Bon Air United Methodist Church, 9 AM.

The September testing session will be on the 9th at the Bon Air United Methodist Church at 9:am.

If you have questions about a session, please see our website, [www.rarclub.net](http://www.rarclub.net) or contact Allan, WA3J, at 804-399-8724, or [wa3j@arrl.net](mailto:wa3j@arrl.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.

**RARC has created it's own Twitter feed!** Please follow @RARC\_W4ZA for updates and information!

#### 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](http://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 007D rather than to any of our modules. Since the W4FJ stack will all be linked to Ref 007D, anyone linked to that reflector will be connected to the net.

<b>Sunday</b>	7:00 pm	50.135	USB
	7:30 pm	52.525	FM
<b>WEDNESDAY</b>	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 #2

In our first installment of Radio 101 (July newsletter), we discussed the evolution of early communications from smoke signals to wire based telegraphy. This month, we resume our discussion at the point where scientists had learned that high voltage spark generated RF could be transmitted across short distances. In that era, two notable forces were working this concept from different directions. Guglielmo Marconi was experimenting with electro-magnetic waves and spark transmitters with the desire of being able to transmit information, much as the telegraph did, but without wires. On the other side, Nicola Tesla was pursuing this with the hope that he could distribute electricity to homes and businesses without the prohibitive cost of building an electrical distribution infrastructure. With the financial help of banker J.P. Morgan, Tesla created Wardenclyffe Tower, (see accomp. photo) an antenna like structure, where he attempted to illustrate that high levels of current could be made to travel through the air, thus making wires unnecessary. The experiment proved to be unsuccessful, but Tesla's experiments in the generation of high intensity electro-magnetic energy did set the stage for later development of lasers, artificial lightning, and medical radiation generation.

Marconi, on the other hand, was tackling what would prove to be a much more realistic goal. After managing to prove his concept in demonstrations at Salisbury Plain and Bristol, he went on to construct land stations, using spark discharges of ever increasing intensity, with which he was able to communicate across large bodies of water and with ships at sea.

Most important to us as hams, is that Marconi's experiments and the prerequisite laboratory research by other scientists, had simultaneously caught the attention of a number of amateur electricians of the day. Through this interest was born the hobby of amateur radio. These early experimenters used commonly available hardware, namely early automobile ignition transformers and galena crystals, to make their own short distance radio-telegraph stations. Of course, the general public was skeptical, and these early operators were often viewed with some degree of suspicion as being either mad

scientists, or sorcerers. It was not until it was learned that the steamship Titanic disaster had been somewhat minimized due to the availability of an on board Marconi radio station, which was successful in alerting the maritime world to the terrible accident, that ham radio gained it's general acceptance. Literally over night, Marconi and his ideas received the validation that would enable accelerated research and investment in the new field of electronic communications, and Ham Radio also benefited.

In the years that followed, Marconi's pioneering radio company was eventually consumed by Radio Corporation Of America, which was ironically run by David Sarnoff, the former sixteen year old Marconi land station operator who happened to be on duty the night of the Titanic disaster.

Despite having made Radio a valuable tool in the maritime sector, Marconi never envisioned Radio as a household news and entertainment device. It was actually Sarnoff who is believed to have initiated that idea. While Marconi continued to claim throughout his life that he was the inventor of Radio, several months after Nicola Tesla's death in 1943, the U.S. Supreme Court, in a case of Tesla vs. Marconi, voided four of Marconi's radio patents, thus acknowledging that Nicola Tesla, not Marconi, was actually the inventor of radio.

In keeping with our story, this month's exhibit from the Museum Of Yesterday is an early 1900s experimental ham transmitter which uses high voltage spark discharges for RF generation. Capable of generating tuned sparks in the 8,000 volt range, it is an example of the "rigs" that our forefathers in the hobby would have been deploying in the very early years before vacuum tubes became available.

Next month, we will look at the work of Dr. Lee DeForest, his introduction of the vacuum tube, and the impact that it had on the development of Radio.



***Welcome Aboard!!***

New members voted in at the July meeting

Robert Thompson	KN4EFP
Geoff Kayton	KN4EFK
Kenny Underwood	KN4EFO
Matthew Anderson	KN4EFN
Steve Kemp III	KX4EF
Peter Osborne	KN4EBN
Karch Frankenfield	KN4EFJ
Joaquin Torres	KN4EFL
Robert Lavoie	N4RVL
Philip Lorito	WB2DHY
J.B. Kirby	K4TAO

**Letter TO the President**

Hi Jim,

Well, I made it - I'm on the air and it's Friday! Goal accomplished! I want you to know, YOU especially, and joining RARC has been an inspiration for me. Also, your notice about the one day U.S. Coast Guard special event station K1CG operation to celebrate the Coast Guard's anniversary was a great motivator. As I had set a personal goal for myself to have my HF station on the air, ready to chase K1CG today.

It was very tuff going but I got the ant. assembled and up. The very near impossible task was digging the trench to bury the hardline in the clay here in Amelia. Clay makes a great ground but it's like concrete to dig into. I had to use a pick ax and it was so slow going that I only had 1/2 of the 90 feet done after two days. So half the hardline is in the trench right now and the other half is above ground.



Finally, called CQ on 40 CW and had my first QSO in 20 years. I was as nervous as a teen novice with a new ticket in hand! But, I surprised myself at how well I copied K9VSO in Bells, Wis. Got a 579 running 180 watts. We were going at it around 10 WPM and boy, was I rusty - made a bunch of sending errors but got it done. We had a great chat! I don't know if this old brain will ever get back to 35 WPM, half the time I can't find either my glasses or my car keys. But, I am thrilled as can be to be back on HF after so long a time. I want to thank you for making me welcome, offering your and RARC's support and help! I will always appreciate that.



I took this pic a moment after my QSO with K9VSO. After sitting in a box for 20 years the meter on my Ant. Tuner died of old age. I had to jerry rig my little tester in the 250ua mode, into the tuner to enable a flattened out SWR. Hey, two pages, nearly solid copy, written history, I should frame them one day ! LOL  
Now, I am ready to chase K1CG today and get that special event station QSL.  
I know getting this station on the air will please my XYL. Now, I can get back to hanging shower curtains in the guest room bathroom and make her happy! LOL

Again, thank you very much!

73,  
Phil

WB2DHY

### The SWAP SHOP

Club members may list their wares in the newsletter. Send descriptive information to Armand at [wa1uqo@arrl.net](mailto: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.**

**For Sale: Carolina windom** wire antenna kit. Radio works model short40.

New never been opened. Pictures available. \$99,95 plus freight. Get on the air today with this bargain.

**Flex 5000a SDR transceiver**, 100 watts 160 to 6 meters. Comes with remote tuning wheel, fire wire cable, Built in 100 watt antenna tuner and 12VDC power cable. \$1399 cash. Pictures available.

**Yaesu Vx7R HT**. Water proof. 5 watts. Also RT systems software for easy programming. Microphone, hi speed plug in desk charger, wall wart. All in original box. \$249.00 cash. Great hand held all channels.  
Pictures available. Contact Jon Bennett, 804-241-6555

**Wanted:** 100 Watt Dummy Load From NQ4A, Jon Bennett 804 241 6555

**Wanted:** 23CM Beam. Contact Ben Richardson, K4ITQ. 804-840-6800 - [kd4tzq@comcast.net](mailto:kd4tzq@comcast.net)

**For Sale:** Best offers will be considered. Floyd Callihan, K4ROG (804) 496-6793.

MemoRex Power Control (5 outlets) Model PC006, 125VAC - 15 Amp 60 HZ

\$10.00

Larsen Mobile Ant LL-MM

\$40.00

### *RICHMOND THE HAM August 2017*

5EL Cushcraft Beam A505S with instruction set for middle of 6M band, used only 6 mos. Freq. coverage 50-54 FWD Gain DB 10.5 – boom length 12', turning radius 7.5 ft., max mast del 2" – shipping wt. 13 lbs. – cost new \$189.95 \$150.00

- 8' Copper grounding rod with copper tie \$5.00  
UNIDEN Ship-to-Shore Transceiver (white) with built-in distress capability  
2 Shakespere Ant (one for boat and one for house use), DIAMOND stainless steel (includes bad weather automatic notice by sound and voice), operating manual \$190.00  
Motorola Heavy Duty Mobile Speaker \$10.00  
Stainless steel rod 3' \$ 1.00  
Amateur foot switch \$20.00  
Alliance HD73 Dual Speed Rotor Head Control (Alliance Rotor recently overhauled, all with operating manuals and over 200' of operating cable \$250.00  
Weller Soldering Kit, 140/100 watts, with roll of solder \$5.00  
YAESU mike stand, MD 100 A8X with mike, new in box \$50.00  
Dymamic Microphone 33-3001, new in box \$40.00  
YAESU Dymamic Mike MH188 \$30.00  
Two mobile speakers VANCO (sell as pair) \$25.00

**For Sale:** Yaesu FT-897D 160-6M + 2M + 440 MHZ. Pristine condition. \$700.00. Call Lew Best @ 804-740-3890 / [lewbest@verizon.net](mailto:lewbest@verizon.net).

### ***Thought For The Day!***

***You never learn anything by doing it right.***

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<b>Maylon Pearman</b>	<b>N4EG</b>	<b>Secretary</b>		
<b>Richard Arnold</b>	<b>WA4FEH</b>	<b>Treasurer</b>		

### **Famous Hams?**

