



THE RICHMOND HAM

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March 2017

The RICHMOND AMATEUR RADIO CLUB will meet Friday, March 10th 2017, 7:00PM, at the Bon Air United Methodist Church, 1645 Buford Road.

Coming Events:

VE Testing Session, March 11th, 2017 at 9am at the Bon Air United Methodist Church.

This Month's Program: This month we'll be learning all about Packet from Lee Maddox (N4HOK).

February 2017 RARC Meeting Minutes

Meeting Date: February 10, 2017

Meet Time: 7:00 PM

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

Directors: David Robinson, KJ4LHP, Tom Flippin, KD4CMK and Marshall Ervine, N4XBP. Newsletter Editor: Armand Hamel, WA1UQO.

Jim opened the meeting and asked Dr. Joe Palsa, K3WRY to lead us in the Pledge of Allegiance. Introductions were made and then minutes of the January meeting were approved by the membership. Richard gave the January's treasurer report. He received four new membership applications. All were approved and voted in. They are James Coon, KE4GIV; and three new techs' Bruce Bartek, KN4ADW; James Dawson, KN4ADT; Erich Schiller, KN4ADU. They received a new Baofeng HT for passing their tech test and joining the RARC. Welcome to the club and enjoy you new HT!

Jim talked about the new program of giving a new Baofeng HT to anyone who takes and passes their tech exam and applies for membership in RARC.

Tom Flippin, KD4CMK updated us on the progress on the Club's new remote station. The station is being setup at the church and can be accessed from other locations. They are working on getting antennas up for HF and VHF/UHF.

Bruce MacAlister, W4BRU reported that the club's school would have classes for tech, general, and extra, plus classes for D-Star, CW, antenna modeling and

electronics for hams. Signups would begin Tuesday, February 28 at 7:00PM at the church. Bruce also announced that the builders group would meet at Ken Zutraven's, K4ZUT on February 21 at 2:00 PM. Check the club's calendar for more information. (

<http://rarclub.net>)

Dr. Joe Palsa, K3WRY, ARRL Virginia Section Manager talked about FCC enforcement of radio regulations and downsizing of the FCC. He spoke about Federal Bills on HOA and also Bills in the Virginia legislature pertaining to mobile radio operating. Jim Bates called for a short break and the program would follow.

From The Prez

March 2017

I hope you found time to participate in the ARRL contest weekend last weekend! It was great having W4HZ, W4DR, and their XYL's present and attend last month - I really enjoyed hearing about their respective histories with Amateur Radio, their adventures and journeys with DXpeditions, and the extended "family" they've established over the years! I really do believe they have World Class expertise and are just nice Hams!

This month we'll be learning all about Packet from Lee Maddox (N4HOK). Here's a brief history of Packet Radio (excerpt from Wikipedia):

Amateur radio operators began experimenting with packet radio in 1978, when—after obtaining authorization from the Canadian government—Robert Rouleau, VE2PY; Bram Frank, VE2BFH; Norm Pearl, VE2BQS; and Jacques Orsali, VE2EHP of the Montreal Amateur Radio Club Montreal, Quebec began experimenting with transmitting ASCII encoded data over VHF amateur radio frequencies using homebuilt equipment.

In 1980, Doug Lockhart VE7APU, and the Vancouver Area Digital Communications Group (VADCG) in Vancouver, British Columbia began producing standardized equipment (Terminal Node Controllers) in quantity for use in amateur packet radio networks. In 2003, Rouleau was inducted into CQ Amateur Radio magazine's hall of fame for his work on the Montreal Protocol in 1978.

Not long after this activity began in Canada, amateurs

in the US became interested in packet radio. In 1980, the United States Federal Communications Commission (FCC) granted authorization for United States amateurs to transmit ASCII codes via amateur radio. Repeaters may be designed for amateur packet radio, these are dubbed "digipeaters". The first known amateur packet radio activity in the US occurred in San Francisco during December 1980, when a packet repeater was put into operation on 2 meters by Hank Magnuski KA6M, and the Pacific Packet Radio Society (PPRS).

In keeping with the dominance of DARPA and ARPANET at the time, the nascent amateur packet radio network was dubbed the AMPRNet in DARPA style. Magnuski obtained IP address allocations in the 44.0.0.0 network for amateur radio use worldwide.

Many groups of amateur radio operators interested in packet radio soon formed throughout the country including the Pacific Packet Radio Society (PPRS) in California, the Tucson Amateur Packet Radio Corporation (TAPR) in Arizona and the Amateur Radio Research and Development Corporation (AMRAD) in Washington, D.C. By 1983, TAPR was offering the first TNC available in kit form. Packet radio started becoming more and more popular across North America and by 1984 the first packet based bulletin board systems began to appear. Packet radio proved its value for emergency operations following the crash of an Aeromexico airliner in a neighborhood in Cerritos, California Labor Day weekend, 1986. Volunteers linked several key sites to pass text traffic via packet radio which kept voice frequencies clear.

The most common use of packet radio today is in amateur radio, to construct wireless computer networks. Its name is a reference to the use of packet switching between network nodes. Packet radio networks use the AX.25 data link layer protocol, derived from the X.25 protocol suite and adapted for amateur radio use.

RARC has created a new e-mail distribution list: richmond-amateur-radio-club@googlegroups.com This e-mail list is for ANYONE who is interested in Amateur Radio activities in the central Virginia area. We would like it to be used for general announcements, items wanted or for sale, updates, events, and any other purpose which supports the goals of our hobby. If you'd like to subscribe to the list - please send an e-mail to the address above and you'll receive instructions from Google. If you get really stuck, just send an e-mail to K8OI and we'll get you all fixed up! Next month we'll have the 6m 50215 group come and discuss their organization, it's history, membership, how to join and some of the fun activities they sponsor and host each month!

73 de K8OI

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 March testing session will be on the 11th at the Bon Air United Methodist Church at 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 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.

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

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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.

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.

Expiring Soon!!

These Call Signs are expiring soon K4JXE and KI4UFS. Please Renew and stay on the air!

Another Outstanding Year for Amateur Radio Licensing!

From the ARRL Letter via e-mail February 2, 2017
Last year -- 2016 -- was another outstanding one for Amateur Radio licensing, says ARRL Volunteer Examiner Coordinator (VEC) Manager Maria Somma, AB1FM. Total Amateur Radio licenses in the US from 2000 until 2016. [Per statistics compiled by Joe Speroni, AH0A] "New Amateur Radio licenses issued were up by 1% over 2015, and this is the third year in a row that the total number of

new licenses has exceeded 30,000," Somma reported. She said 32,552 were granted in 2016, 32,077 in 2015, and 33,241 in 2014. Somma said that while 2014 was a record-setting year for new licenses issued, ARRL VEC "continues to see an elevated interest in obtaining an Amateur Radio license."

The overall trend continues to be up, up, up! The total number of US Amateur Radio licensees has continued to grow each year since the FCC eliminated the Morse code exam requirement in 2007. Over the past decade, the net number of Amateur Radio licensees has risen by nearly 87,000, according to statistics compiled by ARRL Pacific Section Manager Joe Speroni, AH0A. As of December 31, 2016, the total number of licensees in the FCC database was 742,787, topping the 2015 total of 735,405, but down just slightly from the all-time high of 743,003 reached last November.

Somma said license upgrades were down by 5% compared to 2015 -- 10,617 versus 11,224. "A new Amateur Extra class [question] pool took effect on July 1, 2016, which may have impacted upgrade totals in the second half of the year," she speculated.

As of December 31, according to figures compiled by Speroni, there were 143,337 Amateur Extra licensees, 45,071 Advanced licensees, 172,807 General licensees, 371,560 Technician licensees, and 10,012 Novice licensees. The FCC no longer issues Advanced and Novice class licenses. The General and Technician licensee totals at the end of last year were all-time highs, and the Amateur Extra total was nearly so.

New BrandMeister repeater on air in Richmond

Posted on [February 11, 2017](#) by [kd4bpz](#)

While not directly connected to the DMRVA repeater network, this new repeater is operated cooperatively by DMRVA staff.

The repeater is located in downtown Richmond with an elevation of approximately 350 feet. The repeater performs nicely to the north, east and south. Coverage to the west is decent too but there is some shadowing due to the buildings.

It operates on **443.5375 MHz, up 5 MHz with CC1**. TS 1 is wide open for any [talkgroup available on the BM network](#). TS 2 currently carries **Va Statewide** (3151), **Local 2** (2), **Local 9** (9, local repeater only) as well as **Richmond Local** (31511 - tied to the DMRVA repeater local).

There are no codeplugs available for download with this new repeater system (yet).

For further details on how the BrandMeister particular repeater operates differently than DMRVA (a c-bridge network) check out [this page from AF6FB](#).

D Star Seminar

Do you have a D Star radio, but don't know how to program it? Are you thinking of buying a D Star radio? Do you have a D Star radio, but want to learn more about linking to repeaters and reflectors? Did you know that there is a device that will allow you to connect to D Star repeaters when you are out of radio range of the repeater?

RARC has the only D Star repeater in the Central Virginia area. On Saturday March 18 from 9am to noon, we will offer a free D Star seminar to answer your questions about D Star and to demonstrate some of the features of this digital mode. The seminar will be held at the Bon Air United Methodist Church. Just look for a sign when you arrive giving the room number.

If you have a D Star radio (mobile or HT) and need help programming it, feel free to bring it. We will have the capability to program most Icom D Star radios.

Win - WA4SSG

From the Archives:

HAM Radio allowed Richmonders to communicate with other users all over the world

John DeMajo, K5HTZ, discovered a trove of ham radio pictures covering 1949 to 1982 on the *Richmond Times-Dispatch* on-line archive. You can see them at www.richmond.com/from-the-archives/collection_b782b71a-e189-11e6-8dc9-a3b6370c65cb.html. If you would like a print or a picture on a mug, you can order one there. Notice in the photo shown here the YLs carry their husbands' first names, not theirs. There was a time....

License Class Registration has great response!

Registration night for the RARC license classes netted 35 students for the license prep classes and a few more for the Enrichment classes. The club is certainly doing things right and the word has gotten out. Kudos to all those involved!

The future of the hobby thanks you.



Daylight Saving Time Starts March 12th

SPRING FORWARD - FALL BACK

Yep, Sunday March 12th Daylight Saving Time starts.

At 0200 local, turn your clocks ahead 1 hour.

Remember UTC (Zulu, GMT) time does NOT change.

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 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

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
5EL Cushcroft 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
Dynamic Microphone 33-3001, new in box	\$40.00
YAESU Dynamic 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.

Thought For The Day!

Dear optimist, pessimist, and realist, while you guys were arguing about the glass of water, I drank it.

Sincerely, the opportunist.

73 de:

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