



# THE RICHMOND HAM

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June 2018

**THE RICHMOND AMATEUR RADIO CLUB** will meet Friday, June 8th 2018, 7:00PM, at the Bon Air United Methodist Church, 1645 Buford Road.

## Coming Events:

**Radio Run** Starts June 1<sup>st</sup> !!!

Special Olympics, June 8<sup>th</sup> & 9<sup>th</sup>. Sign up @ <http://rvahams.com/signup/>

Field Day, June 23<sup>rd</sup> & 24<sup>th</sup>.

**This Month's Program:** RARC Presents Russian Ham Radio That Changed the World!

With Guests Speakers Edward Kritsky, NT2X – RV7AA and Phil Lorito, WB2DHY – RV3/WB2DHY

## MAY 2018 RARC MEETING MINTUES

Meeting Date: May 11, 2018

Meeting Time: 7:00 PM

Presiding Officers: Jim Bates, K8OI, President; George Gelding, W3PPY, Vice President; Tom Newman, KJ4LVC, Secretary; Ken Leidner, WVOL, Treasurer. Directors: Allen Johnson, WA3J; David Robinson, KJ4LHP; Trustee for W4FJ, Mike Owens, K4RKO; and Armand Hamel, WA1UQO, Newsletter Editor.

The meeting was called to order by the President Jim Bates and the Pledge of Allegiance was led by Jim as well. Jim then reminded the group to prepare to participate in the Radio Run which would be held during the month of June. He encouraged the members to try and make at least one contact each day of the month of June.

Introductions of visitors and members by name and call signs was then made.

Under Old Business Bruce MacAlister reminded the group that classes and testing would be held

the next day May 12, 2018. Participation in both was very good. A clarification was made as to what would happen if a person tested for the extra first and passed though they did not already have the Tech or General. A CSE would be given and good for 365 days while the person then took the Tech and General tests. The secretary brought up a change for the April Minutes that the club status as printed said "501 c3 to 501 c7" and in fact should be printed "501 c7 to 501 c3" Amendment was made to make that change and approved by the club. The Treasurers report included revenues received from dues, 50/50, seminars and classes less the expense for the Newsletter left the club with a balance of \$6,889.72. Ken felt the club would have new members after the testing to be done the next day. Jim mentioned that the D Star repeater system currently did not link but that was being worked on.

For New Business Jim stated that the next months presentation would be by a former Russian now American who experienced the trials of amateur radio between the Russian and American system. George W3PPY said the Field Day would be in June and could use more volunteers. Jim asked for a show of hands for those who participated in the recent Virginia QSO Party and two hands were raised. The Show and Tell had a lively participation with a variety of equipment. Presenters included David Robinson KJ4LHP, Charles Ponry WA5VHU, Art Williams W4TY, Daniel Brown W4ERF, and Steve Boles WB4SED.

The 50/50 raffle was held of which there were three winners. A motion was made and passed by vote to close the meeting. After a short break a presentation was given to the group by Norm Marshall KN4CZZ, entitled Project Knight Sky.

Respectfully submitted by Tom KJ4LVC.

## Letter from the President

June 2018

The beginning of summertime - it has begun! June is just kicking off with a TON of Amateur Radio activities - Radio Run; Russia RARC Presentation; Field Day; 6m sporadic E openings; Special Olympics; Cap to Cap bike race - whoo... That's a LOT of activity and I'm sure I've left some out! I hope you're participating in something this month - tell us what it is and write an article for the RARC newsletter :)

I am really excited to hear Phil and Ed's presentation this month. Those guys have put together quite a presentation; it will be AWESOME and I think you'll both learn something and enjoy their stories! For those that can't make it, we will be videotaping (do we "tape" anything anymore?) the presentation, having it edited and then posted for our viewing pleasure at a later date. If you have the slightest opportunity to make it to the presentation, I'd STRONGLY encourage you to give it all you've got - money back guarantee if you're not completely satisfied!

Mac McNeer (K4YEF) is heading up the RARC nominating committee for the RARC fall elections. If you are interested in any position, please contact Mac or Jim Bates (K8OI) and let us know where and how you might like to serve.

The RARC charter requires term limits for it's elected officers and while it might seem "convenient" to have the same folks "run" for office year after year; we are now enforcing those limits. The RARC board believes that it is IMPORTANT for leadership to have new "blood"/ideas/energy participate in the stewardship of our club. We also recognize that it is "uncomfortable" for people to raise their hand, "run" for an office, and then diligently perform the role the office requires.

I sometimes get asked why I "raised" my hand to "run" for President of RARC; I think that's a great question. When I made my "acceptance" speech - boring as it was; I tried to explain that I really cared about the relationship of the members of the club and wanted to see those relationships expand, grow deeper, and last for many years. I entered the Amateur Radio hobby in 2010 - took all my exams at the RARC testing sessions and "grew up" knowing the folks in the RARC (RATS too) club(s). It was totally overwhelming for me to think that I would be able to hold a position like President when I was totally out of my league technically, historically, and

operationally. I looked around the "room" and saw (still see today) Hams that have 20, 30, 50+ years of experience - now THAT'S intimidating.

So, if it was that overwhelming and intimidating - WHY? It boils down to 1 (one) reason: I wanted to make RARC a "World Class Organization" (if I can be allowed to use some overused business jargon.) I wanted excellent presentations; to support the education of new (and old) hams through the school; encourage individual engagement in different areas of our hobby; and most importantly, I wanted to strengthen member relationships. I wanted to be proud to say I was a member of RARC and I wanted the members to feel that way too.

I hope you noticed that I didn't say that I wanted to be respected as a great technical/operational Ham! Here's the guilt trip - RARC needs new blood and ideas; the only way we get that is by folks who have NOT already volunteered TO volunteer! Please thoughtfully consider how YOU might make a difference and help RARC become better than it is today!

73 de K8OI

## 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 June testing session will be on the 23rd at Field Day at the Laurel Park Recreation Area.

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 [ve@rarclub.net](mailto: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

## RICHMOND THE HAM June 2018

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 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.

<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!

### Don't Miss The June Presentation!!

Russia is in the news an awful lot these days. Perhaps this is a good time, maybe the best time, to tell the story of American/Russian ham radio history and relationships. That narrative can't be told without its center being Ed Kritsky, NT2X - RV7AA. Edward immigrated to the United States in 1979 with his mother and younger brother. Leaving his home, friends and other family members in St. Petersburg, he carried his dreams and love for ham radio to America. Renouncing himself as a Russian national, he took great pride in his new American citizenship. For Ed, America is his home and his country. Russia was a nest he left over 39 years ago. He continued to do what he loved, staying in touch with Russian ham friends of his younger days, getting involved in all sorts of ham radio projects world wide involving DX-peditions, travel, ham equipment, the dissemination of information via ham radio which was incredibly vital at a time before the internet, lending a helping hand in emergency situations and other humanitarian assistance when needed. His home was fondly known as "Hotel NT2X" as Ed welcomed many ham visitors from foreign lands. Ed's presence on the bands in the 1990's made him truly a great American ambassador of good will, promoting understanding and friendship between our Russian ham radio counterparts and us. Edward continues his mission with a unique presentation at RARC. It's not about operating ham radio or working DX, but about how ham radio impacted lives and world history in life or death situations.

Phil, WB2DHY - RV3/WB2DHY was able to make a number of trips to Russia with Ed immediately after the collapse and fall of the Communist regime, as well as a solo trip hosted by Andy Chesnokov, UA3AB. What started out as a search for business opportunities in Russia turned into one of the most profound experiences of his life. Meeting many Russians citizens, both hams and non-hams and living constantly in Russian homes, learning about the Russian people, their emotions, pride, culture and years of historical suffering, he was amazed by their very American-like sense of humor and their sincere

affection and admiration for Americans and America. In Russian homes, after dinner, the table was cleared and hours upon hours of conversation took place between Phil and many ordinary Russian citizens. Phil traveled throughout European Russia as a guest and was shown historical locations that, to our knowledge, no other Americans at that time had ever seen. His stories are touching, enlightening, informative and ones you will long remember.

### **Radio 101, #12** **By John DeMajo, K5HTZ**

In a previous installment, we touched on the National Company's model NC-3 as having been the first commercially manufactured receiver intended for Ham and SWL use. Today, we are continuing that discussion to cover the history of the National Company and their products over the years.

National Company was originally founded in 1914 as the National Toy Company. By the year 1916, they had added household appliances to the company's product offerings, and by 1923, radio parts were an important part of their line, as were food mixers and other kitchen devices. In the mid '20s, National had gained a reputation as a manufacturer of quality capacitors. In that time frame, they were approached by Fred Drake and Glen Browning, two engineers from Harvard, to have capacitors custom made to their specifications in preparation for the production of a kit assembly receiver that would be sold under the Browning-Drake label. It was called the "Regenaformer" and was made to tune the AM broadcast band only. National became heavily involved in this venture, which led to the development of the "SW" line of short wave receivers, based on the Browning-Drake design, but extended to cover short wave bands and marketed under the National name.

In 1935, National had become a serious supplier of Ham radio equipment, at which time they introduced the first in the series of their "HRO" receivers. These sets offered two RF stages in the front end, a crystal filter, and a dial that was resettable, as well as modular coil units that could be swapped out for band changes. This basic design was deployed in National's radios through the "war" years and into the 1950s. The company did keep up with tube technology as it progressed over the years. In the World War II era, National was told by the government to build as many HRO receivers as

possible, which they did. The company therefore gained an excellent reputation for the design and reliability of their radios, and bolstered their treasury as well.

During the 1950s and '60s, National produced a wide variety of amateur radio equipment, and the company advertised their products heavily through ARRL publications. Their NC-300 series was one of the first radios to provide an input specifically designed for use with VHF 144-148 Mhz external converters.

For the following twenty years, National functioned mainly as a government contractor, and by the mid-1990s, the company had ceased operation. Today, National's ham radio receivers are considered to be "highly collectable" and are valued as an example of excellence in tube era radio manufacturing.



Above: Examples of early National radios. The National SW-3 (left) and the popular WW-II HRO.

Below: examples of post-War National models. Shown are the "Anniversary" NC-240, the NC-300, last of the great ham receiver offerings, and the popular NC-SW54, a five-tube series string offering intended to compete with the Heathkit SW-3 and Hallicrafters S-53.





### **Hamvention 2018 Report Win Grant – WA4SSG**

This was my eighth consecutive year of attending Hamvention, formerly in Dayton, but now held at the Greene County Fairgrounds in Xenia, Ohio. It seemed like Hamvention was destined to stay at the crumbling HARA arena in Dayton until the walls fell down, and they were getting pretty close to that for years. HARA was the epitome of “deferred maintenance.” The fairgrounds are a refreshing upgrade. The only criticism of the new venue is that the flea market area is unpaved, and thus can be muddy if it rains, and somewhat less indoor space than HARA. The offsite parking issues that caused some delays last year were non-existent this year. The Dayton Amateur Radio Association (DARA) made major improvements on all fronts this year over last year. As time goes on, it will only get better.

One of the draws of Hamvention is that manufacturers tend to announce new products at the event, and oftentimes prototypes of coming gear can be viewed, if not touched. This year Kenwood had the TS 890S under plexiglass. While other manufacturers are moving to SDR technology, the 890S is still a conventional down conversation radio, but with a built in antenna tuner. Sadly, the Kenwood booth seemed to have much less traffic than the other big manufacturers. Yaesu had a lot more traffic in their booth. Maybe it was the free baseball caps or the also under glass FTDX 101D. This “SDR with knobs” shares some similarities with the Icom 7610 in that both radios are direct sampling SDR radios, but with built in color displays that feature a waterfall panadapter, with no reduction in the number of knobs and buttons that you would find on a traditional HF desktop transceiver. No pricing data was available, but I’m guessing the Kenwood will be around \$2,000, with the Yaesu probably close to \$3,000, comparable to its competition, the Icom 7610.

Icom knows how to attract crowds. Both days they held drawings for significant prizes at 3:00 pm with the requirement that you must be present to win. There were long lines in advance to register for the prize drawings and then huge crowds each day when the winners were announced. The Icom 7610 was announced last year, but they did not become available for sale until a few months ago, so that was probably the newest Icom product on display.

Elecraft and Flex are now building high end HF radios in the United States and competing quite well against the Japanese big three mentioned above. With the demise of manufacturers like Collins,

Hallicrafters, Hammarlund, Heath and National, I wondered if we would ever again see HF radios designed and built in the U.S. Both of these companies had large booths with many people appearing to be placing orders. Last year Flex had prototypes of the Flex 6400 and 6600 series radios. It was that demo that prompted me to order a 6600M which arrived in March. Elecraft seemed to be doing a lot of business in their KPA 1500 solid state amplifier that was shown as a prototype last year and is now being offered for sale with deliveries starting in about 90 days.

In terms of trends, there were more vendors selling SDR products than I have ever seen. The independent brands such as Apache Labs and Elad had a large presence. SDR Play introduced a new two tuner receiver that HRO is selling. There were some new companies with relatively inexpensive SDR products that I had never heard of. I think that is only going to continue.

I attended two D Star events. The first was a forum at the hamfest moderated by Robin Cutshaw, developer of the DVAP line of products and author of the D Plus software that most U.S. D Star repeaters run for linking. Robin has a product in development that we saw previously at this seminar which looks like a DVAP on steroids. If it comes to market, it will be an upgrade to the DVAP and DV Dongle products that allow people to experience D Star when not in the RF coverage of a D Star repeater. Other speakers at this forum confirmed that small companies will continue to innovate on D Star and other digital mode products, thus reaffirming that D Star is not an Icom proprietary product. The fact that Icom did not announce any new D Star product reinforced the notion that D Star has matured and is truly an open platform. Kudos to Icom for sponsoring an offsite D Star forum on Friday night with major prizes and enough free food to make a meal. Although Icom supplied the venue, food and prizes, none of the speakers were Icom employees. Most of the presenters represented ancillary services and products such as the developer of the ZUMspot, a \$129 hotspot which works with a Raspberry Pi that supports D Star, DMR and other protocols. Comments from the attendees confirm that many people are still buying their first D Star radios. DMR was certainly present in a bigger way than any previous Hamvention, but without a single major corporation taking the lead.

On Thursday night my Hamvention partner, Wray, AB4SF, and I attended a banquet sponsored by Flex

Radio, mostly because we had both recently purchased our first Flex and wanted to see if we could learn something. Compared to some of the other banquets we have attended over the years where the focus was on contesting or DX, I thought the Flex dinner was first class. For starters, they held it in a brand new hotel that had very good food, something I cannot say about the "official" Hamvention hotel in downtown Dayton. Perhaps the best part of the Flex dinner was that Flex employees were seated at most of the tables. When we learned that our tablemate was the primary author of the Smart SDR software that drives the current generation of Flex radios, we seized the opportunity ask all the questions we had been saving up. They also gave away some nice prizes, but fortunately for me, Wray did not win anything comparable to the 11 element HF tribander that he won two years ago which we had to transport home in my car. We both only came away with Flex baseball caps.

In addition to Flex having many of their top personnel present to chat with customers, attendees could talk to the owner of SPE Expert Linear Amps and to Pietro Begali whose company makes some of the finest key paddles. Both companies are headquartered in Italy. Bob Heil was also there selling microphones and offering free advice.

As an owner of an Alpha linear amplifier, I was saddened to see no new products from this once great company. I had put my name on the list for a high end tuner that Alpha had displayed seven years ago when the brand was owned by RF Concepts, but despite the current owner telling me there has been progress in developing that product, I have given up on it. Likewise, TenTec, which is part of the Alpha - TenTec - Dishtronix company had very little on display. As I noted two years ago, the decline of these once great American brands continues.

If you have never been to Dayton, I highly recommend it. RARC members were well represented.



Kenwood TS 890S



Gerald Youngblood, K5SDR, President of Flex Radio Systems



Pietro Begali, I2RTF, of Begali Keys



Dave, WD3O, operating the Hamvention Special Event station, W8BI



Wray, AB4SF, checking into the Coast Guard net from W8BI



The famous Luso tower from Japan. If you have to ask how much it costs, you can't afford it.

### **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.***

### **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](http://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](mailto:benvec@gmail.com) KF4HEV

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

***"A clear rejection is always better than a fake promise."***

Jim Bates	K8OI	President	(804) 592-1068	<a href="mailto:jlbbates4@gmail.com">jlbbates4@gmail.com</a>
George Golding	W3PPY	Vice President	(804) 318-6951	<a href="mailto:w3pppy@arrl.net">w3pppy@arrl.net</a>
Tom Newman	KJ4LVC	Secretary		
Ken Leidner	WV0L	Treasurer		



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**RARC Members at Survivor Day 2018**

Roy Shultz, KI4MCX   George Starke, WB4VWR   Tom Ebbert, KG4BIZ   Tom Flippin, KD4CMK