



THE RICHMOND HAM

Published Monthly by the Richmond Amateur Radio Club

P.O. Box 35279, Richmond, Virginia 23235

March 2018

The RICHMOND AMATEUR RADIO CLUB will meet Friday, March 9th 2018, 7:00PM, at the Bon Air United Methodist Church, 1645 Buford Road.

Coming Events:

Vienna Wireless Winterfest — The National Capital Area Ham Radio Fair. March 18, 2018
<http://viennawireless.net/wp/events/winterfest/>

46th Annual RARSfest and ARRL NC State Convention. Saturday March 31, 2018.

<http://www.rars.org/rarsfest/>

This Month's Program:

March 2018 Presentation

FT-8 and RemoteHams - A "Worked All States" (WAS) winning combination! Chris Pohlad-Thomas, (K14AAM) will be presenting FT8, it's use and providing a demo of the FT8 software using the RemoteHams software. Chris attended the RemoteHams class in September of 2017 and has, using only his laptop and the RARC RemoteHams station, Worked All States! Congrats Chris!!!

February 2018 RARC Meeting Minutes

Meeting Date: February 9, 2018

Meeting Time 7:00 PM

Presiding Officers: Jim Bates, K8OI, President; George Golding, W3PPY, Vice President; Tom Newman, KJ4LVC, Secretary; Ken Leidner, WV0L, Treasurer. Directors: Tom Flippin, KD4CMK; Win Grant, WA4SSG; David Robinson, KJ4LHP; Trustee for W4FJ, Mike Owens, K4RKO; Armand Hamel, WA1UQO, newsletter editor.

Jim opened the meeting by welcoming members and guests. All were asked to introduce themselves and give their call signs. We then were led in the Pledge of Allegiance by Jim. Jim remarked on the excellent Frostfest this year, how well it was run and that even a member got a license upgrade at that time. Adding to the discussion were some members who said the Frostfest had great equipment available and many good bargains too. One member described the event as well setup and efficiently run.

The minutes for the January meeting were voted on and accepted. Ken gave the treasure's report for the month of January. It was voted on and accepted. He received 20 new applications for membership. All were voted on and accepted.

Win Grant, WA4SSG reported on our new radio equipment that is up and running very well. Bruce MacAlister, W4BRU announced that the club has some modern radios and equipment that could be made available to our members just getting started in the radio experience.

During Show and Tell Buddy Hall, KM4JCP explained how he had been given a tower and the process he undertook, such as handling the laying of concrete, to now having his tower in working operation. David Thomas, WD30 showed us a wire antennae launcher he built based on what he had found from commercial examples. The working time for building his launcher was about an hour. His is made from PVC and was considerably less expensive than the commercial products. Bruce MacAlister, W4BRU had a vector analyzer he had recently procured. He explained that it worked in the 100 Khz to 100Mhz range. This came to him in kit form and took him about two hours to put together. He also reminded the club that registration for the school was February 27. Activities included in the school would be license classes, tests and seminars. The classes are \$20 and the seminars are \$10. On March 10 upgrade tests will be free.

Jim brought the activities that are a part of a QSO

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Party to our attention and reminded the club that the next one will be March 17-18.

The 50/50 was held and Dr. Joe Palsa, K3WRY had some great prizes that were given out to the winners. A motion was made and voted on and the meeting was adjourned.

After a brief intermission a presentation on the ARRL and the services it has for emergency situations was made by Dr. Joe Palsa, K3WRY.

Respectfully submitted by Tom, KJ4LVC

Letter from the President

2018-03

Letter to the Members from the President

Dear Members, Welcome to the March edition of the RARC newsletter; and yes - time is flying by... The Vienna Wireless "Winterfest 2018" is coming up on Sunday, March 18th - but I won't be there! Nope, my oldest son is getting married on Saturday, March 17th and I'm pretty sure that my XYL "desires" my physical presence :) I think maybe my son does too! The Board held a meeting last month and agreed to purchase a new/replacement projector; we hope this will help when we don't have access to Bon Aire United Methodist Church's big screen TV. I like that TV though; kinda wish I had one like that at home. We have a lot of activities going on right now - one of the topics for the Board meeting was identifying all the different programs and projects RARC members are working. Here's a sampling: School, 1/2 Seminars, Testing, Club Presentations/Face to Face meetings, run the D-Star Repeater Stack, run the Remote Hams Station, and have a "self run" Maker's Club! I am SO excited to see the high level of engagement of our members!

Speaking of members; as a point of trivia - did you know that RARC is now over 150 registered (paid!) members? The Board was evaluating the success of the "HT for Tech" program and we've discovered that 80% of the folks who've received an HT through the testing program have RENEWED their membership after the initial year! That's fantastic news!!! This means that there is a level of engagement with our newest HAM radio friends which is keeping them interested and participating - I couldn't be happier! So - keep on elmerin', eye-ball QSO'n; and having fun with our hobby - I'd love to hear from YOU, what do you LOVE about Amateur radio? What do you love about RARC? (On that note, I'd also like to hear what you think we can do better!!!)

I'm looking forward to Chris' presentation Friday

evening regarding FT8 and RemoteHams - I hope to see you there!

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 March testing session will be on the 10th 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 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 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.

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, #9

By John DeMajo, K5HTZ

This month, we are going to be taking a look at a company that was well known both to Hams and in the commercial side of communications. By the late 1920s, radio was a well established household entertainment and information medium, and wireless communications had proven valuable to public service and the amateur market. As the Great Depression set in, there was financial pressure on the manufacturers of high end household radios, and a number of firms were failing or merging.

William J. Halligan had been a parts salesman for one such company. As the prestigious McMurdo company began to fall on hard times, Halligan left his position and sought to fulfill a dream to own his own company and to manufacture high quality hand-crafted radios for the burgeoning government public service and ham radio market. With the help of a few investors, Halligan founded the Hallicrafters company of Chicago in late 1932. The company had barely set up operations when they were sued by RCA. At the time, any manufacturer of radios in the U.S. was required to hold a patent license from RCA, which Hallicrafters did not possess at the time. At that same time, McMurdo had negotiated a deal with Howard Radio Company to manufacture their sets because Howard did hold an RCA license. Because of his previous connection to McMurdo, Halligan took advantage of Howard's willingness to manufacture radios for other small companies, and it is believed that the Hallicrafters sets made prior to 1936, were actually built in Howard's plant and under the Howard license.

Evidence of this can be seen in the apparent similarity of appearance of the Howard Model 437, (shown in Photo 1 that accompanys this article,) and the early "Sky Buddy" series and Echophone radios bearing the Hallicrafters name. Echophone was also an RCA licensed maker of inexpensive home radios at the start of the Depression. Some time between the 1932 start-up of Hallicrafters, and 1936, Halligan acquired the Echophone Company, which then afforded Hallicrafters an RCA license of it's own. Beginning around 1936, radios such as the Sky Rover and SX series were actually being built in Hallicrafters' own Chicago factory.

Halligan's next big break came when the U.S. And British Governments discovered that Germany was using frequencies just above the present 6 meter band, to control the navigation of it's massive Zeplin

air ships. All short wave radios made prior to that discovery, had short wave bands that only extended to 18 Mhz at best. As conditions deteriorated in Europe, the British government feared that the dirigible fleet would be used for air bombing, so they sought to establish a network of radio systems with the task of tracking Hitler's airship movements. Hallicrafters, which had by then become a respected name in high-end short wave radios, was contracted to build a line of radios that could be used to intercept signals in the 50-60Mhz range. The response to that request was the Hallicrafters SX-16 "Super Skyrider," a highly stable and sensitive receiver with a frequency range extending from the AM Broadcast band up to 62Mhz. Over one-hundred SX-16s were purchased by the government, and deployed across Europe in a network of triangulation stations that could successfully track the movement of Hitler's threatening dirigible ships. The success of the SX-16, and the company's ability to quickly innovate and design radios with specific features, thereby put Hallicrafters in the position of being the U.S. Government's "go-to" for specialized military radio equipment.

As WW-II approached, Hallicrafters' close association with the Amateur Radio community had been well established. Halligan, himself a ham operator, had, by then, developed the SX-28, which was considered to be the "Cadillac" of short wave receivers at the time. He had also ventured into the amateur transmitter business with the creation of the HT series of rugged, overly-designed transmitters.

With the bombing of Pearl Harbor, and the United States' entry into the war, the Army Signal Corps required a reliable medium power, band switching transmitter that could be assembled into a truck mounted radio communications center and easily carried into combat zones. Halligan called on the experience of the Ham radio community to provide the knowledge of what was required in making a rugged yet dependable transmitter to fit the needs of the military. The HT-4, an extremely stable and dependable ham transmitter, was reworked with such modifications as tube hold-down straps, shock-mounted critical components, easily swappable coil assemblies, and a shock absorbing base plate, to become the military spec BC-610. Combined with the already proven SX-28 receiver, and powered by a trailer mounted generator, these Hallicrafters built truck mounted communications centers were the primary long-range radio instruments used throughout the European theater.

After the war, Hallicrafters again returned to building ham equipment as well as home entertainment equipment such as televisions and entertainment radios. While most home offerings were products of extreme quality, the cost of production soon forced the company to return to it's primary mission of producing high-quality communications radios. In the post war market, the SX-42 and later the SX-62 were highly regarded by both amateur and public service clients. A constant progression of "S" and "SX" models evolved throughout the 1950s and 60s, as did the company's HT transmitter line.

By 1972, Bill Halligan had relinquished much of his hands-on control of the company. Through the 1960s, competition from kit radio manufacturers like Heathkit and Allied Radio's Knight-Kit division, forced Hallicrafters to begin producing radios in kit form. The SX-140 "Halli-Kit" ham receiver, which incidentally was this author's first commercially produced ham receiver acquired in 1962, was one of Hallicrafters' first offerings in the kit market. In order to keep the huge former wartime Chicago factory profitably operating, Hallicrafters contracted in the 1960s with Chicago Musical Instruments Company, to manufacture Lowrey electronic organs. The extensive re-tooling necessary to accommodate the organ building business, along with growing pressure from the kit radio makers, eventually forced the Halligan family to divest their interest in the company. In the early 1970s, the company was sold to Northrop. Shortly thereafter, Hallicrafters ceased operations. Bill Halligan died in 1992 at the age of 93. Throughout his life, he was an active ham radio operator, and one of the country's most avid supporters of Ham radio.



Photo 1: The obvious similarity of the Howard Model 437 and the Echophone EC-1 serves as proof that Hallicrafters' radios were actually built in the Howard Radio Company factory prior to Halligan acquiring his own RCA manufacturing license.



Photo 2: The Hallicrafters SX-16 is the 62 Mhz radio developed for use by the British government in the tracking of Hitler's Zeplin dirigible fleet.



Photo 4: Examples of the post-war Hallicrafters sets that were widely used by both amateur radio stations and public service entities such as fire, police and business dispatch communications.

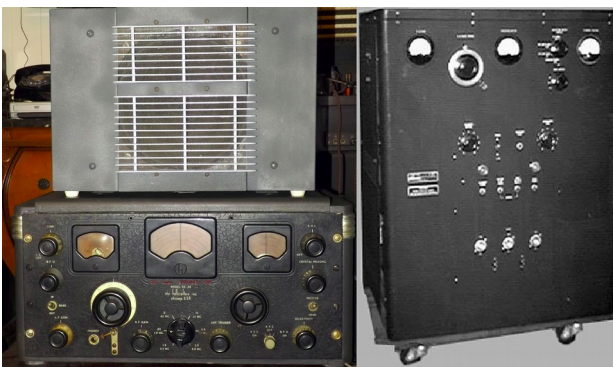


Photo 3: Hallicrafters' famous BC-610 military spec combination which served as the mainstay of U.S. Army Signal Corps communications during World War II.



Photo 5: The "Halli-Kit" SX-140 was the company's first and last attempt at producing radios in kit-form in an attempt to meet competition from the popular Heathkit and Allied Radio Knight-Kit lines.

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.***

Thought For The Day!

Problems that go away by themselves, come back by themselves.

Jim Bates	K8OI	President	(804) 592-1068	jlbates4@gmail.com
George Golding	W3PPY	Vice President	(804) 318-6951	w3ppy@arrl.net
Tom Newman	KJ4LVC	Secretary		
Ken Leidner	WV0L	Treasurer		

Famous Hams?

