



THE RICHMOND HAM

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JUNE 2012

The RICHMOND AMATEUR RADIO CLUB will meet Friday, June 8, 2012, 7:00 PM, at the Bon Air United Methodist Church, 1645 Buford Road.

PROGRAM: Our June program will feature Lieutenant Colonel Robert Kemmler of the Virginia State Police talking about the STARS digital radio system used by VSP and 20 other state agencies.

Coming Events:

June Club Meeting, June 8, 7:00 PM
Special Olympics of VA, June 8 and 9
Field Day 2012, June 23 & 24, Laurel Recreation Area
VE Testing Session, July 14, 9:00 AM

Club Members!

If you are not receiving your copy of the Club's monthly newsletter, please contact Richard, WA4FEH, RARC's Treasurer, at wa4feh@gmail.com or phone 743-3899.

Getting to know this month's speaker

Lieutenant Colonel Robert Kemmler began his career with the State Police over 30 years ago after graduation from American University as a road trooper assigned to Dinwiddie County. He has been a bomb technician as well as commander of the Department's Richmond Division. He has held a number of positions of increasing responsibility and earned a master's degree in Administration of Justice along the way. Bob currently serves as the head of the Bureau of Administrative and Support Service for VSP with the STARS radio system as one of a number of projects in his portfolio.

The STARS system cost over \$300 million. It supports voice and mobile data, mobile repeaters, vehicle tracking information and the ability to communicate with other law enforcement agencies. Join us on June 8 at 7:00 PM to learn more about this technology.

The Greater Richmond 2012 Field Day June 23 and 24, 2012 Laurel Recreation Area, Henrico

If you haven't done so already, mark your calendar for Saturday, June 23, and Sunday, June 24, FIELD DAY! This year's event promises to be a ton of fun. RARC and RATS are joining forces and plan to operate the entire 24 hour period. You night owls get ready to hoot!



Please contact Chris Walker, N4CBW, (christopherwalker@gmail.com) to get on the sign-up sheet for a time slot to operate.

Field Day begins at 2:00 pm Saturday and runs through 4:59 pm Sunday. Plan to come early to help set up and stay late to tear down.

The event will be held at Laurel Recreation Area which is at the corner of Hungary Spring Road and Hungary Road in Henrico, VA 23228.

From the Prez

The Dayton Experience

I have just returned from my third trip to the Dayton Hamvention. Among the 25,000 present this year were a number of RARC club members. As everyone who has been to Dayton knows, it is BIG. I'm sure I saw only about half of the flea market area though I managed to cover most of the inside displays once over two days.

One of the things that distinguishes Dayton from other hamfests is that manufacturers, large and small, tend to announce new products at this event. Kenwood had their new top of the line HF transceiver, the TS 990, in a glass case for people to see, but not touch. The back panel had been covered over so as not to reveal too many details, and the marketing guys were very coy about the price: between \$5,000 and \$10,000. One of the designers of the radio was in attendance, but there was little risk of him revealing too much given his limited grasp of English.

Flex Radio had a huge display with at least a dozen staffers, many of whom were programmers writing code for a new radio, promoting their 6000 Signature Series of software defined radios. A reservation to buy the top of the line 6700 (with the equivalent of eight receivers) available at the end of the year costs \$2,100, which of course will be credited against your \$7,000 purchase price.

There were a number of new D-STAR products announced, but not by ICOM. Robin Cutshaw, developer of the DV Dongle and DVAP devices, announced some upgrades to the DVAP product line without being too specific, as well as something that will be built around a device called a BeagleBoard, a Linux based computer board that fits in your hand. The digital crowd was excited by a UHF radio with an open source digital interface from a small startup called North West Digital Radio (www.nwdigitalradio.com). This product, which should have D-STAR as well as other digital mode capability, should sell for around \$400 and will be a platform for what hams do best which is innovate and adapt.

I attended two of the main hamfest forums (one on D-STAR and one on contesting) in addition to an offsite D-Star event sponsored by the Georgia D-STAR group. Typically the Dayton forums feature the top speakers in the world on specific areas of interest. The head of

ICOM's U.S. operations as well as the designer of the new ID-31A D-STAR handheld participated in the Georgia D-STAR event.

My friend Wray, AB4SF, had a question about using an existing Heil headset with a new ICOM 7000 which he purchased. No need to ask a salesperson who might not know the answer. He simply walked up to Bob Heil and posed his question to the man who owns the company that manufactured the headset.

Tom, DF2BO, the owner of Optibeam, was in the Array Solutions booth. I heard him on 20 meters from somewhere in Texas a couple of days after the hamfest. He had just made a "service call" on a customer's antenna (at the top of the tower) before heading back to Germany. Now that's service.

It does take time and money to attend Dayton, but we live within a reasonable driving distance, and there are some inexpensive housing options (a dorm room at the University of Dayton) if you want to save money so you can buy more "stuff."

If you can't tell, I'm hooked on Dayton. I just wish I had started attending sooner. I intend to make it an annual event as long as I can get around. I encourage you to experience Dayton also. If you are already at the point where getting around is a limitation, they have a very large concession of scooter rentals.

73, Win

D-STAR Note

Our digital repeater usage continues to grow as more members acquire D-STAR radios and install D-STAR hotspots. In addition to our regular Wednesday night net on the VHF D-STAR repeater, we link that repeater to Reflector 025C at 9:00 PM on Wednesdays for the National Capital Region D-STAR net. On Sunday nights at 9:00 pm, we link the UHF repeater to Reflector 002A for the Southeast D-STAR Weather Net. Information on gateway registration and linking is on the Club website at <http://rarclub.net/repeaters/D-STAR/> or contact Jim, KJ4WLH or Win, WA4SSG, for assistance.

Spring 2012 RARC License Classes Finished, 16 passed

Twenty-seven people signed up to take the classes. For six, real life intervened and they dropped out. Of the 21 who stayed with it, 16 passed their FCC exams. Nine of the students are brand new hams! The rest were upgrades. One Extra class student already had his Extra license; he just wanted to refresh himself on the subject. The pass rate was 76%. As expected the Extra pass rate was the lowest at 57%. Extra is a very difficult test and requires lots of studying. And the instructor (me) could probably use a little tuning up to raise the passing rate.

Bruce MacAlister, W4BRU, RARC radio school coordinator

RARC VE News

Allan, WA3J, submitted the following report on VE Exams for May: We gave two testing sessions in May, the 12th and 17th. 45 tests given for the month with 5 extras, 7 Generals, and 11 Techs (5 zero to General and 1 zero to Extra).

Note: The new Extra question pool will be effective July 1, 2012, so be sure to study the correct questions for your Extra upgrade.

Our next VE testing session will be **Saturday, July 14th, 9:00 AM**, at the Bon Air United Methodist Church.

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.

May Meeting Minutes

Meeting Date: May 11, 2012

Meeting Time: 7:00 PM Called to order at 7:05 PM

Funding Officers: Win Grant, WA4SSG, President, Pete Fundinger, AA4PF, Vice- President, Richard Arnold, WA4FEH, Treasurer and Patricia Johnson, N8WEA, Secretary

The President called the meeting to order and welcomed all. Visitors included were: Barry Mapp, K4RUE and Gus Williams, KJ4FCJ.

Old Business:

The April minutes were approved and motioned to accept.

The April Treasurer's report was provided by the treasurer, Richard Arnold, WA4FEH.

Richard also announced that he had no applications for membership this month.

New business:

- Bruce MacAlister, W4BRU, gave an update on the school. He reported several members would like to come up with some ways to promote code. If you are interested in helping Bruce with this task, please see him later.
- Marshall Ervine, N4XBP, reported on the yard sale which was taking place this weekend. The silent auction has already been laid out for all to view during the meeting. After the meeting, all were invited to view the items for sale. Marshall thanked all that helped put it all together and organize.
- Jim Bates, KJ4WLH, reported on the contact contest that will be taking place the month of June. The club will be initiating a challenge for members to make a QSO every day for a month. If members participate, they will be rewarded with lots of praise at the end of the month. ☺ Club members should spread the word. Let Jim know if you are participating. It is solely the honor system and your conscience. All "winners"

(all who make contacts) will be listed in the newsletter the following month. Sounds like fun! ☺

- Roy Schultz, KI4MCX, gave an update on Spring Public Service Events coming up that the club members could help with. The March of Dimes for Babies Walk-a-Thon, tomorrow, May 12th. Other events include, June 2 & 3 Bike MS Virginia and June 8 & 9 Special Olympics of VA. Please contact Roy if you would like information on any of these events. (royschultz@hotmail.com)
- Chris Walker N4CBW, reported on the field day. It will be taking place at Laurel Recreation Park in Henrico. Everyone should come on out and enjoy. The Club will be participating with the RATS Club.
- Joe Palsa, K3WRY, reported that he is working on an antenna for the EOC and would like to begin working nets from the center. He would like members to make the community aware. He also reported on the current nets and encouraged all the check in.
- Win Grant WA4SSG updated members on the revisions made to the by-laws. Copies were available for members to view and were published on the website. The main revision was a change to allow board members to vote by email. It was motioned and seconded to accept the new by-laws. All approved.
- Win also reported on the Club history. A printed form was available at the meeting and was also published on the website. The board will be voting to correct/revise the historical error on the Club's beginning in 1916. The 100th anniversary will be in 2016. Members should look over the information and let the board members know if they approve of the revision also.
- A special thank you to Chris Walker, N4CBW for all his work on the website. It is a great tool for all members.
- The D-STAR Academy handout was posted on the website along with links to register.
- A special thanks to Ron and Barbara Chase for their wonderful work on publishing the newsletter. There is always such great material included. Thanks to all who contribute also.
- Grayle Hunley, KF4USV, thanked the board for following his suggestion of adding phone numbers and emails to the web page. He also suggested that the club consider providing some mode of transportation for elderly members who need rides to the meetings.
- Allan Johnson, WA3J, reported on the VE testing that would occur on the following day at 9:00. Testing would also take place on the following Thursday night for the graduating class. ☺ Please let Allan know if you can help with the testing.
- Richard Arnold, WA4FEH, reported that the Extra books would be a new version for the fall class. Please let Richard know if you plan on taking the class so that he can order the books.
- Win announced that the program speaker for next month will be a guest from the Virginia State Police who will present a program on the STARS digital radio system.

There was no further business, so the meeting was adjourned @ 7:40 PM. A very informative program followed on Feedline and Connectors presented by Mike Owens, K4RKO, and Win Grant, WA4SSG. There was lots of show and tell and the program was enjoyed by all.

Respectfully submitted,
Patricia Johnson, N8WEA

Public Service

Special Olympics of Virginia

Friday June 8 and Saturday June 9

For more information or to volunteer contact Joe Landers, ke4eue@ke4eue.org OR register online at www.ke4eue.net. This event requires an HT and some decent shoes.

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The 2012 Cap 2 Cap Bicycle Ride Report

This event was held on Saturday, May 12.

Ham Radio Volunteers participating were Bruce, N1CSP; Chris, KJ4QZB; Jim, KJ4DMI; Keith, KK4BHH; Mike, AC5PT; Oliver, KF4HVX; Peter, KF4VIZ; Thomas, KJ4CHS, and Roy, KI4MCX.

This year has been short on volunteers and we had just enough people to cover the Western side of the route, with Keith Dingwall, KK4BHH, going to help the New Kent people working the Eastern side.

The day began a bright beautiful sunny day, slightly cool in the morning. Beginning 100 mile riders were scheduled to start at 7:30 AM from Rockett's Landing. Upon arrival at the first rest/water stop our volunteer found that one of the earliest riders had fallen and broken their arm and that EMS had already been called. Things remained mostly uneventful most of the rest of the day until another rider on the route was hit by a car and EMS was called for them also. Those were the only two injuries of the day that we were made aware of, although there may have been a few other scrapes and scratches as will happen on events of this type. The rest of the day continued without incident and the SAG wagons were busy mostly hauling people with mechanical breakdowns or who were unable to finish the

route.

I would like to once again thank everyone who helped out, and also the R.A.T.S. Club for the use of their repeater for this event.

Roy, KI4MCX

Silent Auction and Yard Sale

Again this year, the Club fundraiser was a big success. This success was only possible because of the generous support by each of you who donated ham equipment, household items and plants, placed bids at the auction, and made purchases at the auction and yard sale. There would have been no auction or yard sale without you!

Special thanks are due to those who donated ham equipment for the silent auction: Len Varmette, N4NZL; Win Grant, WA4SSG; Ron Chase, KD4XA; Greg Phelps, KK4OA; Tom Flippin, KD4CMK; Richard Arnold, WA4FEH; Harry Miller, W4PDX; Rob Thomas, KC4NYK; and Grayle Hunley, KF4USV.



This was the first item sold at the Yard Sale!

Many thanks also to those who volunteered their time to set up the auction and yard sale, assisted with yard sale operations, and cleaned up afterward: Richard Arnold, Joyce and Tom Ebbert, Harriet and George O'Mara, Christy and Bob Osterloh, Barbara and Ron Chase, Nancy and Ed Bryce, A.C. McNeer, Len Varmette, and Pete Fundinger. I know that there were others who assisted, and I thank each of you as well. This was another great team effort!

Marshall, N4XBP

Remote Operations, Part III

Jim Bates (KJ4WLH) - June 2012

The past couple of months have been a brief description of my interest in remote operations. I tried to give a little bit of the reason behind my interest and then some of the products that I used to make it all happen. The "why" I want to operate remotely part really drove this entire endeavor - well, mostly! The challenge of being able to operate remotely was exactly that - a challenge, a goal, a destination, something to be overcome. But the end really wasn't my goal - it was really to enjoy the journey of learning, experimenting, trial and error, and (hopefully) FINALLY success.

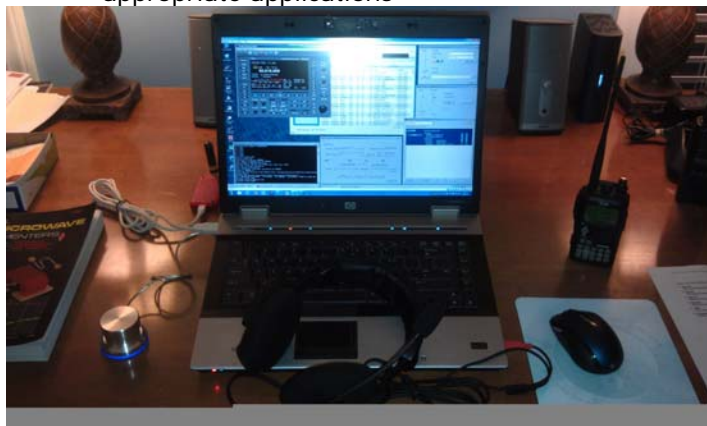
So, where did I end up? Have I accomplished all my goals? Is remote operation the ULTIMATE in convenience and coolness, the best thing ever, or just a check box meaning I can move to the next idea? In some ways, it is all of those things; and more; and less :)

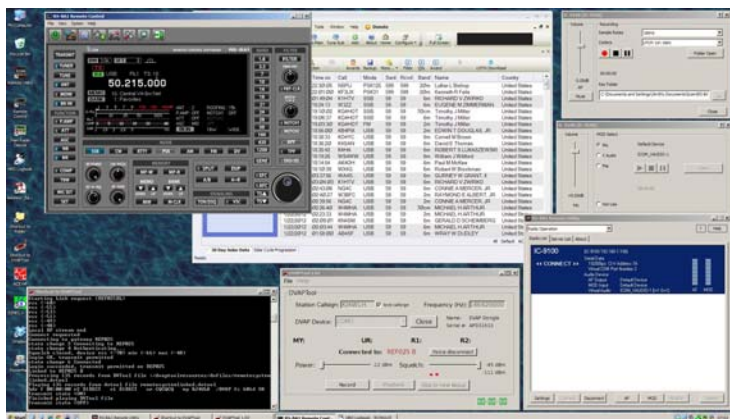
As a reminder, here are my "requirements" as I shared in Part I:

1. Do EVERYTHING that I normally do at my station – except be there!
2. Ease of use – Be easy to understand, use, change, and operate.
3. Portability – Operate anywhere that had wireless or Internet connectivity
4. Reliability – Works reliably all the time – not just sometimes
5. Integration – Must work with Ham Radio Deluxe, DM780, etc.
6. Laptop Compatibility – Software remote operation
7. Rig Compatibility – Must work with my rig!
8. "Reasonably" priced!

A typical operating session kinda works like this:

- Go out to the shack and turn on the power supply, network router, IC-9100, and laptop
- Get back to my laptop, start up my "Radio VM" and get a cup of coffee
- Plug in my headset
- Start up the RS-BA1 software
- Depending up what kinda work I want to do (HF Voice, HF PSK, VHF SSB/FM, etc.) - start up the appropriate applications





KJ4WLH Photos

General Observations

Well, I guess it does work pretty well - but, ultimately, it's not the same as being in the shack operating. You know, it's a little hard to explain - maybe it's like playing Solitaire on a computer instead of with a deck of cards. It works fine; it sure is convenient and portable and all that - but it's not a "real" deck of cards that you are shuffling. I know, I know, I know - yes, the control software is using "real" hardware; like I said - I have a hard time finding just the right analogy...

Regarding the ease of use part; yep - nailed that one. It couldn't be much easier to use - but then I have worked in IT for 25+ years. I'm not sure that I can provide an unbiased opinion here. Let me break this topic into 2 parts: Initial setup and configuration; and Operation. The initial setup was something of a pain in the rear, there were a lot of things to configure. Networks, virtual sound card, firewall port configurations, etc. So, yes, the initial configuration was something that I wouldn't look forward to performing routinely. Operation, however, is a very different story - the system works! You start up the rig and remote laptop; crank up your local pc/laptop and you are in business. The operation part can be VERY routine and easy - just getting to that point can be challenging.

The portability and reliability topics are a mixed bag. The RS-BA1 software is a network HOG - it LOVES low latency (quick response) bandwidth. There are software configuration settings which help you balance your network utilization at the cost of reduced mic and audio quality. I have managed to run my laptop at other locations than my QTH - but the quality of the Internet connection makes a dramatic difference in usability of the remote system. Hotels are pretty stingy with their network; extended family - not so much :) (As a quick reminder, the D-STAR DVAP is super friendly with poor quality network connections - like Hotels, Starbucks, and airports!)

Some days are a little better or worse than others. For example, the wireless network really performs only marginally and I would not be able to recommend it to anyone as a good solution. The RS-BA1 software can tell you if it is losing data over the network connection - I'm surprised at just how much data gets "lost" with the wireless network. The "correct" solution would be

installing a dedicated twisted pair network cable to the shack, but that requires just a little "too much" work and the wireless solution, faults and all, is "good enough" for most activity.

Test Time!

Now it's time for the test, who can figure out the most "inconvenient" part of this setup? I'll give you a hint - it'll most likely be the HF guys who've figured it out first. What I like the least about my setup - my **MANUAL** tuner - the Palstar AT-2K. Don't get me wrong, I love that tuner - it really works well! The problem is that I have to get pretty close to the frequency that I want to work and keep it there! Some bands are more forgiving than others with my doublet; 20m for instance, is a pretty close match across the entire frequency range. 40m isn't so forgiving :)

Finally! The end of the story! I'll finish it up with a **FREE OFFER!** You purchase an IC-9100 and the RS-BA1 software, and I'll help you set it up :) No fee! (Well, I might take a cup of coffee or cold "adult beverage" in lieu of pay - ping pong paddles are such an old school - 70's style, western type of payment...)

If you've made it this far, thank you for your interest! I hope you continue to enjoy our fine hobby and I encourage you to share your experiences with someone else too!

73 de KJ4WLH

P.S. If you didn't get the Ping Pong Paddle reference; "Just doc Jim a day's pay for nappin' on the job..." - Mr. Taggart (Slim Pickens), Blazing Saddles

P.P.S. I only now realized Mel Brooks named the character responsible for creation of the trans-continental railroad in Blazing Saddles - "Mr. Taggart" (Slim Pickens). Ayn Rand named the character responsible for the creation of the trans-continental railroad in Atlas Shrugged - "Nathaniel Taggart". How I love Mel Brook's humor!

Richmond Amateur Radio Club (RARC) 1st Annual June "Radio Run"

Purpose:

RARC wants to encourage ALL amateur radio operators to be MORE active on ANY band, frequency, or mode! Even if you are not (yet) a licensed amateur radio operator, you can still participate!

Rules:

1. You must make at least 1 (one) QSO each day of the month of June
2. You must operate on an Amateur Band/Frequency
3. You must generate RF on an Amateur Band/Frequency at your station
4. If you are NOT a licensed Amateur Radio Operator you must listen to an Amateur Band/Frequency using an RF receiver
5. Not Allowed (QSO does not count)
 - a. DV-Dongle (the blue model)
 - b. IRLP using your phone
 - c. Echolink, etc.

- d. No "radio-reference.com" or internet based radio monitoring sites for listening
- e. Remember, if you don't generate or receive Amateur Band/Frequency RF, the QSO does not count!
- 6. We're going to use the honor system for keeping track of all who complete the "Radio Run"! (Be honest – which is a pretty good policy anyway)
- 7. IF you have made at least 1 (one) contact on each and every day of the month of June, please contact Jim Bates with the following information:
 - a. Call Sign (required)
 - b. Name (optional)
 - c. E-Mail Address and/or Telephone Number (optional)
 - d. If you kept track of your contacts, the # of contacts you made during the month of June, 2012 (optional)

If you have questions, comments, or concerns please contact Jim Bates, KJ4WLH, (804) 592-1068, jl Bates4@gmail.com (e-mail is preferred), or RARC.

BSA to Offer Morse Code Interpreter Strip

For many years, Boy Scouts and Scouters have been able to earn an interpreter strip to wear on their uniforms. This strip -- worn on the uniform above the right pocket -- denotes proficiency in a foreign language or sign language. Each language has its own strip (with the name of the language embroidered in that language), and some Scouts and Scouters wear more than one strip. Now those hams involved with the Boy Scouts can show their proficiency in Morse code with a Morse code interpreter strip (with M-O-R-S-E spelled out in Morse code).

Scouts and Scouters can earn the new Morse code interpreter strip by completing all three requirements: Carrying on a five minute conversation in Morse code at a speed of at least five words per minute, correctly copying a two minute message sent in Morse code at a minimum of five words per minute (copying means writing the message down as it is received) and sending a 25 word written document in Morse code at a minimum of five words per minute.

More information at <http://www.arrl.org/news/bsa-to-offer-morse-code-interpreter-strip>.

Bruce MacAlister, W4BRU

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.

FCC EXAMS EVERY MONTH on the SECOND SATURDAY. For January and all odd-numbered months: Bon Air United Methodist Church, 9 AM. Call coordinator, Allan Johnson, WA3J, 399-8724, or visit <http://www.rarclub.net/>.

For February and all even-numbered months, FCC test sessions are provided by the RAVE group. Coordinator, Pat Wilson, W4PW (932-9424) has information on his website <http://w4pw.org>.

RARC has the first D-STAR digital repeater in the area. 147.255 (+) and 443.7125 (+). We now have the gateway tied into the worldwide D-STAR network.

The Club sponsors several radio nets each week. Join in for the informative discussions and fun.

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 Repeater
	8:15 PM	145.730	Packet

- 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
Age 12 and under	\$5.00
Age 13 to 18	\$10.00
Regular Membership	\$15.00

- Lots of information about the Club and our activities is available on our website, www.rarclub.net. Check it out!

The SWAP SHOP

Club members may list their wares in the newsletter. Send descriptive information to Barbara at wa4vuo@arrl.net. 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: Two 2-meter radios. **ICOM IC-211**, 2-meter SSB, CW, FM transceiver, mic, manual, IC-RM2 computerized remote controller. \$200. Also, **Kenwood TS-700A**, 2-meter SSB, CW, FM transceiver, mic, manual, VOX 3 VOX unit. \$125. Will sell both radios for \$300. Call Jerry Jones, WA4CQX, (804) 449-6245.

Wanted: 6 meter multi-mode transceiver. Base or mobile. Need SSB modes. Please email Blake Forbes at dforges53@comcast.net

Thought for the Day

How long a minute is, depends on what side of the bathroom door you're on.

73 de:

Win Grant	WA4SSG	PRESIDENT	(804) 272-9695	wa4ssg(at)arrl.net
Pete Fundinger	AA4PF	VICE-PRESIDENT	(804) 639-5573	aa4pf(at)verizon.net
Patricia Johnson	N8WEA	SECRETARY		
Richard Arnold	WA4FEH	TREASURER		

Map to this year's Field Day

