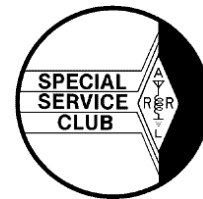




THE RICHMOND HAM

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The RICHMOND AMATEUR RADIO CLUB will meet Friday, February 12, 2010, 7:00pm at the Bon Air United Methodist Church, 1645 Buford Road.

PROGRAM: Software defined radios (and transceivers) like the Flex Radio we saw in January are based on DSP; digital signal processing. So is your cell phone. So what is DSP all about? Professor Alen Docef teaches this subject at the VCU Electrical Engineering School. He's been teaching it for years and he knows how to boil down a complex subject like DSP into an understandable explanation that any ham can grasp. And, Alen's father is a ham. Alen is not. That is something we should try to change.

Weather Note: If Chesterfield County Schools are closed for inclement weather, the church will not be open for our meeting.

Coming Events:

VE Exams Thursday, March 18th, 7:00 PM
March of Dimes Walk-a-thon, Sunday May 2nd

Getting to know this month's speaker

Alen Docef completed his education at the Polytechnic University of Bucharest and Georgia Tech. He worked as a scientific engineer at the University of British Columbia, where he also started to enjoy teaching. The focus of his research at the time was image and video compression. In 2000 he decided to move back to the East coast and join the Electrical and Computer Engineering department at VCU. Professor Docef teaches courses in signal processing and communications. He also does research involving applications of signal processing to medical imaging to achieve faster brain MRI, safer image-guided radiation therapy, and clearer ultrasound.

Digital Signal Processing (DSP) is what makes a Software Defined Radio (SDR) work. An SDR is a radio communications device in which most of the signal processing is implemented in

software. Digital signal processing replaces most of the crystal, capacitive-inductive, and integrated circuit filters hams deal with in their current transceivers with specialized number-crunching processors. With DSP, an SDR is able to implement different wireless protocols by simply downloading a new program. This talk will discuss some of the basic DSP functions (analog-digital conversion, filtering, Fast Fourier Transform, equalization) and their role in SDR.

From the Prez:

Type "ham radio richmond va" into an Internet search and you get "Richmond Amateur Radio Club" at the top. Click the link and you quickly find my name and phone number right there. A Richmond stranger did just that the day of the Haiti earthquake. He called me. His wife's sister was in Haiti, they couldn't contact her, and they were very worried. Could ham radio make contact? As usual my HF rig was nothing but noise. I asked him to call Ron Chase, KD4XA, figuring he knew who might have a functioning rig.

Ron did some digging and found that SATERN, the Salvation Army ham network, was making contact. They have a large staff in Haiti so they use SATERN even when there is no emergency. Ron called the man back and told him how to log on to the Salvation Army Web site and put in the name for transmission to Haiti. He also found Harry Miller, W4PDX. Harry immediately jumped into action and started monitoring the nets. He submitted the information requested to the net and had Ron follow up by entering the information again via the Internet. Harry was pretty well glued to the radio to make sure he did everything he could to help.

Two weeks later I got another call from a Richmonder who had a family emergency. He needed to contact his sister who was on a sailboat near Panama. I called RARC member and intrepid sailor, Ron Farley, KG4QIV. I had thought of the Coast Guard and the Maritime Net at 14.3 MHz but Ron knew about a cruising club that had a morning net for the Caribbean. Ron even found the phone number and e-mail address for the Commodore! Armed with Ron's information I called our second

stranger back giving him that information.

The good news here: the general public thinks that we hams are the go-to folk when regular communications fail. It's good to know that you and I are respected and valued by our larger society. It may be a hobby but we can take it seriously when we need to.

73, Bruce, W4BRU

Jim Bolton WA4WJG – SK

We recently lost one of our old time members, Jim Bolton. Jim was a very active member and is credited with starting the Club's license prep school way back in the 60's.

History Bits

My old friend Jim Bolton WA4WJG died recently. I got to know him well when I started helping with the FCC study classes in 1982. Theory and Code, necessary for the Novice class license, was taught. Jim handled the code instruction.

Jim was licensed in 1964 as WN4WJG. As he upgraded the N (novice) was replaced with an A. His friend and "study buddy" was Buck Buchanan WA4WGH. Thinking back on their struggle learning theory and code on their own, they started a Novice Class, open to all prospective hams. They obtained space for classes at Pine Camp, Old Brook Road and Azalea Ave. Then Jim arranged to meet at William Fox School, one block from his home! A short time later they relocated to the old Westhampton school building.

When Buck Buchanan dropped out, Mac Crush WB4UOI joined Jim Bolton. Mac invited me to ride with him to the school. He had enlisted Jim Fitzgerald W4OJE to handle radio theory. I was sold on the value of visual aids. Jim would tell me the next topic, and I'd bring along a demonstration. I guess it was helpful. I know I had a good time!

Ray W4MYI

The Tech Corner

Rob Thomas will give us a brief overview of the Genesis G3020 SDR kit. Indeed it does look attractive. It may be a better SDR kit for the club than the Softrock transceiver kit with its

surface mount components. Take a quick look at the Genesis G3020 SDR web site <http://www.genesisradio.com.au/G3020/> and see their offerings having PC boards with through plated holes.

This year's kit building project will not be a competitive event but a group building experience with everyone helping each other. If you have never built an electronic kit, you won't believe how much you can learn from the experience. Plus, it's great fun!

The technical committee looks forward to the membership's response to the Genesis G3020 transceiver as the designated 2010 kit.

* * *

The D-STAR repeater has been moved to a downtown location as announced at the January meeting. We are getting interesting signal reports from around town. Remember, this is just an experiment. We have learned a lot about multi-path interference since the move. This should be minimized when the repeater is moved to a roof top location. Stay tuned.

* * *

Don't forget, the Club now has a few pieces of test equipment to loan to our members. Please contact Ron KD4XA if you are interested in borrowing any of it. We have RF and AF signal generators, a VTVM, and a capacitor checker. Jim W8MGZ will be happy to hear the equipment is being used again.

RARC Radio School

Wow. Quite a turnout for the winter session of license prep classes! Bruce's (W4BRU) Extra class is bulging with 10 students, David (K4HIN) has 5 in his General class, and Rob (KC4NYK) has 3 going for their Tech license. Good luck with your studies! And, we can't thank our instructors enough for giving of their time and talents.

Complete information on our license prep classes is available on the club's website www.rarclub.net. If you have questions, please call Ron or Barbara Chase at 320-1627.

RARC Meeting Minutes

Meeting Date Friday, January 8, 2010

Meeting Time 7PM Called to Order at 7:03

Presiding Officer – Bruce MacAlister, W4BRU, President

Recording Secretary __Rob Thomas, Call:: KC4NYK

Old Minutes Approved? Y X N
Discussion: :

1. Kit project ideas put forth for the coming Kit Project were
 - o The Paraset
 - o SoftRock,
 - o Some APRS project
2. Frostfest, Feb 6th – volunteers needed
3. Repeater test move – voted on, passed
 - o Questions about location, access, security, etc.
 - o Ultimate location to be on roof after initial test

New Business Discussion Items::

1. W4FCU had brought some magazines and a couple of CD's for anyone interested
2. It was suggested that occasionally members bring a snack, soda or food item to the meetings.
3. 2010 Spring Session School Registration was announced
4. Mention was made that the equipment of SK, Terry Hebert, KG4GLS was going to be up for bid. Details to follow.

Evening's Program SDR Radio – The Flex 3000 & Quadrature

Presenter John Watkins Call:: NB4B

Certificate? Y X N

Meeting Adjourned at 7:23

Submitted by _Rob Thomas_ Call:: KC4NYK

RARC VE News

Congratulations to those who tested at our January 9th VE testing session. From that session we have two new Technicians, two new Generals, and two new Extras.

Our next VE testing session will be **Thursday, March 18th, 7:00 PM**, at the Bon Air United Methodist Church.

If you have questions about a session, please see our website, www.rarclub.net/ or contact Mac K4YEF at 272-6185.

FCC EXAMS EVERY MONTH on the SECOND SATURDAY.
For January and all odd-numbered months: Bon Air United Methodist Church, 9am. Call coordinator Mac McNeer K4YEF, 272-6185, 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 and registration at <http://www.w4pw.org/>

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.

Welcome to our new member!

Win Grant, WA4SSG.

CLUB NETS:

Sunday	7:00 PM	50.135	USB
	7:30 PM	52.525	FM
Wednesday	7:00 PM	28.470	USB
	8:00 PM	147.255	D-STAR Repeater
	8:15 PM	145.730	Packet

Refreshments

Thanks to Christy Osterloh KC4PKK for providing refreshments at our monthly meetings this year. She will appreciate any help you can offer setting up and putting stuff away. Thank you, Christy!

Can you help?

The Club is looking for storage space for some of our Club property. It's important the goods be kept dry and protected. Items include Field Day essentials, historical items, and some electronic gear. If you have some storage space that you would be willing to share with the Club or know of someone who might, please contact Bruce W4BRU at 353-4269.

The SWAP SHOP

Club members may list their wares in the newsletter. Send your request to Ray at w4myi@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. ***You must be an RARC member to place an ad.***

The Club has a novel arrangement to bring buyers and sellers together--- a "swap shop." Have something to sell or swap? Looking for something related to radio or electronics? Write a brief description and send it in. It will appear in the newsletter three times unless extended. Any interested parties will contact you directly. Questions? Bring them to the meetings.

For Sale: Two SX-99, One HQ-170 and a SWAN 350 with power supply. Will take best offer on all. Don Golden, KB4SCD, armyjeep@comcast.net, phone 804-744-5315.

Join the Richmond Amateur Radio Club

Annual Dues are:

80 and over	\$0
Age 12 and under	\$5.00
Age 13 to 18	\$10.00
Regular Membership	\$15.00

73 de:

Bruce MacAlister	W4BRU	PRESIDENT
Grif Griffiths	KF4JG	VICE-PRESIDENT
Robert Thomas	KC4NYK	SECRETARY
Richard Arnold	WA4FEH	TREASURER

Thought for the Day

Knowledge is like a garden: If it is not cultivated, it cannot be harvested.

VISIT OUR WEBSITE, <http://www.rarclub.net> Much information available!
