



THE RICHMOND HAM

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July 2021

THE RICHMOND AMATEUR RADIO CLUB RARC Meeting Virtually Happening!

Our monthly meeting on Friday July,9th, 2021, will be a virtual one. The Zoom meeting will start at 7:00pm.

Upon joining the meeting you will be muted. You may exchange greetings with members through the chat feature (keyboard).

Cell phone and tablet users please use Landscape orientation for better imaging.

Kenneth Leidner is inviting you to a scheduled Zoom meeting.

Topic: RARC Monthly Meeting - Virtual Time: Junly. 9th, 20201 07:00 PM Eastern Time

(US and Canada)

Every month on the Second Fri.

Please download and import the following iCalendar (.ics) files to your calendar system. Monthly:

https://us02web.zoom.us/meeting/tZwoduGoqzMvEtBdpM3wG1LJ7Ro1ZcdB0qf1/ics?icsToken=98tyKuGgqzoiGtGdtRGDRpw-GYj4WfTwmFxYj7d_mA_IUDd0My_cYdBNY4h8FPqA

Join Zoom Meeting

https://us02web.zoom.us/j/88518058584

Meeting ID: 885 1805 8584

One tap mobile

+13017158592,,88518058584# US

(Germantown) +13126266799..885180

+13126266799,,88518058584# US (Chicago) Dial by your location

+1 301 715 8592 US (Germantown, MD)

Meeting ID: 885 1805 8584

Find your local number: https://us02web.zoom.us/

u/kbj882gslc

Ken Leidner, WV0L

This Month's Program:

At the July meeting Industrial Designer, Rob Thomas, KC4NYK, will discuss the various microprocessors and SoC's (systems on a chip) that have impacted ham radio kits and workbenches globally and will give an overview of the differences of those two platforms. Join Rob as he introduces Circuit Python, a new platform which has the ability to take your formerly "one trick pony" microprocessor and turn it into a hybrid, quasi, minicomputer capable of running the increasingly popular Python script and its already vast libraries while offering many features and benefits over a one-loop program. Rob will demonstrate the ease with which programs can be written once in the Mu text editor running on any computer including a \$10 Raspberry Pi Zero and then "drag and dropped" via USB to multiple boards with few changes other than pin designations. He will also walk you through the various entry level tutorials and other online knowledge resources needed for those of us who are interested in integrating this technology into our experimental workbench projects or even expand those outside of RF to make, for instance, Neopixel light sabers for the grandkids!!

Richmond Amateur Radio Club

Meeting Minutes June 11, 2021

The regular meeting of the Richmond Amateur Radio Club was called to order at 19:04 on June 11th, 2021 on Zoom by President John DeMajo, (K5HTZ) with a Quorum present online. **Members Present:** Check-ins on Zoom **Last month's Minutes** – Correction by David White- His call is W4IIA. Noted and corrected. Motion to approve and seconded. Approved unanimously.

Treasurer's Report:

1) Ken Leidner, (WV0L) gave the Treasurer's Report. We had an ending balance of \$16,536.08 The Report was approved unanimously by voice vote.

- 2) 4 new membership applications: Pat Coughlin (KO4QEA)Technician, Mary Coughlin (KO4QDN)Technician, Arthur Davis (No Call), and James Johnson(KN4MOH)General. All were approved unanimously.
- 3) Field Day will be a multi-club shared event with RATS at Laurel Park in Glen Allen.
- 4) Bruce MacAlister (W4BRU) reported on the ISS Program: Alex Perry with Woodson Middle School in Hopewell met with Club members for initial planning. We are planning to try ISS contact by Direct Connection.
- 5) President John DeMajo, (K5HTZ) announced that the Club still has surplus equipment for sale, including a pristine Yaesu 1000M, vacuum tubes, old and new parts. Contact an officer for more details.

Adjournment at 07:30 Program

Tonight's presentation is by Phil, WB2DHY - R3/WB2DHY and Ed, NT2X - RV7AA It is a follow-up to their June 2018 presentation concerning Ed's life growing up with Ham Radio in Russia and Phil's experience involving several trips he made to Russia right after the People's Revolt and the fall of the Communist government in which Ed and Ham Radio played a major part.

The next general meeting: July 9th, 2021 via ZOOM

Minutes repectfully submitted by:

David F. Robinson, (KJ4LHP), Secretary.

From The Prez

We are still anticipating that we can meet in person for the August or September monthly meeting. I will let everyone know as soon as I get word from BonAir Methodist Church.

We are also hopeful that we can have our annual banquet this year, at least for those who have completed their vaccine inoculations. We will probably be sending out an email in the next few days to see who is interested in having a banquet this year, just to get an idea of what catering arrangements would be required.

Finally, I would like to call everyone's attention to another action by our state political leaders that impacts ham radio and our educational programs. In the past, RARC has assisted with weather balloon tracking experiments for schools and the Science Museum. A well meaning legislature, in an attempt to stop the proliferation of spent plastic party balloons, has given us a law that now makes it a punishable offense to release a balloon into the air in Virginia. The law contains no exemption for non-government

scientific experiment or radio tracking situation in which a balloon is involved, so effectively the law puts an end to any school science or amateur radio projects that involve the release of weather balloons. It is unfortunate that the ham radio community was not given a chance for input in the writing of that law, but it would appear that all balloon tracking experiments by amateur radio operators are now against the law.

John DeMajo, K5HTZ

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.

The September testing session will be on the 11^{th,} 10:AM at Chesterfield Library Bon Air Branch 9103 Rattlesnake Rd, North Chesterfield.

Pre-registration Required.

Walk-ins Accepted.

Pre-Registration required for Techs and for special needs applicants. Also anyone taking the Tech exam needs a FRN from the FCC (Google obtaining a FCC FRN) and bring that info to the session.

If you have questions about a session, please see our website, <u>www.rarclub.net</u> 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. All meetings will be virtual until the pandemic situation is resolved.

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.

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

Regular Membership \$22.00

\$0

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 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.

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!

RARC ELMER PROGRAM

Over the last few years, our license school and volunteer examiner programs have added many new hams to the ranks. When asked about the services they receive from the club, many new hams say that they need some further help in order to set up a station and to feel comfortable in communicating on the air.

To this end, it has been suggested that we place more emphasis on helping newly licensed hams gain the confidence and technical help that they need to get started. Suggestions have centered around the need for a formal Elmering program. In order to fulfill that need, we would need a committee of volunteers who would be willing to help, on an as-needed basis, one or two new hams per Elmer. This would involve possibly a few Zoom sessions, and perhaps answering an occasional question. To assist new hams, and minimize the need for help by the Elmers, we will be designing a kit of material that will be issued to anyone who obtains a

technician license through our programs. It will include items such as a script that could be followed when attempting to use repeaters, a chart of allowable frequencies and modes, an explanation of how to program a VHF/UHF radio, and most importantly a membership application to the RARC.

Along with the kits, we would like to establish a pool of persons who would be willing to assist these new hams while they are getting started. Any member who would be interested in helping in this way, please contact Bruce McAlister, W4BRU.

Bouvet on for 2023!!

The Daily DX has reported that the 3Y0J DXpedition team is still hoping to have a go at the island in 2023. The DXpedition team had planned to travel to Bouvet via the RV *Braveheart*, owned by Nigel Jolly, K6NRJ. "Since the cancellation of 3Y0J, we have been working closely with Nigel Jolly to form a new plan, with a new owner of *Braveheart* and a revised payment plan that enables Nigel Jolly to continue managing *Braveheart* and will keep it available for DXpeditions for years to come," said the announcement from DXpedition co-leader Paul Ewing, N6PSE. "We are working out the details of this plan and hope to have some very positive news very soon. We have not given up!"

The Intrepid-DX Group announced earlier this month that it has canceled its long-anticipated DXpedition to Bouvet. Jolly told the DXpedition that the *Braveheart* was being sold and he was canceling its contract for the **3Y0J** voyage.



Ham radio helping lifelong hobbyists stay mentally fit in old age.

Australia's ABC News has an excellent article on the benefits of amateur radio in old age - which says: It comes with all the benefits of social media but without 'any of the downsides' — and one of Australia's oldest ham radio enthusiasts says it is also the perfect hobby for retirees looking to stay mentally sharp.

West Australian-based Norman Gomm took to ham radio over forty years ago and now aged 82 has no intention of signing off just yet.

As one of Australia's estimated 10,500 licensed ham radio operators, Mr Gomm, also the president of the Bunbury Radio Club. He says it is rare that a day goes by without him spending at least a couple of hours in his purpose-built 'ham shack'.

"I find it's very good for me," Mr Gomm told the ABC amid a dazzling display of flashing lights and crackling radio static. "I'm 82 years of age and you need to keep your mind working actively all the time," he said.

"Ham radio requires a lot of cognitive skills and a lot of understanding technology, so I find that's very good for keeping me active."

Operating under the call sign of 'Victor Kilo Six. Golf

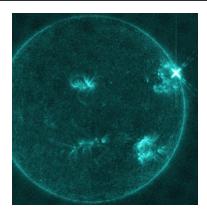
Oscar Mike,' Mr Gomm is able to converse with fellow ham radio enthusiasts "in just about any country on earth" depending on the time of day using an internationally recognised phonetic alphabet. "We're bound by regulation not to say naughty things over the radio waves. and we have a code of conduct which makes us behave relatively politely to each other," Mr Gomm said. "It's just a general ethic among ham radio people that you behave well to each other. "So it's got all the plusses of social media and none of the downsides."

And the topic mostly discussed among ham radio operators? "The weather mainly," Mr Gomm said, with a dry laugh.

"On the international frequencies, the conversation tends to be a bit limited so we stick to topics like the weather and discussing equipment, but the thrill of it lies in making contact with someone on the other side of the planet."

Read the full ABC News item, and watch the video at: https://www.abc.net.au/news/2018-06-27/ham-radio-helping-older-hobbyists-stay-mentally-fit/9908468

Our thanks to **Graham, VK4BB** and Southgate Amateur Radio News for the above information.



First X-flare of Solar Cycle 25

Now, Solar Cycle 25 has *really* begun. On July 3rd, new sunspot AR2838 produced the first **X-class** solar flare since Sept. 2017. NASA's Solar Dynamics Observatory recorded the extreme ultraviolet flash. A pulse of X-rays ionized the top of Earth's atmosphere, causing a shortwave radio blackout over the Atlantic. Ocean mariners, aviators, and amateur radio operators may have noticed unusual propagation effects below 30 MHz just after 1429 UT.

X-flares are the strongest kind of solar flare. They are typically responsible for the deepest radio blackouts and the most intense geomagnetic storms. This is the first X-flare of young Solar Cycle 25. More are in the offing. During the previous solar cycle (Solar Cycle 24) the sun produced 49 of them. Forecasters believe that Solar Cycle 25 should be at least that active. We can therefore expect dozens more X-flares as the sun approaches Solar Maximum in the year ~2025.

The X-flare of July 3rd did something rare. "It disturbed *all* of my instruments," reports Rob Stammes, who operates a space weather observatory in Lofoten, Norway. The flare produced a radio burst, an ionospheric disturbance, a surge of electrical currents in the ground, and a deflection of the observatory's local magnetic field.

"This is a first in many years," says Stammes. "The magnetic disturbance is especially rare."

The phenomenon is called a 'magnetic crochet.' Radiation from the flare ionized the top of Earth's atmosphere and caused currents to flow 60 km to 100 km above Earth's surface. These currents, in turn, altered Earth's polar magnetic field. Unlike geomagnetic disturbances that arrive with CMEs days after a flare, a magnetic crochet occurs while the flare is in progress. They tend to occur during fast impulsive flares like this one.

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 508-838-8353. 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.*

Yaesu 991A 100 watt, 160m-6m + 2m&70cm, Fusion, very clean (non smoking), mike, manual, 3 years old, 10 hours transmit time. \$925.00 + shipping, all sales final Call Ken Zutavern, H (804) 379-1136 & C (703) 472-0998

The Richmond Amateur Radio Club has a set of original complete years of QST from 1925, 1927, 1928, 1929. 1930 and 1931, available for sale in ARRL binders, for \$25 per year. We also have a 20Mhz oscilloscope for sale . Proceeds of sales go directly into the RARC club treasury. These old issues of QST are priceless for anyone interested in the history of ham radio and are being offered for way below what QSTs are selling for on EBAY.

Contact John DeMajo, K5HTZ (<u>jdemajo@demajo.net</u>) if interested.

For Sale: Estate Items of W4JHM, SK. ICOM IC-756 PRO II Transceiver with desk mic and Matching speaker. ICOM IC-7000 Transceiver with matching speaker and matching LDG AT-7000 Autotuner. Ameritron AL-80B Amplifier wired for 120V A/C. LDG AT-1000 Autotuner. Daiwa CN-101L SWR/Power Meter. Alinco DM-34 OMV Power supply. MFJ-269 Antenna Analyzer. MFJ-267 Dummy Load/Wattmeter. MFJ-912 Remote Balun Box. Radio Shack Power Meter, 2000 Watt Range. Uniden Scanner BC 560 XLT. Direct inquiries to Diane Clarke at (804) 276-7913 or dgclarke@verizon.net

Thought For The Day

Confessions may be good for the soul, but they are bad for the reputation.

John DeMajo	K5HTZ	President	(504) 858-7689	jdemajo@demajo.net
Allan Johnson	WA3J	Vice President	(804) 318-6951	wa3j@arrl.net
Dave Robinson	KJ4LHP	Secretary		
Ken Leidner	WV0L	Treasurer		

