



ROCKINGHAM COUNTY AMATEUR RADIO CLUB. INC.



President
Tim Walker
WD4GXD

Vice-President
Roger Joyner
W4AYO

Treasurer
Paul Patterson
N4CE

Secretary
Jamey Nixon
K4RVJ

The RockingHAMmer News

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PRESIDENT'S CORNER

Greetings;

Thanks everyone for your contribution to our club in 2020; attending club activities, presenting programs, maintenance at the club repeater sites, participating in field day, on-air nets, maker fairs, picnics, social dinners, VE test sessions, special thanks to all net control operators, those who served on committees and to everyone for promoting our hobby. There is no business meeting scheduled for December. However Our meeting location for next year remains uncertain as we have not received word yet on the availability of the Salvation Army Community Center for the first quarter of 2021. Plan on meeting January 19, 2021 with the location to-be-announced. Enjoy a fulfilling and safe Christmas and New Year holidays. Thank you so much for supporting our radio club in 2020.

73s Tim (WD4GXD)

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You can click on the title above and you can jump to that section without scrolling.

Meeting Minutes

Minutes November 2020, RCARC

1. The November meeting was held at Jim, N3UZ QTH (11 present)
2. Bill N8KSG had program, a Little Lengthy, on Active Propagation (see RCARC , FB,)
3. Paul N4CE covered the RCARC Treasure report/activities.
4. Tech. committee had nothing to report.
5. SERA up-date will be done by Bill N8KSG.
6. Nominations for 2021 officers, were submitted and confirmed.
7. November 21, at 9 am a V E test session will be conducted at Jim N3UZ QTH.
8. December 12th social scheduled at Fursty's will require Masks while away from your table.
9. Audit for 2020, and Budget for 2021 will be done by Furman WD4MKU, and Bill N8KSG.

W5YI V E Team News

W5YI, V E Team, Serving our club and Area, (Session Manager Jim, N3UZ & wife Lynn, N3WKW) Along with their special friend, Bob, KN4BBA, set up the computerized sessions. They CAN and WILL do the session by themselves. (LET'S DON'T LET THIS HAPPEN).

November 21, 2020 a session was held at Jim's QTH, the 3 mentioned above along with 2 additional V E's completed the session, 6 applicants in about 1 hour, with some taking 2 test.

Jim greeted and assigned the applicants to their computer, (That grades the test pass/failed) Lynn does the necessary paper work, Bob assisting Jim and Lynn as needed and signs forms as a V E 2 other V E's completed form signing.

If you are an EXTRA CLASS please consider becoming a V E. Realizing some have to work on Saturday, sometime plans or not in town day of the session will hinder you. Jim is NOT the type to pressure V E's to come out and help. But if you can offer to help. 2 V E's plus the above 3 will make a FAST and EASY session.

Let's support this program by having 2 V E's at each session, Jamey, K4RVJ

**** Please note:**

*****ATTENTION FCC, VE CHANGES*****

If you or someone you know is looking to take their ham radio test, the FCC will no longer accept SSN on the 605s. It has to be an FRN from now on. You can obtain an FRN without having a call.**

Six Successful Candidates During the November VE Test SessionThe Rockingham County W5YI, VE team conducted a test session on Saturday November 21st at session manager, Jim Smith's, N3UZ location. There were 6 candidates and all 6 passed.

The candidates are listed below with their license class and call:
-Tommy Dawson, Technician, KO4JAZ

- Stephen Poe, Technician, KO4JRT
- Alex Hernandez, Technician, KO4JRU
- Joseph Harward, Technician, KO4JRV
- Ethan Poe, General, KO4JRW * passed Tech and General same day.
- Phillip Poe, General, KO4HLZ + Joined RCARC new member.

Many thanks for Jim, N3UZ and Bob KN4BBA for providing the location, test setup and hardware.

VE test team consisted of:

- Jim Smith, N3UZ
- Lynn Smith, N3WKW
- Bob Thibodeau, KN4BBA
- Jamey Nixon, K4RVJ
- Paul Patterson, N4CE



YL's and XYL's of RCARC (Members/associates)

As my memory could list, no one was overlooked on purpose!

- K4ADA Kay Miley SK
- KE4ZPQ Malinda Bonesteel
- KJ4WRE Angie Stallings, Got her EXTRA at one of our W4VEC test sessions.
- KJ4YOC Ambra Janney Preston, Prior club officer.
- KJ4ANA Peggy Brewer, Prior club officer.
- N4SLP Pat Patterson, SK, Prior club officer.
- N4BLY Sarah Davis
- KI4TFA Slyvia Mosser
- KI4PRU Margie Rogue
- KM4ENF Tamara Mansfield
- K3SJT Slyvia Tweedle
- KJ4ADQ Sherie Bennett
- Jamey, K4RVJ



Thanks to Bob (KN4BBA) and Jim (N3UZ) for fulfilling our club's October repeater site obligation.



Terry (KF4KPM) scores another hit by completing his radio-to-computer electronic interface project.

****** 2021 Membership Drive ******

It is time for all members to renew their membership for 2021. At only \$25, RCARC membership is a bargain, and your renewal is CRITICAL to maintaining the activities and club repeater. We have been averaging about 35 paid memberships the last couple years, and many active hams just simply forget to renew, and this creates a strain on predicting how our needs will be met. Please bring a check to the January meeting to renew, or better yet - put your renewal in the mail to the PO box listed at the top of the newsletter today. Thanks!

Thanks to the following Amateurs who have renewed their RCARC membership for 2020. Your continued support is appreciated!

Members as of November 8, 2020. Family memberships * are listed by the primary call sign

N4JRA	WF4I	WA3RFE*	WA4ROX	KN4BBA
KK4IFG	N1YBH	K2CPR	N4CE	KK4KFG
W4SH	N2ECS	KF4LIK	KI4PRU	W3EBM
N4ZZC*	KE4WSF	KF4KPM*	N8KSG	WD4GXD
W4SIX	KN4ODM	WB4VVY	N3UZ	KN4NBH
WA4LTY	W4AYO	N4RFX	N3WKW	KO4HLZ
KJ4ANA	WD4MKU	K4RVJ	KJ4WRE	

Honorary members:

W4WBP
WB4JYC

Please consider **renewing** your membership OR sharing the membership application with non-member local hams. Membership is open to all licensed amateurs. Dues are \$25 annually. To join, fill out the application below or speak with any of our members or officers for more information. Here's the link to the membership application: **[Membership Application](#)**

This newsletter is published monthly by and for the members of the Rockingham County Amateur Radio Club. Computer / internet users should be able to click on the website links that are usually underlined. Please advise me of any change of address or mail preference. Please have all articles to me by the 1st Tuesday of each month.

73, The Editor (n4rfx.1@gmail.com)

EVENTS

Breakfasts

- Henry Pollock Memorial Breakfast - Tuesday – 7:00 am, The Farmer's Table, Reidsville
 - *NOTE: The Farmer's Table has re-opened*
- Thursday – 7:00 am, Sanitary Cafe, Reidsville.

RCARC Meeting

The RCARC usually meets on the 3rd Tuesday night of the month. The January 15th, 2019 meeting will be 7 p.m. at the Salvation Army facility at 708 Barnes Street in Reidsville, NC.

Club Socials

RCARC holds a social once per quarter. For 2019 we will gather at Ruby Tuesday in Eden at 6:00 p.m., enjoying dinner together after a few brief announcements. Planned dates for 2019 are March 9, June 8, Sept. 14, December 14, all being Saturdays. Please remember that there is no regular 3rd Tuesday club meeting during the month.

UPCOMING HAMFESTS

Editor's Note: Regretfully, most all Hamfests and Conventions for the rest of 2020 and into the first quarter of 2021 have been cancelled within 250 miles of Rockingham County.



Skywarn Weather Spotters (and all amateur radio operators) encountering severe weather, are encouraged to monitor and make reports. The Skywarn website is: skywarn.org.

Blacksburg SKYWARN conducts a weekly net one Wednesday evenings at 9pm on 146.745 as well as numerous other linked repeaters in SW VA, Northern NC and SE WV. The net is available on Echolink via KF4YLM-R. All stations, regardless of prior SKYWARN training or experience, are welcome. The net provides SKYWARN spotters with information on training events, spotting tools, and severe

weather potentials in the Blacksburg County Warning Area.

The full list of FM repeaters on which this net runs is:

- 146.745 T107.2 K1GG/R Roanoke/Poor Mtn
- 147.225 T100.0 KF4YLM/R Lewisburg, WV
- 145.130 T103.5 N4VL/R Galax/Mt. Airy
- 145.410 T103.5 N4VL/R Roanoke/Poor Mtn
- 444.600 T103.5 N4VL/R Pulaski
- 147.420 T103.5 N4VL/L (simplex) Big Walker Mtn / Wythe Co.



NOAA WEATHER RADIO BANDS - CHANNELS-FREQUENCIES - S.A.M.E.

Codes

162.400 MHz WXL42 WINSTON-SALEM NWS PIEDMONT AREA
 Rockingham County, N.C. SAME code: 037157

162.475 MHz WXL60 BLACKSBURG NWS ROCKINGHAM COUNTY
 Rockingham County, N.C. SAME code: 037157

All stations listed for travel (in MHz):

162.400	162.425	162.450	162.475	162.500	162.525	162.550
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A nation-wide network of radio stations broadcast continuous weather information from nearby National Weather Service (NWS) offices. You can get weather 24 hours a day. NOAA weather radios are the best way to receive warnings from the NWS. It is best to have a battery back-up and Specific Area Message Encoder (SAME) that will alert you when a watch or warning is issued for Rockingham County, N.C. (037157). Complete information is at NOAA's website: nws.noaa.gov/nwr . For current weather forecasts on the internet, go to NOAA's National Weather Service website: weather.gov . Weather forecast on a mobile device: mobile.weather.gov or cell.weather.gov

RCARC CLUB NETS

Monday 8:00 PM RCARC System Fusion Ragchew, 147.345 MHz, C4FM mode
 This is a weekly informal net conducted in Yaesu C4FM digital mode to promote its use.
Please put your radio in fixed C4FM "VW" Mode.

Monday 8:30PM RCARC 2-meter FM net 147.345 MHz 103.5
 This club net is a weekly meeting for announcements, business, and comments. Check-ins will be taken in analog (FM) mode. Please make it a priority to check into our net.

Thursday 8:00 PM RCARC System Fusion Ragchew, 147.345 MHz, C4FM mode

This is a weekly informal net conducted in Yaesu C4FM digital mode to promote its use. Please put your radio in fixed C4FM “VW” Mode.

AREA NETS

- | | | |
|--------------------|---------------------------------|------------------|
| • Sunday 8:00pm | Sherrills Ford, NC | 50.150, no tone |
| • Sunday 8:30pm | Southern Alamance Net | 146.670, no tone |
| • Sunday 9:00pm | Greensboro News & Info Net | 145.150, 100 Hz |
| • Sunday 9:00pm | Southeastern D-Star Weather Net | REF002A |
| • Sunday 9:30pm | Central NC Traffic Net | 146.820, no tone |
| • Monday 8:00pm | Randolph County Net | 147.255, 82.5 Hz |
| • Monday 9:00pm | Lynchburg, VA | 50.400, no tone |
| • Tuesday 8:00pm | Sandlappers, Lexington, SC | 50.250, no tone |
| • Tuesday 8:00pm | Burlington ARES Net | 146.670, no tone |
| • Tuesday 8:30pm | Triad Skywarn Net | 147.255, 82.5 Hz |
| • Tuesday 9:00pm | N.C. D-Star Net (W4GSO) | REF054C or |
| 442.86250 | | |
| • Wednesday 8:00pm | Roanoke Amateur Club Net | 146.985,107.5Hz |
| • Wednesday 8:30pm | Forsyth County ARES Net | 145.470, 100 Hz |
| • Wednesday 8:45pm | Greensboro Amateur Society Net | 145.250, 88.5 Hz |
| • Thursday 8:00pm | Pink Hill, NC | 50.200, no tone |
| • Thursday 9:00pm | Guilford County ARES Net | 145.150, 100 Hz |
| • Saturday 8:00am | Wake Forest, NC | 50.200, no tone |

Daily Nets

- | | | |
|----------|------------------------------|------------------|
| • 5:30am | Possum Trot Net | 147.225, 82.5 Hz |
| • 8:00am | Richmond 6 Meter Net | 50.215, no tone |
| • 2:30pm | Vag-A-Bon Net | 145.470, 100 Hz |
| • 7:30pm | Tarheel Emergency Net (ARES) | 3.923 LSB |
| • 7:30pm | Piedmont Triad Traffic Net | 145.250, 88.5 Hz |

OTHER AMATEUR RADIO NEWS THAT MAY BE OF INTEREST

Analysis determines we are in Solar Cycle 25

September 15, 2020 - The solar minimum between Solar Cycle 24 and 25 - the period when the sun is least active - happened in December 2019, when the 13-month smoothed sunspot number fell to 1.8, according to the Solar Cycle 25 Prediction Panel, co-chaired by NOAA and NASA. We are now in Solar Cycle 25 with peak sunspot activity expected in 2025, the panel said.

Solar Cycle 24 was average in length, at 11 years, and had the 4th-smallest intensity since regular record keeping began with Solar Cycle 1 in 1755. It was also the weakest cycle in 100 years. Solar maximum occurred in April 2014 with sunspots peaking at 114 for the solar cycle, well below average, which is 179.

Solar Cycle 24's progression was unusual. The Sun's Northern Hemisphere led the sunspot cycle, peaking over two years ahead of the Southern Hemisphere sunspot peak. This resulted in solar maximum having fewer sunspots than if the two hemispheres were in phase.

Solar Cycle 25

For the past eight months, activity on the sun has steadily increased, indicating we transitioned to Solar Cycle 25. [Solar Cycle 25 is forecast to be a fairly weak cycle](#), the same strength as cycle 24. Solar maximum is expected in July 2025, with a peak of 115 sunspots.

“How quickly solar activity rises is an indicator on how strong the solar cycle will be,” said Doug Biesecker, Ph.D., panel co-chair and a solar physicist at NOAA’s Space Weather Prediction Center. “Although we’ve seen a steady increase in sunspot activity this year, it is slow.”

The panel has high confidence that Solar Cycle 25 will break the trend of weakening solar activity seen over the past four cycles. “We predict the decline in solar cycle amplitude, seen from cycles 21 through 24, has come to an end,” said Lisa Upton, Ph.D., panel co-chair and solar physicist with Space Systems Research Corp. “There is no indication we are approaching a Maunder-type minimum in solar activity.”

“While we are not predicting a particularly active Solar Cycle 25, violent eruptions from the Sun can occur at any time,” Biesecker added.

Solar cycle prediction gives a rough idea of the frequency of [space weather](#) storms of all types, from [radio blackouts](#) to [geomagnetic storms](#) and [solar radiation storms](#). It is used by many industries to gauge the potential impact of space weather in the coming years.

New satellites will provide enhanced observations of the Sun

In 2024, before the peak of sunspot activity in Solar Cycle 25, NOAA is slated to launch a new spacecraft dedicated to operational space weather forecasting. [NOAA’s Space Weather Follow-On L-1 observatory](#) will be equipped with instruments that sample the solar wind, provide imagery of coronal mass ejections, and monitor other extreme activity from the Sun in finer detail than before. NOAA’s next Geostationary Operational Environmental Satellite (GOES-U) is also scheduled to launch in 2024. GOES-U will carry three solar monitoring instruments, including the first [compact coronagraph](#), which will help detect coronal mass ejections. Enhanced observations of the Sun from these satellites will help improve space weather forecasting.

The Solar Cycle Prediction Panel forecasts the number of sunspots expected for solar maximum, along with the timing of the peak and minimum solar activity levels for the cycle. It is comprised of scientists representing NOAA, NASA, the International Space Environment Services, and other U.S. and international scientists.

For the latest space weather forecast, visit NOAA’s Space Weather Prediction Center, the nation’s authority for space weather alerts, watches, warnings, and advisories at <https://www.spaceweather.gov/>.

COLLAPSE DESTROYS NOTED ARECIBO RADIOTELESCOPE

JIM/ANCHOR: We begin this week with news that the noted Arecibo radiotelescope, famous in groundbreaking scientific research and seen in a number of Hollywood movies, is no more. Kent Peterson KC0DGY has the details.

KENT: The historic Arecibo radiotelescope in Puerto Rico, once the largest in the world, has collapsed before its scheduled demolition could begin. The telescope, which had been shut by the U.S. National Science Foundation following storm damage, was credited with unlocking numerous astronomical mysteries for more than 50 years.

On Tuesday, December 1st, the telescope’s 900-ton receiver platform fell 400 feet, landing on its reflector dish. It was the final blow to the radiotelescope, where an auxiliary cable had snapped in August, causing damage to the reflector dish and receiver platform. Then last month, a main cable broke.

Built in the 1960s, the telescope was part of a 1974 research project into gravitational waves that led to a Nobel Prize in Physics in 1993. The telescope also followed asteroids on their earthbound paths but became quite an attraction itself, drawing some 90,000 visitors a year.

For Amateur Radio Newslines, I’m Kent Peterson KC0DGY.