



ROCKINGHAM COUNTY AMATEUR RADIO CLUB, INC.



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The RockingHAMmer News

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www.n4iv.org

President's Corner

Greetings;

Thanks to all who attended the January club meeting. Because of your presence we were able to accomplish a number of necessary items preparing the way for an exciting year in amateur radio. Thank you also to those who have already paid dues for this year! There are expenses necessary to keep our repeaters operational and our club viable and safe.

There has been a change in the location for Maker Faires scheduled for March 14th due to the unavailability of the Salvation Army Community Center on weekends. Instead, Jim Smith (N3UZ) is making his facility available to members willing to improve soldering skills with AmeriKit's "Learn To Solder Electronic Educational Kit". This complete kit contains all the materials and tools to teach proper and safe soldering of electronic components. The second session, scheduled for June 13th, will complete the training by constructing a flashing European siren with flashing lights. No previous experience is required and "Elmers" will be on-hand to help participants. Jim's location is 660 Butter Road, Reidsville, and we are indebted to him for allowing us to learn these techniques in a group setting. The session begins at 4 PM and will conclude in sufficient time to attend the March club social at Ruby Tuesday's Restaurant, 706 S. Van Buren Road, Eden at 6 PM.

In other club news if interest, the next VE Testing Session is scheduled for March 28th, 9 AM at the Eden Library. Bring a copy of your current FCC Amateur Radio License (if you are currently licensed), two forms of identification (one must contain your photograph) and copies of both plus the \$14 testing fee. No appointment is necessary.

Swapfest preparations are coming into focus for the May 9th event. As always, we need members to volunteer their time and presence in order to make this annual fund-raising and fellowship event successful again this year. And, SURPRISE!, there is even a group of members intent on participating in the June 27-28 ARRL Field Day. Stay tuned for further developments!

The next club meeting is scheduled for February 18th. See you then,

73s

Tim (WD4GXD)

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

CLUB NEWS & MEETING MINUTES

Meeting Minutes

RCARC minutes from Jan. 21, 2020

Called to order at 7 pm, with introductions, 15 present.

Tim WD4GXD had program on VHF 2/440 copper loop antenna. With antenna he made and demonstrated through the 146.850 repeater.

Paul presented the treasure report.

Minutes from Dec. 14 2019, Social at Ruby Tuesday, 19 present.

Old Business

Committee reports, Bill N8KSG reported on audit and Budget reports for year 2020. Both reports were approved by members, including a new Amp for 147.345 repeater .

Swapfest set for May 9th Paul N4CE and Roger W4AYO are working together to get this event set-up, with Ads in QST and SERA, and ARRL Affiliated & Sanctioned.

New Business

V E test session date set for March 28th at 9 am Eden Library.

N4IV.org, website Hosting now by Bill N8KSG and Bob KN4BBA

Fieldday June 27&28, co-chaired Bill N8KSG and Mike WA3RFE .

First Maker/Faire date March 14 at 4pm, at Jim’s N3UZ QTH, (garage) Elmer program Kit building etc.

Roger W4AYO said 7 dates open for programs, Bill N8KSG volunteered for April.

Internet Expense for 147.345 to be reviewed in June by Bill N8KSG

Paul N4CE, encouraged members to check-in to the Monday analog and Thursday digital nets. Recent net check-ins have been down quite a bit.

Meeting adjourned 8 pm

****** 2020 Membership Drive ******

It is time for all members to renew their membership for 2020. 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 2019. Your continued support is appreciated!

Received as of August 19, 2019. Family memberships * are listed by the primary call sign

N4JRA	N1YBH	K2CPR	N8KSG
KK4IFG	N2ECS	KF4LIK*	N3UZ
W4SH	KE4WSF	KF4KPM*	KJ4WRE
N4ZZC*	KN4ODM*	WB4VVY	KN4BBA
W4SIX	W4AYO	N4RFX	KK4KFG
WA4LTY	WD4MKU	K4RVJ	W3EBM*
KJ4ANA	KN4PUN	WA4RDX	WD4GXD
WF4I	KJ4FWT	N4CE	KN4NBH
N4SOI	WA43RFE*	KG4CRJ	KX4IQ
KF4HX	KN4AWV	KI4PRU	AF4TZ

Honorary Members: W4WBP WB4JYC

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
- 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 2010 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

03/29/2020 | **Winterfest, ARRL Virginia Section Convention 2020**

Location: Annandale, VA

Type: ARRL Convention

Sponsor: Vienna Wireless Society

Website: <https://viennawireless.net/wp/events/winterfest/>

04/11/2020 | **Raleigh Hamfest, ARRL Roanoke Division Convention**

Location: Raleigh, NC

Type: ARRL Convention

Sponsor: Raleigh Amateur Radio Society

Website: <http://rarsfest.org>

Learn More

Burke County Fairgrounds

04/25/2020 | **Catawba Valley Hamfest**

Location: Morganton, NC

Type: ARRL Hamfest

Sponsor: McDowell Amateur Radio Association

Website: <http://cvhamfest.com>

05/15/2020 | **Dayton Hamvention 2020**

May 15 - 17

Green County Fair Grounds and Expo Center

Xenia, OH

Get Hamvention Alerts – text: Hamvention to 888777



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

Fitting 19th Century technology into 21st Century warfighting

Editor's Note: Right here in NC



CAMP LEJEUNE, NC, UNITED STATES

02.07.2020

Story by Cpl. Stephen Campbell

II MEF Information Group

CAMP LEJEUNE, N.C. (Feb. 7, 2020)— U.S. Marines with Information Group, II Marine Expeditionary Force (II MIG) participated in a HAM Amateur Radio General Licensing Course as part of the group's High Frequency Auxiliary Initiative on base, Jan. 27-31, 2020.

The course, taught by members of the Brightleaf Amateur Radio Club, out of Greenville, N.C., helps Marines learn the principles of high frequency radio operations as a contingency against a peer-to-peer adversary in real-world operations.

Throughout the duration of the course, Marines learned HAM radio frequency and propagation theory, frequency band allocation, conventional and field-expedient antenna theory in addition to HAM radio operations and control.

U.S. Marine Corps Col. Jordan Walzer, commanding officer of II MIG, created the High Frequency Auxiliary Initiative after recognizing the need for utilizing more options in a combat environment. He wanted the Marines to familiarize themselves with older technology to ensure their lethality in any situation.

“Embracing technology is great but overreliance leaves us vulnerable,” Walzer said. “In a peer-to-peer conflict, our space-based capabilities will be attacked. The next war will look less like ‘Saving Private

Ryan’ and a lot more like ‘Ghost Fleet’.”

Contrary to Saving Private Ryan, which was fought utilizing traditional land-based maneuver warfare, Ghost Fleet is a book set in the near future and includes the addition of space and cyber warfare.

So wars of the past were fought in the air, on land and at sea, whereas future wars will likely include the addition of space warfare, explained Walzer. U.S. forces need to create a cohesion of modern technology and analog throwbacks to mitigate hackers and drones.

HAM radios make effective alternate communication because they do not rely on satellites or internet, but instead, radio waves. They can travel directly or indirectly, along the ground or by bouncing the radio waves off of the ionosphere or troposphere layers of the atmosphere to communicate.

“Right now, our adversaries are aggressively pursuing counter-space weapons to target our satellites and ground stations,” Walzer said. “If our satellites get knocked out, what do we do then? [High Frequency] radio has been around for well over a century and is still used today. Why? Because it’s a reliable, low-cost alternative to satellite communications. With the right training and education, a Marine with a radio and some slash wire can communicate over-the-horizon for long distances, even between continents.”

HAM radios, also known as amateur radios, are communication devices created in the late 1800s. Depending how much an individual is willing to spend on equipment, someone can talk to others across town or across the world, all without the need for an internet connection. Although most people use HAM radios as a hobby, II MIG views them as potential lifelines in a highly contested environment.

There are three courses taught on HAM radios by the Brightleaf Amateur Radio Club. The entry level class is called the technicians course, which gives people frequency privileges in very high frequency (VHF) and ultra-high frequency (UHF) bands and some privileges in the high frequency range. A frequency privilege is just another meaning for permission to use a specific frequency. The HAM Amateur Radio General Licensing Course is the intermediate level course, which allows spectrum privileges on almost all spectrums that the government gives amateur radio operators. The expert class license, also called Extra Class, gives users full privilege on any frequencies allocated to HAM radios.

“I think the course was very informative,” said Sgt. Matthew Griffith, an intelligence surveillance reconnaissance systems engineer with 2nd Radio Battalion, II MIG. “It’s good to learn the things that make our equipment work. In my area of this field we use the equipment but don’t [always] know how the equipment works on the inside, which sometimes makes it harder to troubleshoot if a problem arises. Leaving the course with this knowledge will be invaluable for my Marines and me in the future.”

Dave Wood, the president of the Brightleaf Amateur Radio Club and instructor of the course, plans to conduct the first expert level course in the future after enough Marines have graduated from the intermediate course. The club plans to host the next entry level course during the summer of 2020 and

train more Marines.

“The volunteers who make up our High Frequency Auxiliary are absolutely vital to us building a world-class capability,” Walzer said. “We’re drastically improving our skill by pairing experts with Marines who have a passion for HAM radio. They may not wear the uniform, but they’re American patriots serving our country in a different way.”

Whether the next conflict is fought in air, on land, at sea, or in space, one thing is clear; Marines will adapt to face those threats whether it is with the technology of today or equipment of the past.

FCC COMMISSIONER CALLS FOR ITU'S REPLACEMENT

DON/ANCHOR: Also at the FCC, Commissioner Michael O’Rielly has said that the future of global spectrum use might be better served by an international body other than the ITU. He also questioned the value of the World Radiocommunication Conference that is held every few years to revise member nations' use of the spectrum.

Speaking before a committee of the United States Senate, O’Rielly said a replacement for the ITU might be a body that resembles the G7 organization, also known as the Group of Seven. Its members include the United States, Canada, France, Germany, Italy, Japan, and the U.K., the world's largest advanced economies. The ITU is a body contained within the United Nations.

O’Rielly said his biggest concern was that under the ITU, the geopolitics of certain nations could get in the way of harmonization of spectrum use.

(FIERCE WIRELESS)