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This Month's Program

This month, Nathan Jackson (K4NWJ) will be giving a presentation on the Greensboro and NC public service communications infrastructure. Nathan is a lifelong resident of Sophia NC, just south of Greensboro, near the "tall towers". Nathan chose a career in public safety dispatch and is in his 15th year in that field. He is a telecommunicator with Guilford Metro 911 at the rank of Master Telecommunications Specialist. I hope you can make it to the meeting to hear Nathan's talk.

This talk was originally scheduled for the July meeting.

Dave McLin AC4A

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NEXT MEETING Oct. 22, 2018

The next meeting of the Greensboro Amateur Radio Association will be held at the Cooper's Ale House on Swing Road in Greensboro on Oct. 22, 2018. The topic: GSO & NC Public Service Communication, presented by Nathan Jackson K4NWJ.

Tech Tips: Mag Mounts an Issue with More Vehicles With Non-Steel Roofs

More vehicles have non-steel roof panels constructed of fiberglass, aluminum, or carbon fiber. This makes placing a temporary mag-mount antenna on the roof difficult. We have run into this issue several times in the past when our radio operators were riding in Support And Gear (SAG), sweep, or pace vehicles during special events or riding along with a Jeep Patrol in the mountains. Recently, I was assisting a neighboring ARES region with a special event and was riding in a new law enforcement vehicle that had an aluminum roof panel. The solution was to use an HT Window Mount Clip from MFJ (MFJ-310). They make a BNC, SMA, and female SMA version of this clip so you can easily attach an HT antenna and get it outside of the vehicle. It is small enough to throw in a ruck sack if you know you will be operating from a vehicle other than your own. Operators may find other uses for this mount such as to get an antenna outside of a room with Low-E window treatment, to get some extra height for an HT antenna, etc. It may not have the same ground plane effects of a mag-mount, but it definitely works. -- John Bloodgood, KD0SFY. Emergency Coordinator and Public Information Officer, Region 2 District 2, Colorado ARES (Pikes Peak ARES); follow Pikes Peak ARES at:

https://www.facebook.com/PikesPeakARES

The International Amateur Radio Union Monitoring Service (IARUMS) reports interference on 40 meters from various Russian sources. The Russian coastal over-the-horizon (OTH) radar "Sunflower" was very active on 40 meters and audible in Europe in the evenings, transmitting FM on pulse. The site is believed to be northeast of Vladivostok. IARUMS Region 1 Coordinator Wolf Hadel, DK2OM, said it was monitored in September. In addition, a Russian ship was observed transmitted on 7,110 kHz on F1B with 50 baud and 200 Hz shift. The vessel was believed to be in the vicinity of Cyprus and on the air daily in September. Another Russian ship was heard on September 18, transmitting AT3004D with 12 x 120 baud PSK2A on 7,179 kHz with a 2.6 kHz bandwidth, also in the area of Crete. And a Russian military system, believed to be near Moscow, was heard transmitting on 7,198 kHz in AT3004D test mode. Elsewhere, fishing crews often were monitored on 3,500; 3,535; 3,540; 3,560; 3,585; 3,590; 7,000 kHz, and 14,320 USB.

The Greensboro Amateur Radio

Association

President Scott Toth ND4L Vice-President Dave McLin AC4A Treasurer Jaimie Restrepo, N4JAI Secretary Gregory Ray KK4MHY Financial Chandlee White, KJ4ADX Engineering Chair Matt Trull KX4GG Operations Chair John Strandberg W4DX Members-at-Large: Chris Thompson, K4HC Jesse Lindley K4AX Appointed Positions: **Public Information Officer** Newsletter Editor Betty Williams KC2BFN

The Feed Line is ©2018 by the Greensboro Amateur Radio Association and published monthly. Our address is P.O. Box 39829, Greensboro, NC 27438. The purpose of the newsletter is to provide the club and prospective members' information about the club and amateur radio in general. Material and information should reach the editor by the first Friday of the month for the next edition of the newsletter. Opinions expressed in "The Feed Line" do not necessarily represent the views of the officers, directors, editor or members of the Greensboro Amateur Radio Association. Material may be reproduced, provided proper credit is given to GARA

ARE YOU BENEFITING FROM THE ARRL **WEBSITE?**

A few topics to consider:

- Logbook of the World
- International Operating
- Tutorials
- Special Event Stations
- Contests
- QSL Services

Explore the website www.arrl.org and learn something new or refresh something old.

GARA Meeting Minutes Board Meeting Minutes

There was no Board meeting in October.

Regular Meeting Minutes – September 2018

The September GARA General Meeting was held on the 24th at Cooper's Ale House.

Board Members Present: Scott Toth, President Greg Ray, Secretary Matt Trull, Engineering Chair

Scott began the meeting at 7:15pm with introductions.

Scott mentioned again that GARA has an upcoming service opportunity assisting with the Boy Scouts of America's Jamboree on the Air (JOTA) on October 20th at their HQ on Westover Terrace. https://www.scouting.org/jota/

Matt Trull, Engineering Chair mentioned the D Star upgrade is in progress with help from Jesse Lindley.

Scott gave our monthly presentation titled **How to build a hot spot on the cheap.** We learned what to buy and how to build an inexpensive hotspot that will put all of our digital radios to use even when we are not near a repeater.

Patrick Moore made a motion to adjourn, Jonathan Davis seconded the motion, and the September meeting was adjourned at 8:15pm.

Respectfully submitted by Greg Ray 2018 GARA Secretary

From the President's Shack

October 2018

Hopefully we can look forward to a quieter autumn and wintertime now that hurricanes Florence and Michael have passed. It's my sincerest hope that you fared well and that nothing significant happened to your family or property as Michael passed through. Even so, in all reality, some of us probably did sustain some damage. In my case, my HF doublet was taken down when a tall pine tree fell in my back yard. Thankfully the tree fell in an open area and my antenna was not broken, but I will need to re-shoot one line over a tree to put it back up. That should be a simple task. Maybe your situation is worse. If so, and if you need help repairing or replacing an antenna or other equipment, would you please let us know? There are many club members who would be happy to lend a hand to get you back on the air. You can e-mail info@w4gso.org with your request and GARA will help facilitate some help.

One of the most visible aspects of GARA is the fact that we host repeaters that are used by many people in our area. Although hosting repeaters is not our only focus, providing stable local communications platforms is an important part of our club identity because they are a gathering place for us all to meet even when we're not together in person. Despite their simple concept, it's not always easy to keep the equipment on the air and it takes time, dedication, persistence and money to keep it going. Anyone who has served as club engineer or who has assisted in the engineering area can attest to the fact that repeaters, unfortunately, are not continuously self-sustaining.

We recently lost our UHF D-star repeater due to the age of the equipment, and although we have replacement gear in hand, the complexity and uniqueness of the new setup is causing problems with implementation. Many hours have been spent reading, researching, e-mailing, testing and experimenting, but we are still struggling to make the new system perform as expected. I'm confident that D-star will be back soon, but I wanted to make clear that a lot of effort is being put into this project and that it is a priority. Our engineering team is doing an excellent job and should be commended for their work. With any luck, you'll be hearing the new, improved system on the air and fully functional in the near future.

Thank you for your continued support, and I'm looking forward to seeing you all at Cooper's on October 22. If you haven't been in a while, please consider visiting again!

73, Scott ND4L

FINANCE COMMITTEE

Finances are in order. No unexpected expenses encountered. Preparing for upcoming year for new budget and growth of membership roster.

October Engineering Report

As Scott mentioned above, work continues on our new D-STAR repeater setup. At this time, we suspect a hardware issue with the stm32-dvm board that we are using with the new setup. I have contacted the manufacturer of this board for assistance. We had it working briefly with RF traffic on both D-Star and C4FM, but now that has stopped functioning as well. While we work to resolve the problem with the stm32-dvm board, I am working on a temporary solution using an UDRC-IIDS board. Both of these solutions are "hats" that mount to a Raspberry Pi. You might also be interested to know that the Raspberry Pi runs Pi-Star, just like Scott demonstrated with his hotspot presentation last month.

During the recent hurricane our 2-meter repeater was temporarily off the air. This was due to a generator failure at the tower site and not due to any equipment failure with our repeater. Not only did this affect our repeater, but all of the equipment in the one building was offline. Luckily this was fixed within a few hours and our repeater came back up. The mobile phone providers located on the tower have their own respective generators for their equipment.

Matt Trull, KX4GG

ASHEVILLE RADIO MUSEUM

The <u>Asheville Radio Museum</u> is closing its offsite storage unit and selling all remaining contents at bargain prices. The sale will occur in Asheville on Saturday, November 10 from 9 AM until noon at the storage unit, located at 192 Swannanoa River Road.

To see a list of ham and home radio items in the sale and other information, please visit www.avlradiomuseum.org/2018-storage-unit-sale

YOUR PARTICIPATION REQUESTED

Elections for the 2019 Board of Directors will be held at the November meeting.

Patrick Moore, K2CPR and George McCormick, KN4JPB are the nominating committee. Their e-mail addresses are:

George McCormick: papagem@gmail.com

Patrick Moore: k2cpr@yahoo.com

Members should contact them if they are interested in running for any of the elected offices: president, vice-president, secretary, treasurer, engineering committee chair, operations committee chair, finance committee chair, and two at-large positions.

VE Testing

Every month on the second Saturday, except in March when it is the third Saturday, W4VEC holds a testing session for those who live in the area. This provides an opportunity for individuals to be able to test for their amateur radio license or upgrade. Thanks to David Macchiarolo, AJ4TF, and his team of volunteer examiners for taking time out of their busy schedules each month to help new or upgraded hams in our area.

Next month's testing session will be on Nov. 10th at Hinshaw United Methodist Church, 4501 Gate City Blvd., Greensboro, 27407, at 9am. While walk-ins are welcome contacting the lead VE is preferred. Please contact David Macchiarolo, AJ4TF, email aj4tf@ arrl.net, phone (cell), 336-420-9424.

New location for High Point VE testing: Hickory Chapel Wesleyan Church, 301 Hickory Chapel Road (off MLK Jr. Drive), High Point NC 27262. No testing in November or December. Pre-registration is required. Contact David Macchiarolo, AJ4TF, 336-420-9424 at least two days prior to the session. David's email: aj4tf@arrl.net.

Look Who Passed

High Point, NC September 29, 2018



Lacey A. Armistead, KN4JOX **High Point, NC Earned Extra**



Waxhaw, NC **Earned Technician**



Robert G. Smedberg KN4PIE Jeffrey A. Sutton KF4RKZ East Bend, NC **Earned General**

No Photo Available:

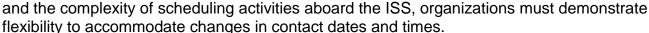
Doris J. Phillips KN4PID, Winston Salem, NC, Earned Technician

Proposals to Host Contacts with Space Station Crew Due by November 15

<u>Proposals</u> by school and educational organizations to host Amateur Radio on the International Space Station (<u>ARISS</u>) contacts with an International Space Station crew member next year will be accepted starting on October 1. Completed proposals are due by November 15. ARISS anticipates that the contacts will be scheduled between July 1 and December 31, 2019, although crew schedules and ISS orbits determine exact contact dates. A committee of educators evaluate and approve proposals.

"ARISS contacts allow education audiences to learn firsthand from astronauts what it is like to work and live in space," ARISS said. "These scheduled contact opportunities are offered to formal and informal education institutions and organizations, individually or working together."

To maximize these radio contact opportunities, ARISS is looking for organizations that will a draw large number of participants and integrate the contact into a well-developed education plan. Because of the nature of human spaceflight



Educational proposals should include plans for students to study topics related to space technology, space exploration, or space research, and to learn about communication, wireless technology, and radio science. The more advanced preparation educators make with educational plans, the more learning and value the ARISS event will have for students, ARISS said. A Proposal Guide can help in planning and identifying what's necessary to host an ARISS scheduled contact.



Astronaut Reid Wiseman, KF5LKT, at the helm of NA1SS on the International Space Station. [Image courtesy of NASA]

An ARISS Technical Mentor is assigned to assist educational organizations with technical preparations and logistical coordination of the contact. With the assistance of the ARISS team, ARRL and AMSAT can help in locating a local Amateur Radio group to provide equipment and expertise. In many cases, local ham radio club volunteers may also be able to assist with lessons on communication, wireless technology, or radio science.

ARRL ARISS-US Delegate Rosalie White, K1STO, quoted one educator who wrote, "Many of our middle school students who participated in and attended our ARISS contact have selected science courses in high school as a result of that contact." Many teachers report setting up ham radio clubs in schools and learning centers because of students' interest prior to an ARISS contact.

<u>Full information</u> on hosting an ARISS contact is available on the ARISS website.

Calendar of Events

Oct. 22	GARA General Meeting (Cooper's Ale House in Salon "B" Greensboro)
Oct 27	VE Session (Hickory Chapel Wesleyan Church, High Point)
Nov. 10	VE Session (Hinshaw United Methodist Church, Greensboro)
Nov 12	GARA Board Meeting
Nov. 26	GARA Election Meeting (Cooper's Ale House in Salon "B" Greensboro
Dec. 8	VE Session (Hinshaw United Methodist Church, Greensboro)
Dec. 20	GARA Board Meeting (transition meeting)
Dec.?	Area Ham Christmas (holiday) Party TBA
Dec.	No GARA General Meeting this month
Jan. 5	Winston-Salem FirstFest
Jan. 12	VE Session (Hinshaw United Methodist Church, Greensboro)
Jan. 14	GARA Board Meeting
Jan. 26	VE Session (Hickory Chapel Wesleyan Church, High Point)
Jan. 28	GARA General Meeting (Cooper's Ale House in Salon "B" Greensboro)
Feb. 9	VE Session (Hinshaw United Methodist Church, Greensboro)
Feb. 11	GARA Board Meeting
Feb. 23	VE Session (Hickory Chapel Wesleyan Church, High Point)
Feb. 25	GARA General Meeting (Cooper's Ale House in Salon "B" Greensboro)
Mar. 8,9	Charlotte Hamfest (http://charlottehamfest.org)
Mar. 9	VE Session (Hinshaw United Methodist Church, Greensboro)
Mar. 11	GARA Board Meeting
Mar. 23	VE Session (Hickory Chapel Wesleyan Church, High Point)
Mar. 25	GARA General Meeting (Cooper's Ale House in Salon "B" Greensboro)
Apr. 8	GARA Board Meeting
Apr. 13	VE Session (Hinshaw United Methodist Church, Greensboro)
Apr. 20	Raleigh Hamfest (http://rars.org/hamfest)
Apr. 22	GARA General Meeting (Cooper's Ale House in Salon "B" Greensboro)
Apr. 27	VE Session (Hickory Chapel Wesleyan Church, High Point)

The purpose of this calendar to provide information on events in and around our area that might be of interest to our readers. As you might expect, there are many more events (public service, hamfests, flea markets, etc.) taking place in North Carolina and around the Greater Greensboro Area. If you know of an event that would be of interest to our readers, please contact Betty KC2BFN at kc2bfn@att.net.

Area Happenings

FOURTH MONDAY – at 6:30 pm, the Greensboro Amateur Radio Association have their regular monthly meeting at Cooper's Ale House, 415 S. Swing Rd., Greensboro, NC 27410. Please plan to gather at 6:30 pm for dinner. The meeting is scheduled to start at 7:15 pm

CLUB NETS:

SUNDAYS – at 8:30 pm, the GARA Sunday evening net. This features a rag chew followed by News and Information including Amateur Radio Newsline. It is on the 145.150, W4GSO repeater. Scott Toth, ND4L is always looking for net controls.

TUESDAYS – at 8:30pm The Triad SkyWarn Net meets on the 147.225, K4ITL repeater, no tone required.

TUESDAYS – at 9pm, the D-STAR Net meets on 442.8625 (W4GSO B and Reflector 54C)

WEDNESDAYS – at 8:45pm, The Guilford Amateur Society Rag Chew Net holds their weekly net on the 145.250 W4GG repeater. Jim Hightower, W4JLH is the net control.

THURSDAYS – at 9pm, The Guilford County ARES Net meets on the 145.150 repeater (100 Hz. tone).

OTHER ACTIVITIES:

FIRST MONDAY – The Guilford County A.R.E.S. monthly meeting is held at 1002 Meadowood St. off W. Wendover Ave, in the EMS building, beginning at 7pm. THIRD MONDAY – The Guilford Amateur Society is currently looking for a new venue for their meetings. When found, that information will be posted here.

THURSDAY – at 11:15am, Greensboro Hams get together for lunch. Thursday lunch group is meeting at the K&W Cafeteria, 300 Forum VI Mall at Friendly Shopping Center. Talk-in is on the 145. 150, W4GSO repeater with a 100 Hz. tone. EVERY FRIDAY – at 8pm (approximately) Greensboro Hams get together for coffee at Starbucks at Edney Ridge Rd.

The W4VEC Testing Schedule Nov. 2018 to Dec. 2018

Nov. 10, 2018 Dec. 8, 2018

Location: Hinshaw United Methodist Church, 4501 Gate City Blvd., Greensboro, NC

Time: 9:00am

Contact: David Macchiarolo

Phone: 336-420-9424 E-mail: aj4tf@arrl.net

GARA REPEATERS

145.150 MHz - offset, 100 Hz. tone

442.8625 MHz. + offset, Digital D-Star



Greensboro Amateur Radio Association

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The Official Publication of GARA