



The Greensboro Amateur Radio Association

Feed Line

Providing Amateur Radio news for the Triad



Julia Toth, Editor

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This Month's Program

This month I will be talking about a battery management project I am working on for a set of LiPo batteries to power a portable station. The goal is to monitor the status of each battery in the set and to automatically switch a battery to a solar charger or to the radio as needed. I built a manual system to do this, but now I want to automate it. I hope you find it interesting.

Also, winter Field Day is coming up, so if you are interested, please let me know. I will discuss it at the meeting. Several of us participated in last year's event and had a good time, so I hope you will consider helping out this year.

73,
Dave McLin, AC4A

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NEXT MEETING

October 29, 2019

The next meeting of the Greensboro Amateur Radio Association will be held at Sarah's Kabob Shop in Greensboro.

MEETING TOPIC: Battery Management

GARA Board Meeting Minutes

No October board meeting.

GARA Meeting Minutes

The September GARA meeting was held at Sarah's Kabob Shop in Greensboro on Monday, September 22 at 7:15pm.

Scott Toth, ND4L called the meeting to order at 7:15pm.

Scott gave some reports on behalf of the Vice President, Treasurer and Secretary.

Matt Trull, KX4GG gave an update on the status of the GARA repeaters, especially the UHF machine.

For the presentation, Scott and Matt demonstrated the NanoVNA, showing the device itself, how to calibrate it, and how to use it with Windows-based software to measure line loss, antenna SWR and other parameters. Some hams in attendance provided their antennas to be measured as a demonstration.

The meeting was adjourned at 8:15pm.

The Greensboro Amateur Radio Association

President Scott Toth ND4L | **Vice President** Dave McLin AC4A | **Treasurer** Drew Paschal WB4IHY | **Secretary** Gregory Ray KK4MHY

Financial Committee Chair John Strandberg W4DX | **Engineering Chair** Matt Trull KX4GG | **Operations Chair** Open

Members-at-Large: Chris Thompson K4HC and Jesse Lindley K4AX

Appointed Positions: Public Information Officer/Newsletter Editor Julia Toth

The Feed Line is ©2019 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.

From the President's Shack

Elections are almost here! GARA, like with national, state and local elections, holds elections for the Board of Directors at our November meeting. In recent years we've been challenged to find candidates to fill the slate. While we have a nearly-full board right now, many of the current board members do not intend to seek re-election. That means we have some spots available that you may be able to fill! And just because we already have a candidate (whether an incumbent or not), it doesn't mean that you can't run for a particular position if you are interested in it! Here is a list of board positions that you may consider:

President
Vice President *
Treasurer
Secretary *
Engineering
Finance
Operations *
At Large
At Large

The positions with asterisks currently do not have anyone running for them, although, as I mentioned, you're free, as a member in good standing, to run for any of them! We are happy to have a ballot with some respectfully contested positions!

I'd like to encourage you to consider running. The board doesn't always meet each month as we communicate a lot by email, so the time commitment isn't too high (although there are months where we do need to meet for dinner in person). This is a great way for you to help steer the direction of the club and give your input to the decisions that are made. The new term starts in January.

I'd like to express my gratitude to the current board. It isn't always easy to help an organization to function well and these amateurs have stepped up to the plate. Maybe it's your turn now!

73,
Scott Toth, ND4L
GARA President

Engineering Report

As some of you have discovered, our D-Star Gateway server is no longer accessible. With the introduction of the current Pistar based D-Star and C4FM repeater setup, the G2 Gateway was being maintained solely for registrations. That gateway machine has now failed and is no longer serviceable. At current we do not have plans to replace it. The good news is that you can register on any D-Star gateway and still use the W4GSO repeater. I personally registered with the Charlotte group's gateway many months ago so that I could have the capability of experimenting with the newest D-Star features on radios such as the ID-51A Plus 2. The new hotspot and terminal modes require registration with a G3 Gateway and our old one was only running the G2 version.

We are encouraging members who need to create or modify their registration to register with the central D-Star group, or the Charlotte group. Links for both are provided below and both are running version 3 of the Gateway software so you can take advantage of the latest D-Star features. If you have a registration already on the W4GSO system you can continue to use D-Star, but if you need to register somewhere else you will need to have this registration deleted first from the system. You can do that by emailing trust-server-admins@dstarusers.org. Ensure that your registration has been deleted before registering with another gateway. You can check your registration status here: <https://wb1gof.dstargateway.org/cgi-bin/dstar-regcheck>

Central D-Star group:

<https://regist.dstargateway.org/Dstar.do>

Charlotte D-Star system KI4WXS:

<https://ki4wxs.metro-uhf.org/Dstar.do>

73,

Matt Trull, KX4GG

From ARRL...

Pitcairn Island DXpedition Offers Tips on Working VP6R on FT8

<http://www.arrl.org/news/pitcairn-island-dxpedition-offers-tips-on-working-vp6r-on-ft8>



10/25/2019

The contact count for the VP6R Pitcairn Island DXpedition was approaching 50,000 as of October 24. Stormy weather put a bit of a damper on things, however.

“Late yesterday, we were hit with a tropical storm with torrential rain and gale force-plus winds,” DXpedition leader Glenn Johnson, W0GJ, reported on Thursday. “We had several antennas come down, but they are repairable and will be back up when it is safe to go outside.”

Johnson said VP6R has experienced great band conditions from 160 to 10 meters. “We had a very successful night on 60 meters (5.357 MHz) 2 days ago and will be on again. We are using FT8 in fox/hound (F/H) mode.” VP6R has been working a lot of FT8 on all bands except 160 and Johnson said the digital protocol has been putting a lot of new and unique call signs into the log. VP6R anticipates using FT8 on 160 starting on Tuesday, October 29, on 1.836 MHz.

“Most DXpeditions, including VP6R, are using fox/hound mode,” Johnson noted. “If you are not in F/H mode when you call us, it will be impossible to make contact. Make sure the radio tab has split selected and that you have selected ‘hound’ mode on the advanced tab,” he stressed. “If the hound is using the wrong software version, it does not respond properly to the fox. The message formats are not compatible. The fox will call the hound three times, and then they are dropped.

Johnson said operators seeking to snag VP6R on FT8 must be using WSJT-X version 2.1.0 in F/H mode and in split mode in the software (not the radio). Transmit frequency must be above 1,000 Hz.

“When conditions are good and everyone has FT8 set up properly, we have seen peak rates over 1,000 contacts/hour and often sustained rates of 400 contacts/hour from a single station,” Johnson said. “And, yes, it is possible for one person to operate two stations at once. We do it often.”

Johnson reported two successful schedules with Dorothy Grant Elementary School (K6DGE) in Fontana, California. “It has been fun to chat with the kids and answer questions,” he said. “We love their enthusiasm.”

VP6R expects to shut down temporarily at around 2200 UTC on Friday, October 25, to get ready to participate in the CQ World Wide SSB contest in the multi-multi category. After the contest VP6R will return to DXpedition mode until October 31.

From ARRL...

Arizona Club Takes Advantage of Low Bands to Support 100-Mile Endurance Run

<http://www.arrl.org/news/arizona-club-takes-advantage-of-low-bands-to-support-100-mile-endurance-run>



10/24/2019

The Coconino Amateur Radio Club (CARC) provided safety and coordination communications for the 100-mile Stagecoach Line Run over the September 21–22 weekend. This endurance run from Flagstaff to the Grand Canyon takes place every September. The 31-hour event pushes runners to the limit. The Stagecoach Line Run also tests Amateur Radio's capabilities and requires planning and commitment. Because of the geographical coverage required, the club's Amateur Radio support even took advantage of 160 meters, not a band typically associated with public service communication.

"Because we are in a solar minimum, a combination of bands and communication methods were required in order to track and maintain contact with the numerous stations," said Dan Shearer, N7YIQ, the club's Public Information Officer. "What worked well at 3 o'clock in the afternoon was not going to work at 2 in the morning." The club's communication infrastructure required a combination of HF and VHF/UHF equipment that included setting up portable repeaters and stations powered by generators and other power sources.

"When you add in the cold weather of the high desert in September and the possibility of rain and snow, this becomes a test of what Amateur Radio may be called upon to do to support a disaster somewhere in the nation," Shearer said.

CARC members invested more than 300 hours of their time in planning and supporting the race, helped by a few additional volunteers from Glendale and Prescott. Nineteen club members staffed eight sites, where volunteers set up camps and kept vigil through the night to track and make sure runners were accounted for throughout the race.

In addition to tracking runners into and out of each aid station, net control entered these times into an online spreadsheet as they progressed through the race, allowing runners to be located easily in case they did not make it to the next checkpoint.

During the event, CARC members helped locate two missing runners and helped save the life of another who developed severe asthma. Medical care and treatment during these types of extreme events poses a significant challenge, as EMS responses are delayed. "Much of the area between Flagstaff and the Grand Canyon is US Forest Service land, and travel through these areas by vehicles is slow," Shearer explained. Severe emergencies can only be handled by aircraft, if conditions permit."

During the race, 75 meters worked well during the day, but 160 meters was put into play after dark. Cross-band repeaters were placed at remote sites to allow access to existing repeaters. Although VHF and UHF were used, these links at times became unusable, and alternate forms and bands were required to maintain contact.

The Coconino Amateur Radio Club is an ARRL-affiliated club with about 50 members. It has a large ARES component that trains regularly and conducts SKYWARN and ARES® nets weekly.

VE Testing

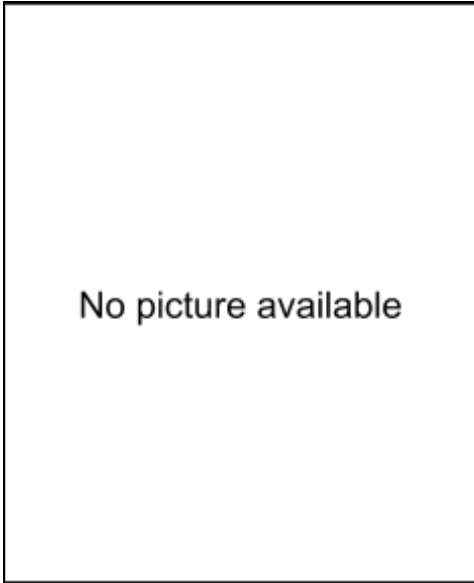
Every month on the second Saturday, except in March when it is the third Saturday, W4VEC holds a testing session for those who live in the area. This provides an opportunity for individuals to be able to test for their amateur radio license or upgrade. Thanks to David Macchiarolo, AJ4TF, and his team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

The next testing session in Greensboro will be on October 9th at Hinshaw United Methodist Church, 4501 Gate City Blvd., Greensboro 27407, at 9 a.m. While walk-ins are welcome, contacting the lead VE is preferred. Please contact David Macchiarolo, AJ4TF, email aj4tf@arrl.net, cell (336) 420-9424.

The next testing session in High Point will be on November 30th at Hickory Chapel Wesleyan Church, 301 Hickory Chapel Road (off MLK Jr. Drive), High Point 27262 at 10 a.m. **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.

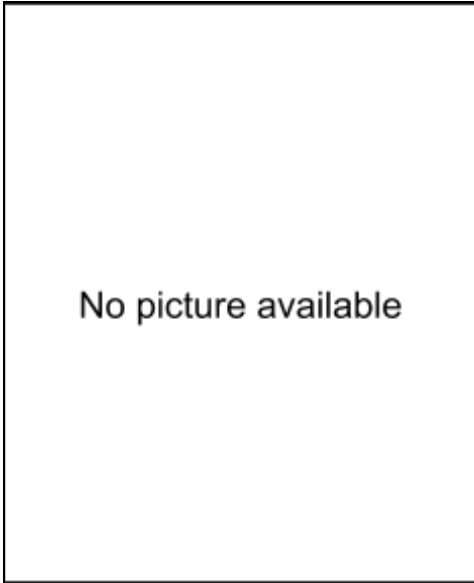
Look Who Passed

Greensboro VE Session - October 12, 2019



No picture available

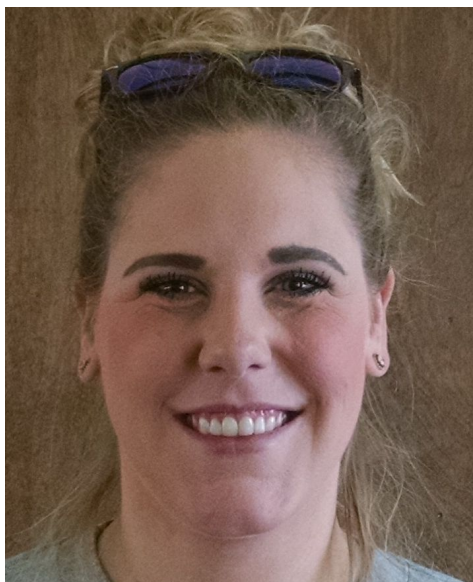
Craig S. Linville Jr., KN4VZU
Kernersville, NC
Earned General



No picture available

Thomas H. Parsons
Kernersville, NC
Earned Technician

High Point VE Session - September 28, 2019



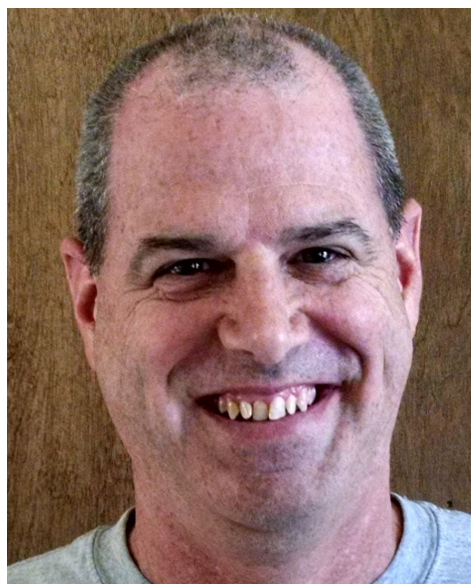
Meridith L. Lockamy, KN4YQI
Spartanburg, SC
Earned Technician



Christopher E. Oakman, II, KN4YQJ
Kernersville, NC
Earned Technician



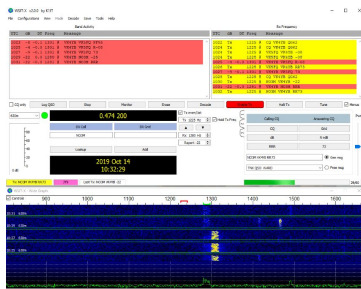
Leamon L. Ratterree, KN4YQK
Monticello, FL
Earned Technician



Brian K. Stewart, KN4BKS
Greensboro, NC
Earned General

From ARRL...**New 630-Meter Distance Record Claimed**

<http://www.arrl.org/news/new-630-meter-distance-record-claimed>



10/23/2019

Eric Tichansky, N03M, and Roger Crofts, VK4YB, are claiming a new world distance record on 630 meters. They worked each other on October 14 at 1032 UTC using JT9 mode. Tichansky said the contact represented the culmination of 2 years of effort around every equinox since September 2017.

"Hopes were wearing thin as we were moving away from the recent equinox on September 23," he said. "Even when the path may have been open over the past 3 weeks, either end would be plagued with QRN." He

said that while the opening that facilitated the record-breaking contact was not comparably as strong as past openings, "something special was obviously at play."

The contact covered 9,307.5 miles (14,979 kilometers), topping the previous record of 8,351.9 miles set by Roger Crofts, VK4YB, and Kenneth Roberson, K5DNL, by nearly 1,000 miles. Tichansky said his transmit antenna is a 67-foot top-loaded vertical, and the receive antenna is a full-sized eight-circle array comprised of short verticals. The transmit/receive at VK4YB is a linear-loaded vertical. — Thanks to Eric Tichansky, N03M

Calendar of Events

Oct. 28	GARA General Meeting (Sarah's Kabob Shop, Greensboro)
Nov. 9	VE Session (Hinshaw United Methodist Church, Greensboro)
Nov. 17	JARSFEST (http://jars.net Benson, NC)
Nov. 25	GARA General Meeting (Sarah's Kabob Shop, Greensboro)
Nov. 30	VE Session (Hickory Chapel Wesleyan Church, High Point)
Dec. 14	VE Session (Hinshaw United Methodist Church, Greensboro)
Dec. 23	GARA General Meeting (Sarah's Kabob Shop, Greensboro)
Dec. 28	VE Session (Hickory Chapel Wesleyan Church, High Point)
Jan. 11	W4NC First-Fest (http://w4nc.com Winston-Salem, NC)
Jan. 11	VE Session (Hinshaw United Methodist Church, Greensboro)
Jan. 25	VE Session (Hickory Chapel Wesleyan Church, High Point)
Jan. 27	GARA General Meeting (Sarah's Kabob Shop, Greensboro)
Feb. 9	VE Session (Hinshaw United Methodist Church, Greensboro)
Feb. 24	GARA General Meeting (Sarah's Kabob Shop, Greensboro)
Feb. 29	VE Session (Hickory Chapel Wesleyan Church, High Point)
Mar. 13	Charlotte Hamfest (http://www.charlottehamfest.org Concord, NC)
Mar. 23	GARA General Meeting (Sarah's Kabob Shop, Greensboro)

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 the Board of Directors at info@w4gso.org.

FEEDLINE

FOURTH MONDAY – at 6:30 p.m., the Greensboro Amateur Radio Association has a regular monthly meeting at Sarah's Kabob Shop, 5340 W. Market., Greensboro, NC 27409. Please plan to gather at 6:30 p.m. for dinner. The meeting is scheduled to start at 7:15 p.m.

CLUB NETS:

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

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

TUESDAYS – at 9 p.m., the D-Star Net meets on 442.8625 (W4GSO B and Reflector 54C)

WEDNESDAYS – at 8:45 p.m., 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 9 p.m., The Guilford County ARES Net meets on the 145.150 repeater (100 Hz tone)

OTHER ACTIVITIES:

FIRST MONDAY – The Guilford County ARES monthly meeting is held at 1002 Meadowood St. off W. Wendover Ave, in the EMS building, beginning at 7 p.m.

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 11:15 a.m., 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 8 p.m. (approximately) Greensboro Hams get together for coffee at Starbucks at Edney Ridge Rd.

The GSO W4VEC Testing Schedule Nov. - Jan. 2019

Nov. 9th

Dec 14th

Jan. 11th

9:00 a.m.

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

Contact:
David Macchiarolo
(336) 420-9424
aj4tf@arrl.net

GARA REPEATERS

145.150 MHz - offset, 100 Hz tone, FM and Fusion

442.8625 MHz + offset, D-Star and Fusion



Greensboro Amateur Radio Association

P.O. Box 39829

Greensboro, NC 27438

www.w4gso.org

FIRST CLASS MAIL

The Official Publication of GARA