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The Greensboro Amateur Radio Association



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# This Month's Program

Steven Blackford (K4SQI) will be updating us on the details of the Carolina Link for the Feb 26th meeting presentation. Steven has been instrumental in making the Carolina Link work, and will be sharing his knowledge with us. I hope you can make it to the meeting!

Thanks, Dave. AC4A

NC QSO PARTY 2018 (2/25) – The NC QSO Party 2018 will be held on Sunday, February 25, 2018, from 10:00 AM to 8:00 PM EST. For further information, see <a href="http://ncqsoparty.org/">http://ncqsoparty.org/</a>

#### **INSIDE THIS EDITION**

President's Message.

**Engineering Report** 

Spotlight on new Board Members

New hams in the area

Calendar of events

### NEXT MEETING February 26, 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 Feb. 26, 2018. The program will be presented by Steven Blackford, K4SQI. He will speak about Carolina Link.

#### ARRL HUDSON DIVISION DIRECTOR PROMOTES AMATEUR RADIO PARITY ACT

BEFORE SENATE COMMITTEE – ARRL Hudson Division Director Mike Lisenco, N2YBB, testified Thursday (January 25) before a session of the Senate Committee on Commerce, Science and Transportation regarding Amateur Radio's readiness to respond in an emergency. The session, "This is not a Drill: An Examination of Emergency Alert Systems," was called in the wake of an incoming missile warning erroneously released in Hawaii earlier this month. Lisenco said Amateur Radio played a role not only in responding to the warning but in disseminating word that the missile alert had been issued by mistake. ... Lisenco took the opportunity to address how private land-use regulations can preclude Amateur Radio disaster response capabilities. ... For further information, see <a href="http://www.arrl.org/news/arrl-hudson-division-director-promotes-amateur-radio-parity-act-before-senate-committee">http://www.arrl.org/news/arrl-hudson-division-director-promotes-amateur-radio-parity-act-before-senate-committee</a>

(source: ARRL website)

#### ARRL BOARD OF DIRECTORS AGREES TO REVIEW OF CODE OF CONDUCT FOR

 $\underline{\textbf{DIRECTORS}} - For \ further \ information, \ see \ \underline{\text{http://www.arrl.org/news/arrl-board-of-directors-agrees-to-review-of-conduct-code-for-directors}}$ 

(source: ARRL website)

<u>ARRL CEO TOM GALLAGHER, NY2RF, TO RETIRE</u> – ARRL's chief executive officer for the past 2 years, Tom Gallagher, NY2RF, announced his retirement as CEO, as the ARRL Board of Directors prepares to meet January 19-20. He will step down on March 2. For further information, see <a href="http://www.arrl.org/news/arrl-ceo-tom-gallagher-ny2rf-to-retire">http://www.arrl.org/news/arrl-ceo-tom-gallagher-ny2rf-to-retire</a>

(source: ARRL website)

#### The Greensboro Amateur Radio Association

President Scott Toth KD4L
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

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

Betty Williams KC2BFN

# 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 <a href="www.arrl.org">www.arrl.org</a> and learn something new or refresh something old.

# **GARA Meeting Minutes**

# **Board Meeting Minutes – February 2018**

GARA February Board Meeting 2-12-18 Nazareth Bread Co., W. Market St.

Board Members present: Scott Toth, ND4L, David McLin, AC4A, Matt Trull, KX4GG Chandlee White, KJ4ADX, John Strandberg, W4DX, Jamie Restrepo, N4JAI Greg Ray, KK4MHY, Chris Thompson, K4HC, Jesse Lindley, K4AX

Invited member Patrick Moore K2CPR

President Scott Toth began the meeting at 7pm.

Two items were on the agenda, interference issue on the repeater and the 2018 GARA Financial Forecast.

Patrick Moore shared with the Board his findings of the interference issue with the repeater. The Board developed a response. This will have been accomplished by the time the Feedline is published.

Scott noted members have been working hard on the financial forecast for 2018. The Board looked over the spreadsheet and noted some needed additions and corrections. These changes will be done on line and the Board will vote on the final version before publication.

Scott asked for a motion to adjourn, Chris Thompson seconded the motion, the Board Meeting was adjourned at 7:45pm.

Respectively submitted by Greg Ray, GARA Secretary

#### **Z60A FIELDING THREE STATIONS TO HANDLE HUGE PILEUPS FOR NEW DXCC #1**

(ENDING 2/18) – Three Z60A stations are up and running with DL3DXX, DL5CW, DJ5IW, IK0FVC, and VE7NY handling operating duties. The special activation to mark the addition of the Republic of Kosovo to the DXCC List has reached 50,000 contacts and counting. ... – Thanks to Martti Laine, OH2BH. For further information, see

http://www.arrl.org/news/z60a-fielding-three-stations-to-handle-huge-pileups-for-new-dxcc-1 (sources: OH2BH, ARRL website)

### Regular Meeting Minutes – January 2018

GARA January Meeting Cooper's Ale House 1-22-18

President Scott Toth called the January meeting to order at 7:15pm.

Introductions were given.

Reports:

President: Scott Toth reported the Internet was down and will be upgraded. Scott mentioned he is excited about new things for the club this year.

Vice President: David McLin is working on 10 presentations this year, topics including Technical, Public Service and Operating.

Secretary: Greg Ray Please sign the attendance sheet.

Treasurer: Absent

Engineering Chair: Matt Trull, Matt installed a donated Dell equipment rack at the repeater site, this combined all equipment in one rack. The club is going with Spectrum Business Class Internet.

Operations: Scott Toth noted we are having intentional interference issues with the repeater.

Finance: Chan White asked for equipment donations and volunteers to assist him with inventorying donations.

January Program: "DX Etiquette" or how not to be a LID. Presented by Member at Large Chris Thompson

Scott asked for a motion to end the meeting, Patrick Moore and Chris Thompson seconded the motion, meeting adjourned at 8:15pm.

Respectively submitted by

Greg Ray
GARA Secretary

## The Financial Forecast as of 1-27-2018 is below.

# **Greensboro Amateur Radio Association 2018 Financial Forecast Income (Projected)**

Source	Quantity	Amount Per	Total
Membership Dues	90	\$24.00	\$2,160
Cash Donations	10	\$20.00	\$200
Sales from Gear Donations	1	\$500.00	\$500
Sales of unused GARA equipment	1	\$300.00	\$300
Amazon Smile Income	1	\$30.00	\$30
SpreadShirt.com Commission	1	\$20.00	\$20
Total Income			\$3,210

#### **Expenses**

Expenditure	Quantity	Amount Per	Total
Property Insurance (Mercer)	1	\$468.00	\$468
Other Insurance (Mercer)	1	\$320.00	\$320
Website Hosting	12	\$21.35	\$256
P.O. Box	1	\$86.00	\$86
GARA Picnic Supplies	1	\$200.00	\$200
Field Day Site Fee	1	\$160.00	\$160
Spectrum Internet	12	\$70.00	\$840
Sponsorships	1	\$50.00	\$50
Miscellaneous Engineering	1	\$400.00	\$400
D-star Repeater Replacement	1	\$700.00	\$700
Total Expenses			\$3,480

#### **Potential Events**

NC/SC QSO Party

N4G

**GARA Picnic** 

**GARA Open House** 

Field Day

**Shelby Hamfest** 

**Foxhunt** 

Antenna building party

SOTA Activation (Hanging Rock?

Pilot Mountain?)

Submitted by Chan - KJ4ADX

# From the President's Shack

#### February 2018

What comes to mind when you hear the word "digital?" Do you think of that old DEC computer you used to have in the late 1990s? Or maybe about some dystopian future like in the "Matrix" movies? I think the idea of only having two states - 1s and 0s - is a bit (pun intended!) frightening because it seems too simple to accurately reflect our reality. Those little bits, though, have transformed our society in ways that were unimaginable less than a century ago. Paper money is going extinct (as are checkbooks), shares in stocks are traded in picoseconds, and communications have been revolutionized by digitalization.

I have to tell you that I love vacuum tubes. I don't know why, but there's something soothing about their glow and the way that they represent waveforms perfectly in such an analog sort of way. There's just some sort of balance there. However, despite my affection for them, they still have limitations. They're big. They get hot. They have a finite life span. I can't make a smart phone out of them. I guess if I want everything the valves can't provide I'm going to have to settle for a transistorized existence. Good thing though, because that means that I can do all sorts of new and exciting things that weren't possible even five years ago, let alone a century.

We have gotten to an era in ham radio that resembles the old-time ingenuity of yesteryear in an analog-to-digital, yin-and-yang sort of way. People used to scab together radios from scraps so they could use the Code to communicate with people around the world over HF. Now we scab together all sorts of internet-connected hotspots from Raspberry Pis and Arduinos and hats and DVMegas and who-knows-what. People are writing code (not THAT code!) that converts audio from one digital standard to another in real time, allowing compatibility and interoperability in such a way that it almost doesn't matter which brand or mode you choose anymore. You want convergence? All of the bright hams out there designing hardware and software solutions have opened up an entirely new world where money isn't a barrier any longer and most modes have been converged in one way or another. You can talk to people all over the globe on various systems using an \$80 radio and an \$80 hotspot. Yes, it uses the big, bad internet (NOT REAL RADIO!) but that seems to be OK for everything else we do in life, so I suppose we can utilize it for amateur radio occasionally too.

One of the visionaries in this radio space is our very own Steve Blackford, K4SQI. Steve has had a vision to push that convergence, make digital radio accessible, and link up repeaters throughout our state and beyond. He has experimented, built servers, tried hotspots, used laptops, dongles and Pis, and done all sorts of other things to get this system stable and functional. And functional it is. Steve has communicated with and learned from other digital link pioneers in other states, worked with existing and upcoming digital audio networks, and has come up with something pretty special in North Carolina. That's what he's going to tell us about on Monday.

And this is also the future of GARA. A few years back we upgraded our VHF repeater to one that can handle both analog and digital traffic. For a while now, and not without a lot of effort, the setup has been working very smoothly. We have a VHF repeater to be proud of. Unfortunately our other repeater, the one of the UHF and D-star variety, is getting up in age and will need to be replaced in the near future in order to maintain a high standard of service. That is also the repeater that gets GARA onto the digital voice superhighway that I explained earlier, so it has some importance to us. (Side note: if you haven't heard, we recently upgraded our superhighway on-ramp - our internet connection at the repeater site - to one that is over ten times faster than we had before.) Thankfully we have bright minds of our own like Steve K4SQI, Matt KX4GG, Jesse K4AX, Cameron AJ4TW, and others who will be able to help us transition to a new digital repeater setup economically and efficiently while bringing new and exciting features that aren't available now.

With that in mind (and I'm closing now, I promise!), at our meeting on Monday we will be raffling off a new Baofeng UV-B5 U/V radio that John Strandberg W4DX has graciously donated to the club. All proceeds from the raffle will go towards the replacement D-star repeater. We already have a significant number of donations that have been earmarked for this project, so if you're so inclined, please consider donating a tax-deductible gift of \$20, \$50 or

#### **FEEDLINE**

\$100 to make that happen. We will be sharing more details about this effort in the future, but our plan is to perform the upgrade without touching any of GARA's general fund.

And finally, speaking of finances, I want to give a special thanks to Chandlee White KJ4ADX and Jaime Restrepo N4JAI for putting together GARA's financial forecast for 2018, and to all of the Board members for their efforts to make the forecast as accurate as possible.

Thanks for your continued support, and I'm really looking forward to seeing many of you at Cooper's Ale House on Monday!

Best, Scott ND4L

# **February Engineering Report**

Our internet service provider has changed to Spectrum business class. The speed is significantly greater than we had with the DSL, but most importantly, the service has been reliable. Only time will tell, but I believe this will be more stable in the long run versus the DSL that used questionable buried copper.

Work continues on cable management and upgrades for the rack and equipment at the repeater site. Over the past month we have upgraded all of the coax jumpers to 1/4" heliax/superflex (hardline). This also allowed us to have a bit more space between the new rack and the 2 meter duplexer. The performance seems to be a tad better than the older RG8 coax jumpers that were in place. Next, we will be consolidating the DC power connections onto our Astron power supply and use Powerpoles with a distribution block. This will help ensure reliable connections and make maintenance easier.

We have recently completed the update to our equipment inventory. Now we just need to finalize a few values for some of the equipment. Once we have this finalized, we will provide it to our insurance provider, and hopefully be able to realize some savings through reduced premiums.

We will once again be selling or donating some old repeater equipment. Selling would be preferred, but may prove difficult. At the Shelby hamfest we could not get rid of the Master II's we brought. Do you know anyone who needs a couple of Master II's!?

Speaking of equipment, I would like to see our club be able to have a set of gear to use for events such as Field Day. Currently the things that we use are borrowed from various club members and other sources. I would love for us to start putting together a set of equipment, i.e. tables, folding chairs, EZup canopies or tents, feed lines, extension cords...you get the idea. Part of the challenge with this is where to store it all. I think that an enclosed trailer might be a good solution. This way it could be transported to Field Day, NPOTA, NCQP, or to a hamfest to sell equipment. What do you think?

Matt Trull KX4GG

### **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 March 17th 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.

Unfortunately, the High Point-Greensboro W4VEC team has lost its venue (High Point Red Cross Building) for amateur radio exams, so there are no scheduled sessions for High Point, NC in 2018 at this time. The VEC team is actively looking for a replacement site in the High Point area, so when a site is located, exams will be scheduled as soon as possible. Please see the Greensboro, Winston-Salem, Thomasville and Salisbury listings for other nearby sessions.

### Look Who Passed

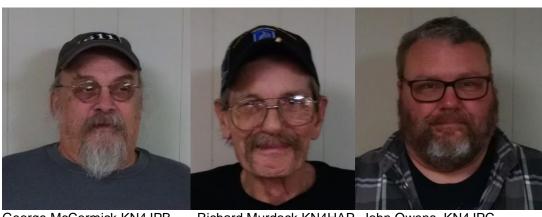
#### GREENSBORO, NC 02/10/18



Lacey Armistead KN4JOX High Point, NC Earned Technician

David Follweiler KN4JOZ Mayodan, NC Earned Technician

Ken Johansen Jr. KN4JPA Thomasville, NC Earned Technician



George McCormick KN4JPB Gibsonville, NC Earned Technician

Richard Murdock KN4HAP Thomasville, NC Earned General

John Owens KN4JPC Archdale, NC Earned Technician



Justin Terrell KN4JPD Reidsville, NC Earned Technician

Charles Werner KX4IQ (former call KN4HMQ) Eden, NC Earned Extra



The Spotlight is on your two new Board Members: Dave McLin and Matt Trull.

Matt Trull, the current Engineering Chair, was born in Greensboro but grew up in Summerfield. He has been licensed for two years and has earned the classification of Extra. Currently he works for a public safety software company in High Point named Superion. As part of the Support group, he provides IT-related service for its customers, with his main focus on things like Windows Server, general network issues and Microsoft SQL Server. If being Engineering Chair doesn't keep him busy enough, he has lots of hobbies, like surf fishing and camping on the outer banks on Cape Lookout National Seashore. He also likes military vehicles and owns a 1993 M1078 that he takes to various events and a yearly rally in Denton, NC. He also enjoys shooting, knife collecting and basic metal fabrication. He doesn't enjoy yard work but then when does he find the time? Regarding the special skills he brings to the club: I am pretty good with IP networking. I have also become familiar with the SCOM7330 programming since creating our current programming that ours is running. I'm also pretty good with a soldering iron.

Here's what he'd like to say to GARA members: I hope to serve the club to the best of my ability. In order to do that I need to understand the club's needs and wants. This is where you come in; to let the board members know areas of concern, interest, or praise. Is there a particular technology or capability you would like to see added to our repeater system?

<u>Dave McLin</u>, the current Vice-President, was born in Beaufort, SC and has been a licensed ham for 4 years, having earned the classification of Extra. He is happily retired but has other hobbies besides amateur radio: Shooting (shotgun, handgun), reloading, woodworking, travelling with spouse. Some of the skills he brings to the club are electronic design, PCB layout and embedded software development. This is what he'd like to say to GARA members: I am looking forward to being the GARA VP this year. I hope the membership finds the monthly programs interesting, and I invite your suggestions for topics you would like to see included.

### **Calendar of Events**

reb 23	NC Q5O Party (http://www.rars.org/hcqsoparty/)
Feb 26	GARA General Meeting (Cooper's Ale House in Salon "B", Greensboro)
Mar 9	North Carolina Section Convention (Charlotte Hamfest http://charlottehamfest.org)
Mar 12	GARA Board Meeting
Mar. 17	VE Session (Hinshaw United Methodist Church, Greensboro)
Mar 26	GARA General Meeting (Cooper's Ale House in Salon "B", Greensboro)
Mar 31	North Carolina State Convention (Raleigh Hamfest http://www.rarsfest.org/)
Apr 9	GARA Board Meeting
Apr 14	VE Session (Hinshaw United Methodist Church, Greensboro)
Apr 21	Catawba Valley Hamfest, Morganton, NC (http://cvhamfest.com)
Apr 23	GARA General Meeting (Cooper's Ale House in Salon "B", Greensboro)
May 12	VE Session (Hinshaw United Methodist Church, Greensboro)
May 14	GARA Board Meeting
May 28	GARA General Meeting (Cooper's Ale House in Salon "B", Greensboro)
Jun 9	VE Session (Hinshaw United Methodist Church, Greensboro)
Jun 11	GARA Board Meeting
Jun 23-24	Field Day
Jun 25	GARA General Meeting (Cooper's Ale House in Salon "B", Greensboro)
Jul 7	33rd Annual Firecracker Hamfest (Salisbury, NC http://www.rowanars.org/firecracker-hamfest/)
Jul 9	GARA Board Meeting
Jul 14	VE Session (Hinshaw United Methodist Church, Greensboro)
Jul 16	GARA General Meeting (Cooper's Ale House in Salon "B", Greensboro)
Jul 21	Mid-Summer Swapfest (Cary, NC) <a href="http://www.qsl.net/n4nc/">http://www.qsl.net/n4nc/</a>
Aug 11	VE Session (Hinshaw United Methodist Church, Greensboro)
Aug 11	20th Annual Cape Fear ARS Swapfest (Fayetteville, NC http://www.cfarsnc.org)
Aug 13	GARA Board Meeting
Aug 24	GARA General Meeting (Cooper's Ale House in Salon "B", Greensboro)
Aug 31	Roanoke Division Convention (Shelby Hamfest) (Shelby, NC <a href="http://shelbyhamfest.org">http://shelbyhamfest.org</a> )

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 Tom, KB1P at <a href="kb1p@arrl.net">kb1p@arrl.net</a>.

<u>ARRL BOARD MEETING MINUTES POSTED</u> – The minutes of the 2018 ARRL Annual Board of Directors Meeting held January 19-20, 2018, are now available on the ARRL website. For further information, see <a href="http://www.arrl.org/news/arrl-board-meeting-minutes-posted">http://www.arrl.org/news/arrl-board-meeting-minutes-posted</a> (source: ARRL website)

# **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 145.150, W4GSO repeater until further notice. 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**

Mar. 2018 to June 2018

Mar. 17, 2018

Apr. 14, 2018

May 12, 2018

June 9, 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**

P.O. Box 39829 Greensboro, NC 27438 www.w4gso.org

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### The Official Publication of GARA