President’s Corner / John Norris, N4IHV

For the past couple of months, I have been joining Wes W3WL on the porch at Slope’s welcoming the new hams upon their passing of an exam at the NFARL VE sessions. I have been pleasantly surprised by the number of new candidates desiring to become Hams. We read in many publications that the Amateur Radio Hobby is becoming obsolete. It is very clear to me now that the hobby is alive and well. Just seeing the enthusiasm of those taking tests each month is proof enough.

It is time to vote for your 2021 NFARL Officers. A list will be coming out soon with the recommendations from our nominating committee headed by Wes Lamboley, W3WL, of the proposed candidates. I am sure everyone is aware we are not able to meet in person and cannot vote in person due to Covid-19 issues. We held an Executive Meeting to determine how to handle this voting issue. Our Executive Committee decided to use an online voting system; eBallot (https://www.eballot.com) after investigating alternatives to in-person voting. Using this system, each active, current, and authorized voting member will receive an eBallot by email in order to vote. This method should work for us during this time. We will continue our regular voting procedure when we are able to return to our in person meeting place. It looks like the 2022 vote will be the period of return. Special times require special methods and I believe we have done the best at this time. Please be sure to vote.

We are still not allowed to use the Senior Center in Alpharetta. Until further notice we will continue to use Zoom for our meetings.

Our club has received a large selection of connectors consisting of PL259, SO239, BNC, N, and others we cannot identify. These connectors are in many different configurations. They were a gift to NFARL and are available to club members. The connectors need to be separated by specific type. We need help in sorting and labeling these connectors. Please let me know if you have time to help. In the meantime, if you need any connectors, let me know. I will work to make them available.

It appears we are aiming toward the backside of this Covid problem and hopefully we will be back to normal by January 2022. There are still many projects to complete and many new ones to try. Lots of radio time available for many people across the world. A great time for DX.

John Norris, President  N4IHV
Georgia ARES Simulated Emergency Test October 2020 /NFARES Team

This article is compiled from input by several North Fulton Amateur Radio Emergency Service (NFARES) members. Two members provided summaries based on their individual experiences and combined with notes from the subsequent after-action reviews held by the NFARES team. We have the article below.

From Mike KN4OAK

So, what is a “Simulated Emergency Test” and what does it involve? Why would the Georgia ARES® Team decide to run such an exercise? Who is participating, and why? Well, it sounded interesting and the NFARES Team was intent on participating, so I decided it must be worthwhile. I was going to get involved!

Before I begin describing my take on the event, here is a bit of background information you can explore if you are unfamiliar of what Amateur Radio Emergency Service® (ARES) is about.

- America Radio Relay League ARES® page http://www.arrl.org/ares
- Georgia Amateur Radio Emergency Service https://gaares.org/
- North Fulton Amateur Radio Emergency Service http://nfares.org/

The 2020 ARRL Simulated Emergency Test (SET) took place October 3, 2020. The annual, nationwide exercise provides Amateur Radio Emergency Service (ARES) volunteers the chance to test personal emergency-operating skills and communication readiness in a simulated emergency deployment. ARRL Field and Local Agencies developed fictitious emergency scenarios as a basis for the exercise. The Georgia ARES simulation was based on an earthquake occurring in North Georgia. You can review the incident briefing document (ICS-201) generated in support of the exercise at this link https://gaares.org/set/ICS-201%20GA%20SET%20Vers1.pdf.

North Fulton Amateur Radio Emergency Service (NFARES) members began planning for the exercise in August. NFARES met several times during the last two weeks of September to ensure members understood the exercise plan, communications plan, and were able to commit to the operating modes and exercise agenda. NFARES members concluded that it would be prudent to utilize the American Red Cross exercise operating structure and communication plan as a basis for the GA SET (Georgia Simulated Emergency Test) given the successful outcome of the May 2020 Red Cross exercise.

The GA SET check-in on HF 80m net station 3.975 Mhz began at 8AM Saturday morning. I was feeling pretty good about the exercise. I could easily hear NCS (Net Control Station) on 3.975 and those checking in ahead of me. KK4PCR and W4IU checked in and as the check-ins reached the end I made several transmissions in an attempt to get on the check-in list, to no avail. “OK” I thought. “This is why we run the exercises. Add this matter to the issues list”. I proceeded on to the next exercise sequence.

I returned to the 145.47 repeater and joined the exercise there. Rig was operating fine. We soon turned to the NFARES regional groups (Sandy Springs, Roswell and Alpharetta) on simplex. AJ2Y led us through the group check-in on 146.580. I could hear everyone except KO4BCO. Frustration again. Sam’s QTH is maybe a mile away from mine. Add this matter to the issues list. Back to 145.47.
Now we’re all working to send digital messages. MT-63 1KS. I have no problems receiving. FLdigi seems to be working as it should. One problem- I cannot transmit. This situation popped up several months ago and I just haven’t allocated time to further debug it and correct the issue. Luckily Jim W4IU has an IC-7100 as well. He recently ran into a similar issue and discovered the radio settings weren’t as obvious as they could be if you were not using an external soundcard (aka SignaLink, etc.). One setting is required for phone transmission, another for digital. In the meantime Steven KW4HQ sends a digital message that appears as machine language... random characters. Steven explains what this is to everyone as I’m not the only one who hasn’t translated it. OK- add this to the issues list so I don’t forget to go figure this out. However, thanks Jim W4IU, for helping me get the settings fix in place. Looks as though I’m going to put the SignaLink back into the rig. Add this matter to the list.

Now we go back to simplex. Still don’t hear KO4BCO. On to “digital voice”. D-Star and D-RATS prove to be no issue operations wise for me. Learned a few things by observation on the D-Rats reflector though. I will definitively be experimenting in this mode later on. Now I’m providing another Situation Report (SIT REP) to AJ2Y. One thing comes to mind: make sure the message is “SMART” (specific, measurable, actionable, relevant & time bound) so whomever receives it down the line can use the information.

The exercise continues onward. GA ARES NCS reminds us to attempt communication with neighboring counties and local ARES. OK- hmmm, what frequencies might they be on? I’m too busy to go looking at this point. It’s time to react to an evacuation order issued. There is a reported chemical spill with an evacuation zone of 5 miles radius. Wow. Just thinking about the scope of something that big jolts my thoughts back to asking myself “what if this were real? How would the general population behave?” I need a reference book to have on the desk so I can operate the PC to run the radio.... Add this to the issues list.

So now we’ve explored the use of D-Star and APRS maps to figure out who might be where while evacuating from the spill zone. Mark WO4MW has also physically gone mobile to move to the Forsyth Hospital (he’s an MD and on call). So he’s actually put another operating mode into the exercise.

By this time it’s nearing 1PM. GA ARES appears to be satisfied with the exercise at this point. Many others from across the state have dropped or completed their participation in the exercise and moved on to the next part of their day. I’m about do the same when Bill KN4LDE calls an end to NFARES participation. Given the time spent, I had feel it was well worth it. Next step, as in all ARES exercises, is to compare my notes with the other NFARES participants and develop an action plan to close gaps.

My gratitude and appreciation go to Bill KN4DLE and the rest of the NFARES members who made the exercise a success! Thanks Tammy KK4USM, Grant KK4PCR, Mike AD4MC, Scot KN4JXE, Jim W4IU, Sam KO4BCO, Joe AJ2Y, Fred W4FRA, Mark WO4MW, and Wayne KE4WYU.

From Jim W4IU

I was eager to get started with the GA SET drill. However, this exercise was ‘limited’ in that it did not include actual mobilization and deployment due to the on-going pandemic. It did, however, test the full measure of my QTH EMCOMM capabilities. I found myself almost overwhelmed with the radio traffic. Having three radios going at the same time and using two computers com-
plicated the task. I was covering HF command and control traffic on HF, monitoring D-Star on VHF, while responding to requests and updates from NFARES Net Control (Bill, KN4DLE). After the first few go-arounds, I fell into the communication tempo and was able to relax and enjoy the SET.

It was a lot fun, but more importantly, I was able to test my EMCOMM communication capabilities that include traffic handling, equipment performance, and antenna coverage. In addition, I learned a number of things along the way that will hopefully make me a better and more effective ECOMM operator.

Here’s the 2020 GA SET Timeline that was provided as part of the Incident briefing

Here’s an example SIT REP used

4) SITREP Examples: Cherokee County (send to KX4MAT).

<table>
<thead>
<tr>
<th>Cherokee County</th>
<th>Bartow County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power - Green</td>
<td>All utilities – Green</td>
</tr>
<tr>
<td>Water – Yellow - spotty outages</td>
<td>Transportation – Yellow - some road damage</td>
</tr>
<tr>
<td>Internet – Yellow - slow but good</td>
<td>some bridges down</td>
</tr>
<tr>
<td>Cell – Red - offline</td>
<td>Reports of damaged dams</td>
</tr>
</tbody>
</table>
This QST Stray is from the June 2006 issue. Jim Hanson, W1TRC, author of "A Home-made Ultrasonic Arc Detector" [Apr 2006, pp 41-46], reports that PC boards for the project are available. FAR Circuits, www.farcircuits.net, is producing the 2 × 3 inch boards based on artwork developed by Tom Hammond, N0SS, and John Brosnahan, W0UN.

Jim reports that there has been quite a bit of interest in the detector. He notes that at least one ham, Roger Monroe, K7NTW, already has his detector working. He has been able to use it to pinpoint his first noise source on a pole about 3/4 mile from his home that has been giving him problems on 15 meters.

Name This Ham!

This member of NFARL, yet another in this series who has served as president of NFARL, has been a ham since 1960. He has been involved with the Boy Scouts of America for 10 years longer than that.

This man milked cows and helped to make cottage cheese as he worked towards his degree in Agricultural Engineering from UGA.

Following college graduation, this ham went to work for the Boy Scouts as a Field Scout Executive. That position had him based in New York, where he had grown up. His family had already moved to the Atlanta area and eventually, this man resigned from the BSA and moved back to Georgia. He was able to use his Ag Engineering degree for his next position when he was the SE Regional Manager for a Hawaii based company. His specialty was designing micro-irrigation systems. He travelled all over the SE and even to the Virgin Islands in this position.

All that travelling is tiring, of course. Eventually this ham ended that job and became the first Manager for the first HRO not in the western US, the candy store located in Doraville. That is a great job for a ham but he has since retired all the way.

This ham keeps himself busy chasing DX and forming/maintaining friendships with friends locally and around the world.

Name this ham whose picture appears on page 8-7 of the 4th edition of the ARRL Ham Radio License Manual.

See Page 12 for the answer (if you’re unable to identify this NFARL member), and to see photographs.

Did You Know?

According to the October 1988 edition of “Squelch Tales”, there were 13 HamFests that were scheduled to occur across the South East. Things are different today!
N7C QSL Cards / Terry Joyner, W4YBV

Do you remember participating in the Navajo Code Talkers Special Event back on August 11, 2020?

Here’s the QSL cards I received from participating. I always like these special events that are related to a historical point of significance. To me, the event takes on a level of worthiness when it’s connected to a place, thing or people that likely had an effect on how things are today. In my opinion, the Navajo Code Talkers event symbolizes how a small group of individuals can play such a major role in shaping the outcome of a major world-wide situation. I thought you’d appreciate me sharing the QSL cards I received from the 2020 Navajo Code Talkers event.
With Slope’s owner Bob White’s permission, NFARL was able to expand the number of candidates we could host at the monthly VE session from 8 to 12 plus 2 standbys. Well, all 14 candidates showed up and we were able to test them all.

Hams and soon to be hams from Decatur, Alpharetta, Roswell, Sandy Springs, Gainesville, Chatsworth, and more showed up early Saturday morning anxious to get started. John W4TXA, serving as VEC, checked everyone in. VEs Steve KS4KJ, Lane KB4KHQ, Mike N4MEP, and Martha W4MSA welcomed the candidates and readied the testing supplies. Wes W3WL and John N4HVI waited on the porch to greet the test takers afterwards and tell them all about NFARL.

Every one of the candidates passed at least the test they came in to take. Upon passing that first test, folks were given the opportunity to take the next. Some were successful at the next level test, some were not. One candidate, one of the standbys, came in with no license and left having earned an Amateur Extra class license. We had two sets of husbands and wives taking and passing the exams.

If you know anyone who is wanting to take a licensing exam, please let them know about the NFARL VE sessions. As one candidate stated in an email sent afterward, the NFARL team’s VE session is well organized. Potential candidates should contact Ian NV4C to reserve a seat at the November session once he announces the opening of the next registration period. (nv4c.ian@gmail.com).

Thanks to everyone involved in the VE session, both the VEs and the candidates. Welcome new hams and new members of NFARL!

<table>
<thead>
<tr>
<th>October 2020</th>
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<tbody>
<tr>
<td>James T. Abernathy</td>
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<tr>
<td>Alicia D. Pate</td>
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<td>Joshua M. Pate</td>
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<tr>
<td>Kevin P. Hannan</td>
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<td>Anthony J. Pecoraro</td>
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<td>Margaret M. Thompson</td>
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<td>William C. Thompson</td>
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**NFARL October 2020 Club Meeting**

Join us on October 20, 2020 at 7:00PM EDT (23:00 GMT) via Zoom for our October club meeting. We’ve got a few things to address from a business matter perspective and then we get to the important part; **Joe Eisenberg K0NEB**, is our guest presenter. Joe will be telling us about kit building and the impact on youth development inside the Ham realm. Joe has been licensed since 1969 and currently serves as the Kit Building Editor for CQ Magazine. “There is nothing better than sitting down at the bench with parts sorted and ready to be stuffed into a circuit board!”

If you are a NFARL member and you haven’t received an invitation to the Zoom meeting yet, please contact Jim W4IU at w4iu@nfarl.org or John N4IHV at president@nfarl.org and they’ll be happy to provide you with the meeting information.

*See you Tuesday October 20th!*

**What’s This?**

**Have you Seen Me?**

I’m really wondering what I am and where I should be…

What’s this mechanism?

Where might you find one?

Send your answers to enews@nfarl.org before 10/31/2020 and include a brief description of how the mechanism works. First 5 contestants are eligible for selection to receive one mixed bag of UHF connectors!

---

*Graphic template courtesy of shutterstock™*

*Device photograph courtesy of ebay*  
www.ebay.com/itm/392799593874
A very valuable tool for those interested in working amateur radio satellites is the ‘Sky Guide’ app (about $3) for your iPhone. This is an ‘augmented reality’ program that shows what celestial bodies (and satellites) are visible from your location. Take your phone outside and point it at the sky and move it around. It will label what you see. As an example, the following figure is a screen shot of what I saw this evening while scanning the sky for an amateur satellite called Cute 1. The program has an arrow you follow to get you pointed directly at the overhead satellite.

How did I get there? See Figure 2. Tap on the magnifying glass. Under ‘Find any Object’ tap on ‘Satellites’. Under Satellites tap on ‘Amateur Radio’. Highlight ‘overhead’ and all satellites currently visible from your location will be found. See below. This evening about 8pm I tapped on ‘Cute-1’ to get the view in Figure 1.

If you tap on the ‘i’ button by the satellite, 4 screens of information on this satellites are shown.

This screen gives the Beacon and Downlink frequencies and the Mode.

Continued on next page-
If you go back to the ‘Amateur Radio’ link and highlight ‘passes’ it will show every satellite that will be visible from your location for the next day, and more.

This is only one of several pages covering 12:02 am to 6:15 am on Tuesday, October 13. The time the satellite will be over head, the azimuth and elevation are shown as well as the frequency.

Happy Hunting,
N4BEC, Blake Cherrington


https://www.imore.com/sky-guide-everything-you-need-know
New info for Technicians and Generals and a refresher for Extra Class Licensees!

E6D02 — What is the equivalent circuit of a quartz crystal?

A. Motional capacitance, motional inductance, and loss resistance in series, all in parallel with a shunt capacitor representing electrode and stray capacitance
B. Motional inductance and loss resistance in series, paralleled with motional capacitance and a capacitor representing electrode and stray capacitance
C. Motional capacitance, motional inductance, loss resistance, and a capacitor representing electrode and stray capacitance all in series
D. Motional capacitance, motional inductance, loss resistance, and a capacitor representing electrode and stray capacitance all in parallel

See answer on the last page!

Studying for your Amateur Extra-class license?

The Amateur Extra-class license examination question pool, effective from July 1, 2020, through June 30, 2024, has been released and is available at the National Conference of Volunteer Coordinators (NCVEC) website.

Ian NV4C and his team hold license test sessions on the second Saturday of each month. For more information including upcoming test dates, click here.

WANTED! eNEWS EDITOR! / From Mike Riley, KN4OAK

North Fulton Amateur Radio League is looking for someone willing and capable of serving as the Editor / Publisher of NFARL eNEWS.

NFARL is looking for someone to volunteer their time to publish the NFARL eNEWS each month. The document is assembled from articles and information submitted by members volunteering to do so. Presently the document is assembled and “published” using Microsoft Publisher 2013. However, the successful candidate can choose their choice of preferred software and operating platform. The Editor relies on volunteer assistance to proof-read the final version before it is released to the Webmaster for posting on the NFARL website and distribution through automated mailing.

Contact Mike Riley at KN4OAK@nfarl.org for info or to volunteer as Editor.
Neil Foster N4FN is our guest celebrity Ham this month.

Contest Corner

From: https://contestcalendar.com/contestcal.html

- K1USN Slow Speed Test 0000Z-0100Z, Oct 19  http://www.k1usn.com/sst.html
- K1USN Slow Speed Test 0000Z-0100Z, Oct 26  http://www.k1usn.com/sst.html
- ARRL Sweepstakes Contest, CW 2100Z, Nov 7 to 0300Z, Nov 9  http://www.arrl.org/sweepstakes
- ARRL Sweepstakes Contest, SSB 2100Z, Nov 21 to 0300Z, Nov 23  http://www.arrl.org/sweepstakes
- K1USN Slow Speed Test 0000Z-0100Z, Nov 23  http://www.k1usn.com/sst.html
NFARL Upcoming Events and Dates

- **Every Sunday — NFARES net** - 8:30 PM - 147.06 MHz (+) PL 100
  All licensed hams are welcome, you do not need to be an ARES member!
  Check [NFARES.org](http://NFARES.org) for more information.

- **Every Monday — Tech Talk** - 8:30 PM - 145.47 MHz (-) PL 100
  NFARL’s flagship technical based “non check-in” net.  The net is always better when using the web based chat room (Discord) but Internet is not required to join the net.
  Check [NFARL Nets](http://NFARL Nets) for more information and “how to”.  Here’s the link to the NFARL server on Discord web app [https://discord.gg/spr2a9D](https://discord.gg/spr2a9D)

- **Every Wednesday — Hungry Hams Lunch Bunch** - 11:15 AM
  Location:  Slope’s BBQ, 34 East Crossville Road, Roswell, GA  30075
  (770) 518-7000  *Call to verify operations*  
  *Dining Room now OPEN with COVID-19 Restrictions.  Get Take Out if you can’t stay!*

- **Every Thursday — YL OP Net** - 8:00 PM - 9:30 PM - 145.47 MHz (-) PL 100
  Check NFARL Nets [website](http://NFARL Nets) for “how to.”  This is a great opportunity for YL’s to get on the radio with other YL’s!  OM’s (guys) are welcome to listen in to this YL net.

- **Every Saturday — Royal Order of the Olde Geezers Breakfast** - 9 AM
  Location:  Reveille Café, 2960 Shallowford Road, Marietta, GA  30066
  (770) 971-6800  *Call to verify operations*  
  *Dining Room now OPEN with COVID-19 Restrictions.*

- **Second Tuesday — NFARES Meeting** - October 13, 2020  *Online meetings only until COVID-19 Restrictions Lifted.*
  Check [NFARES.org](http://NFARES.org) for more information.

  Contact Ian at [nv4c.ian@gmail.com](mailto:nv4c.ian@gmail.com) for questions / concerns.

- **Spalding Amateur Radio Club Video Supervised Virtual VE Exam**- Go Here and Review Info  [https://k4cxs-scarc.wixsite.com/k4cxs](https://k4cxs-scarc.wixsite.com/k4cxs)

- **Third Tuesday — NFARL Club Meeting** - October 20, 2020, 7:30 PM  
  *Online meetings only until COVID-19 Restrictions Lifted*
  — **October 2020 Topic:**  Joe Eisenberg K0NEB, will discuss kit building and impact on Youth participation

- **Fourth Tuesday — NFARL Executive Team Meeting** - September 22, 2020, 7:00 PM  
  *Online meetings only until COVID-19 Restrictions Lifted*  
  — monitor website and NFARL Groups.io reflector for updates.
## Contact Us

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**North Fulton Amateur Radio League**

P.O. Box 1741  
Roswell, GA 30077

[nfarl.org](http://nfarl.org)

eNews can be located online at:  
[https://www.nfarl.org/enews/eNewsIndex.html](https://www.nfarl.org/enews/eNewsIndex.html)
Club Repeaters

<table>
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<th>Frequency—Description</th>
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<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>145.470 (-) EchoLink Node 560686 NF4GA-R</td>
<td>100 Hz</td>
<td>Morgan Falls</td>
</tr>
<tr>
<td>147.060 (+) Primary ARES Repeater</td>
<td>100 Hz</td>
<td>Roswell Water Tower</td>
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<tr>
<td>* 224.620 (-) Joint Venture with MATPARC</td>
<td>100 Hz</td>
<td>TBD</td>
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<tr>
<td>443.150 (+)</td>
<td>100 Hz</td>
<td>Roswell Water Tower</td>
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<tr>
<td>444.475 (+)</td>
<td>100 Hz</td>
<td>Morgan Falls</td>
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<tr>
<td>* 927.0125 (-)</td>
<td>146.2 Hz</td>
<td>TBD</td>
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</table>

* Currently off the air

Club Callsigns: NF4GA and K4JJ

Extra Extra answer: A (question E6D02)

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