

NFARES- For Fun, To Help, and When All Else Fails/ Martha Muir, W4MSA

Suppose a series of tornadoes rip through our neighborhoods, knocking down trees, crushing houses, hurting people, blocking roads, and destroying the normal lines of communications. Who you gonna call? Well, instead of trying to rely on Ghostbusters, count on NFARES. **NFARES** is the North Fulton Amateur Radio Emergency Services and that group will be the focus of the July NFARL club meeting.

From fun events like the Sandy Springs Lantern Parade to serious training with local fire stations, NFARES is ham radio in action. Grant Register K4PCR and Mike Cohen AD4MCwill talk about the diversity of activities with which NFARES gets involved. They will demonstrate a new software recently added to their tool kits: VARA.

NFARES can send documents, emails, and photos using VARA via ham radio, something that would be quite useful during the emergency situation described above. **A live demonstration of this will be done at this meeting.** Mike Cohen will not be at this meeting in person; he'll be the 'distant location' sending and receiving messages with Grant.

Our club meetings are held at the Preston Ridge Community Center at 3655 Preston Ridge Road (the facility is attached to the backside of the YMCA). NFARES looks forward to demonstrating to you what they enjoy doing with ham radio. The social half hour runs from 7 to 7:30 PM and the program begins at 7:30 PM. Hope to see you there!

Want to attend via Zoom? Here are the Zoom link and info:

https://us06web.zoom.us/j/84502444073?pwd=Z1ZvUXh3TGdkY1JBNzJObVdCRTU5dz09 Meeting ID: 845 0244 4073 Passcode: 719106







President's Corner / John Norris N4IHV

It is hard to believe that half of this year is already gone. We had an wonderful 2022 Field Day. Steve Randall, KO4VW, did an amazing job organizing everything. He had wonderful help from many club members. His team captains did excellent work keeping all of the slots busy at all of the stations. The setup of antennas, radios and computer system was completed in record time. Our experiment using a receive antenna turned out to be a success. The food was excellent for break-fast, lunch and dinner. Thanks to all who helped prepare the food and those who brought dishes. Everyone had a great time and we believe the scores will reflect all of the hard work. The fellowship I experienced was wonderful and it was good to see so many new faces.

The 13 Colonies Special Event was lots of fun and many of our club members participated. This is always a special event for all of us here in the USA, Canada and England.

I have been working on a project that required me to review many other Amateur Radio clubs across the US. I have found we have a very organized and excellent club. We do much more than most and are very active in comparison. It is sometimes hard to appreciate what we have until we compare our situation to others. I am so pleased to be a member of NFARL and feel very fortunate to have met so many wonderful people.

The relays have finally come in for the power switcher boards and the kits will be available at the July meeting. If your name is on the list you can pick one up and if not please let us know at the meeting because we have very few that are not purchased. These are at cost and are worth owning. They will have instructions with each kit.

We have some excellent hamfests coming up. Huntsville, August 20-21, 2022; Dalton September 10, 2022: and Chattanooga, October 14-15, 2022 are some of the ones in our area. Please plan to attend, visit with old friends and you may find some excellent deals. Consider posting on social media or the reflector if you are considering attending these events. Offer to share transportation with others seeking to attend as well.

Let's continue to make 2022 a wonderful year at NFARL.

AUGUST 2022 ARRL MEMBER SPOTLIGHT - / Wes Lamboley, W3WL



Jeff Stuparits, W4DD Courtesy QST, August 2022

This month in QST one of our Club members is written up in the "Member Spotlight" on page 13. Jeff Stuparits – W4DD has been highly instrumental in finding and solving Radio Frequency Interference (RFI) for many hams in the area, including me! Jeff has designed and built a comprehensive mapping and tracking system for use in locating interference caused by power lines, among other things. The information Jeff collects is a great aid to the power company involved when the problem is caused by faulty equipment. Do take a look at the excellent article about Jeff; you will also learn about persistence and blueberries at the same time! Jeff was one of the many excellent speakers at our annual HamJam event, which will be held this year on the morning of Saturday, November 12. Do mark your calendar and attend this special event that brings world-class speakers to our Club area and helps fund many youth-related scholarships and activities!

2022 Amateur Radio Scholarship Awardees / Wes Lamboley, W3WL

Close to \$1,000,000.00 (one million dollars) has been awarded to deserving students with ham licenses this year! Two scholarships in the amount of \$2000.00 each from the NFARL Youth Education, Scholarship, and Activities (YESA) fund were awarded to Rachel Jones, KO4HLC and Jonathan Crist, KM4CLP. Club member Alexandra Kemp-WD4BDQ was awarded \$1000.00 from the Gwinnett Amateur Radio Society (GARS) scholarship fund. These three scholarships were awarded through the ARRL Foundation.

Additionally, the Amateur Radio Digital Communications (ARDC) Foundation awarded a scholarship in the amount of \$25,000.00 to NFARL club member Audrey McElroy-KM4BUN! Congratulations to all these deserving young hams!

It deserves mentioning that two other young hams we are familiar with also received scholarships from ARDC. They are Bryant Rascoll-KG5HVO for \$25,000.00 and Ruth Willet-KM4LAO for \$10,000.00. We are extremely proud to know these young hams, as Audrey, Bryant and Ruth have all been speakers at our annual HamJam event!

NFARL Field Day 2022 Recap/ Steve Randall, KO4VW



Field Day has come and gone for 2022. We had a great effort and results from all of our participants. While it will be a few months before we know how we did in comparison to other clubs in our class, we definitely improved on our scores from last year. We had a lot of fun doing it.

Scott Straw, KB4KBS put together an amazing group of CW operators. We kept those stations busy for the entire period. Scott, despite refusing to call himself the 'Captain', came up with the tag line 'QO Crew' for the CW Operators. This has a dual meaning. It's in memory of our Elmer, Jim Stafford, W4QO. 'QO' also means "Quality Operators'. We're aiming to carry this moniker forward into the future.

The SSB voice station was busy for 24 hours as well, thanks to Tom Jacobs, N4NFM. Tom put a great team together including many of our portable operators (SOTA/POTA) as well as a few of our more experienced contesters. For these team members, some of which had their first NFARL Field Day, it turned into a great experience.



Robert Achtenberg, KF4RJA set up a magnificent 6 meter station. This station attracted a lot of attention from visitors, and gave us a fine opportunity to add highly prized points to the score.

John Hathcock, WE4AUB and Ted Macklin, K4MPM did a wonderful job with the GOTA station. Their effort resulted in greatly exceeding our GOTA scores from last year. We ran FT4/FT8 at times on our GOTA, 6 Meter, and CW stations this year. This change also enabled us to maximize operations with good results.

Of course, Daryl Young, K4RGK was there with his impressive satellite station, scoring points for us and also making contact with astronaut Kjell Lindgren, KO5MOS aboard the ISS. Wayne Garber, KE4WYU served as our Safety Officer and did a great job as well a checking all the boxes. Ian Kahn, NV4C put together our educational event that was the Boy Scout merit badge program. That's great for the Scouts and 100 points for NFARL. Lynn Kahn, N4MSK orchestrated our incomparable Field Day picnic, which we all enjoyed very much. Martha Muir, W4MSA put together the Field Day flyer which as well as being informative gave us bonus points. Martha was also responsible for the Field Day breakfast, which many of us enjoyed greatly. Pavel Anni, AC4PA took care of

NFARL Field Day 2022 Recap/ Steve Randall, KO4VW



the sign in list and did a great job as always.

John Norris, N4IHV and Warren Merkel, KD4Z came up with a separate vertical receive antenna for the CW stations which eliminated the interference between stations we had experienced in the past. Warren also put together the microwave link and network to streamline our operations as well as other contributions.



Our NFARES group performed with excellence as they provided an impressive station as well and scored quite a few points for us with their digital messages, contacts, and invitees. A visit as the result of invitation by NFARES, Andy Wheeler, the Emergency Management Coordinator from Alpharetta, gets us another 100 points. Thanks so much to Grant Register, KK4CPR, Joe Schippert, AJ2Y, Mike Cohen, AD4MC, Jim Kempthorne, K4OFV, Bill Largin, KN4DLE, Tammy Waggoner, KK4USM and the rest of the NFARES team for their contributions.

Chuck Catledge, AE4CW again told us where to put the lines for the antennas and where to place them as well. Jim Paine, N4SEC handled procurement of all our tents and managed some of our publicity activities, exceeding expectations as always. Dave Bisciotti, KO4USA submitted and got us published for our printed media points.

We were also visited by Mickey Baker, N4MB, ARRL Southeast Division Director and David Benoist, AG4ZR, ARRL Southeast Division Georgia Section Manager. Three members of the Roswell City Council also attended, thanks to Fred Ackley, W4FRA giving use needed exposure and bonus points as well. One name I can't leave out is Mike Riley, KN4OAK Field Day Chairman from last year, who was there the entire time to help and assist with anything and everything, and such a great resource of information for all of my questions before, during, and after. It takes a lot of people to make this event a success, and without all the Hams who came out and operated for us this wouldn't have happened. Many more were there to set up, and tear down before, during and after the event.

We are currently in the process of capturing all the pictures available as well as the QSO information and calculating the final point score. We expect this information to become available shortly, so we'll make sure we communicate the photo location and score information to you under a separate email. At this time our preliminary score looks to be north of 13500 points. We've also gathered 50+ photos, so we will be placing access directions and links on the NFARL website. You can send your photos to <u>enews@nfarl.org</u> in the meantime.

It was a pleasure being your Field Day Chairman this year, but all the real work was done by the people mentioned and not mentioned above. It's great to see everyone come together to show what we can do when it comes to communication and fellowship. The lasting impression I came away with was the many smiles on faces and the friendliness of everyone there. What a great club we have!!!!

Steve Randall KO4VW 2022 Field Day Chairman

BREAKING NEWS / Wes Lamboley, W3WL



2022 YHOTY Audrey McElroy, KM4BUN Courtesy of arnewsline.org

Audrey McElroy - KM4BUN, was selected as the Bill Pasternack Memorial *Young Ham Of The Year*. This annual award will be officially presented at the Huntsville Hamfest on August 20, 2022. The announcement can be heard at https://www.arnewsline.org and scroll down to the 'Audio' link. Audrey's interview starts at the 14 minute and 40 second mark. Do take the time to listen to this excellent podcast! Audrey is now a student at Georgia Tech and taking courses this summer. She will start her first year at Tech as a Sophomore due to all the advanced courses she has completed in high school! She will be majoring in a new field called Electrical Computer Engineering.

Congratulations, Audrey! We are very proud to have you and your family as members of NFARL.

VE Testing in July 2022 / Wes Lamboley, W3WL

There were only two takers at Slope's this month, but what a two they were! First was Cody Tawfik, and he earned his Tech. Cody is a student at University of North Georgia majoring in Chemistry. He got an email from the college stating they were going to start a ham radio club, so Cody checked it out. He is now hooked and really interested in ARES and emergency situations in general. It turns out that UNG has a club that helps find lost hikers and Cody realized how important ham radio can be in some situations where there is no cell coverage. He is also interested in SOTA, so our Club offers numerous kindred souls to help him and the fledgling club at UNG get started.

Second "taker" was Scott Banks – WA2AXB, who earned his Extra. Scott is already a member of NFARL and said to give his free first year membership to someone else. Scott has his dad's old call sign, as a tribute to his dad's getting him started in radio. Scott is an IT guru and now has some time to get back doing some hamming. He is restoring one of his first radios, a Drake R4C, and plans to get involved with CW again.

Both these guys plan to be at the meeting this Tuesday; so do come and get to meet them personally!



Last year I reported on my findings regarding the use of this OCFD. After several adjustments, I finally got the SWR performance close to MFJ's specifications. Additionally, I will show you results from using the **NanoVNASaver** application with my NANOVNA.

Test equipment:

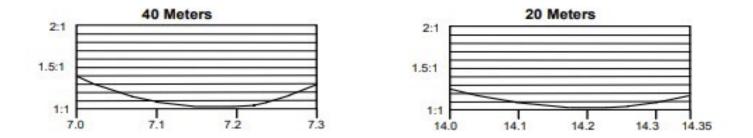
1 - NanoVNA-4 with 4" screen from R&L Electronics.

2 - NanoVNA-Saver X64 See <u>https://nanovna.com/?page_id=90</u>

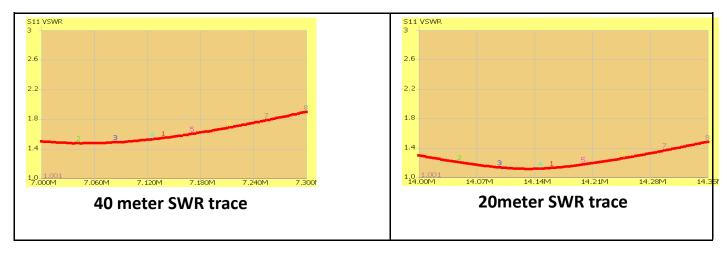
I'm not much for reading instruction manuals, but I found this part regarding MFJ's test results from their installation manual:

SWR

The sample SWR plots shown below were taken through 60 feet of lowloss (RG-8X) cable with the antenna mounted 45 feet above ground in a typical back-yard residential installation.



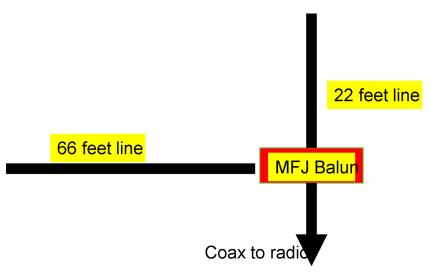
Below are my test results after a final adjustment. Note only 20 and 40 meters are shown here.



Continued on next page—

MFJ-2020 OCFD, The Latest Result / Continued from previous page

Installation: Due to a small backyard with many trees and homeowner covenants, I initially set up the antenna at about a 100 degree angle in my back yard. Average 25' to 30' in height.



Results: Here are the original and final readings:

Frequency	7.025	7.175	7.3	14.025	14.225	14.35
Original Installation	3.2	3.2	3.1	1.7	1.8	2
Nov 9 , 2021	1.9	1.9	1.8	1.6	1.4	1.34
June 24 th , 2022	1.48	1.56	1.8	1.2	1.23	1.5

Final adjustments: I relocated the whole antenna, so I had a straight line. I was able to get both ends of the antenna up to approximately 40 feet. The balun connection is about 30 feet in height and the coax is LMR-400 rigid approximately 90 feet long. On 40 meters, the SWR bottoms out around 7.07mhz which works well for FT8. On 20 meters, the SWR is well below 1.5 across the band.

The height adjustment made the biggest difference in SWR. After raising the antenna, I also attempted to tune the antenna by shortening both ends by 18". Through trial and error, I settled on trimming 9" from each end. Instead of cutting the cable I sanded off the insulating material on the ends and clamped them back onto the main wire In the event I have to move the antenna I will have ample length to work with.

Using NanoVNASaver X64

The two SWR charts in this article were generated using the NanoVNASaver software connected to the NanoVNA. Even though the software is not very user friendly, it does offer a lot of detail. Here are some additional screen shots of some of its features.

Continued on next page—

A couple of things here:

- 1 Once you calibrate the device, you can save and recall the settings.
- 2 It automatically identifies the device to connect to.

3 – Notice the two SWR detail charts below. They show not only the SWR but notice the complex numbers under the Impedance. The 20 meter chart indicates negative-i(capacitance) where the 40 meter chart indicates positive+j(inductance). (Hint: this is an Extra Class exam question)

Active calibration Calibration: Application calibration (101 points) Source: June_24.cal Calibrate Short Loaded (101 points) Open Loaded (101 points) Load Loaded (101 points) Built in calibration and saving to file.	Serial port control Port <u>COM15 (H4)</u> <u>Rescan</u> Connect to device Manage	
Marker 3 Frequency: 14.0980 MHz Impedance: 50.3 -j 6.41Ω Parallel R: 51.146Ω Parallel X: 28.131 pF VSWR: 1.136 Marker 4 Frequency: 14.1470 MHz Impedance: 53.6 -j 4.68Ω Parallel R: 54.031Ω Parallel R: 54.031Ω Parallel X: 18.159 pF VSWR: 1.121 Marker 5 Frequency: Frequency: 14.1995 MHz Impedance: 57.9 -j 3.93Ω Parallel R: 58.144Ω Parallel X: 13.1 pF VSWR: 1.178	Marker 1 Frequency: 7.13800 MHz Impedance: $44+j19.6 \Omega$ Parallel R: 52.798Ω Parallel R: 52.798Ω Parallel X: 2.6385μ H VSWR: 1.544 Marker 2 Frequency: 7.04200 MHz Impedance: $35.7+j8.48 \Omega$ Parallel R: 37.719Ω Parallel R: 37.719Ω Parallel X: 3.5913μ H VSWR: 1.478 Marker 3 Frequency: Frequency: 7.08400 MHz Impedance: $38.7+j13.5 \Omega$ Parallel R: 43.445Ω Parallel R: 43.445Ω Parallel R: 2.7926μ H VSWR: 1.489	

My interest is mostly CW, so optimizing for 14.040mhz or 7.40mhz helps in those sweet spots. Feel free to reach out to me on any of this information as there is way too much detail to include for this article. Also, some of the ideas I got are from the Hungry Hams lunch discussion. That's definitely worth the time to attend.

So much to learn, so little time...

73s, Tony WA3TRA

NFARL eNEWS / July 2022

Jim Stafford, W4QO Estate Sale/ John Tramontanis, N4TOL

In December of 2021, we lost a dear friend and a great man, Jim Stafford, W4QO.

Words here cannot describe what a fine gentleman Jim was, and the far reaching and positive impact he had on the local and national amateur radio community.

Items from Jim's estate are now being offered for sale to the local ham community.

The following link contains a list of items for sale from the estate:

https://nfarl.org/w4qo-estate-sale/

Bidding will open to club members willing to expeditiously pay and pick up item(s) in Roswell, Georgia.

The window to make offers for these items will open on Tuesday July 12th @ 6:00 PM and run through Tuesday July 19th at 6:00 PM local Atlanta time. Offers received before the window opens will not be accepted.

All sales cash only. No checks please.

Items sold as is, mostly untested - please feel free to inquire about the items and we will do our best to provide additional info.

The first email received that offers the asking price on an item takes that item.

One may make offers below the asking price. If the original asking price is not met on an item, the highest <u>reasonable</u> offer <u>may</u> be accepted, with priority to those received first. In that case the winner will be notified via email after bidding ends July 19th.

The list will be updated as often as possible with status updates on item availability, and also for additional items being added to the list. Check back for updates.

John Hathcock, WE4AUB Now is a CWops Member/ Steve Randall, KO4VW

Congratulations to you John, WE4AUB, for having been nominated and gained the required number of sponsors for an invitation to join CWops!!!! If you don't have the official email you will see it soon!!!!

ken@ak0a.net	2	Need Sponsorship	AK0A	Ken Kopp	14-Jul-2022	N7US	W6SX		
john.hathcock@gmail.com	3	Need Sponsorship	WE4AUB	John Hathcock	14-Jul-2022	N7US	KO4VW	K4PQC	W6SX
		Need							

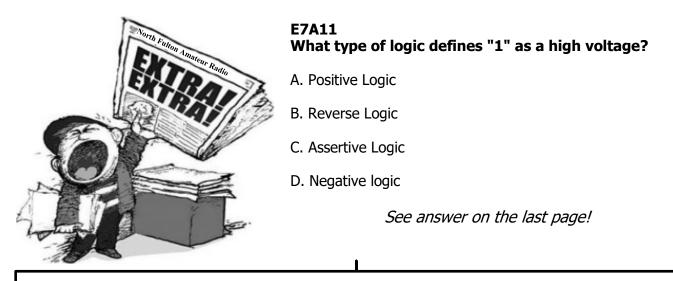
For more information on CWops and CW Academy, please visit https://cwops.org/

REMINDER! Field Day Results Due JULY 26th/ Steve Randall, KO4VW</sup>

Report your Results

The "2022 Field Day Packet.PDF", downloaded from http://www.arrl.org/files/file/Field-Day/2022/2022%20Field%20Day%20Packet.pdf, includes instructions for submitting your entry after Field Day is over. Search the PDF document for "Field Day's Over... Now What? Tips for Submitting Your Field Day Entry". **SUBMITTAL Due: 2022-07-26 20:59:59Z**

If you have any questions, please contact Steve Randall KO4VW at <u>KO4HVW@gmail.com</u> Make sure you use "**NORTH FULTON AMATEUR RADIO LEAGUE**" from the 'Club or Group Name' pull down list!!! If you to correct your submittal, contact Steve, KO4VW or Mike, KN4OAK and they will try to assist you. New info for Technicians and Generals and a refresher for Extra Class Licensees!



The new 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) <u>website</u>. Note the new Technician class license examination question pool is effective July 1, 2022.

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

Contest Corner

These are some contests and events besides the "routine K1USN, CWops, and other organizational events" scheduled to occur the near future

Contest Name	Time & Date
+ Walk for the Bacon QRP Contest	0000Z-0100Z, Jul 21 and 0200Z-0300Z, Jul 22
+ YOTA Contest	1000Z-2159Z, Jul 23
+ QCX Challenge	1300Z-1400Z, Jul 25
+ QCX Challenge	1900Z-2000Z, Jul 25
+ QCX Challenge	0300Z-0400Z, Jul 26
+ SKCC Sprint	0000Z-0200Z, Jul 27
+ Tennessee State Parks on the Air	1400Z-2200Z, Jul 30 & 1400Z-2200Z, Jul 31
+ ARS Flight of the Bumblebees	1700Z-2100Z, Jul 31
+ Walk for the Bacon QRP Contest	0000Z-0100Z, Aug 4 & 0200Z-0300Z, Aug 5
+ NRRL MGM Weekend Contest	1400Z, Aug 6 to 1400Z, Aug 7
+ North American QSO Party, CW	1800Z, Aug 6 to 0559Z, Aug 7
+ ARRL 222 MHz and Up Distance Contest	1800Z, Aug 6 to 1800Z, Aug 7
+ SKCC Weekend Sprintathon	1200Z, Aug 13 to 2400Z, Aug 14
+ Maryland-DC QSO Party	1400Z, Aug 13 to 0400Z, Aug 14
+ Kentucky State Parks on the Air	1400Z-2200Z, Aug 13

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 <u>NFARES.org</u> 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 <u>NFARL Nets</u> for more information and "how to". Here's the link to the NFARL server on Discord web app <u>https://discord.gg/spr2a9D</u>
- Every Wednesday Hungry Hams Lunch Bunch 11:15 AM Location: Slope's BBQ, 34 East Crossville Road, Roswell, GA 30075 (770) 518-7000
 Dining Room is OPEN. Get Take Out if you can't stay!



Every Thursday — YL Net – 8:00 PM - 9:30 PM - 145.47 MHz (-) PL 100

- Check NFARL Nets <u>website</u> 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 Wednesday CW CHAT 8:00 PM on ZOOM.
 New meeting link and credentials: https://us06web.zoom.us/j/84722087419?wd=VIN2d0xvQVhKcDIUL0R4N1hQMTQ2UT09 Meeting ID: 847 2208 7419; Passcode: CW-CHAT
- Every Saturday Royal Order of the Olde Geezers "Breakfast" -This informal breakfast group on Saturday mornings is **NOT MEETING IN PERSON** during the COVID issue. A notice will be made when in-person meetings commence again.
- Second Tuesday NFARES Meeting August 9, 2022 Presently- Online meetings only. Check <u>NFARES.org</u> for more information.
- Second Saturday VE Testing NFARL August 13, 2022 session: By reservation only. See the <u>"Test Sessions"</u> web page for details & registration pro-cess. Contact Ian at <u>nv4c.ian@gmail.com</u> for questions / concerns / reservations.
- Third Tuesday— NFARL Club Meeting July 19, 2022, 7:30 PM
 Live meeting! Preston Ridge Community Center Zoom Included!
 —July 2022 meeting : "NFARES For Fun, To Help, and When All Else Fails" (see Page 1)

Door opens at 7 PM for Social Networking. Meeting begins at 7:30 PM

- Fourth Tuesday NFARL Executive Team Meeting July 26, 2022, 7:00 PM.
 Online meeting only monitor website and NFARL Groups.io reflector for updates.
- 2022 ARRL Field Day June 25-26, 2022 Groveway Community Park, Roswell, GA You don't want to miss this event! (See Page for more info) <u>http://www.am.org/nelu-uay</u>
- **Huntsville Hamfest-** August 20-21, 2022. Von Braun Center, 700 Monroe St. SW, Huntsville, AL 35801 Website: <u>http://hamfest.org</u> Hosting the ARRL Southeastern Division Convention.

Contact Us

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North Fulton Amateur Radio League

P.O. Box 1741 Roswell, GA 30077

nfarl.org

eNEWS can be located online at: <u>https://nfarl.org/enews-index</u>

Club Repeaters

Frequency—Description	P.L. Tone	Location	
145.470 (-) EchoLink Node 560686 NF4GA-R	100 Hz	Morgan Falls	
147.060 (+) Primary ARES Repeater	100 Hz	Roswell Water Tower	
* 224.620 (-) Joint Venture with MATPARC	100 Hz	TBD	
443.150 (+)	100 Hz	Roswell Water Tower	
444.475 (+)	100 Hz	Morgan Falls	
* 927.0125 (-)	146.2 Hz	TBD	

* Currently off the air

Club Call signs: NF4GA and K4JJ

Extra Extra answer: A (question E7A11)

Supporters and Affiliates

Please support our sponsors and affiliates by a visit their websites.

