

North Fulton Amateur Radio League NFARL eNEWS

December 2023

Over 42 Years Promoting Service | Friendship | Education | Fun

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Celebration at NFARL 2023 Holiday Party

We didn't see Santa, but...

While some of those who joined in the celebration the NFARL 2023 Holiday party might have been disappointed Santa wasn't able to attend, it was agreed the party was enjoyed by all and a good night was had!

Once again, we were blessed to enjoy a fantastic meal served by Holmes2Home, LLC. Rose and her team catered a very tasty holiday meal. Thanks for helping us celebrate again this year!

Following dinner, awards for "Ham of the Year" were presented to Lori and Daryl Young, K4UPI and K4RGK. During 2023 their efforts in support of club operations helped make a positive impact in all the events which they participated.

In addition to the "Ham of the Year" award, a Special Recognition award was presented to Catherine Moore for the years of behind the scenes support she has given to the club. Catherine's aid in making important things happen is another example of leadership service which we all benefit from. Thank you for your service to the club!

While Santa wasn't able to join us for the event, Tim Lemmon W4KU, performed superbly as the Master of Ceremonies during the gift giving segment of the program. We know Santa was watching and now knows he's got an excellent substitute if one is ever needed. Thanks Tim!

And speaking of gifts, thanks to all who helped make our donation to Children's Healthcare a success. You can read the thank you letter we received from them inside this edition of eNEWS.

Check out the 2023 NFARL Holiday Party photographs on page two of this eNEWS edition , and in our website Gallery.

Join us on January 16, 2024 for our monthly NFARL Club meeting. Daryl Young, K4RGK, will be presenting "**Ham Radio in Space**". We'll be gathering at our regular meeting location; Preston Ridge Community Center, 3655 Preston Ridge Road Suite 100, Alpharetta, GA 30005. The facility's doors will open at 7:00PM. Our meeting will begin at 7:30PM and should conclude by 9:00PM.

The meeting will be broadcast on Zoom using this invitation link:

https://us06web.zoom.us/i/86255827457?pwd=a1FHR3F1bDBqMUVuY3pIMDdFa2VMOT09

Meeting ID: 862 5582 7457

Passcode: 584698

If needed, find your local number at this link: https://us06web.zoom.us/u/kdQc8IE9oj

NFARL 2023 Holiday Party Photos





NFARL 2023 Holiday Party Photos











NFARL 2023 Holiday Party Photos





What happened in 2023?

At the end of each calendar year, some people reminisce about the events which occurred. Some will be dissatisfied things occurred the way in which they did. Others will be thankful of the outcomes that mattered most to them. Some will undoubtedly stack up the events without any emotional influence, noting just the relative facts or comparisons between each situation and occurrence they reflect on.

How about this approach: for each situation you evaluate, list and rank things you judged as going well and those you viewed not going well. Relative to this matter, make a list of things you'd like see continued or repeated, and then of those you'd prefer to have stopped or changed. Would this approach change your perspective?

Regardless of whether you mix subjective and definitive evaluation methods or, just recognize that there are different results possible from different viewpoints.

And with that said, here is a list of some things we did as a club in 2023;

- Dabbled with a Winter Field Day exercise.
- Achieved a high score in the Georgia QSO party.
- Went to the Dalton Hamfest.
- Supported and or provided ground station operations for a number of ARISS contacts.
- Watched 5th and 6th grade school students' reactions to seeing a Tesla coil demonstration.
- Placed second in our class for ARRL Field Day.
- Conducted a "Ham Camp" for youngsters who achieved receipt of their Amateur Radio Technician license.
- Participated in the Stone Mountain Hamfest.
- Held a successful HamJam fundraising event.
- Supported our NF ARES team in their endeavors to provide tactical support to civic and municipal events.

There may be a few that weren't listed here, which you think are worth noting. Let us know by send me a note at president@nfarl.org so we don't overlook them again.

Perhaps you're one who doesn't reminisce, instead thinking only about what's likely to happen in the future. If that's the case, help the rest of us out by predicting the possibilities for 2024.

Acknowledgement of In Kind Donation from Children's Healthcare

Our members and guests attending the NFARL 2023 Holiday Party this month were very generous with their donations to Children's Healthcare of Atlanta. Candy Randall's car was full of gifts Saturday evening as she left the Holiday Party. A few days later we received the note below from CHoA thanking us for our generosity. Great job NFARL Members!



Dear Mr. North Fulton Amateur Radio League,

On behalf of Children's Healthcare of Atlanta at Scottish Rite, we would like to thank you for your generous donation of 100 Christmas gifts. This donation has helped brighten the hospital experience of our patients and for that we extend our heartfelt gratitude on behalf of patients, families and staff.

Children's Healthcare of Atlanta, one of the largest pediatric clinical care providers in the country, is a not-for-profit organization that benefits from the generous philanthropic and volunteer support of our community. Operating three hospitals and 19 neighborhood locations with over a million patient visits annually, Children's is recognized for excellence in cancer, nephrology, gastroenterology, orthopedics, urology, pulmonology, neurology and neonatology.

Learn more about our services and the many ways your support makes a difference.

Thank you for your tremendous commitment, dedication, and generous support to Children's Healthcare of Atlanta.

Sincerely,

Volunteer Services

Children's Healthcare of Atlanta at Scottish Rite

Please keep a copy of this information for your records

Children's Healthcare of Atlanta is a not-for-profit organization

ID number 58-1710601



choa.org

This email was sent by Children's Healthcare of Atlanta, located at 1575 Northeast Expressway, Atlanta, GA 30329. ©2020 Children's Healthcare of Atlanta Inc. All rights reserved.

FIVE NEW HAMS COMMISSIONED AT SLOPE'S

The December 8 test session produced 5 new hams; thank you Slope's for letting use your facilities!

Robert Whirley - KQ4NBW- got his Tech. He got interested in ham radio by being in the Georgia Defense Force. It turns out that you need to have a ham license if you want to be a full member!

Mark Dudzinski - KQ4NEZ - got his Tech as well. He met 2 guys on an Icelandic cruise who were hams and they challenged him to get his license! Mark is an EE from Cornell and works at GE in Marketing.

Dylan Eves - KQ4NAR - got Tech and interested in ham radio as his dad, Mike, is involved with our NFARES. All of the Eves are also involved in Family Radio. Dylan is a student at Georgia State for the time being, but is transferring to UGA soon. He is majoring in Statistical Analysis.

Bella Eves - KQ4NCC - got Tech and will soon be a freshman at Young Harris. She got a great scholarship in part due to her expertise as a softball player. She intends to major in Business.

Mike Eves - KQ4NDA - got both Tech and General! He got his start via Family Radio and attending NFARES meetings. And, as you can see, now ham radio is a family activity! Mike is a data engineer in Marketing.

All the above expressed a strong interest in joining NFARL, and we will be most pleased to have them in the fold!

Thank You NFARL! / Wes Lamboley, W3WL

We got a letter from William Sims - KN4LVQ - thanking us for providing a \$2000 scholarship to help him along with his college education. William writes

"Thank you so much for providing the scholarship funds for me through the ARRL. I have enjoyed my time in the Ham Radio world since high school, and am thrilled that now I can continue my college education in part thanks to your generous scholarship. I am planning to major in Information Technology, hopefully pursuing a career in data protection. I have learned a great deal about older communications through my time in ARRL.

I appreciate your investment in me and in my education at college. It is an honor to be chosen for your 2023 scholarship, and it allows me to spend more time on studies and academic opportunities.

Best Regards William Sims - KN4LVO"

NFARL has donated over \$50,000 toward scholarships and educational opportunities for young people using our YESA funds donated at HamJam!

"Magic Blanket" – Faraday Fabric / Dave Bisciotti, KO4USA

Have you ever tried to use a VHF mobile mag-mount antenna away from the car, or tried to use a Vertical HF Antenna without ground radials? Without question, the results were not great. It is imperative that each of these "see" a ground plane relative to the radiating element of the antenna.

I have been using a simple solution to address the radial or ground plane requirement. This solution is inexpensive, lightweight, and easy to deploy, pack and carry.



The Blanket (Faraday Fabric) comes in many sizes. I have found that this 1.1 Meter by 1.5 Meter blanket (43.3" by 59.06") works pretty well for most bands. Many sizes are available on AMAZON. I use two of these for a greater surface area when working 40M or 20M.

Take a look at the results when deployed under a mobile mag mount for 2 Meters.







SIMPLE - EASY and EFFECTIVE...

The Human Interface

This month's column is an opinion piece that begins far afield from ham radio. Eventually however, the following stories will tie back to our favorite pastime.

Let's begin with two news articles, one describing an unfortunate trend and one describing two catastrophic incidents.

The first article:

Screen fatigue – Buttons are back in these new electric vehicles. By Morgan Korn, writing for ABC News. Some quotes:

"Drivers now traverse layers of screens to switch radio channels or turn on the heated seats. Digital dashboards seemingly extend for miles. Buttons and knobs are scarce -- even obsolete."

"There is growing evidence some consumers are experiencing 'screen fatigue."

"According to a recent J.D. Power study, built-in infotainment systems are making motorists unhappy. These systems "are a prime example of a technology not resonating with today's buyers."

"An EV is still a luxury vehicle and needs to be refined and elegant. It's not a good experience to dig through two menu layers to change the heat inside the car."

"Consumers are tired of having to do everything via the screen."

I can attest to the car-screen-fatigue problem. I had the unpleasant experience of owning a 2018 Acura MDX for three years. The dashboard had one knob – a volume control. Figuring out how to tune the AM and FM radio bands was worse than non-intuitive, it was counterintuitive. I ran off the road once trying to do some nighttime DXing on the AM band.

Whenever I brought that car to the dealership, a young man would drive the car from where you meet your service advisor (the guy who 30 minutes later will up-sell you a cabin air filter) to the bays in the back. I would comment to the young man how much I liked the car and disliked the infotainment system. His reply: "I hear that all day, every day." Why do Acura owners tell the valet how much they dislike the car, given he can't do anything about it? It's because the frustration can become visceral.

I half-heartedly shopped at the Acura dealership for the MDX's replacement. Me: "How's the infotainment system in these new ones?" Salesman: "Oh yeah, they fixed that." Note the choice of words. Acura's infotainment system hadn't been "improved," it had been "fixed." I test drove a new one; it wasn't fixed. That cost Acura a sale. I bought a competitor's car. One that had a rational, safer human interface.

Poor human interfaces can be worse than annoying and inconvenient, they can be lethal. Here is the second story – a tragic one. I promise to get back to ham radio shortly.

Excerpts from the article *Collision Course*, Written by T. Christian Miller, Megan Rose, Robert Faturechi and Agnes Chang, for ProPublica, December, 2019, regarding the USS John S. McCain, an Arleigh Burke-class destroyer, 9,000 tons):

"To guide the McCain...relied upon a navigation system the Navy considered a triumph of technology and thrift. It featured slick black touch screens to operate the ship's wheel and propeller."

"In the early hours of August 21, 2017, the McCain was 20 miles from Singapore, navigating one of the world's busiest shipping lanes. Sanchez was on the bridge to assist in the complex maneuvers ahead. He ordered Bordeaux to take control over steering the warship while another sailor controlled its speed. The idea was to avoid distractions by having each man focus on a single task in the heavy maritime traffic."

"To check that he had control, Bordeaux tugged the ship's wheel lightly to the left. The McCain did not alter its course. Bordeaux rotated it slightly to starboard. Again, the McCain maintained its track. Bordeaux suddenly realized that the McCain was steering uncontrolled toward a cargo ship sailing the Singapore straight."

"Three minutes and 19 seconds later, the McCain collided violently with a 30,000 ton Liberianflagged oil tanker. Ten navy sailors were killed and scores more were injured. It was the Navy's worst accident at sea in 40 years."

"The NTSB put it plainly: 'The danger of the John S McCain's touch-screen steering and thrust control system, the board found, increased the likelihood of the operator errors that led to the collision."

This was the Navy's worst accident in 40 years, but there was a similar one two months earlier.

"The US Navy reports looked into collisions involving the USS Fitzgerald in June 2017 and the USS McCain in August 2017.

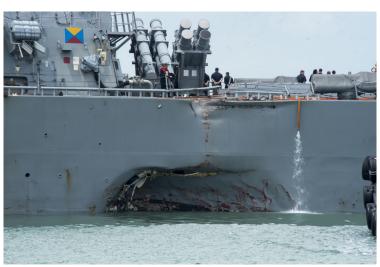


Figure 1. Result of piloting the USS McCain with a touchscreen

The Fitzgerald collided with a container ship near the Japanese mainland in an accident that killed seven sailors. The McCain was off the coast of Singapore when it hit a container ship [not correct – it was the oil tanker Alnic MC], killing 10 of the Navy destroyer's crew."

"Strongly implicated in the collisions were the touch screen controls introduced on the destroyers."

Here are a few notes:

The reference to a steering wheel in the McCain incident refers to a small wheel provided

for small steering corrections - the main steering was via touchscreen.

The assignment of one man to steer and another to control the throttle onboard the McCain is a clear indication something was wrong on an everyday basis. Those tasks are best done by one person, not two. The statement that the job was split up to avoid distractions is antithetical. Having to communicate between two people doing that job IS a distraction.

Why did anyone think you could pilot a ship (throttle and steering) with a touchscreen? Can you replace the steering wheel and gas peddle in your car with a touchscreen? No, no you can't. Tesla however may be close to trying it.

Piloting a destroyer with a touchscreen is an inherently bad idea – one that should be self-evident. There's no need to look at the details to draw that conclusion, but let's. The workload 20 miles from Singapore is high but not unreasonably so. Compared to being at war? In wartime stress levels and fatigue will be enormous compared to sailing through routine maritime traffic.

Then there is "sea state." US Navy destroyers operate in conditions up to sea state ten (20 foot seas, 50 knot wind). Sea state ten will toss a bridge crew from one wall of the bridge to the other if there isn't something to grab on to. How would anyone operate a touchscreen under those conditions?



Figure 2. Result of piloting the USS Fitzgerald with a touchscreen

It took three years and \$220 million to repair the McCain. The Fitzgerald's repair cost \$377 million. When I saw those numbers I thought they were somehow in error, until I looked up the cost of an Arleigh Burke destroyer. They cost \$1.5B. So, okay, \$220 million is "only" a 15% repair bill — "not bad."

The Navy is in the midst of replacing touchscreens with conventional controls on all its destroyers. The retrofit will cost considerably more than the savings attributed to the use of touchscreens.

"[I]t goes into the, in my mind, 'just because you can doesn't mean you should' category. We really made the helm control systems, specifically on the [DDG] 51 class, just overly complex, with the touch screens under glass and all this kind of stuff," said Rear Admiral Bill Galinis during a recent speech quoted by USNI News.

"When we started getting the feedback from the fleet from the Comprehensive Review effort... doing some fleet surveys and whatnot — it was really eye-opening. And it goes into the, in my mind, 'just because you can, doesn't mean you should.""

I'm nonplussed by the last quote. Not the "just because you can, doesn't mean you should" part, I'm painfully aware of that phenomenon. It's that the user community had to be surveyed to discover steering ships with touchscreens was a bad idea, and, describing that finding as eye -opening!

Here is Jonathan M. Gitlin, writing for ARS Technica. He is bringing the McCain incident back to autos:

If you would like to read more, Google: "Navy gets rid of touchscreens." You can read for hours.

What is it about digital interfaces in general and touchscreens in particular that makes people lose their common sense? Seventeen US Navy sailors are dead because someone thought a touchscreen was both a cool way to drive a ship and because a touchscreen in lieu of controls was less expensive. I chose the word "cool" because it had to be due to a cult-like belief that "advanced technology" is better, or maybe it was "digital is better?" It couldn't have been the result of sound human factors engineering followed by comprehensive testing (like it's supposed to be).

Okay, finally, back to ham radio. What's new and exciting in ham radio? *No knobs and touchscreens.*

This begs the question, how important is the human interface when dealing with a piece of ham gear – let's say an HF transceiver?

Fortunately, fumbling at the controls of your radio is not serious, unlike driving off the road or ramming a 9,000 ton warship into a 30,000 ton oil tanker. But the human interface or "ease of use" if you prefer, will affect your enjoyment. Ham radio is a hobby. Hobbies are to be enjoyed.

I had a great deal of difficulty thinking through what to write from here forward. The problem is ham radio is a diverse set of sub-hobbies, encompassing a variety of interests, brand loyalty, cost sensitivity and other considerations. It's not possible to generalize. I'm writing this month simply to urge you to consider the human interface the next time you make a buying decision.

Let's look at a summary of the myriad considerations. As we read through these, keep in mind that most of these items involve tradeoffs. Individuals will see the value of various considerations through their own lens. Getting a given desire fulfilled may come at the expensive of others foregone. There are no perfect radios. What are your needs? What are your wants? Only you know.

Considerations, in no particular order (except the last one is intentionally last):

Where is the radio made? Some of us want a radio made in the USA if possible. Is this a deal-breaker or just nice to have? Knowing you can't have everything, where does this

- consideration fall on your hierarchy of desired characteristics?
- What about performance? Are you planning to work rare DX down in the noise level, perhaps next to strong stations, i.e. do you need high dynamic range? How important is that and all the myriad other performance characteristics?
- Cost. What can you afford? What do you choose to afford?
- Portability. Is this radio destined to be a base station, never moving from a large desk? Or will it be operated mobile and/or portable? Will it go to Field Day? POTA? Will it be spending time under airline seats?
- What about features? For example, is a good spectrum display a must-have or just nice to have? If the radio will drive a high resolution display via a jack on the back, is that good enough, or, maybe, is that best? What about all the other features?
- How much power would you like? How much do you need? If you want to drive a ground-ed-grid amplifier you are working with a gain of ten. A 100 watt radio will get you 1,000 watts output. Is that good enough? Maybe you have an amp with a gain of 30 dB and you plan to use it most or all of the time that only requires a few watts of drive from the transceiver. Maybe you have no amp. How much power then? There are now 200 watt transceivers to choose from. Is an extra 100 watts valuable to you?
- Appearance, i.e., fit and finish. Important or unimportant? I heard an opinion once in defense of a poorly finished radio. The owner said, (with an edge in his voice) "I don't want a radio that looks like some hi-fi stereo." Was that an honest comment or simply defensiveness?
- Is your radio at the perceived state of the art? Do you care? At one end of this axis are those who don't care if the radio is full of vacuum tubes as long as the performance is outstanding. Those are the operators. At the other end of the spectrum are technically minded hams who look forward to working with the latest advancements in technology. They enjoy the opportunity to learn and the challenge of getting new technology debugged and up-and-running. Unfortunately, however, some advanced technology falls into the category of "just because you can doesn't mean you should." Maybe you adhere to Rob Sherwood's receiver rankings, oblivious to or not caring that Rob states publicly and frequently that any radio in the top 30 on his list has more performance than anyone needs. Being on top of the list comes with bragging rights for radio owners and manufacturers, but doesn't offer useable enhancements in performance. What does that mean to you?
- What about the ability to add upgrades and the necessity to add fixes? Will you look forward to adding a sub-receiver downstream? Will you look forward to replacing an audio board with high distortion with a new one that has less distortion? Do you enjoy testing out a stream of firmware updates? Or maybe you prefer to spend your time operating and want a radio that's excellent as-delivered. This goes for software as well. Are you eagerly awaiting the next release of Ham Radio Deluxe or are you dreading it?
- How about integration challenges? Do you look forward to station building or just want to get on the air? Are your technical skills minimal such that "plug and play" is important to you?

How about your new radio's learning curve. Do you look forward to a steep/long learning curve? Some people do. Or maybe you want to get on the air in under an hour without opening the manual. Where will the radio reside? If it's going to a clubhouse, will a steep learning curve scare club members away? Or will such a radio contain enough new technology to attract a younger crowd?

What about reliability and service? Will this radio break often? How's the service department's reputation? Turn-around time? Willingness to pay shipping? Do you know these things from personal experience or from hearsay? Could you conceivably fix it yourself? If you built the radio from a kit, then maybe so.

Etcetera. This list is not exhaustive although it may have been exhausting to read.

Last and often receiving the least attention is the quality of the human interface. There is inattention to this on both sides of the purchase transaction. Buyers often overlook 'ease of use.' Radio designers often save it for last, or don't care, or run out of budget before 'ease of use' receives proper treatment. I've managed many EEs and many designs. High dynamic range low-noise quad-balanced mixers are sexy to EEs, while 'which button does what' isn't. Meanwhile, the user will spend no time operating the mixer and all of his time pushing the buttons.

Is the radio hard to operate? Even the human interface on poorly thought-out radios can be learned over time. Human factors engineers (yes, there is such a discipline) call this "mastery learning" or "automaticity." Even when mastered however, some radios are needlessly difficult to operate, forever, and therefore less fun.

Radios with poorly implemented human interfaces come with many drawbacks. They are hard to master and easy to forget. If you put the radio on the shelf for two years, you can count on learning it all over again. If you operate for long stretches, interface complexity causes fatigue.

Poorly thought-out radios are anathema to visitors. A visitor to your shack will not be able to operate the radio(s). Someone sitting down in front of your radio at Field Day will have the same problem. Field Day exists to demonstrate preparedness. Inscrutable radios don't square with that objective. If a high learning-curve radio is in a club station, how many members will visit? To have attendance, the zeal for advanced technology will have to outweigh the desire to get on the air.

A trend in ham radio is toward smaller radios and more features. That's fine although, personally, I don't understand putting a small radio on a large desk in a base station. What could be the advantage?

Smaller radios have smaller front panels with less room for knobs, switches and buttons. This requires functions be placed within menus. That's justifiable by virtue of necessity.

Going to smaller radios and more features greatly increases the value of good human factors design.

The smaller the radio, the more the human interface has to be optimized. The opposite is often what happens.

A few conclusions:

- A given radio's human interface may or may not be important to you. It is important if you operate a lot. If you prefer challenging yourself to master new technology it may not be.
- Touchscreens are fine if used judiciously. So are trackballs and mice. Small radios can't have a knob for everything, so touchscreens, mice and trackballs are in order.
- Your enjoyment (what it's all about) may suffer, long term, from a less than optimized human interface. After you learn the radio, you will be happy or stuck with whatever you wound up with.
- In my humble opinion, consideration of a radio's human interface should be a part of every buying decision.

73, Hal N4GG

Postscript: Many radios are bought without consideration of anything mentioned above. They are bought on the basis of "everyone says it's a great radio."

Here's a true story: In the 1990s and 2000s the FT1000MP was considered a gold standard radio, particularly among contesters. I know a contester who bought two because everyone said they were great. A week later he was voicing disappointment that the radios didn't include six meters. He blamed "everyone" who said it was a great radio rather than his lack of due diligence. Don't do this!

New info for Technicians and Generals and a refresher for Extra Class Licensees!



E3A06

What might help to restore contact when DX signals become too weak to copy across an entire HF band a few hours after sunset?

- A. Switch to a higher frequency HF band
- B. Switch to a lower frequency HF band
- C. Wait 90 minutes or so for the signal degradation to pass
- D. Wait 24 hours before attempting another communication on the band

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) website. 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, click here.

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		
+ RAC Winter Contest	0000Z-2359Z, Dec 30		
+ YOTA Contest	1200Z-2359Z, Dec 30		
+ Stew Perry Topband Challenge	1500Z, Dec 30 to 1500Z, Dec 31		
+ PODXS 070 Club PSKFest	0000Z-2400Z, Jan 6		
+ Marconi Club ARI Loano QSO Party Day	0700Z-2100Z, Jan 6		
+ ARRL RTTY Roundup	1800Z, Jan 6 to 2400Z, Jan 7		
+ ARRL Kids Day	1800Z-2359Z, Jan 6		
+ YB DX Contest	0000Z-2359Z, Jan 13		
+ SKCC Weekend Sprintathon	1200Z, Jan 13 to 2400Z, Jan 14		
+ UBA PSK63 Prefix Contest	1200Z, Jan 14 to 1200Z, Jan 15		
+ North American QSO Party, CW	1800Z, Jan 13 to 0559Z, Jan 14		
+ 4 States QRP Group Second Sunday Sprint	0100Z-0300Z, Jan 15		
+ North American QSO Party, SSB	1800Z, Jan 20 to 0559Z, Jan 21		
+ NA Collegiate Championship, SSB	1800Z, Jan 20 to 0559Z, Jan 21		
+ ARRL January VHF Contest	1900Z, Jan 20 to 0359Z, Jan 22		
+ Australia Day Contest	2200Z, Jan 25 to 1000Z, Jan 26		
+ CQ 160-Meter Contest, CW	2200Z, Jan 26 to 2200Z, Jan 28		
+ Winter Field Day	1900Z, Jan 27 to 1900Z, Jan 28		

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 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 for more information and "how to". Here's the link to the NFARL server on Discord web app 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



- 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.
- FUN NET (DIGITAL) THURSDAYS (Click on the link at left for details) Check-ins start @ 8:00pm to the repeater or Echolink.147.060 (+) PL 100 Hz 443.150 (+) PL 100Hz (Alternate repeater) EchoLink N4SBD-R, Node: 522043
- 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
- Second Tuesday NFARES Meeting January 9, 2024 Now meeting in-person! Meeting location: The Church of Jesus Christ of Latter-day Saints, 500 Norcross St. Roswell, GA 30075. Enter using the "Family History Center" Door. See NFARL website for details & Zoom link. NFARES members receive Zoom invitation automatically.
- Second Saturday VE Testing NFARL January 13, 2024 session: 8:30 10:30AM Slope's BBQ, 34 Crossville Road, Roswell, GA 30075. Seating will be limited to 20 preregistration is required. Registration is by enail to Ian NV4C; monitor registration opening & closing on the website. Clok here for more information.
- Fourth Tuesday NFARL Executive Team Meeting January 23, 2024, 7:00 PM. Online
 meeting only monitor website and NFARL Groups.io reflector for updates.
- NFARL Club Meeting— Tuesday, January 16, 2024— 7:00 PM Preston Ridge Community Center, 3655 Preston Ridge Road Suite 100, Alpharetta, GA 30005. The facility's doors will open at 7:00PM. Our meeting will begin at 7:30PM and should conclude by 9:00PM. Our meeting topic is "Ham Radio in Space", presented by Daryl Young, K4RGK
- GARS TechFest— Saturday, January 13, 2024— 8:30AM-3:15PM Gwinnett County Fair-grounds (Expo Center Building), 2405 Sugarloaf Pkwy, (Davis Rd. Entrance) Lawrenceville, GA 30045 See NFARL Groups.io message #36076 or http://www.techfest.info/

Contact Us

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2023 Field Day Chair	Chair- Steve Randall, KO4VW Co-Chair-Dave Bisciotti, KO4USA Co-Chair-Mike Riley, KN4OAK	FieldDay@nfarl.org
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ARES Liaison and Community Relations	Jim Paine N4SEC	n4sec@nfarl.org
Repeater Operations	Mike Roden K5JR	Repeaters@nfarl.org
Web Master	Bill Cobb K4YJJ	Webmaster@nfarl.org
VE Team Lead	Ian Kahn NV4C	nv4c.ian@gmail.com
eNews Team	Help Wanted!!	enews@nfarl.org

North Fulton Amateur Radio League

P.O. Box 1741 Roswell, GA 30077

nfarl.org

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

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: B (question E3A06)

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