



## **NFARL Club Meeting September 20, 2022: NFARL Mini-Hamfest /Swap Shop**

Join us for the first NFARL Mini-Hamfest /Swap Shop at the September NFARL club meeting on Tuesday, September 20!

Do you have some radio related equipment that you no longer need or want? Would you like an opportunity to find that special piece of equipment to add to your shack at reasonable boneyard type prices? Enjoy chatting with your fellow hams as you wander around from table to table? In any and all of those cases, the September NFARL meeting is for you! Browse in an indoor event with air conditioned comfort and no rain!

Tables will be available for NFARL members at no charge. If you are not a member and wish to have a table it doesn't cost that much to join. We welcome all new members. Non-members are very welcome as always and we hope you will come. Membership is not required to attend, just to have a table. NFARL will have items from excess inventory. There will be several tables of recent estate sales on display for purchase as well. Please contact Steve Randall to reserve one (or more) table in advance for the September 20th event @ [KO4HVW@gmail.com](mailto:KO4HVW@gmail.com). **Purchases from NFARL's tables can be paid for with cash or credit card. Purchases / transactions between other sellers or individuals (members and guests) are subject to terms of the seller. No warranties of sale items are implied or provided by NFARL.**



The time frame for this meeting will not follow the usual time frame. Doors open at 6 PM for folks to set up their equipment tables. Selling of equipment will begin at 7 PM. **There will not be a formal meeting, just the hamfest.**

NFARL club meetings are held at the Preston Ridge Community Center, which is on the backside of the YMCA at 3655 Preston Ridge Road in Alpharetta.

**Due to the format of this event, the meeting will not be shared on Zoom.  
So please join us in person for this very social club meeting!**

Congratulations to Audrey McElroy, KM4BUM, for receiving the 2022 Young Ham of the Year award from ARRL. Audrey is currently attending Georgia Tech and is studying Computer Science and Engineering. It has been a pleasure for members of NFARL to know and watch Audrey become such an amazing young woman. Thank you Audrey for what you have done for Amateur Radio. We know you will accomplish great things in life.

It is very good to see more participation in our in person NFARL monthly meetings. Getting to connect people with their call signs and learn more about them creates a positive experience for our members. Thanks to everyone who takes time out of their busy schedule to attend.

We have club members working on projects that you should ask them about at our meetings. Fred Moore, N4CLA, and Warren Merkel, KD4Z, and Don Rogers, K4UAF are working on a special mag loop with what Fred refers to as a Trombone system. This is a very interesting project and just shows the ingenuity our NFARL members possess. Steve Randall, KO4VW, is working on some very interesting antenna and 3D printing projects. Ask him about them.

Don't forget that October is the month for nominating new club officers. Wes Lamboley, W3WL, is head of the nominating committee. Please send him anyone you want to be considered for office in NFARL before the October meeting.

Enjoy our first mini hamfest / Swap Shop for NFARL at our September 2022 meeting. We will do it again if this proves to be successful.

73,

John Norris, NFARL President  
N4IHV

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## ***Bench Trial Desk at NFARL Mini-Hamfest / Mike Riley, KN4OAK***

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Jim Paine, N4SEC and Mike Riley, KN4OAK will have a table set up for folks to try to execute simple power up and operation on gear that they may either be selling or buying at the September NFARL club meeting.

Jim will have a 200W dummy load, a watt-meter, a volt-meter and a few connectors. Mike will have power strips and a 13.8V DC / 10A power supply with leads, a DMM and miscellaneous connectors and coax jumpers.

We're not talented enough to provide any "expert" diagnostic level consultation on issues that may arise during your use of the test equipment. However, we're more than willing to help you connect and conduct some basic operational tests if needed on an article you're evaluating for a sale or purchase.

We'll also have a fire extinguisher available, just in case there is a run-away event that occurs...

I was recently challenged to talk about how to operate portable, but on the cheap. So, I thought to myself, with all these expensive radios out there like the 705, KX2, TX-500, 6100 and others, is there actually a way to do this inexpensively and still have an effective station?

# Portable Ham Radio for \$200 – Is It Possible?

Tom Jacobs, N4NFM

After a little thought I decided to set a project limit of \$200. I think most of us can convince our XYL's to allow us a \$200 budget for a complete portable radio station, so I got to thinking about how this can even be possible. I mean, \$200 is not that much money, and in ham radio terms it's even an even smaller sum, so how can we do it? Can it be done? The answer is yes. You will need a few skills, have to assemble a few kits, but yes, for \$200 you can build a complete portable station...radio, antenna, battery, coax...the whole nine yards. So are you game? Here's how to do it:

## Radio

The radio I chose for this project is the (tr)uSDX, from DL2MAN / PE1NNZ. You can purchase a kit for this radio for just \$89. Check out this webpage for details on where to buy the real deal, not the knock-offs: <https://dl2man.de/where-to-buy-trusdx/>.

The (tr)uSDX is a 5 watt radio with capabilities from 80 to 20 meters. In kit form you will receive everything you need to assemble your rig, and if you want to break the budget you can purchase fully built radios as well for about \$149. This is a basic radio, it will operate in all modes (i.e. AM, FM, SSB, and CW) and the radio includes 60m as an option, which is great for portable operators looking for local contacts.

This radio is a small form factor, just 5 watts max, and very lightweight, which fits the bill perfectly at \$89 for the kit. So

we're almost halfway to our budget just on the radio...can we keep the rest of the gear under \$200 total? Let's find out...

## Antenna

You can't go wrong with an end fed half wave antenna. They are resonant on multiple bands due to harmonics, lightweight and inexpensive. So let's go with an EFHW setup for our under \$200 build. I recommend the QRP Guys EFHW antenna, \$30 for the 49:1 kit, so that takes us up to about \$120 out of our \$200 budget. You can check them out here:

<https://qrpguys.com/qrpguys-end-fed-wireantenna>.



You can also check out the Spark Plug at [SparkPlugAntenna.com](http://SparkPlugAntenna.com). There is a 50w and a 100w version available. This costs a bit more, so we're talking budget busting option here, but if you want to spend a bit more than \$200 total definitely check out the SparkPlug antenna,

<https://www.sparkpluggear.com/shop/p/sparkplug>. The 50w version costs \$45, so that's a \$15 increase to budget if you choose the plug over the QRP Guys. Honestly, I've used both and both make great contacts. I like the SparkPlug a little better because of its small form factor, but there is the price increase to consider.

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# Portable Ham Radio for \$200 – Is It Possible?

Tom Jacobs, N4NFM

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Also note you can get an assembled “QRP Guys” antenna, but it’s actually a knock off. They are on eBay and Amazon for around \$20, and it looks like you can get a genuine assembled antenna for \$25 on Amazon here: [https://www.amazon.com/Portable-Tune-Half-Antenna-Assembly/dp/B08KRR4B8Q/ref=sr\\_1\\_2?crd=3VX4ZAMCPRJ3D&keywords=qrp+guys&qid=1659035434&sprefix=qrp+guys%2Caps%2C241&sr=8-2](https://www.amazon.com/Portable-Tune-Half-Antenna-Assembly/dp/B08KRR4B8Q/ref=sr_1_2?crd=3VX4ZAMCPRJ3D&keywords=qrp+guys&qid=1659035434&sprefix=qrp+guys%2Caps%2C241&sr=8-2).

The 49:1 is just one aspect of your antenna, you also need some wire. I recommend 26ga silicon sheathed stranded copper wire, which you can get a 250’ reel of from Amazon for \$20. [https://www.amazon.com/BNTECHGO-Silicone-Flexible-Stranded-Impedance/dp/B072829WN7/ref=sr\\_1\\_6?crd=32XWUK2B0PLZC&keywords=26ga%2Bsilicone%2Bwire&qid=1658962483&sprefix=26ga%2Bsilicone%2Caps%2C98&sr=8-6&th=1](https://www.amazon.com/BNTECHGO-Silicone-Flexible-Stranded-Impedance/dp/B072829WN7/ref=sr_1_6?crd=32XWUK2B0PLZC&keywords=26ga%2Bsilicone%2Bwire&qid=1658962483&sprefix=26ga%2Bsilicone%2Caps%2C98&sr=8-6&th=1)



Of course you will need to cut the wire down to length for your EFHW, you can use an antenna analyzer or just use the SWR meter / scale on your radio. For example, for a 40-10m EFHW start with about 66’ of wire and cut it down until it’s resonant or it’s SWR is low enough that it’s not an issue. Make sure you measure the SWR with the antenna in the air, not just laying on the ground, so you can determine how it will really perform

when it’s up in a tree or on your mast.

So that takes us up to \$140 out of our budget, and we just have a radio, a 49:1 and some wire. What next?

## Coax

So next you need to connect your antenna to the radio right? So we need some Coax. I recommend RG-174 for field work. Yes, there is some loss there but really only on runs higher than 30’, so for QRP portable work RG-174 fits the bill. It’s small, light, and cheap. You can get a 25’ run with BNC connectors on Amazon here:

[https://www.amazon.com/Amphenol-CO-174BNCX200-025Black-RG174-Coaxial/dp/B000071Q3E/ref=sr\\_1\\_8?crd=2DA38A0SXRHH8&keywords=rg-174+bnc+coax&qid=1659035631&sprefix=rg-174+bnc+coax%2Caps%2C86&sr=8-8](https://www.amazon.com/Amphenol-CO-174BNCX200-025Black-RG174-Coaxial/dp/B000071Q3E/ref=sr_1_8?crd=2DA38A0SXRHH8&keywords=rg-174+bnc+coax&qid=1659035631&sprefix=rg-174+bnc+coax%2Caps%2C86&sr=8-8). Now this

coax apparently increased in cost by \$10 since I last purchased it, so to be honest, we just blew our \$200 budget, but not by much!

## Battery

We now have an antenna, we have a radio, we have coax to connect them, but how do we power this whole operation? I recommend the 3ah Bioenno battery for this task.



You can get them for about \$50 here: <https://www.bioenpower.com/products/12v-3ah-lfp-battery-black-w-pvc-pack>. Three amp hours will last this radio a long time at 5w output, so you could activate several summits or camp in a park and call CQ all day if you like.

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# **Portable Ham Radio for \$200 – Is It Possible?**

**Tom Jacobs, N4NFM**

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## **Budget Review**

Let's check out how we did to our goal.

Radio=	\$90
Antenna=	\$30
Wire=	\$20
Coax=	\$30
Battery=	\$50
<b>Total=</b>	<b>\$220</b>

That's not bad, we just exceeded the budget by \$20 with our base setup with the QRP guys kit. You can increase your budget and do things like purchase the radio already assembled, add the SparkPlug antenna as opposed to the QRP Guys kit, etc. Even if you went premium on all options, including buying the radio assembled, the assembled 49:1 and all the other options you would still just be at \$270 total spend, so all in with a premium station you're still looking at under \$300 total spend and that includes adding a new radio to your kit.

## **What to Expect**

This is a basic radio station setup. You will have a good antenna, so assuming you cut the wire correctly for the bands you wish and you can get the end up in a tree you will make contacts. You will be limited to 5 watts with this radio, and if you are not familiar with QRP operation this might be new to you. I implore you not to be scared of the low power. First, if you are a CW operator, you should have no problems making contacts with this setup. For us SSB operators the 5 watts is a bit of a challenge but that's what spotting is for. If you are on a summit spot on SOTA, and you're likely in a park too so spot POTA. This will ensure you can make contacts and that other hams will be looking for you. You might get a 33 signal report back but you still made the contact. Low power operation can be a learned skill but if it's your first time out QRP do not worry, you will make contacts.

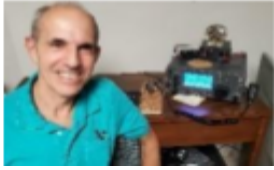
I look forward to hearing about some folks who take this as a challenge and decide to build this load-out. You will have a lot of fun and also have a radio you can use for any emergency situation as you'll be off the grid and battery powered.

73 de N4NFM

# **The Kodak SLIDE N SCAN Film Scanner**

**Tony Santoro, WA3TRA**

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This month I'll change things up a bit. I've talked to many members at the meetings and the Hungry Hams lunch and discovered a common trait. Everyone seems to have slides and negatives stashed away somewhere. Shack pictures and memories that you don't know how to process. I'll show you a gadget I used to clean up my photo stash and bring back memories.

## **What it does:**

This product will display slides and negatives for viewing on your PC. You can use it to save them to your desktop. Here's what it looks like. You insert the slides on the right as shown and push them through till they are viewed. If you like what you see, press the OK button bar on the top of the unit. This will save the picture to a SD card. If you don't like the picture, push it out and put it in the discard pile.

I have a large quantity (tons...) of slides that I processed in a short amount of time using this gadget. It will even view negatives! The important ones, I uploaded to Google drive and shared with friends and family (you know, the back in the day stuff).



So get out those pictures of your shack , the dog and family. Share them while you have a moment in time. Here is further reference: [KODAK SLIDE N SCAN Digital Film Scanner | Kodak](#)

73s, Tony WA3TRA

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# **Georgia QSO Party 2022 Results—"NFARL Challenge"**

**John Tramontanis, N4TOL**

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## **Participation Record Set - Goals Achieved**

The 2022 Georgia QSO Party results have been posted.

We are happy to report that a record number of operators participated in the "NFARL Challenge" this year, attaining one of our primary goals.

Feedback from participants have indicated that the main team goal was achieved - everyone had fun and enjoyed operating in the event!!

NFARL also posted the top club score in the event.

The club would like to recognize these club members for their contributions behind the scenes:

- Daryl Young, K4RGK, for managing the QRZ pages for the special 1x1call signs, enabling the promotion and administration of the "Spell NFARL" award program.
- Also thanks to Chaz Cone, W4GKF, for providing guidance to the team and management of the GQP awards.

NFARL would also like to thank all those who participated in the Georgia QSO Party and for their efforts in enhancing the fun for all in the contest!!!

– 73 John N4TOL





Hey NFARL members: SEDXC is pleased to announce that the SEDXC DX Elmers, a service of the Southeastern DX Club is officially open for business! As we announced in our August Bulletin, Hal Kennedy N4GG, Mike Greenway K4PI and Mac McDonald NN4K have volunteered to lead this activity. As the name implies, this talented team is prepared to provide services and support to any hams who are interested in learning all about DXing. If you're a ham getting back into the hobby, or getting serious about DXing, the DX Elmers are eager to answer your questions about working DX -- whether about rigs, antennas, QSLing, operating techniques or any other aspect of DXing. We will do this by "elmering"; we'll assign an experienced DX Elmer to help you over the bumps.

DXing can be great fun! You are encouraged and welcome to ask for help from a DX Elmer. To make it especially easy to sign-up for this service, SEDXC has a web page that captures all your pertinent information and forwards it to our DX Elmer team. Based on your specific needs, one of our Elmers will contact you. If you would like to see what the sign-up page looks like (or to sign-up right now!) click [SEDXC DX Elmers](#). There is also a link on the SEDXC Club web home page titled "DX Elmers Can Help!" that will open the sign-up page.

One of SEDXC Club goals this year is to connect/introduce DXing to as many clubs as we can reach. We believe DX Elmers can be a big asset in informing and reaching out to these potential new DXers.

If you are considering trying DXing or already DXing, please consider signing up for a DX Elmer who would be happy to help you further enjoy the DXing hobby! And don't forget our monthly SEDXC meetings the 3rd Thursday of the month at 7 pm with a featured guest to talk about a DXing related topic. Attend using ZOOM – details here: [SEDXC meeting ZOOM info](#).

73, Bob Hensey K4VBM  
SEDXC Activities Manager

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## ***September License Exams Held At Slope's***

### ***Wes Lambole, W3WL***

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This month there were four candidates and all four were successful in their quest! There was one Tech, two Generals and one Extra.

**Ken Merry**, a Georgia Tech grad and a software engineer working for Spectra Logic saw the Yellow Jackets celebrate his getting his Tech license by winning!! Ken is looking forward to getting really involved in ham radio and will soon be upgrading his license. For now, however, Ken is a Ramblin' Wreck from Georgia Tech with a Tech.

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**Darren Nelsen-K4DMN** is a great story and one that made my day. It turns out that Darren and his wife were out walking and happened to wander into our Field Day site and Darren got interested! Just what Field Day is supposed to do! Darren now is a General and has a Yaesu FT -891 and antenna up in the air. He is anxious to see what the HF bands hold for him.

**Shravika Pendyala-KQ4CUS** is also a great story and made my day a second time -two made days in one day! Shravika upgraded to General after getting interested in ham radio while doing high school science project that involved 2.4 GHz. She got her Tech license as a result and really got interested in satellites. Shravika speaks several languages including EZ NEC and designed and built an 8-element Yagi antenna. Her dad holds the antenna while she talks over it. She is going to speak to her school about seeing if we can get a ham radio club going and support their STEM programs.

**Wendall Jackson-N4WBQ** got his Extra. Wendell recently retired. He has had his General for 20 years, but was not really active. He now has a new end fed half wave up in the air and is ready to play some radio!

All four of the folks above plan to be at the next Club meeting; do congratulate them and let them know that our motto is "**Hams Helping Hams**" and that if they need help we are ready. 73, Wes W3WL

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## **W4QO Remembered / Wes Lamboley, W3WL**

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As HamJam 2022 approaches, we recently reached out to sponsors and suppliers requesting assistance with raffle prizes. This was a task Jim Stafford, W4QO(SK) eagerly undertook each year. I thought you might be interested in reading a response from Mr. Begali regarding Jim's passing. Ham friendships extend beyond the horizon given capabilities and technologies, but also due to personal relationships developed from conversation and common goals. Jim certainly was able to share his enthusiasm for amateur radio and teaching the subject to others with lots of people. CW was one of Jim's skills he was able to share widely.

Here's the content of the emails to Mr. Begali and his reply;

From: [begali@i2rtf.com](mailto:begali@i2rtf.com)

To: [weslamb@aol.com](mailto:weslamb@aol.com)

Sent: 9/16/2022 10:51:54 AM Eastern Standard Time

Subject: RE: HamJam

Hello Wes,

I sadly get your email since I knew Jim was sick but I didn't know he passed away and this makes very sad .

I know you were in touch with him and for sure we hope you were able to say him goodbye!

Please, could you pass our deepest condolences to his family? This would be one favor we ask you !

About the event , sure we will be more than pleased to donate a key especially in Jim's memories!

Please, let me know where should I send the key to .

Here in attachment you can find our logo if you wish to place it online please.

Thanks for your email and for let me know about Jim!

We are very very sorry.

Best wishes from Italy,

73 Bruna Begali

Continued on next page—



**From:** Wes Lamboley <[weslamb@aol.com](mailto:weslamb@aol.com)>  
**Sent:** Wednesday, September 14, 2022 11:59 PM  
**To:** [begali@i2rtf.com](mailto:begali@i2rtf.com)  
**Subject:** HamJam

Hello Mr. Begali,

I am Wes Lamboley, W3WL. Usually Jim Stafford, W4QO contacts you about our event, but, as you probably know, Jim passed away from cancer earlier this year. We will be holding our 13th annual HamJam event and honoring Jim this year on November 12.

You have been most gracious to donate a prize to our HamJam event for many years now. We proudly display your logo on our web page ( [hamjam.info](http://hamjam.info) ) and would be pleased if you can donate a prize again this year. All of our net proceeds go for Youth Education, Scholarships and Activities related to ham radio.

Please let me know if you can participate again this year.

Warm Regards,

Wes - W3WL

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## ***Extra Extra! / From the Extra Class Question Pool***

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



### **E6A05**

How does DC input impedance at the gate of a field effect transistor compare with the DC input impedance of a bipolar transistor?

- A. They are both low impedance
- B. An FET has lower input impedance
- C. An FET has higher input impedance
- D. They are both high impedance


See answer on the last page!

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](#).

# NFARL Upcoming Events and Dates

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- **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](https://www.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](https://www.nfarl.org) 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 [website](https://www.nfarl.org) 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. **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 - October 11, 2022 Presently- Online meetings only.** Check [NFARES.org](https://www.nfares.org) for more information.
- **Second Saturday – VE Testing - NFARL October 8, 2022 session:**  
**By reservation only.** See the ["Test Sessions"](https://www.nfarl.org) web page for details & registration process. Contact Ian at [nv4c.ian@gmail.com](mailto:nv4c.ian@gmail.com) for questions / concerns / reservations.
- **Third Tuesday— NFARL Club Meeting** - September 20, 2022, 6:00 PM  
**Live meeting ONLY! Preston Ridge Community Center -**  
**—September 2022 NFARL Mini-HamFest / Swap Shop " (see Page 1)**  
Door opens at 6:00PM for Set up and Social Networking. Selling begins at 7:00PM
- **Fourth Tuesday – NFARL Executive Team Meeting** - September 27, 2022, 7:00 PM.  
**Online meeting only** — monitor website and NFARL Groups.io reflector for updates.
- **October 2022 NFARL Club Meeting** - October 18, 2022, 7:00 PM  
**We're working the details on a couple of topic selections More details coming!**
- **HamJam 2022-** November 12, 2022. Mark your calendars now! HamJam 2022 is coming. We have a building list of prizes including a Buddipole™, ICOM !!C-705, and a Begali Key. Look for more info coming soon!

## Contact Us

President	John Norris N4IHV	<a href="mailto:President@nfarl.org">President@nfarl.org</a>
Vice President	Mike Riley KN4OAK	<a href="mailto:VicePresident@nfarl.org">VicePresident@nfarl.org</a>
Secretary	Martha Muir W4MSA	<a href="mailto:Secretary@nfarl.org">Secretary@nfarl.org</a>
Treasurer	John Tramontanis N4TOL	<a href="mailto:Treasurer@nfarl.org">Treasurer@nfarl.org</a>
Activities Chair	Steve Randall K04VW	<a href="mailto:Activities@nfarl.org">Activities@nfarl.org</a>
Membership Chair	Wes Lamboley W3WL	<a href="mailto:Membership@nfarl.org">Membership@nfarl.org</a>
Past President	Daryl Young K4RGK	<a href="mailto:PastPresident@nfarl.org">PastPresident@nfarl.org</a>
Mentors / Elmers	John Hathcock WE4AUB	<a href="mailto:Elmers@nfarl.org">Elmers@nfarl.org</a>
2022 Field Day Chair	Steve Randall K04VW	<a href="mailto:FieldDay@nfarl.org">FieldDay@nfarl.org</a>
Scout Coordinator	Jon Wittlin K4WIT	<a href="mailto:k4wit@nfarl.org">k4wit@nfarl.org</a>
ARES Liaison and Community Relations	Jim Paine N4SEC	<a href="mailto:n4sec@nfarl.org">n4sec@nfarl.org</a>
Repeater Operations	Mike Roden K5JR	<a href="mailto:Repeaters@nfarl.org">Repeaters@nfarl.org</a>
Web Master	Bill Cobb K4YJJ	<a href="mailto:Webmaster@nfarl.org">Webmaster@nfarl.org</a>
eNews Team	<b>Help Wanted!!</b>	<a href="mailto:enews@nfarl.org">enews@nfarl.org</a>

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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://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: C (question E6A05)**

## Supporters and Affiliates

Please support our sponsors and affiliates by visiting their websites.

