



North Fulton Amateur Radio League NFARL eNEWS

November 2023

*Over 42 Years Promoting
Service | Friendship | Education | Fun*

www.nfarl.org



HamJam 2023 / Wes Lamboley, W3WL

I cannot express how overjoyed I was with our HamJam this year. We had over 60 prizes to give away, the speakers were great, and the camaraderie was palpable. I tried my hand at being "Master of Ceremonies" this year, and I wound up being the bad guy because I had to stop all of the speakers when there was so much more to say and those present wanted to hear more. I felt like I was at a concert and the audience wanted an encore and there was just not any more time. We hope to do HamJam number 15 next year! If you were not there we hope to see you in 2024.

Ham radio events are sort of in a death spiral, like many other get-togethers. Look around you and you can see the effects of COVID and people isolating because they had to. The knock-on effects are still with us and it is hard to get off the couch and go out instead of watching on Zoom.

Please do plan to attend events in person whenever you can. We need to get back to the old normal instead of surrendering to the apathy that developed during COVID.

If you are interested you can see more photos on our web page relative to HamJam. <https://nfarl.org/PhotoAlbum/gallery/2023-activities/hamjam/> They are mere shadows of what we all experienced by attending the event, but they tell some of the story.

And - do consider getting back to Hungry Hams at Slope's on Wednesday and join in some serious conversations about ham radio and the Meaning of Life. Also, do not forget the Club meetings on the third Tuesday of the month. Attendance is ramping up and we need you to show up!



LIFE IS ALL ABOUT SHOWING UP!!



President's Corner / Mike Riley, KN4OAK

November is Crunch Time

Well, here it is the 1st of December. I'm just getting the November issue of eNEWS completed. I'm saying that this is just one of the items that validates "November is Crunch Time."

Having a lot of activity on the docket is not a bad thing though! I think we'd all be more comfortable with things to do rather than absolutely nothing. However, moderation at times, is a good practice to use when making your plans. So, in 2024 I'm looking forward to putting moderation into practice where ever possible. Staying in control is a key to success, no matter how much or little you've got to do.

During the next couple of weeks the NFARL Executive Committee will be working to finalize our 2024 operating plan. We will be sharing information on that in our December eNEWS edition and asking for feedback and volunteers where needed.

In the meantime, most of us will be getting into the Christmas and other year-end holiday modes, preparing for travel, visits, gifts and other occasions. Make sure you and yours make the best of this time in 2023.

73,

Mike KN4OAK

NFARL Officer Election Results for 2024- / Steve Mays, KS4KJ

NFARL Officer Elections for the 2024 operating year were held at the October 2023 NFARL Club meeting on October 17, 2023. Five positions were open for election: President, Vice President, Secretary, Treasurer, Activities Chairman, and Membership Chairman.

The Nominating Committee offered a slate of candidates consisting of:

Officer Role	Candidate	Call Sign
President	Mike Riley	KN4OAK
Vice President	Steve Randall	KO4VW
Secretary	Martha Muir	W4MSA
Treasurer	John Tramontanis	N4TOL
Activities Chairman	Lee Johnson	N4WYE
Membership Chairman	Wes Lamboley	W3WL

Members present at the meeting made a motion to accept the slate as presented. No other nominations were presented. Members present then voted to elect the slate of candidates to the positions named for the 2024 NFARL Board of Directors.

How to amplify computer shack speakers / Lee Johnson, N4WYE

How to amplify computer/shack speakers for less than \$10!

I recently upgraded my computer to a Mac Mini and found my monitor speakers severely lacking both in volume and fidelity. In addition to the usual computer audio applications, I also use an SDR transceiver and I wanted get the best audio that I could.

I imagined that the solution to be a pair of good speakers with a stereo audio amplifier powered via USB. As it turned out, I had a extra pair of mid range speakers that I picked up at "Goodwill" last year, so off to a good start.

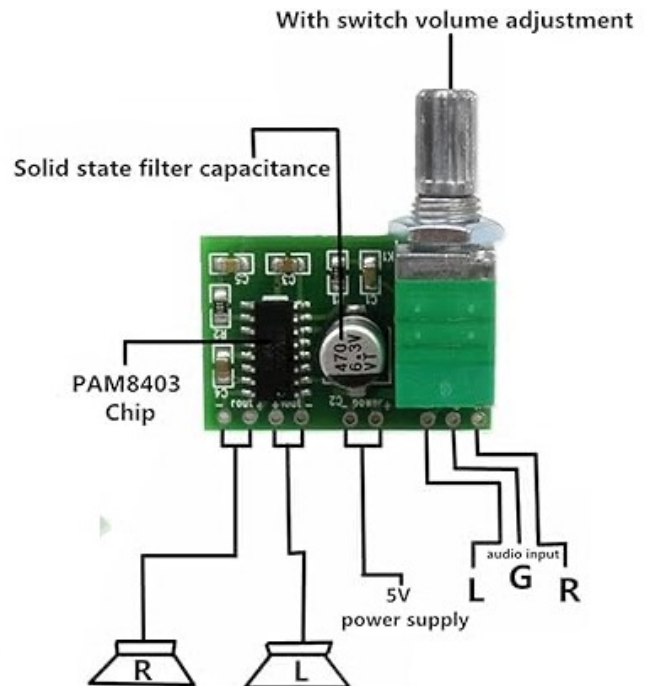
Next on Amazon, I found the unexpected: inexpensive audio amplifiers that could be powered via USB, dual channel, 3 watts output that were perfect for my application. Some of these modules even included Bluetooth capability. These amplifiers are Class D and therefore are quite efficient.

✓PAM8403 small mini 5 v digital power amplifier board (can be USB powered) (XY) board USES PAM8403 digital power amplifier chip, circuit is simple, reliable work.

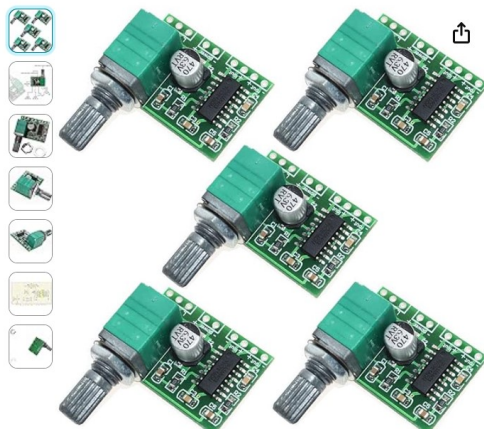
✓Working voltage of 2.5 V to 2.5 V, 3 W x2 maximum output, efficiency can achieve 90% above, can use computer USB 5 V power supply.

<https://a.co/d/fvwaWLK>

As you can see from this webpage, **\$8.99 you get 5 of these modules.**



Electronics > Home Audio > Home Theater > Receivers & Amplifiers > Amplifiers



R REIFENG 5pcs Mini PAM8403 DC 5V 2 Channel USB Digital Power Amplifier Board Module 2 * 3W Volume Control with Potentionmeter

Brand: R REIFENG
4.5 ★★★★★ 72 ratings

\$8⁹⁹

Get **Fast, Free Shipping** with Amazon Prime
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Voltage	5 Volts
Manufacturer	R REIFENG
Brand	R REIFENG
Number of Channels	2

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Delivery

Pickup

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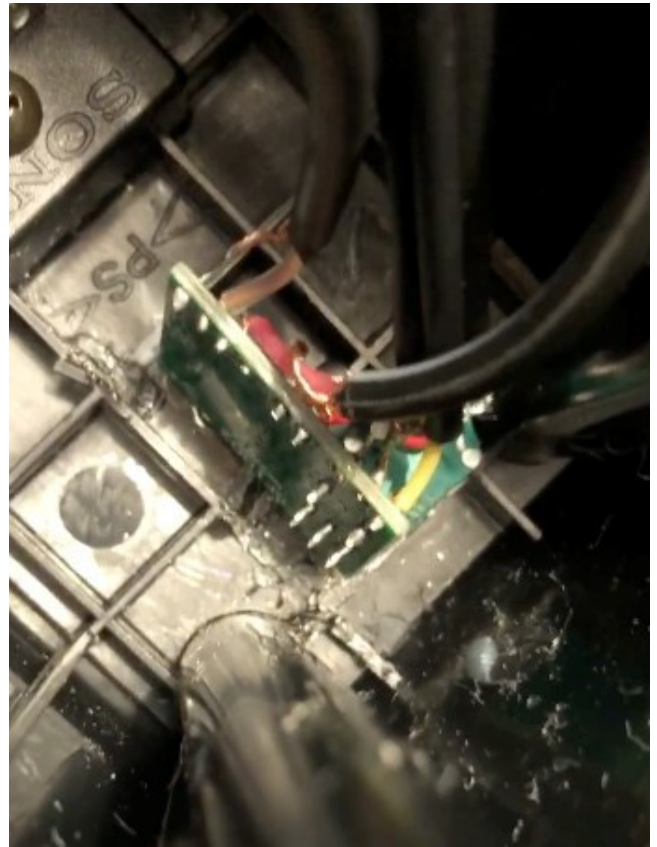
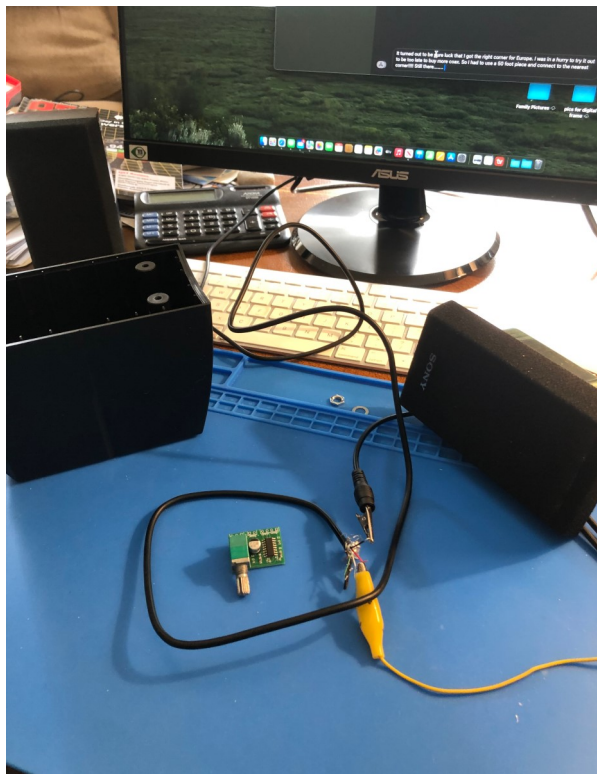
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FREE delivery Saturday, December 9 on orders shipped by Amazon over \$35

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How to amplify computer shack speakers / continued from previous page

I mounted the wired amplifier module, with salvaged USB and stereo cables in one of the speakers.

I now have booming audio on my new Mac Mini and SDR Transceiver.



SET (Simulated Emergency Test) 2023 / Robert Achtenberg, AJ4RJ

SET is the Annual Simulated Emergency Test which ARRL sponsors in the fall. This event is basically a field day for ARES groups across the country in which to take part. Of course there are many differences between ARRL Field Day and SET. The SET is a reactive deployment where ARES team members will deploy into the field and split up in groups and attempt to establish a Net between each of the deployed groups. Each team will use a set of Simplex frequencies to communicate with each other and set up digital and voice communication to a Central Command Station. Each group will have their own command structure and collect information from individuals within the field and report back to a Central command.

This year the North Fulton ARES deployed three teams into the Field. Each field team consisted of 2 to 3 operators and one field station. On October 7, 2023, each member was to monitor the 147.06MHz repeater and listen for instructions on the Simulated Emergency Test. At 9:30am a message went to all team members that "The Entire Southeastern United States is experiencing a Tier 1 Internet service degradation to the internet backbone. The affected Tier 1 ISPs include AT&T, Verizon, Sprint, NTT and PCCW. This Tier 1 issue has cascaded down to all Tier 2 and Tier 3 Internet Service Providers. The Tier 2 and 3 ISPs are currently experiencing internet outages across the region. Currently, Internet degradation is affecting all Cellular Service Providers this includes the use of Voice and Mobile Data. Utility companies including Gas, Electric and Water are also affected by these internet outages. Power outages and brownouts are occurring across the Southeastern United States. Hospitals and Emergency Service report they are on backup generators. The Department of Transportation reports many traffic control signals are malfunctioning. Commercial businesses are closing due to the failure of processing financial transactions. This includes gas stations, retail stores, restaurants, and grocery stores. There have been reports of sporadic smash & grabs and looting across the region. At this time this repeater has only 1 hour of battery back and cannot be heavily used, so simplex operations must be utilized from here on out."

So as instructed, all team members were to report to central command and receive their instruction packets for field deployment. By 10:10am all members reported to Central Command in Roswell and received their deployment instructions packets. All team members successfully deployed and checked-in to Central Command via VHF Simplex by 10:30am. The three Tactical Teams consisted of the Encore Team (Tammy KK4USM and Scott KM4JXE), Elevate Team (Grant - KK4PCR, Steve - KQ4EIQ and Matt - KO4BLW), and the PillHill Team (Bill - KJ4WLF and Lisa - KO4NYA). NFARES also had two backup command stations from their QTH's, Joe - AJ2Y and Mike - AD4MC. The Central Command team in Roswell was manned by Robert - AJ4RJ, Jim - W4IU and Abby - KQ4JEU.

The first task instructions were to send a digital ICS-213 form via Winlink Peer to Peer to Central Command on simplex. Two teams were successful in completing this task. The next task was to deploy field operators to all of the surrounding fire stations and attempt to make contact with their field Command station on a Simplex frequency utilizing a mobile or HT via Simplex frequency. Each team was successful in making contacts from each fire station they were assigned to via Phone (Voice). Central Command in Roswell sent Abby -KQ4JEU to the field. Abby, KQ4JEU made 2 of the 4 contacts back to Command Central. The third task was to create an ICS-213 report from each field team identifying which fire stations made contacts, and send it back to Central Command via Winlink Peer to Peer over a predetermined simplex frequency.

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SET (Simulated Emergency Test) 2023 / Robert Achtenberg, AJ4RJ

The final task was for each team to make contact with other ARES affiliates located in Atlanta and DeKalb County. These were DeKalb EOC and Emory Hospital on Clairmont Rd in Atlanta. The Elevate Team were the only ones to successfully establish contact with all of the ARES affiliate locations, while Command central was able to contact Atlanta and DeKalb EOC. By 1:00pm all field teams were relieved of their duties and headed home.

I want to thank NFARL for the use of the 145.47MHz repeater and all of our team members for participating in the event. I hope to have another Simulated Emergency Test this spring. If you are interested in Emergency Field Communications, Digital communications or want to learn what this is all about, please contact AJ4RJ - Robert Emergency Coordinator at nfares.ec@gmail.com

73,

Robert AJ4RJ



Grant, KK4PCR, running the radio during the SET 2023 exercise

Robert AJ4RJ, seems to have the NFARES Command Center under control during the ARES SET 2023 exercise



High Power Antenna Tuners Clearing the Smoke

The high power antenna tuner purchase-decision is a tough one. Performance and cost are major drivers. Cost is cost, but when it comes to specifications there are no standardized power ratings for tuners. There are a myriad of tuners to choose from which is more confusing than helpful.

There has been a lot written about antenna tuners. There has been A LOT of advertising supporting the sale of antenna tuners. There have been construction articles galore – from the 1920s to the present. Perusing the QST archives, I counted over 300 antenna tuner articles.

What needs attention, I think, is an objective treatment of high power tuners' capabilities together with an appreciation, pre-purchase, of why they fail to meet our needs, or, fail outright. High power antenna tuners fail a lot.

High power antenna tuners have taught me that smoke comes in many colors. Rice Krispies are not the only thing that go snap, crackle and pop. High power antenna tuners can sizzle and/or emit a variety of odors. I was told by the co-owner of a popular manufacturer that their repair techs know what parts to replace in a tuner by the smell. They know what to do before the covers come off.

High power antenna tuners tend not to do what we wish they would do. Ideally we would like a tuner that can work from 1.8 to 30 MHz (or 1.8 to 54 MHz), handle any antenna impedance that presents an SWR of up to 10:1 and handle 1,500 watts continuously with sufficient margin. The folks at Alpha RF Systems (formerly Alpha Power, ETO and other names) have defined "continuously" well: "Full legal limit, brick on the key, 100% duty cycle, forever."

Some of the blame for failed expectations and failed hardware lies with the manufacturers' specifications being incomplete and/or rooted in "one-upmanship." When it comes to specifications there are no "terms of art." One manufacturer's "3KW PEP" power handling specification might be less robust than another's "2 KW PEP." The first might be for a 50% duty cycle, the second for 100%. The first might be for an SWR of 5:1 or less, the second for an SWR of 10:1 or less.

Meanwhile, specification and design problems are difficult for manufacturers. In antenna tuner design and operation, at any power level, everything affects everything. As an example, designing a robust tuner for 1.8 MHz requires large variable inductors and capacitors. These parts will have stray inductance and capacitance that doesn't affect operation at 1.8 MHz, but can cause significant loss at 28 MHz. Unusual load impedances can reduce a tuner's power handling ability and/or operating frequency range.

So, what's someone in the market to add a high power antenna tuner to the shack to do?

First, figure out what you need. There are wants and there are needs. If you want the ideal tuner (if there is such a thing), count on it being large and very expensive. What you need vs. what you want is a personal decision. What you need is probably attainable. In particular, decide whether a tuner optimized for the low bands (1.8–7 MHz) or the higher bands (21–28 MHz) best suits your needs. Most tuners cover all the HF bands, but as the recommendation in the next paragraph will tell you, loss can be a major problem at one end of the HF range or the other. Remember, your antennas with an SWR of 2:1 or less don't need a tuner.

Continued on next page

Next, I strongly suggest you read the article QST Reviews Five High-Power Antenna Tuners, by Jim Parise, W1UK, ARRL Technical Advisor, QST, February, 2003. All but one of the tuners tested are still available. The one that's not, the Ten Tec 239B, is the one I like best of the five. I bought two of them for my two-station shack many years ago. They performed flawlessly at 1.5 KW into all sorts of loads. Used ones often come up for sale.

Next, deal with the specifications. A few examples, selected at random, will illustrate how difficult this is. I have faithfully copied the manufacturer's words:

- MFJ 986. Advertising: 3 KW, 1.8-30 MHz. Manufacturer's specifications: 3 KW PEP input, 1.5 KW PEP output for 30-500 ohms. 1.8–30 MHz. Type: Differential-T. \$480.
- Palstar BT1500A. Advertising: 1,500 watts, 1.8-30 MHz. Manufacturer's description: 1,500 watts, 160 – 20 meters 2,500 +/- j 2,500 ohms. 10-15 meters 1,000 +- j 1000 ohms. Manufacturer's manual: 1,500 watts PEP, 1,000 watts single tone, 2,500 +/- j 2,500 ohms 160 – 20 meters, 1,000 ohms +/- j 1,000 ohms 17 to 10 meters. Type: balanced double-L network. \$995.
- Ten-Tec 238B. Manufacturer's manual: 2 KW maximum. No more than 10:1 SWR, any phase angle, 1.8–30 MHz, 3000 ohms maximum at full power. Type: L-network. No longer in production. \$350 used.
- ACOM 06AT Automatic antenna tuner. Advertised: 1,500 watts PEP, 1.8-54 MHz, Manufacturer's description: Up to 1,200 watts for SWR less than 3:1. Manufacturer's specifications: Matches all load impedances below 3:1 SWR, any phase angle unbalanced. Maximum allowed input power (PEP, mean or continuous carrier, without mode limitation): 1,500 watts SWR 2.5 or less, 1,200 watts SWR 2.5 to 3, 500 watts SWR 3 to 5, 200 watts SWR 5 to 10. SWR above 10:1 not allowed. Type: unknown \$1600.
- FLEX-Radio Tuner Genius XL. 1X3. (Note: Automatic) Manufacturer's description: 1.8-54 MHz, "Ability to tune 10:1 SWR with the ability to handle up to 2,000 watts." Manufacturer's specifications: 1.8-54 MHz continuous, up to 10:1 SWR, Nominal operating power 2,000 watts. Duty cycle 100% ICAS. Single channel \$2200, SO2R \$2500. Type: Unknown.

My immediate thoughts on typing this up:

1. Wow is this sad.
2. Specs are all over the place. The advertising doesn't match the published specifications in most cases
3. LOTS of weasel-words and nonsensical terms. What does 100% ICAS mean when the "I" in ICAS stands for intermittent? What does "ability to handle..." mean?
4. "High power" is very much an undefined term. 1,500 watts? 2,000? 3,000? PEP or average or continuous? Sometimes as a function of SWR and/or frequency (the right way to do it) but usually not.
5. Automatic antenna tuners in fancy boxes offer no advantage in electrical performance yet cost much more.

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Additional thoughts about antenna tuners:

- It is not possible to determine the reliability of any of these tuners. At least one has a known, serious design defect. I have seen two examples arc and short the internal tuning capacitor – the repair was expensive. I have spoken to the manufacturer about this, the response was “it’s not worth fixing.”

- There are A LOT of tuners to choose from. MFJ offers 37 antenna tuners capable of 200 watts or more. Eight of those are advertised to handle 1,500 watts or more. Some of this is due to MFJ acquiring Vectronics. Through many acquisitions, MFJ seems reluctant to drop redundant products. Just figuring out which high power MFJ tuner is right for you is a chore.

- I have a personal preference for L-Network, manual tuners. There is a long-standing debate about which type is better: L-Network, Tee, or PI. The pros and cons are beyond the scope of this article, but L-networks have only two high-power components, the Tee and PI types have 3. High power components are expensive and are failure prone. Also, Tee and PI networks can, sometimes, be tuned for a 1:1 SWR at two different settings. One is “correct,” the other is usually catastrophic. The “bad one” uses internal strays as part of the tuning solution. Although an over-simplification, this is sometimes referred to as tuning the tuner into itself. You can’t put 1,500 watts into a tuner with the tuner being the load.

I don’t care for automatic tuners. They don’t tell you what’s going on. When you tune a manual tuner you can read the inductor and capacitor values off the dials. If this changes over time it indicates a changing antenna. If the values are near the end of the ranges it tells you the SWR on the transmission line is high – that’s important to know. Automatic tuners either match or they don’t – they provide no information.

Automatic tuners are sometimes fooled in multi-transmitter environments. They hunt and peck in an effort to minimize SWR as measured at the antenna terminal(s). Power from a nearby transmitter will also be at the antenna terminals and the tuner may try to get a match based on that or some combination of the primary and parasitic signals. This happens a lot at Field Day.

Automatic tuners sometimes refuse to find a match under conditions where a manual tuner will.

Automatic tuners are expensive yet offer nothing beyond automation where, in my opinion, automation is of negligible value.

Automatic tuners offer lots of whiz-bang. I’m not into whiz-bang.

Remote automatic tuners do have a valuable place in our antenna system designs. As explained in prior columns, the tuner is best placed as close to the antenna as possible.

I hope your antennas tune well and the magic smoke stays inside your box!

73,
Hal N4GG

Congratulations New & Upgraded Hams! / Wes Lamboley, W3WL

November VE Testing Held at HamJam 2023

Following our change of practice in 2022, we held the November 2023 VE Test session at Preston Ridge Community Center. Doing so to make it easy for test candidates and examiners to join the HamJam event following completion of their testing.

Four candidates successfully completed and passed their exams. We're glad they had the opportunity to take the exams and would like to take the opportunity to congratulate them. Please greet and congratulate these folks the next time you see them.

<u>Candidate Name</u>	<u>Email</u>	<u>Call (if applicable)</u>	<u>Test</u>
Joey Supple	joeysupple@gmail.com	KM4OHX	General
Rodney Richter	drricktor@comcast.net		Tech
Frank Hansen	kato1234@bellsouth.net		Tech
Charles Dean	hcdkdean@yahoo.com		Tech/General

Each successful candidate, who is not already a club member, receives an offer to join NFARL at no cost for one year as part of our testing program.

In order for the VE license testing to occur we need a supporting panel of Volunteer Examiners to be available and willing to participate in the program. Our thanks goes to the thirteen VE member panel associated with NFARL.

If you're interested in becoming a VE, please contact Ian, NV4C Contact Ian at nv4c.ian@gmail.com or 404-626-1566. You may also visit <http://www.arrl.org/become-an-arrl-ve> and check out the requirements for becoming a VE.

Larry Gantt, KJ4YOT, SK

Club member Larry Gantt, KJ4OYT, passed away on October 28, 2023.

Larry was an occasional attendee at our club meetings and on our over the air nets.

He also participated in the "NFARL Challenge", scoring for the club in the Georgia QSO Party

Here is the link to Larry's obituary

<https://www.mariettafuneralhome.org/obituary/larry-gantt>

He was recently featured in a front page article in the Marietta Daily Journal just 4 months ago.

<https://www.newsbreak.com/marietta-ga/3091064219100-camp-meeting-congregants-observe-186-year-old-tradition>

Larry was a true gentleman and always had a smile to share.

73 OM

2023 Holiday Party / Dave Bisciotti, KO4USA

North Fulton Amateur Radio League cordially invites you and your guests to our 2023 Holiday Celebration.

The event will be held at Preston Ridge Community Center on December 16th, 2023 beginning at **6:00PM**.

Advanced reservations are required. Reservation deadline is 6:00PM local time on December 12th. Click [here](#) (to purchase dinner tickets in our Mart.

Please bring a new, unwrapped child's toy in original packaging for donation to [Children's Healthcare of Atlanta](#).

***Drawings for prizes will be held during the evening.
You must be present to win a prize.***

Recipients of NFARL recognition awards will be announced during the evening.

Our meal will be catered by Holmes2Home, the firm that earned rave reviews for our 2021 & 2022 Holiday Dinners. Here is this year's dinner menu.

Menu

Roast Beef w/Carrots and Mushroom Gravy

Smoked Salmon

Cajun Style Fried Turkey

Macaroni & Cheese

Cilantro Lime Rice

Pasta Salad

Green Beans

Zucchini/Squash/Broccoli/Onion Medley

Tossed Salad (Balsamic & Ranch Dressings)

Rolls

Tea / Lemonade / Water

Peach Cobbler / Cheesecake

See more details about our 2023 Holiday Party at <https://nfarl.org/2023-holiday-party/>

Extra Extra! / From the Extra Class Question Pool

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



E5C04

What coordinate system is often used to display the resistive, inductive, and/or capacitive reactance components of impedance?

- A. Maidenhead grid
- B. Faraday grid
- C. Elliptical coordinates
- D. Rectangular coordinates

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](#).

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
+ SEC QSO Party	2100Z, Dec 1 to 2100Z, Dec 2
+ ARRL 160-Meter Contest	2200Z, Dec 1 to 1600Z, Dec 3
+ ARRL 10-Meter Contest	0000Z, Dec 9 to 2400Z, Dec 10
+ PODXS 070 Club Triple Play Low Band Sprint	0000Z, Dec 9 to 2359Z, Dec 11
+ 4 States QRP Group Second Sunday Sprint	0100Z-0300Z, Dec 11
+ NAQCC CW Sprint	0130Z-0330Z, Dec 13
+ ARRL Rookie Roundup, CW	1800Z-2359Z, Dec 17
+ Run for the Bacon QRP Contest	2300Z, Dec 17 to 0100Z, Dec 18
+ NAQCC CW Sprint	0130Z-0330Z, Dec 20
+ Walk for the Bacon QRP Contest	0000Z-0100Z, Dec 21 and 0200Z-0300Z, Dec 22
+ RAC Winter Contest	0000Z-2359Z, Dec 30
+ YOTA Contest	1200Z-2359Z, Dec 30
+ Stew Perry Topband Challenge	1500Z, Dec 30 to 1500Z, Dec 31

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](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](#) 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](#) 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.



SLOPE'S BBQ

- **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=VIN2d0xvQVhKcDIULOR4N1hQMTQ2UT09>
Meeting ID: 847 2208 7419; Passcode: CW-CHAT

- **Second Tuesday — NFARES Meeting - December 12, 2023** **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 December 9, 2023 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 email to Jan NV4C](#); monitor registration opening & closing on the website. [Click here for more information.](#)

- **Fourth Tuesday — NFARL Executive Team Meeting** - November 28, 2023, 7:00 PM.
Online meeting only — monitor website and NFARL Groups.io reflector for updates.

- **NFARL Holiday Party— Saturday, December 16, 2023— 6:00 PM** Our annual Holiday Party will take place at Preston Ridge Community Center, 3655 Preston Ridge Road Suite 100, Alpharetta, GA 30005. Doors will open at 6:00PM. Dinner tickets are available in the Mart and will be available until 6:00PM on December 12th; click here to purchase yours today!! If you are so inclined, please bring an unwrapped gift for a child being cared for at Children's Healthcare of Atlanta - Scottish Rite Hospital.

- **REMINDER! NFARL'S NOVEMBER AND DECEMBER CLUB MEETINGS WILL BE REPLACED BY HAMJAM AND OUR HOLIDAY PARTY** NFARL's November and December club meetings will not take place. They are replaced by HamJam on November 11th and our Holiday Party on December 16th.

Contact Us

President	Mike Riley KN4OAK	President@nfarl.org
Vice President	Steve Randall KO4VW	VicePresident@nfarl.org
Secretary	Martha Muir W4MSA	Secretary@nfarl.org
Treasurer	John Tramontanis N4TOL	Treasurer@nfarl.org
Activities Chair	Dave Bisciotti KO4USA	Activities@nfarl.org
Membership Chair	Wes Lamboley W3WL	Membership@nfarl.org
Past President	John Norris N4IHV	PastPresident@nfarl.org
Mentors / Elmers	John Hathcock WE4AUB	Elmers@nfarl.org
2023 Field Day Chair	Chair- Steve Randall, KO4VW Co-Chair-Dave Bisciotti, KO4USA Co-Chair-Mike Riley, KN4OAK	FieldDay@nfarl.org
Scout Coordinator	Jon Wittlin K4WIT	k4wit@nfarl.org
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: D (question E5C04)

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